QUALITY ASSURANCE PRACTICES IN ELEARNING: A CASE OF NAMIBIAN COLLEGE OF OPEN LEARNING (NAMCOL)

By

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Submitted in accordance with the requirements
for the degree of

DOCTOR OF PHILOSOPHY
in the subject

EDUCATION MANAGEMENT
at the

UNIVERSITY OF SOUTH AFRICA

PROMOTER: PROF Dr J. NYONI

EXECUTIVE SUMMARY OF THE STUDY

QUALITY ASSURANCE PRACTICES IN ELEARNING: A CASE OF NAMIBIAN COLLEGE OF OPEN LEARNING (NAMCOL)

ELearning has become increasingly critical in the mediation of content and facilitation of learning and learning mode in education institutions and corporate training. Not to mention, the rapid growth of information communication and technology has also brought significant changes in the practice of eLearning. With the introduction of eLearning programmes, there is an expectation by stakeholders of high-quality teaching and learning. However, several scholars indicate that there is doubt in the quality of eLearning programmes at many institutions around the world.

The purpose of the qualitative descriptive case study design was to determine and eventually narrate the quality of eLearning and quality assurance practices in the development and implementation of eLearning modalities at NAMCOL. Subsequent to the outcomes of the study was to create an eLearning quality model that would enhance the quality of eLearning at NAMCOL. The purpose highlights the interest of the researcher in gaining an insight by analysing the experiences of the participants on the quality and quality assurance approaches in eLearning at NAMCOL, by understanding the participants in their own voices. The study findings revealed that quality is multi-dimensional thus each participating category defined quality eLearning according to how it related to them. Based on the participants' experiences, the institution seemed to have done fairly well to ensure quality of teaching and learning through eLearning. Findings pointed to a number of quality assurance measures employed by the institution to ensure quality eLearning, such as: recruitment of appropriately qualified academics and tutors (part-time), team approach for the development of e-content, programme review, external audits, training interventions, establishment of LMS and computer laboratories with internet connectivity among others.

Based on the findings, the study has put forward some recommendation aimed at addressing and mitigating the above identified deficiencies: thorough induction to part-time tutors on the policies and guideline document related to eLearning; close collaboration must be established among key departments such as programme

development, student support and IT departments. Strategies need to be employed to facilitate close collaboration between subject content and technology experts for cross fertilisation of knowledge and skills. Readiness evaluation need to be conducted to identify tutor and student training needs and ensure the provision of a need-based training and responsive student support. Similarly, there is a need to provide continuous training on the development and teaching of online e-content and make it mandatory for content developers and tutors/facilitators for eLearning.

STUDY ORIGINALITY DECLARATION

I NDESHIMONA LAINA AFUNDE hereby declare that this dissertation titled **"QUALITY ASSURANCE PRACTICES IN ELEARNING: A CASE OF NAMIBIAN COLLEGE OF OPEN LEARNING (NAMCOL)"** is of my composition and has not been presented or accepted in any previous application for a degree. The work, of which this is a record, has been carried out by me unless otherwise stated and where the work is mine, it reflects personal views and values. All quotations have been distinguished by quotation marks and all sources of information have been acknowledged using references including those of the Internet.

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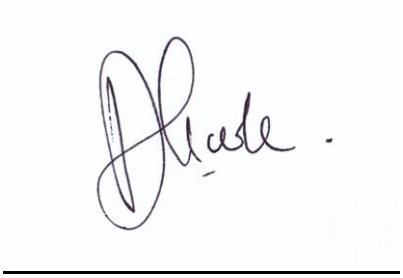

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Quality assurance practices in e-learning: A case of Namibian Colleges of Open Learning

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Kind regards,

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I dedicate this work to Odhikwa ya Fiina ya Simeon.

ACKNOWLEDGEMENTS

The efforts culminating to this point could not have been achieved without the support from many people, however, my heartfelt gratitude and special word of thanks is extended to the following:

Prof Jabulani Nyoni, my study supervisor for his patience, invaluable advice and scholarly guidance which contributed to the finalization of this project. Thank you, Prof, for silently “pushing” me to complete the writing of the thesis

Dr Ndeutungu Keendjele, my technical advisor, thank you for your unwavering support, your encouragement when I was on the verge to give up, your guidance and tutelage throughout my studies. I greatly appreciate your willingness to listen and value what I had to say and gave me guidance to continue and complete this research study.

The Director of NAMCOL, Dr Heroldt V Murangi and his management for granting me permission to conduct my research study at NAMCOL and for graciously sponsoring my studies. A special word of appreciation to the staff, tutors and students at NAMCOL who contributed to the study. Your willingness and wholehearted participation made this study a reality.

My siblings Kawitangelwa, Nambashu and Panduleni for the support and encouragement to soldier on when the going got tough. I am also grateful to Ntuni Kamati and Neto Kasuto for your contribution and support to this thesis.

Special word of thanks to my family, especially Etuna and Tangeni for allowing me time to invest in my study. Tangeni, your” making progress mommy?” was a great motivation.

A special thanks to my mom who kept on asking “owa mana nee? ninga ashike”, that kept me going.

To God be the glory and honour for the completion of my study.

EXPANDED DEFINITIONS OF ACRONYMS

BOCODOL	Botswana College of Open Distance Learning
BOU	Botswana Open University
CAL	Computer assisted learning
CECD	Certificate in Early Childhood Development
CK	Content knowledge
CML	Computer managed learning
CoDeL	Centre of Distance eLearning at University of Namibia
COLL	Centre of Life Learning at Namibian University of Science and Technology
DE	Distance Education
ENQA	European Association for Quality Assurance in Higher Education
ESG	Standard and Guidelines for Quality Assurance in the European Higher Education Area
ETSIP	Education and Training Sector Improvement Programme
HEFCE	Higher Education Funding Council of England
ICT	Information Communication Technology
ISO	Organisation for Standardisation
IT	Information Technology
JKUAT	Jomo Kenyatta University of Agriculture and Technology
LMS	Learning Management System
MoE	Ministry of Education (MoE
MOODLE	Modular object-orientated dynamic learning environment
NADEOSA	National Association of Distance Education Organizations of South Africa
NAMCOL	Namibian College of Open Learning
NCHE	National Council of Higher Education
NOLNet	Namibia Open Learning Network Trust
NRI	Networked Readiness Index
NUST	Namibia University of Science and Technology
ODFs	Online discussion forums
ODL	Open Distance Learning
OECD	Organisation for Economic Co-operation and Development

OER	Open Education Resources
OUM	Open University of Malaysia
PCK	Pedagogical content knowledge
PDOSOM	Post Graduate Diploma in Open School Operation and Management
PDPP	Planning, development, process, and product
PEOU	Perceived ease of use
PK	Pedagogical knowledge
PU	Perceived usefulness
QA	Quality assurance
QAA	Quality Assurance Agency
QAMs	Quality assurance measures
QAu	Quality audit
QC	Quality control
QM	Quality Measures Rubric Standards
QS	Quality system
TAM	Technology acceptance model
TCK	Technological Content knowledge
TK	Technology knowledge
TPCK or TPACK	Technology Pedagogical Content Knowledge
TR	Technological revolution
UHCL	University of Houston-Clear Lake
UNAM	University of Namibia
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNISA	University of South Africa

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PLAGIARISM DECLARATION

I, the undersigned, hereby declare that the work contained in this research proposal entitled "QUALITY ASSURANCE PRACTICES IN ELEARNING: A CASE OF NAMIBIAN COLLEGE OF OPEN LEARNING (NAMCOL)" is my original work and that I have acknowledged all sources and resources consulted in the preparation of this proposal by way of complete referencing.

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ABSTRACT

The rapid growth of information and communication technology has brought significant changes in practices of eLearning. Despite the apparent benefits of eLearning, there is doubt in the quality of eLearning services and programmes.

The main purpose of this study was to investigate the status and practice of quality assurance system in eLearning at the NAMCOL. The intent was to determine how the quality in eLearning might have been enhanced through the quality assurance system. The study focused on academics, tutors and students at NAMCOL who are directly involved in the development and facilitation of eLearning programme content. The Technological Acceptance Model and Planning, Development, Process and Product (PDPP) were used to frame the study. The phenomenological descriptive approach of this study employed a qualitative data gathering tools such as semi-structured interviews, non-participant observation and document analysis. One on one interviews were conducted with 4 academics, 2 support staff and 4 tutors. Focus group discussions had a total of 15 students. The collected data was analysed to understand, through the experiences of participants, quality assurance was understood in eLearning.

The results of this study revealed that the institution has put in place mechanisms to ensure quality eLearning, however, the participants decried that they were not involved in the development nor in the implementation of key quality assurance mechanisms for quality eLearning. It is, therefore, recommended that the institution should involve the key stakeholders in the development and implementation of quality assurance measures in eLearning.

The study further identified challenges that hampered quality eLearning such as lack of quality standards for eLearning, lack of access, and scarcity of relevant expertise. The study advanced eLearning quality assurance model for consideration by the institution to address the identified deficiencies as well as suggestion for future research.

DEFINITION OF KEY RESEARCH OPERATIONAL TERM

Academics –In this study academics refers to staff who are tasked with the responsibility of ensuring the development and implementation of eLearning at NAMCOL. These staff are employed on a full-time basis at NAMCOL.

Audits- Audit is the process of evaluating institutional procedures for assuring quality. It focuses on accountability of institutions and may involve a self-study, peer review and a site visit. Such evaluation can be self-managed or conducted by an external body (Materu 2007:4).

Constructivism- Is an education philosophy based on the assumption that individuals construct their own knowledge from ideas, objects, and events which they experience and encounter in relevant environments (Perkins, 1992; von Glasersfed, 1992).

eLearning - *eLearning* refers to "any form of telecommunications and computer-based learning," Also known as electronic learning, it is broadly defined as instructional and learning environments that are delivered via electronic technology such as the Internet, audio and videotape, satellite broadcast, interactive TV and CD- ROM.

Information Communication Technology - This is an umbrella phrase that describe a diverse set of technological tools and resources used to communicate, and to create, disseminate, store and manage information (Tinio, 2002). These technologies include, among others, computers and network hardware and software, mobile phones, fax and broadcasting technology such as radio, television and interactive whiteboards (MoE, 2005, p.4).

Mobile learning -Mobile Learning (M-learning) refers to any kind of learning which takes place within and beyond the traditional learning environment via wireless mobile devices. Keegan (2005) defines mobile learning as the provision of education and training using devices easy to carry and to use everywhere and anytime, such as smart phones and tablets. Mobile learning is restricted to those devices which are portable and flexible to provide a wide range of social contexts.

Quality Assurance- Quality Assurance refers to a planned and systematic review process of an institution or programme to determine whether the standards are being met, maintained and enhanced (Materu, 2007).

Student/learner – In this study the word student and learner are used interchangeably. Student is the person who has enrolled and is studying.

Tutors – are the teachers responsible for the development of e-content and the facilitation of eLearning on a part-time basis at NAMCOL.

Web-based learning - is learning that is electronically supported and it uses the internet as a means and method of learning (Alessi & Trollip, 2001). Web-Based learning is geared around technology, specifically the computer. Students need to have access to computers as well as knowledge on how to use them in order to be successful (Wang, 2009).

CHAPTER 1: CONTEXT AND CONCEPTUAL FRAMEWORK

1.1 INTRODUCTION AND BACKGROUND

This chapter introduces the study on Quality Assurance (QA) practices in *e*Learning at the Namibian College of Open Learning. A brief background of the study and the NAMCOL institution is presented, together with the statement of the problem, significance of the study, limitations of the study as well as a brief synopsis of the literature review. The technological revolution (TR) that has gripped the world within the past century has transformed life in many ways. With this explosion of technological advances, the use of Information Communication Technology (ICT) has become prominent in the teaching and learning environment (Oliver 2005). In Namibia, the Ministry of Education (MoE) implemented the ICT Policy for education to enhance the use and development of ICT in the teaching and learning environment (MoE, 2005).

1.2 INFORMATION AND COMPUTER TECHNOLOGY (ICT) AND eLEARNING?

Gallagher (2001) states that *e*Learning is defined in many ways, therefore it is crucial to have a clear understanding by providing a definition. Guri-Rosenblit (2006) defines *e*Learning as the integration of Information and Communication Technology (ICT) in educational settings. ICTs are a diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information (Tinio, 2002). According to Iipinge (2010) ICT integration is the use of ICT tools in the teaching and learning of a subject matter. Be that as it may, the Namibian College of Open Learning (NAMCOL) refers to *e*Learning as the use of electronic technologies to access educational content outside the traditional classroom (NAMCOL 2016). In this study, *e*Learning refers to learning that is enhanced by ICT.

eLearning, comprehensively refers to mediated online content mediation or facilitated electronic learning, is the transfer and acquisition of knowledge which takes place through electronic technologies and media. In simple language, eLearning is defined as, “learning that is enabled electronically”.

1.3 ELEARNING AT THE NAMIBIAN COLLEGE OF OPEN LEARNING

NAMCOL is a state funded educational institution, which was established by an Act of Parliament in 1997 to provide educational opportunities for adults and out-of-school youths. As stated in Section 4 of the Namibian College of Open Learning Act, 1997 [Act No. 1of 1997], the objectives of the NAMCOL amongst others, are to:

(a) contribute towards the social and economic development of Namibia by upgrading the educational levels of adults and out-of-school youths through programmes of open learning and by providing them with opportunities to upgrade their professional and vocational skills, as well as their levels of general education, to attain economic self-improvement.

(b) create opportunities for open learning using modern instructional techniques, including, but not limited to, the media and utilisation of technological equipment.

(c) provide guidance and counselling services to those seeking admission to programmes of open learning, as well as to students already involved in such programmes.

(d) provide an effective collegial governance structure that encourages active participation by all its constituents and reflects the collective input of such constituents.

(e) co-ordinate with other bodies, institutions, organisations and interest groups to facilitate co-operation and encouragement of an inter-disciplinary and multi-disciplinary approaches to open learning; and

(f) seek and promote co-operation with regional and international institutions providing education.

In response to its mandate, as stated in the NAMCOL Act 1997, to create educational opportunities using modern techniques and technology, NAMCOL has set the expansion of ICT and *e*Learning as one of its Strategic Objectives (NAMCOL 2005, 2010 & 2016). Students' enrolment in all its programmes at NAMCOL increased over

the past few years with, 47 412 students enrolled in 2017 compared to 40 151 students enrolled in 2015 (NAMCOL 2017).

As additional learner support initiatives to enhance teaching and learning, NAMCOL has developed interactive web-based, radio and video lessons. Interactive web-based lessons were developed in six of the secondary education level subjects and they can be accessed on the NAMCOL's website. The UNESCO and the Ministry of Education funded the initial development of these interactive web-based lessons in 2005. NAMCOL received an international award from the Commonwealth of Learning for the development of innovative *e*Learning lessons during the 4th Commonwealth Pan African Forum in 2006 held in Ochorio, Jamaica (NAMCOL 2007). Over the past eight years NAMCOL developed 1885 radio lessons and 240 video lessons (NAMCOL, 2016). The radio lessons are broadcasted on the National and community radio stations while the video lessons were aired on the National Broadcasting Corporation (NAMCOL 2016).

In 2014 NAMCOL developed an online programme for one of its tertiary level programmes, the Certificate in Early Childhood Development (CECD), as one of its strategic Objectives. Thirty students were selected to take part in the pilot phase of this programme. The thirty (30) selected students were provided with tablets and internet data, to enable them to access the web-based lessons (NAMCOL, 2016). However, as from mid-2017 the CECD lessons were moved to an open-source Management Learning System (MLS), "Moodle," which students could access via a link on NAMCOL's *e*Learning portal. All the 1300 registered students for the Certificate in Early Childhood Development were issued with a log-in password and informed to access the web-based lessons to enhance learning (NAMCOL 2017).

For the past six years NAMCOL has trained tutors on how to access and utilise the web-based lessons. Tutors are also trained on how to retrieve information from the internet and develop their own teaching materials (NAMCOL 2020). In a study conducted by Iipinge amongst student teachers at the Colleges of Education in Namibia, 75% of the respondents indicated that "ICT is providing individualised learning, providing current information, making research possible, making learning easier and making lessons fun and enjoyable" (2010: 208). Most of these student teachers are now practicing teachers and some are recruited as tutors at NAMCOL.

All the above stated initiatives are aimed at the expansion of ICT integration and *e*Learning at NAMCOL.

The Director of NAMCOL stated in his foreword in the 2016-2020 NAMCOL Strategic Plan, that there is an increasing demand by students for the availability of high quality online, resource-based, and flexible learning opportunities (NAMCOL, 2016). However, the increase of ICT in education does not guarantee its integration and quality. In support of this observation, Masoumi & Lindström (2012) state that with the escalating demand for eLearning, there is a worldwide call to enhance and ensure quality in eLearning especially in developing countries. Hence, the need to evaluate the quality of eLearning for the purpose of accountability and stakeholder satisfaction. The focus of this study was to evaluate the quality practice of eLearning at NAMCOL**.**

1.4 RATIONALE FOR THE STUDY

There is an increasing popularity of *e*Learning internationally and nationally. Over the past four (4) years, ICT integration has been one of the strategic priority areas of NAMCOL to enhance teaching and learning (NAMCOL 2015). Given the rapid increase and interest in *e*Learning, institutions invest greatly in the development, management, and maintenance of *e*Learning and NAMCOL has been no exception. To this effect, during the 2012-2016 academic year, NAMCOL spent over N$ 4.9 million in producing e-lessons, radio and television lessons and establishing computer laboratories in various towns in the country (NAMCOL 2016). In the light of the rapid increase in ICT investment at NAMCOL, there is a call for accountability by stakeholders.

Although NAMCOL has invested considerable resources in setting up computer centres and development of *e*Learning materials including the recently launched Open Education Resources (OER), there has not been research done to investigate the quality in eLearning at NAMCOL. This study, therefore, targeted quality assurance in eLearning at NAMCOL. Evidence based information will therefore help the management of the institution to make decisions on the way forward regarding quality in programmes offered through eLearning.

1.5 STATEMENT OF THE PROBLEM

Several scholars indicate that there is doubt in the quality control of eLearning services and programmes at many institutions around the world (Chua & Lam 2007; Casey 2008; Harasim 2000: 42; Njiro 2016; Oliver 2005).

The study by Gibbs and Gobler (2012) found that the development of the eLearning course materials is done rapidly which leads to inconsistency in applying quality assurance measures. In the same vein they are concerned that educators in eLearning environment are restricted to the structures presented by technology which led to pedagogical weak designs for learning. Students are found to value a stable and easy to use eLearning environment (Uppal, Ali & Gulliver, 2018). This is consistent with the views by Dabbagh (2002) that students are frustrated when they must navigate in and out using different passwords and having difficulties to download materials. These concerns raise the need for educational institutions to enhance and assure quality in eLearning (McGorry 2003; Ehlers & Pawlowski 2006).

With the introduction of eLearning programmes, there is an expectation of high quality of teaching and learning using eLearning by management at NAMCOL. In addition, the current strategic plan of 2015-2020 aims at the provision of quality programmes including eLearning. It is crucial to note that despite massive investment in the implementation of eLearning at NAMCOL, no research has yet been conducted on the quality of the eLearning at this institution. It was against this background that the researcher was interested in determining quality practices of teaching and learning in the eLearning methodology and to establish the quality assurance measures (QAMs) that are used in eLearning at NAMCOL.

1.6 THE RESEARCH QUESTIONS

1. What are the experiences of staff and students on the enhancement of quality assurance (QA) in eLearning spaces at the Namibian College of Open Learning (NAMCOL)?

2. How can the experiences of the NAMCOL staff and students on teaching and learning in eLearning be used to harness quality assurance design?

1.6.1 The following are the sub questions for this study.

1. What are the views of people (programme developers, distance education coordinators, IT Technical staff, tutors, and students) involved in eLearning at NAMCOL on quality in eLearning?
2. How do institutional policies support QA in eLearning at NAMCOL?
3. What quality assurance standards, processes and mechanism are in place to assure quality in eLearning at NAMCOL?
4. How are participants engaged in the quality assurance development and implementation in eLearning at NAMCOL?
5. What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance?
6. What strategies can be used to improve the quality and QA of eLearning at NAMCOL

1.7 PURPOSE OF THE STUDY

The purpose of this study was to determine and eventually narrate the quality assurance practices in the development and implementation of quality eLearning programmes at NAMCOL and subsequently create the eLearning quality assurance model that would help improve the quality of eLearning programmes at NAMCOL.

1.8 AIMS OF THE STUDY

The aim of the study was to explore the quality practices of eLearning services at NAMCOL and benchmark it against the internationally accepted standards.

The following were the objectives of this study:

(a) To determine how eLearning (material developers, learner supporters, technical support staff and the students) understand quality in eLearning,

(b) To establish what quality assurance measures in eLearning are in place at NAMCOL,

(c) To investigate whether the college has quality standards for eLearning,

(d) To determine the challenges encountered by those who engage eLearning services and products,

e) To determine the best quality practices in eLearning to enhance quality assurance in eLearning at NAMCOL.

1.9 CONCEPTUAL FRAMEWORK

The technology acceptance model (TAM) proposes that perceived ease of use and perceived usefulness predict the acceptance of information technology. Evaluating an eLearning module is necessary to ensure that the module can meet the learning objectives. Using a theoretical background TAM, underpinned by PDPP evaluation model, the study identifies the determinants of quality in eLearning and quality assurance practices which can enhance quality in eLearning. The quality determinants are the factors that will establish the quality standards in the eLearning systems, information and services. Once the system quality, information quality and service qualities are put in place, quality assurance practices will be applied to enhance quality eLearning. It should be remembered that the main purpose of this study was to explore the status and practice of quality assurance system in eLearning at NAMCOL to determine how the quality in eLearning might have been enhanced through the quality assurance system.

The technology acceptance model (TAM)

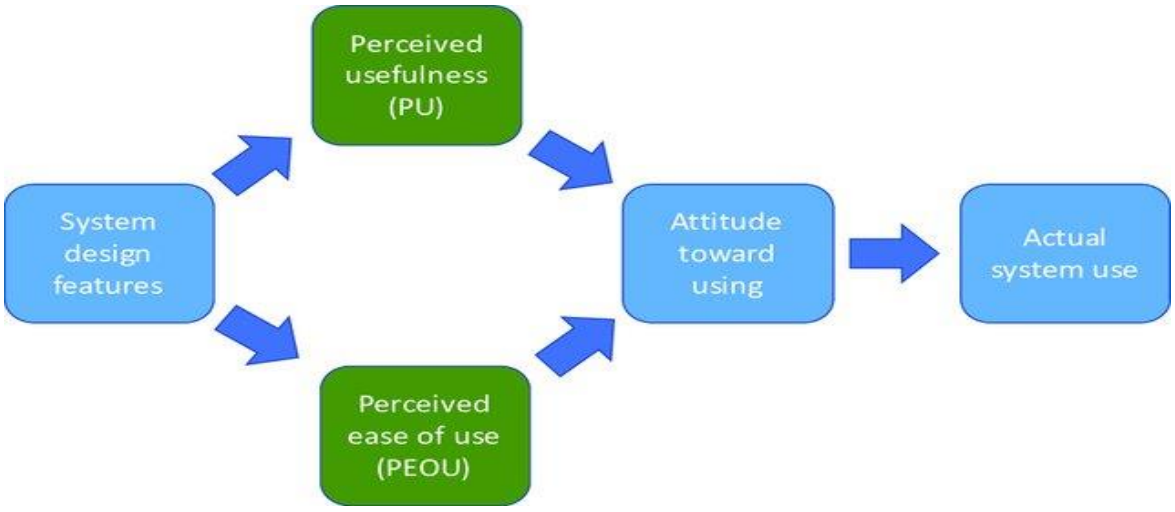

Figure 1.1: **The technology acceptance model (TAM) model, adapted from Davis (1993: 476)**

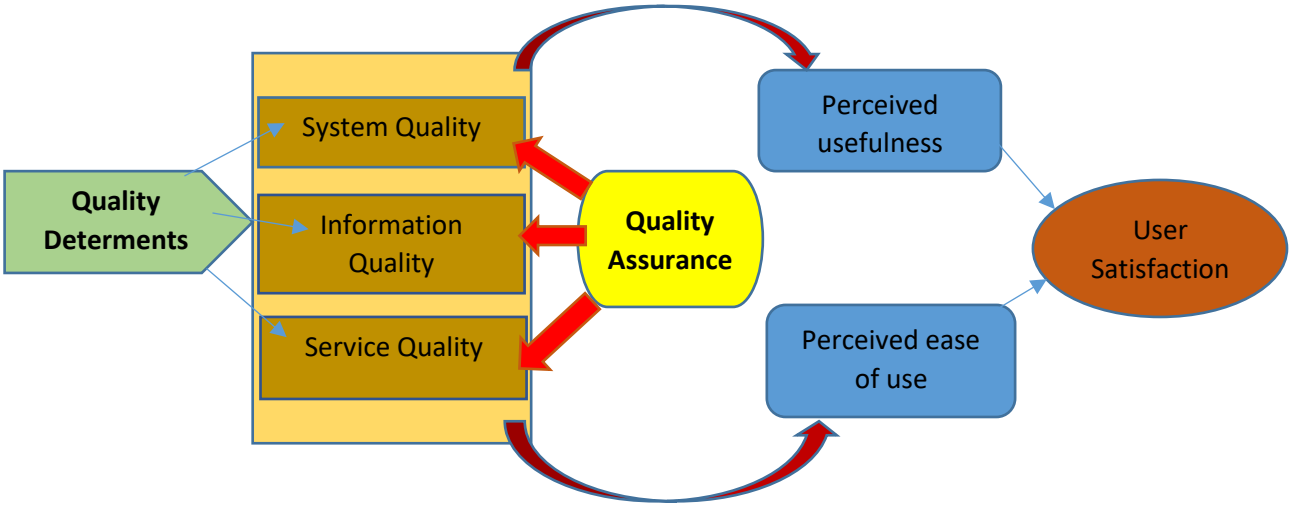

Figure 1.2. The Conceptual model for eLearning quality assurance (Adapted from Mahande and Jasruddin, 2018)

1.10 CONCEPT OF QUALITY

'Quality' is an elusive concept which is not easy to define as noted by various scholars. Most scholars contend with the view that there is no single meaning for the term and that it all depends on the context in which it is discussed (Materu 2007; Ehlers 2011). As a result, quality in education has been defined in the context of zero defects, value for money, and fitness for purpose of the institution or quality for transformation (Biggs 2001; Oliver 2005; Dagles 2008; Harvey & Green 1993). Furthermore, quality aims at meeting the commonly agreed standards as defined by institutions or a coordinating body and it aims at ensuring accountability in the operations of higher education institutions (Materu 2007; Vlachopoulos 2016).

1.11 WHAT IS QUALITY ASSURANCE?

According to the Council for Higher Education Accreditation (2002), quality assurance is a deliberate review process that ensures that acceptable standards of education are being maintained and enhanced in an institution. In a similar vein Harman and Meek (2000: vi) refers to quality assurance as "systematic management and assessment procedures used to ensure achievement of quality outputs or improved quality.", Materu (2007) concurs and postulates that the aim of quality assurance is to deploy methods which will guarantee stakeholders that the education institution keeps its

promises. In the same vein, NAMCOL defines quality assurance as the process of continuous evaluation of the process, systems, and programmes at the institution (NAMCOL 2012.

1.12 QUALITY AND QUALITY ASSURANCE IN ELEARNING

A study conducted amongst European universities revealed that about 53% of the studied institutions used a quality model for eLearning with the focus on learner satisfaction, external peer evaluation, creation of internal quality systems and course development standards (Wirth 2006). In the same study, 10% of the studied institutions were reported to apply the same quality assurance methods for both *e*Learning and conventional education (Ehlers 2011). There are two ways on how quality can be assessed namely through benchmarking or by measurement of standards.

Oliver (2005) observes that due to the high demand for accountability, educational institutions are expected to demonstrate that their eLearning approaches are effective and reflect quality in the eLearning curriculum and delivery. eLearning is found to be multi-dimensional, and it takes on different forms in different institutions, hence the quality management systems dealing with *e*Learning also vary to fit the planned purpose (Oliver 2005; Elhers & Hilera 2011). Similarly, the quality assurance methods which are employed in *e*Learning should consider that *e*Learning is not just the implementation of another way of traditional teaching. Therefore, one cannot just take the quality standards for conventional teaching/learning and apply them to *e*Learning.

Given the above background there is a need for institutions to design quality standards and quality assurance plans that will address *e*Learning (Zhao cited in Masoumi & Lindstrom 2012; Oliver 2005). This view is supported by Njiro (2016) who states that each institution must have clear quality notions upon which its standards are built. In addition, the quality of any service or product can be determined by the level of its customer satisfaction (Kadhila, Nyathi & Van der Westhuizen 2013). Therefore, the quality of eLearning is linked to student satisfaction as noted by Kadhila et al. (2013).

1.13 ELEARNING PROGRAMME QUALITY ASSURANCE MODEL

Phenomenological approach represents different approaches, from pure description to those more informed by interpretation. Phenomenological philosophy developed from a discipline focusing on thorough descriptions, and only descriptions, toward a greater emphasis on interpretation being inherent in experience. Heidegger's (1889 – 1976) developed interpretive phenomenology using hermeneutic, the philosophy of interpretation and postulated the concept of 'being' in the world, asking, 'What is being?'. Heidegger was interested in interpreting and describing human experience but rejected 'bracketing' because he accepted that prior understandings impact on our interpretations of the world. The philosophy of phenomenology resides within the naturalistic paradigm; phenomenological research asks: '*What is this experience like?*', '*What does this experience mean?*', and '*How does the lived world present itself to the participant or to me as the researcher?*' Not all eLearning research questions that seek to describe professional experiences will be best met by a phenomenological approach; for example, service evaluations may be more suited to a descriptive qualitative design, where highly structured questions aim to find out participant's views, rather than their lived experience.

Therefore, the phenomenological descriptive approach to my study employed qualitative data gathering tools which collected data that was then analysed to understand the experiences of quality assurance in eLearning participants. One of the outcomes of the 'quality movement' has been the development of a specialised leadership hybridity to ensure the smooth operation of (often complex) quality assurance systems including apparatuses for audit and accountability. Quality assurance systems at system, organisational or individual level typically operate within an eLearning Programme Evaluation Model as shown in Figure 1.

1.14 CONSTRUCTION OF AN ELEARNING COURSE EVALUATION MODEL

eLearning has become increasingly critical in the mediation of content and facilitation of learning (Nyoni, 2013) and learning mode in educational institutions and corporate training. The evaluation of eLearning, however, is essential for the quality assurance of eLearning programmes to enhance credibility.

Planning, development, process, and product (PDPP) evaluation model is a frequently used evaluation process in the field of education, is the acronym for context, input, process, and product evaluation (Zhang & Jiang, 2007). Within the context of PDPP, (Zhang & Jiang, 2007) employ the CIPP evaluation model and characteristics of eLearning programmes. Authors propose a system for evaluating eLearning programmes that consists of four evaluation activities: planning evaluation, development evaluation, process evaluation, and product evaluation; in short, the PDPP model. Based upon the proposed PDPP model and in line with the components and eLearning characteristics, the eLearning evaluation model consists of 26 items (see Figure 1.3).

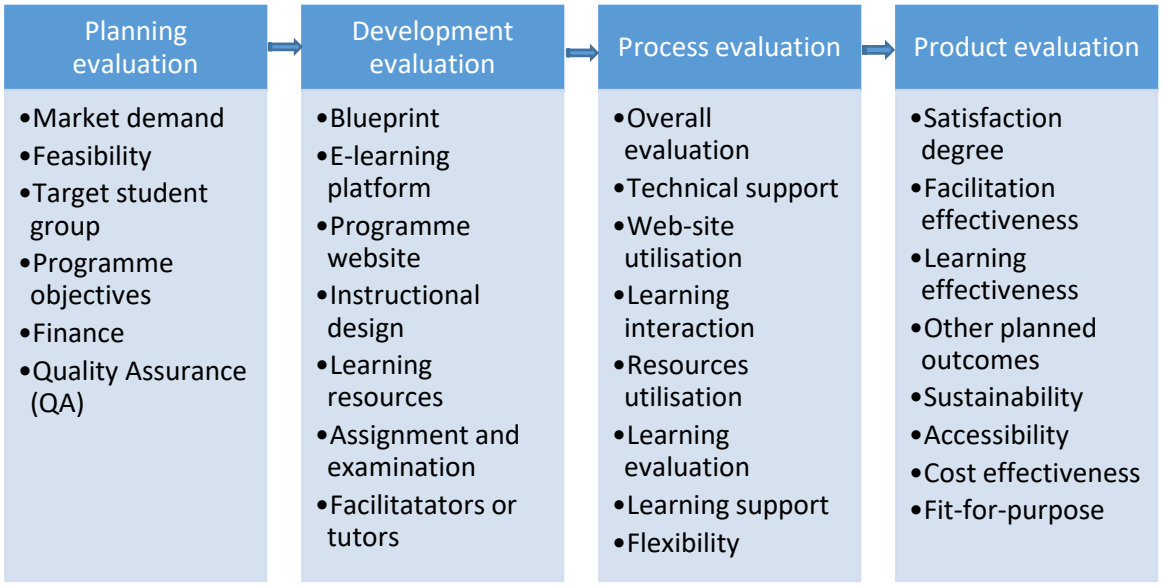

Figure 1.3 The PDPP evaluation model for eLearning programmes

Figure 1.3 shows that the planning evaluation of eLearning courses begins with market demand analysis and feasibility analysis. Market demands refer to needs of target student groups for knowledge and skills in their careers. If courses are job-related, employer perspectives on the essential needs of their employees also need to be considered. If a course is to be exported to other countries, it is necessary to analyse their local educational import policies, regulations, and levels of technical support. Then one needs to analyse the target student group, course objectives, financial issues, and quality assurance mechanism. Analysis of target student groups includes

age range, educational background, work experiences, work hours, study time availability, learning motivations, and job requirements. If the exported course is to be jointly launched with local educational institutions, the quality assurance system of the partner institution needs to be analysed as well. Development evaluation of eLearning courses involves analysing every component of programme development, including the programme blueprint, eLearning platform, course Web site, instructional design, learning resources, assignments and examinations, and tutors. Development evaluation is a process corresponding to eight activities of eLearning. According to the research findings of Zhang and Wang (2005), evaluating the eLearning teaching process should include the following eight dimensions: overall evaluation, technical support, Website utilization, student-student interaction, resources utilization, learning evaluation, learning support, and flexibility. Product evaluation measures the students' degree of satisfaction, teaching effectiveness, learning effectiveness, and any other possible additional outcomes. In the end, the sustainability of courses will depend on the results of the abovementioned analyses.

While most review and evaluation systems are developed based on promoting on-going improvement, review systems need to be robust enough to stop under-performing institutions, subjects or programmes from receiving monies from governments or other funders or from admitting students.

1.15 OVERVIEW OF THE STUDY

This study consists of six chapters distributed as follows:

Chapter One begins with an introduction, outlining the background and context of the study. This includes, the rationale of the study, statement of the problem, the purpose, questions, and aim and objectives of the study as well as the limitations and delimitations of the study as well as the definitions of key terminology used.

Chapter Two presents the review of the relevant literature. It presents the conceptual framework drawn from literature to illustrate how eLearning in education evolved and its significance in enhancing teaching and learning. It also deals with concepts of quality in education in general and quality assurance in eLearning. The chapter further

highlights work done regionally and internationally on the evaluation of quality in eLearning.

Chapter Three present the research methodology utilised in this study, which focuses on the research paradigm and framework adopted in this study. The research design, approach, sampling techniques, the data collection methods, the methods of analysis employed in this study are also discussed.

Chapter Four deals with data presentation and analysis.

Chapter Five discusses the findings of the study.

Chapter Six presents the summary, conclusions, as well as recommendations.

1.16 SUMMARY AND CONCLUSION

The study focused on the evaluation of quality assurance practices in eLearning at NAMCOL. Be that as it may, the researcher engaged information rich participants to get what they perceived as quality in eLearning by engaging qualitative data collection methods. This study therefore proposed to evaluate the quality assurance practices in eLearning at NAMCOL. The findings will help management at NAMCOL in their decision-making processes on the way forward in terms of the quality assurance of eLearning.

CHAPTER 2: LITERATURE SEARCH AND ANALYSIS

> *"While education unlocks the door to development, increasingly it is information technologies that can unlock the door to education*" (*Kofi Annan 2003)*

2.1 INTRODUCTION

This chapter reviews literature related to eLearning and quality assurance (QA). It starts with a brief outline of the development of Open Distance Learning (ODL) and then chapter focuses on defining eLearning, the status of eLearning in Africa. It also highlights some quality determinants of eLearning, quality assurance practices and challenges in eLearning. The chapter further explores the concept of quality and QA in education, approaches of QA and presents an overview of quality assurance and eLearning in the Namibian context. This review of literature on the conceptualisation of eLearning, quality, QA as well as their implications were guided by the following questions and sub-question of this research study:

- What are the views and experiences of academic staff, tutors and students involved in eLearning at NAMCOL on quality in eLearning?
- What quality assurance standards, processes and mechanisms are in place to assure quality eLearning?
- What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance?
- What strategies can improve the quality and QA of eLearning?

2.2 OPEN AND DISTANCE LEARNING (ODL)

Any discourse on quality assurance in ODL is bound to remain incomplete unless situated within its dynamic global context. It is, therefore, appropriate that the study briefly outline the broad contours of the development of ODL so that the case studies can be viewed against that backdrop (Koul & Kanwar 2006: 2). This section reviews literature on Open and Distance Learning (ODL) for this study. With this awareness, the researcher highlights the evolution and developmental stages of ODL and the characteristics of each developmental stage of ODL. This enables the researcher to identify how eLearning has evolved through the different developmental stages of

ODL. This section further highlights the definitions of ODL as outlined by various scholars.

2.2.1 THE ORIGINS OF OPEN AND DISTANCE LEARNING (ODL)

2.2.1.1 First generation

The **first generation** of Distance education programmes started over 150 years now with correspondence courses (Keegan 1996; Koul & Kanwar 2006).

Correspondence study mainly used print-based materials and communication was via postal services. According to Summer (2000), the first generation was much individualised and had isolated students due to postal communication services which were mainly one way. Despite this long existence, this mode and level of education is rated second or "second chance" (Koul & Kanwar 2006: 2) because it provided minimal pedagogical interaction.

Distance education was well established by the end of the 19th century with the establishment of the University of South Africa in 1946 as the first dedicated distance education university. Other institutions which offered correspondence education which emerged include the Malawi Correspondence College in 1964, the British Open University in 1969 (Young, Perraton, Jenkins, & Dodds 1980).

2.2.1.2 Second generation

The second generation of the Distance education is referred to as the Multi-media Model (Taylor 2001). This generation was based on print, audio, video technologies and according to Taylor (1995) it used some highly developed teaching-learning resources such as interactive videos, computer-based courseware, computer assisted learning (CAL) and computer managed learning (CML).

The British Open University pioneered the introduction of open registration, distributed team teaching via self-learning, mediated didactic communication and the incorporation of computer marked assignments (Koul & Kanwar 2006). These developments led to the evolution of the second generation of ODL. Just as in the first generation, learning in the second generation was individualised with no social learning due to the lack of interactivity amongst the students. Furthermore, Koul and

Kanwar (2006) state that the replacement of teaching as the crucial activity by learning, led to the emergence of ODL, which has made a lasting contribution to the evolution of education as an institution and is at the centre stage of socio-development.

2.2.1.3 Third generation ODL

The third generation ODL is referred to as the Tele-learning Model, based on applications of telecommunications technologies to provide opportunities for synchronous communication (Taylor 2001). Summer (2002) refers to it as the computer-mediated distance education since the distance education students are supported by the internet and the World Wide Web. The third generation displayed a gradual shift from print to electronic technologies for improved interactions. Koul and Kanwar (2006) postulate that during the late 1970s, there was enthusiasm and bold experimentation with technologies such as audio- and videotapes, audio- and video-teleconferencing, audio-graphic communication together with computer-assisted evaluation and course preparation. This development prompted the new model of education, which is the evolution of the third generation, epitomized by Universities in West Indies, China, and Japan. The third generation of ODL demonstrated great prospects, however, they are costly and in the long-term viable to those institutions with adequate resources for maintaining the required infrastructure (Koul & Kanwar 2006).

2.2.1.4 The fourth generation

The fourth generation is called the Flexible Learning Model based on online delivery via the Internet (Taylor 2001). The first online courses commenced during the mid-1990s and that is when the notion of virtual universities emerged. Virtual universities deliver courses mainly online using internet and to a certain degree print study material (Koul & Kanwar 2006). Instructional communication is done by means of computer conferencing and web-related technologies and contacts may be synchronous or asynchronous. This mode offers improved interactivity and access to wide-ranging teaching-learning resources offered online (Taylor 1996).

2.2.1.5 Fifth generation

The fifth generation of distance education is named the Intelligent Learning Model and is grounded on the fourth generation, which aims to exploit the features of the Internet and the Web. This generation is comprised of advanced technologies, such as internet, access to World Wide Web resources, interactive multimedia, computer mediated communication that uses the automated response system and campus student portals, which give access to institutional processes and resources (Taylor 2001).

The first- and second-generation distance education delivery, the variable cost of the distribution of materials varies, and is in directly proportion to the number of students enrolled. In contrast, the fifth generation has the potential to decrease the cost associated with providing access to institutional process and online tuition significantly. Taylor (2001) argued that through the development of automated course ware, automated pedagogical advice systems and automated business systems, the fifth generation has the prospect to deliver a major leap in economies of scale and associated cost-effectiveness.

Koul and Kanwar (2006) note that the fifth generation fully integrates pedagogy, educational and institutional management, and technology, unlike the previous four generations in distance education. They further state that technology is being used in every aspect of the education system including “educational administration, learner management, learner preparation for readiness, curriculum construction, instructional design and support services which include tutoring, library services and learner evaluation” (p.3).

The fifth generation has brought about the development of learning objects and management systems as well as the evolvement of eLearning (Taylor 2001). Summer (2000) highlights that the use of technology, such as radio, video, print and audio, has always mediated the separation between teacher and learner throughout the evolution of distance education. The use of multimedia and information technologies resulted in ODL undergoing evolutionary process leading to the evolvement of Open Distance and eLearning (ODeL) (Mitra and Hendrikz, 2009).

2.3 THE NEED FOR ELEARNING

It is important to state that eLearning has become a well-received medium of teaching and learning for education in the 21st century. It is also clear that there is a massive demand for higher education as more people are enrolling into institutions of higher learning (Boit & Kipkoech 2012). Be that as it may, the demand for higher education surpasses its supply. As a result, and according to the Organisation for Economic Co-operation and Development (OECD), various institutions of learning have introduced the use of information and communication technologies (ITCs) and have changed the delivery of content from face-to-face to eLearning to enhance the provision of education. Similarly, Mbodila, Mkabile and Ndebele (2019), posit that the rapidly changing and flexible ICT is calling for institutions of learning to use modern, efficient, and effective technologies for teaching and learning. Universities throughout the world are increasingly introducing eLearning and this is becoming the key mode of delivering education (Allen & Seamen 2008; Blackmon & Major 2012; Carson & Jesseman 2011). This increase is driven by the rising cost of conventional education in relation to the decreasing cost of storing and transmitting information electronically (Cakiroglu 2014). While developed countries have made significant strides toward integrating eLearning in their institutions of learning (Allen & Seaman, 2015; ECAR 2013), developing countries have not yet effectively implemented eLearning (Makokha 2016; Tarus 2015).

Above all, with the outbreak of the Corona Virus (COVID-19) pandemic across the world, which resulted in the closure of schools and universities in 165 countries, affecting more than 1.52 billion children and youth (Ngalomba 2020; World Health Organisation 2020) eLearning obviously becomes the most viable option for education delivery. This situation forced many institutions to implement the use of eLearning.

The rapid growth of ICT has also brought significant changes in the practice of eLearning. However, it is reported that improving quality in eLearning remains a challenge particularly for institutions of learning in developing countries (Hadullo, Oboko & Omwenga 2018b). This is due to lack of financial resources, poorly trained staff and inadequate academic staff (Aung & Khaing 2016). Hence, addressing quality in eLearning systems is of vital importance as this will play a role in increasing the success rate in the implementation and use of eLearning.

2.4 CONCEPTUALISATION OF ELEARNING

Learning could be regarded as a process that combines cognitive, emotional, and environmental influences and experiences for acquiring or enhancing knowledge and skills (Illeris 2000; Illeris 2009). eLearning is an umbrella term for the use of various technologies in the delivery of instructional materials to attain the learning outcomes through a distance learning mode. It is also crucial to note that eLearning can be traced back to the early 20th century when new learning perspectives started to replace rote learning and memorisation (Nyoni, 2014). Learning could be regarded as a process that combines cognitive, emotional, and environmental influences and experiences for acquiring or enhancing knowledge and skills (Illeris 2000; Illeris 2009). eLearning is an umbrella term for the use of various technologies in the delivery of instructional materials to attain the learning outcomes through a distance learning mode. It is also crucial to note that eLearning can be traced back to the early 20th century when new learning perspectives started to replace rote learning and memorisation (Nyoni, 2014).

There exists a range of eLearning definitions, and some are as follows. Fry (2001) describes eLearning as “the delivery of training and education via networked interactivity and a range of other knowledge collection and distribution technologies” (p. 234). Similarly, Govindasamy (2002) defines eLearning as distance education that uses computer-based technologies, information communication technologies (ICTs), and learning management systems. Moreover, extant literature defines eLearning as the mode of delivery of teaching and learning using ICTs such as televisions, radios, tape recorders, internet and computers (Ellis, Ginns & Piggott 2009; Ahmad 2012; Urdan & Weggen cited in Mbodila, Mkabile & Ndebele 2019). Ngumbane-Mokiwa & Letseka, (2015) argue that ODeL assumes that all students have access and are able to use modern technologies to access their study material and to interact with their teachers.

The researcher concurs with the conceptual understanding of eLearning as presented by the above scholars, however, the definition by Govindasamy (2002) has appealed more to the researcher’s attention as it is in concurrent with the researchers understanding of the concept. For the purpose of this study eLearning refers to the provision of distance education through computer–based technologies, information

communication technologies and interaction with Learning Management Systems (LMS).

Be that as it may, eLearning entails the following features:

- Flexibility in that it provides the opportunity to study at anytime and anywhere.
- Enables students to study at their own pace.
- Creates rapid and inexpensive distribution channels of educational reference materials.
- Avails educational opportunities to more people.
- Provides access to quality educational resources.
- Allows equitable access to information.
- Enhances personal computing and internet skills.
- Provides avenues for human development and bridges the digital divide (Dwyer, Barbieri & Helen 1995; Queiros & de Villiers 2016; Bharuthram & Kies 2013; Mbati 2012).

However, Phipps & Merisotis (1999) opine that even though eLearning has many advantages, the dropout rates have been very high compared to the conventional classroom approach.

2.5 SIGNIFICANCE OF eLEARNING

Extant literature reveals that eLearning increases access to education since many students can enrol for courses without the need to be physically at the institutional campus (Pappas 2008; Mbodila, Mkabile & Ndebele 2019). In addition, the Department of Higher Education and Training (2018) in South Africa commended eLearning as an effective and accessible mode of delivery that improves the provision to quality education especially in the geographically diverse context and to the remotely located students. However, Pappas (2008) cautions that institutions need to have plans and mechanisms in place to enable users to fully access online content and maximise their experiences especially for the novice users.

The most cited benefit of eLearning is its flexibility, as it enables students to study and interact anytime and anywhere. Students have the flexibility to engage with the course materials at any place they deem fit. This cut down on time and resources spent on

traveling (Mbodila, Mkabile & Ndebele 2019). The above statement is consistent with the views of Arkorful and Abaidoo (2014) that eLearning is cost effective since students do not have to travel long distances and since they can study at their own pace and their chosen place. A study by Oye, Salleh, & Iahad, (2011) found that the majority of leaners who use eLearning embark on their learning at their workplaces and only one third of these persons said that they used eLearning in the comfort of their homes. In a similar vein, Grifoll (2010) states that eLearning is a comfortable way to enrol for foreign qualifications and attend virtual classes with other students from all over the world (Grifoll 2010). He further points out that eLearning programmes provide better access to education for students with disabilities, for example the text-to-speech technologies. My argument is that flexibility brought by eLearning is possible in a country or a community with a wide internet coverage and students who have easy access to devices.

Moreover, eLearning is viewed to result in higher knowledge retention as it uses numerous methods of teaching- learning, such as blended learning as well as gamification, to increase the students' learning experiences (Mbodila, Mkabile & Ndebele 2019). According to Bada and Suhonen as cited in Mbodila, Mkabile & Ndebele (2019), the increasing adoption of Learning Management System (LMS) assists eLearning and enables teachers to monitor each learner's participation and track their progress to give them continual feedback.

2.6 PRACTICES OF ELEARNING / WHAT IS HAPPENING

The rapid development of new technology is seen as a promising avenue to support teaching and learning, resulting in institutions acquiring the new software and hardware. There has been more research on the use of ICT for educational purposes in developed countries. It should be stated that research has shown that there is a dearth of information on the use of ICT in schools in developing countries (Anene, Imam & Odumuh 2014). Despite this high rate of adoption of ICT, literature reveal that the usage of eLearning in Africa is still low as Unwin, Kleessen, Hollow, Williams, Oloo, Alwala, Mutimucuio, Eduardo and Muianga (2010) observed. Their study revealed that 46% participants in a study of 25 African countries revealed that they used LMS for teaching and uploaded materials less frequently, once a month. According to the eLearning Africa Report (2013), in Africa the efforts in the use of technology for

Learning have experienced 49% failure. The issue of access to the internet and digital platforms is particularly pertinent in Africa, with less than a third of the population having access to broadband connectivity (Ngalomba 2020). This study reviewed the implementation of eLearning in some developing and developed countries.

2.6.1 Examples of eLearning in developed countries

In a quest to meet the needs for lifelong learning, up skilling, and quality improvement, several countries have developed national eLearning strategies for their higher education sector. For example, the Higher Education Funding Council of England (HEFCE), adopted a strategy to embed eLearning in all institutions of higher education in a sustainable way by 2010 (HEFCE 2005).

European education systems are under pressure to reform and modernize their academic curricula, teaching methods, expand learning outcomes, new types of students, qualification frameworks, quality assurance research and innovation (CEC 2003). Hence the pressure to adopt eLearning to respond to the reform and modernisation (Mac Keogh & Fox 2009). In 2008, a total of 25% of the post-secondary education students in the United States of America (USA) were enrolled for full online courses (Allen & Seamen 2008). The pace of the purchase of computers in USA schools has been increasing and it is reported that over one million computers were in American elementary and secondary schools (Anene, Imam & Odumuh 2014).

In Malaysia, the Open University of Malaysia (OUM) is the main academic institution that adopted eLearning to deliver its programmes (Datuk & Ali 2012). These scholars opine that the further enhancement of eLearning in Malaysia was affected by the following factors, low adoption rate due to lack of quality e-content, bandwidth and connectivity issues which slow down the downloading of engaging content, digital divide as a large segment of the population is computer illiterate.

2.6.2 eLearning in developing countries

Turning to the African continent, it was discovered that in 2015 Kenya had 50 public and private universities (Hadullo, Oboko & Omwenga 2017). Kashorda and Waema (2014) report that most of these institutions offered some courses using eLearning in a blended and fully online mode. The main mode of learning being asynchronous LMS

supported eLearning. They further point out that most institutions of learning with blended learning have not invested sufficient funds in eLearning infrastructure and quality eLearning course materials. Nevertheless, what is worth noting is the collaboration that exists between Mount Kenya University and Telkom which has facilitated the issuing of 5 000 4G sim cards with 1GB data to students, although the problem of the slow connectivity persisted (Ngalomba 2020).

The study conducted by Hadullo, Oboko and Omwenga (2018b) at Jomo Kenyatta University of Agriculture and Technology (JKUAT) to determine the status of quality in eLearning, found that just above 50% of the students were happy with the course information, reminders, announcements and the course layout of the Learning Management System (LMS). However, it was recorded that the use of audio-visual content was not fully exploited, and the uploaded content lacked interactivity. About 53% did not like the course structure, they complained about the lack of constructive feedback from facilitators and that the content rarely included relevant examples to help understand the subject. More than 60% of the student participants indicated that they did not get emotional support, affirmation support and they found it difficult to interact socially on LMS with peers and tutors.

In addition, it was found that the lack of funds at JKUAT resulted in the institution's inability to equip the laboratories with computers and to have strong network to host the LMS. Therefore, the poor network connectivity and internet bandwidth weighed down the quality of eLearning. The study also revealed the lack of adequate training in course development and LMS usage to both the students and facilitators. In the same vein, a study by Makokha (2016) revealed that some instructors failed to include online quizzes and self-assessment activities in their programmes.

It should be highlighted that Kenya has a national ICT policy adopted in 2006 which aims at ensuring availability, accessibility, efficiency, reliability and affordability of ICT services in the country. The policy clearly states that the government will encourage the use of ICT at all levels of education in the country to improve the quality and access to formal education (Makokha & Mutisya 2016). Similarly, the Kenya Education Sector Support Programme (KESPP) prioritises the mainstreaming of ICT in teaching and learning process. Despite all these initiatives, there is no national eLearning policy to guide its implementation (Nyoni, 2014).

2.6.2.1 eLearning in Nigeria

In Nigeria, Kamba (2009) and Anene, Imam and Odumuh (2014) found out that there was a high degree of eLearning awareness among the universities. Kamba further suggests that most university staff and students use internet related eLearning sites to find information, but not for formal online learning, since their libraries could not provide adequate reference materials. This finding is in line with Oluwade (2012) in a study conducted in Kigo State University who further reported that the low level of investment and the lack of commitment to develop eLearning applications hindered the adoption of eLearning in the country.

While there is a growing demand for eLearning in Nigeria, the challenges are many. Anene, Imam and Odumuh (2014) point out that 51% of the students indicated that their bandwidth was limited, 61% claimed that the online materials were not interesting and engaging, while 69% said that the online course activities did not help them to learn. Most students reported that they did not engage online discussions with their teachers, nor did they receive or submit assignments online and these could be attributed to the lack of infrastructure and lack of awareness.

The major challenge for the implementation of eLearning in Nigeria is reported to be the erratic electricity supply in most parts of the country with most rural areas not even connected (Edemoh & Ogedebe 2014; Anene, Imam & Odumuh 2014). They further identified the limited inclusion of ICT programmes in the teacher training curriculum resulting in many not possessing the necessary ICT skills to fully integrate them in education and the inadequate infrastructure such as hardware, software and limited internet access to effect the acceptability of eLearning by both teachers and students. The cost of accessing internet was also found to be too high.

2.6.2.2 Uganda

A study conducted by Kasse and Balunywa (2013) in Uganda revealed that eLearning was mainly (80%) used for uploading learning materials, 12% to conduct discussion and only 2% used for assessment. The study further revealed major infrastructural and technical shortages which included lack of electricity and the unavailability of internet connectivity. It was further found that staff and students' attitudinal challenges

were also other factors which hindered the adoption and implementation of eLearning in Uganda.

2.6.2.3 Tanzania

With regards to Tanzania, Ngalomba (2020) states that eLearning is not a new phenomenon since the Open University of Tanzania has been offering its programmes by distance since 1992. Equally, the oldest in Tanzania, the University of Dar es Salaam, has strengthened the use of ICT by establishing the Centre for Virtual Learning to facilitate eLearning. The government of Tanzania also introduced reduced taxes on computer items which contributed to a good number of students securing their own laptops and personal computers. It was further observed that the government, private sectors, and non-governmental organisation have been working together to improve the ICT infrastructure in the country.

It should be noted that despite all these positive moves, the use of eLearning technologies to support learning and teaching activities in Tanzania remains very low. The reasons behind this could be attributed to resistance to change, and lack of knowledge, skills and awareness of the importance of eLearning in teaching and learning practices (Mugwanya, Marsden & Boateng 2011). Ndume et. al., (2008) identified lack of human resource capacity as one of the major challenges towards the successful adoption of eLearning programmes in the country. Similarly, Njenga and Fourie (2010) identified low awareness of eLearning issues and reluctance among most faculty members to use ICT for teaching purposes in Tanzania.

In addition to the above challenges, electrical power outages, poor internet connectivity and inadequate ICT infrastructure for eLearning were also cited as some of the major challenges bedevilling Tanzania (Ngalomba 2020). In addition, Ngalomba points out that eLearning programmes in the country are mainly donor funded and tend to be unsustainable in the absence of donor funding. Despite these challenges, there is still a lack of empirical findings on the extent to which institutions of learning in Tanzania have integrated eLearning technology into their curricula (Ndjone 2013).

2.6.2.4 South Africa

Turning to South Africa, research conducted in 2018 established that eLearning had advanced as observed by the new policies, structures and budget that support the integration of eLearning technologies in the institutions of higher learning (Czerniewicz & Brown in Maphalala & Mpofu 2018). A study conducted among rural university students in South Africa on the use of social media as an educational tool for teaching and learning showed a significant impact of students' collaboration and engagement (Mbodila, Bassey, Kikunga, & Masehele 2016b)

2.7 CHALLENGES THAT HAMPERS EFFECTIVE IMPLEMENTATION OF eLEARNING

Whereas the focus on barriers that hamper the effective implementation of eLearning might be perceived negatively, the logic is merely to caution and alert the users as to what can be encountered with the implementation of eLearning (Chigona & Dagada 2015).

A survey conducted by ECAR (2013), highlights that almost all institutions of learning in the world are involved in some practices of eLearning. However, in most developing countries, the implementation and growth of eLearning has not been successful due to challenges associated, among others, with course development, learner support, assessment, users and institutional factors (Mutisya & Makokha 2016; Chawinga 2016; Baloyi 2014a; Queiros & de Villiers 2016; Arinto 2016; Matipa & Brown 2015; Azawei 2016 Kisanga 2016). Start-up costs, its time-consuming nature, lack of social presence and interactivity, and learner demotivation also serve as barriers to the adoption of eLearning (Bharuthram & Kies 2013; Pollard & Hillage 2001).

A recurring theme in literature is its technology dependence (yet inadequate technical support); inadequate expertise in online tools; lack of access/connectivity; and hardware/software problems (Zhang & Walls 2006). Anxiety because of online learning has also been noted among students and teachers (Bharuthram & Kies 2013; Geduld 2013; Mbati 2012). Similarly, some scholars have noted that the majority of eLearning initiatives in developing countries lack the desired quality which contribute to the slow growth of eLearning (Ssekakubo, Suleman, & Marsden 2011 Kashorda &

Waema 2014; Tarus Gichoya, & Muumbo 2015; Mutisya & Makokha 2016; Chawinga 2016).

In Kenya, quality issues are linked to the following constraints: financial constraints, lack of ICT skills to use eLearning, inadequate and expensive internet bandwidth, inadequate ICT and eLearning infrastructure, lack of full utilisation of LMSs, lack of operational eLearning policies, lack of technical skills on eLearning and e-content development by academic staff, lack of interest and commitment among teaching staff and longer hours required for the development of eLearning programmes (Tarus, Gichoya & Muumbo 2015; Makokha & Mutisya 2016). While in Malawi, the use of eLearning was hampered, among others, by poor learning materials, delayed feedback from instructors, lack of academic support, lost assignments and grades, and failure to find relevant information for studies (Chawinga 2016).

Studies conducted by Mpofu et. al., (2012), Walimbwa (2008), Kamba, (2009) reveal that only a few teachers in Nigeria, Zimbabwe, Tanzania, Uganda, and Malawi could facilitate teaching and learning in an online setting. Be that as it may, in Tanzania the teachers' positive attitude is attributed to their computer experiences while their negative attitudes are due to poor facilitation conditions (Kisanga 2016). It was however, discovered that most African universities do not have explicit policies on eLearning. This impedes the adoption and implementation of eLarning in the institutions and the countries at large. It is in this context that Queiros and de Villiers (2016) point out that the lack of access to computer and internet from home are some of the barriers to the use of eLearning in South Africa. In the similar vein, Bharuthram and Kies (2013) and Geduld (2013) cite the following as barriers faced by students in South Africa, limited access to libraries and computers, high costs of computing, limited internet access, lack of English proficiency, and poor writing skills. The same barriers have been experienced by students in Namibia, due to the poor socio-economic situation in the country, many students do not have access to computers and internet at home due to high cost in acquiring the devices and internet. Also lack of access to well-equipped library services in communities across the country might have contributed to lack of English proficiency and poor writing skills.

Teachers are concerned about the inability of students to access material on Moodle due to the poor internet connectivity and insufficient infrastructure, leading to the

rescheduling of deadlines to accommodate the students (Maphalala & Mpofu 2018). To access Wi-Fi, students are found sitting in the corridors of the buildings with connectivity. They further recommend for institutions to invest in eLearning centres for students, where students can go and engage in eLearning with either installed devices or their own devices. These centres should not be used for any other activity, and hopefully that will promote the adoption of eLearning in institutions (Maphalala & Mpofu 2018). Similarly, Bates cited in Mbodila, Mkabile and Ndebele (2019) is of the opinion that the implementation of eLearning continues to be a challenge for the off-campus students compared to those on campus with 24/7 Wi-Fi access.

In a similar way, extant literature recommends that institutions which implement online learning in developing countries should pay close attention to their students' situations and perceptions. This should entail the creation of an environment that would accommodate both the disadvantaged and the techno-savvy students without compromising quality in teaching and learning. The restricted access to computers, apart from smart phones, hinders the implementation of effective eLearning as a medium of teaching as observed by Bharuthram and Kies cited in Queiros and de Villiers (2016).

Moreover, Maphalala and Mpofu (2018) argue that several students have smart phones, which could be exploited as learning platforms by assisting them to access the LMS. In the same fashion, Ngalomba (2020) indicates that research conducted in the United States revealed that the majority of university students are tech-savvy and spend most of their time on social media platforms for entertainment or news updates. However, the use for academic purposes is less common.

However, most students involved in eLearning, value it and have interest in basic training in technologies for learning, though they lack the necessary equipment (Mbodila, Mkabile & Ndebele 2019). Thus Coopasami, Knight & Pete, (2017) recommend that institutions should provide students with the required hardware and appropriate training to ensure the success of this mode of learning. Furthermore, the lack of eLearning implementation is not only among the students, but also among the teachers and instructors. Some teachers pointed to the slow internet connectivity and old computers in the laboratories as contributing to their frustration (Maphalala & Mpofu 2018). Chigona and Dagada (2015) reports that many teachers lag on the

uptake of ICTs for teaching and learning. The teachers' lack of confidence in terms of computer self-efficacy, lack of technical skill and lack of technological pedagogical knowledge affect their adoption and use of eLearning platforms for teaching and learning (Moore-Hayes 2011; Mishra &Koehler 2006; Compeau & Higgins 1995).

Moreover, Maphalala and Mpofu (2018) argue that training was not provided to teachers on how to utilize technology in their teaching as a result their involvement in eLearning is mostly related to posting announcements and notes without interactive exercises on the platform. They further lament about the lack of necessary pedagogical skills to integrate ICT in the curriculum. However, Qureshi, Ilyas, Yasmin & Whitty (2012) emphasise that the teacher confidence in their skills and ability to use eLearning, contribute significantly to the adoption and use of the technology.

Therefore, institutions are urged to provide training to teachers and students to boost their computer efficacy and increase the adoption of eLearning platforms (Chigona & Dagada 2015, Tarus, Gichoya & Muumbo 2015). It is argued that even those teachers who have sufficient training and access to resources do not use the technology for teaching and learning (Roblyer & Doering in Chigona & Dagada 2015).

In addition, the above scholars reported that the low quality of connectivity to the internet affects the users' ability to access the needed content. What makes matters worse, is the fact that institutions do not provide technical and system support for staff on the use of LMS, neither put structures in place to ensure proper implementation of eLearning. Therefore, teachers recommended the establishment of an IT Help desk to assist them with the technical challenges. Similarly, the average Internet penetration in Africa is reported to be at 39.8 per cent, with Namibia standing at 36,8% according to the as quoted in the eLearning Africa Report (2019).

2.8 EXPERIENCE AND OPINIONS ON ELEARNING

Davis (1989) argues that people will accept and use eLearning platforms once they perceive it as being useful and easy to use. Therefore, all institutions have the obligation to ensure that users are orientated on the importance of eLearning platforms as well as provided with sufficient training as teachers and students. In addition, users should be trained to equip them with the skills that will make the use of eLearning easy. It is important to keep in mind that the introduction of eLearning does not only

affect the students and teachers who are directly involved in the delivery, but also affect institutional processes to support students (Deepwell 2007).

In South Africa, teachers with computer experience and in-service training on how to use technology for teaching and learning display confidence in adopting eLearning (Chigona & Dagada 2015). They further state that younger teachers use eLearning more than the older ones. As stated earlier, challenges of implementing and maintaining eLearning are limiting factors for the adoption of eLearning, even though the users are willing to use them (Tarus, Gichoya & Muumbo 2015; Queiros & de Villiers 2016; Bharuthram & Kies 2013; Geduld 2013). Researchers also found that eLearning has merits in institution of learning, but it can also be a source of threats, as it can "contribute to information and digital exclusion, new social divisions and social stratification" (Ziemba 2016: 89).

2.9 IMPACT OF CORONA VIRUS DISEASE (COVID-19) ON ELEARNING

The outbreak of COVID-19 and the subsequent lockdown during the year 2020, caused the closure of schools and universities in about 165 countries, affecting 1.52 billion students and 60.2 million teachers. This was done as a measure to prevent the spreading of the virus (Ngalomba 2020). Given the fact that the threat of COVID-19 and the uncertainty about how long the crisis will last, that has necessitated the rapid move by most institutions of learning to eLearning, hence, making it imperative for institutions to enhance their eLearning platforms within a short space of time. As a result of this pandemic eLearning has become a viable option to sustain the teaching-learning process in most institutions of learning (Ngalomba, 2020 & Mbodila, 2020).

Although much has been achieved in developed countries to support eLearning at institutions, of learning, numerous factors hindered the immediate uptake of eLearning, such as limited internet connectivity, lack of latest ICT facilities, lack of capacity among staff and power outages (Ngalomba 2020; Mbodila 2020). Similarly, based on the listed factors, the student unions in Zimbabwe, Ghana and South Africa rejected the adoption of eLearning to continue teaching and learning during COVID-19 (Mokuredzi, Kokutse & Dell, 2020). The eLearning Africa Report (2019) recorded that only 7 per cent of households in the least developed countries, of which the majority are in Africa, had Internet access in late 2014.

Be that as it may, several students and parents own cell phones hence institutions are called upon to develop mobile friendly sites to enable them to access content (Ngalomba 2020). This is consistent to the eLearning Africa Report (2019), that "smartphone penetration reaches significant levels across the continent" and that it is now more affordable to buy internet for mobile phones than for home. In South Africa, universities faced challenges to turn to eLearning, due to the large numbers of first year students from diverse social background. Quite a number of these students come from poor rural communities and from poorly resourced schools with little or no ICT for educational purpose and with poor network coverage (Mbodila 2020).

In response to the students' needs, some institutions acquired laptops which are offered on loan to students, for example, the University of Witwatersrand was lending 5 000 laptops and gave data of 30GB to disadvantaged students who could not afford such gadgets and connectivity costs (Mukeredzi, Kokutse & Dell 2020). Similarly, the University of Stellenbosch also availed 1500 laptops on loan to its needy students (*University of Stellenbosch, 2021*). In the same vein Rhodes University ran an orientation workshop on Online teaching and learning for its students, engaged mobile network providers for affordable data as well as availing laptops on loan to its students who could not afford these gadgets and connectivity costs (Monnapula-Mapesela, 2020).

Ngalomba (2020) advises that regular quality check mechanisms should be put in place to address challenges as they emerge for continuous improvement. Given the student and institutional challenges, highlighted above, the call for a rapid switch to fully online approach is unrealistic keeping in mind that for many years the adoption and integration of eLearning in institutions of learning have not been effective (Mbodila 2020). Mbodila further points out that most institutions have no policies to promote eLearning, as such eLearning only exists in theory wasting money on renewing of unused license.

Consequently, institutions are advised to develop a plan to cater for both students, i.e., those with full access to internet and e-resources as well those without such access. The challenges which were experienced some 10 years ago are persisting, which is the reason why the current review of literature highlighted such factors which are perceived as hampering the rapid migration to eLearning due to COVID-19.

2.10 QUALITY IN ELEARNING

Given the above observations, the future of any discipline rests on quality and eLearning is no exception. Over the years Distance Education faced challenges for recognition and had to develop procedures to demonstrate quality in the early stages. With the introduction of eLearning, the need for quality assessment became greater as there has been more questions and challenges related to quality management and quality assurance especially in distance education and eLearning across the nations (Etedali & Feiznia 2011).

Quality in eLearning is a complex and multifaceted phenomenon, with contributions from education, technology and economy which are needed to achieve quality (Jung 2011). Ehlers (2004:7) argues that quality eLearning should "be defined from the position of the provision of learning services: the learner" as it has to do with empowering and enabling the students. The following are the three pre-requisites for quality eLearning. There must be learning content, there must be gadgets to be used by the students and teachers to access the content and there must be financial injection to put in place the needed infrastructures such as network and data. The development of quality process, systems, and the integration thereof throughout the whole organisation is not a quick fix and takes some time (Etedali & Feiznia 2011).

Rubin (2010) opines that high quality is the main indicator of competitiveness in this competitive era. Above all, institutions are compelled to manage the learning process and improve their competitive level. That can only be done once they have enhanced quality in education which include eLearning. The Standard and Guidelines for Quality Assurance in the European Higher Education Area (ESG) directs those institutions should demonstrate quality of their eLearning programmes and services at a national and international level as students from different countries are likely to be admitted in those programmes (Grifoll 2010). This refers to trans-border and transnational education through eLearning.

Quality is seen differently by different people and by nature its definition is contextual. Interest, priorities, and situations influence the definition of quality (Etedali & Feiznia 2011). Some scholars argue that quality of eLearning should be judged by the same criteria and standards as conventional education. Others are of the opinion that quality

concepts for the conventional education are not appropriate due to the structural difference of eLearning (eLearning Advisory Group, Stella and Gnanam cited in Jung 2011). Others still opine that, certain criteria and standard can apply to both conventional and eLearning, where the unique features in eLearning, such as "asynchronous interactions, open access to vast resources and distributed learning" should also be addressed (Jung 2011:446).

Quality in eLearning can be perceived in terms of fitness for purpose, adherence to guidelines, degree of stakeholders' satisfaction (Deepwell 2007). Be that as it may, eLearning must serve the aim of the institution and the particular programme, by increasing access to educational programmes, improving performance and user satisfaction, achieving more with less which should yield greater return for investment. Jung (2011) adds that eLearning relies more on the students' motivation and commitment to interactivity and collaboration, and that makes it challenging to assure quality in eLearning. However, stakeholders need evidence that indeed eLearning will achieve the desired objectives and hence the importance for quality management.

Quality standards provide a framework in an institution which will enable it to reach a harmonised, consensual concept on how to manage, assess and assure quality in eLearning. Ehlers (2004) opined that "there are universally applicable, standard perspective for assuring quality. Quality development always has to take different perspectives and different meanings into account". Quality standards have been regarded as being restrictive towards creativity and flexibility, hence the new generation of quality standards just cater for a basic framework to allow institutions to develop their own quality systems according to their requirements (Ehlers and Pawlowski 2006).

Quality Assurance in the conventional education programmes is at an advance level and has become an integral part of the national quality reviews, while in the eLearning programmes it is not as widespread (Huertas, Prades & Rodriquez 2010). In Europe, it is reported that Norway and Sweden national agencies have developed small-scale projects on quality criteria for eLearning, while in the United Kingdom, guidelines on the assessment of quality in eLearning have been drawn up. However, Huertas, Prades and Rodriques (2010) further report that the standards and guidelines which were established by European Association for Quality Assurance in Higher Education

(ENQA) did not place emphasis on quality in eLearning. As a result, there has been a tendency to apply measures which are applied in the general education in evaluating quality in eLearning (Deepwell 2007).

2.11 QUALITY ASSURANCE IN ELEARNING

Quality Assurance (QA) in eLearning can be undertaken for the purposes of international comparison, national accreditation, external and internal institutional review, users' information, and protection of the consumers (Wirth 2006). Extant literature emphasizes the importance of QA in any educational institution and echoes that without effective QA strategies, institutions will not survive the competitive environment in which they operate (Machumu & Kisanga, 2014). The use of external expertise in the process of quality assurance is important as it depicts a transparent outcome and boosts confidence of the public in the programmes and services being offered.

It is most compelling for educational institutions to develop policies that will maintain the programme integrity and quality of eLearning to enhance learning. (McGorry 2003). Quality cannot be assured by those designing and delivering the programmes alone, but it is the responsibility of all from the top leaders to the bottom (Deepwell 2007). Ehlers (2004) argues that the students' perspective is the best measurement of quality in eLearning. The Quality Assurance strategies should consider the rapidly changing technologies in eLearning. The rapid pace of change at which technology is emerging, places a demand on the educational environment and it intensifies the tension between the wish to innovate and the need to develop suitable quality process (McGorry, 2003; Deepwell 2007).

A study by (Jung, Wong & Belawati 2013) reveals that the formation of quality mentality is the most important factor in the development and improvement of QA systems in any educational institution. They further acknowledge that establishing a quality mentality is not an easy process in any establishment, but concurs with the study by Ossiannilsson (2012) on the following factors which requires one to be critical in the establishment and sustainability of quality mentality in eLearning:

- staff to become familiar with the quality and QA procedures.

- presence of formal quality policies and institutions' readiness to embrace incentives to aspire towards the development of quality mentality; and
- leaders to ensure the provision of material needs and the motivation of staff and students.

2.11.1 Quality Assurance Approaches in eLearning

There seems to be few literatures on recognised quality management approaches in eLearning (Etedali & Feiznia 2011). Nevertheless, Quality Assurance in eLearning can take one of the following approaches:

i. Quality management systems

According to Wirmth cited in Ehlers & Pawlowski (2006), there are organisations that support the development of quality management approaches, such as the European Foundation for Quality Management whose Excellence Model has been adopted by over 30 000 organisations across the world and Organisation for Standardisation (ISO) which has developed thousands of standards related to quality, amongst others. These organisations have developed standards that focus on customers and students.

ii. Criteria-referenced and checklist-based Quality Assessment

The above approach is associated with the Normative-static tools which are used to assess, develop, select learning platforms, learning software and learning management systems. Such tools assess the quality of eLearning without the background empirical studies. The quality criteria list usually covers the interface and technical usability, however, the criteria for pedagogy are mostly underrated (Etedali & Feiznia 2011).

iii. Benchmarking best and good practices

Benchmarking focuses on the continuous assessment using and comparing best practices to provide eLearning solutions (Rekkedal 2012).

iv. **Accreditation and certification approaches**

These approaches subject eLearning providers to periodical external audits using clear quality criteria for accreditation and certification (Etedali & Feiznia 2011; Rekkedal 2012).

v. **Quality competition and awards**,

Several eLearning and ICT organisations award institutions for outstanding eLearning solutions (Etedali & Feiznia 2011; Rekkedal 2012). I was on this basis that in 2006, at the 4th Commonwealth Pan African Forum held at Ochorio Japan, NAMCOL received an international award from the Commonwealth of Learning for the development of innovative eLearning lessons (Afunde 2015).

2.12 SOME ELEARNING QUALITY ASSURANCE PRACTICES IN EDUCATION INSTITUTIONS

i. QA at institutions in the United Kingdom (UK)

It is interesting to note that Coventry University has adopted the action evaluation framework approach, a participatory method which involves stakeholders from the beginning to evaluate quality in eLearning (Deepwell 2007). This is a three-phase approach which is comprised of: baseline, formative and summative evaluation. The action evaluation follows the following steps:

1. Stakeholders identify what the level of success is at the individual, group and organisational levels.
2. Collecting data from document analysis, discussions & observation and organising data.
3. Reporting method, where the evaluator presents a structured report to the stakeholders at various points within the evaluation.

The report makes provisional and provocative statements as gathered during data collection and raises questions for consideration by the stakeholders. Stakeholders are given the chance to respond to the report by either further clarification, correction, support, or rejection of the reporter's findings (Deepwell 2007).

The study conducted by Jara and Mellar (2007) at four institutions in the UK on the effectiveness of quality assurance procedures, revealed that procedures are strongly linked to the notion of accountability and enhancement as they are required to be in line with the Code of Practice established by the Quality Assurance Agency (QAA). Hence each institution has the responsibility to set up adequate internal procedures that will assure the quality of its programmes according to its internal standards (QAA 2002).

Their study further found that key factors covered in the QA include course definition, teaching and learning, student support, learning resources and QA procedures. However, the study discovered that the major issues left out from the quality documentation was related to assessment strategies, and organisational issues. Strategies to collect student feedback was observed not to be fully effective (p.3). In addition, eLearning programmes were isolated from the institutional processes since the institutional quality assurance mechanisms "allowed these courses to carry on their business on their own, sometimes without significant oversight, as they had not set up any particular requirements for online courses" (p. 3).

Furthermore, Jara and Mellar's (2007) found that the external examiners and annual review were some of the few quality assurance procedures in place. However, the perceived effectiveness on the annual review varied, while most staff regarded annual review as worthwhile, others felt that their institutions were not prepared to deal and solve the identified problems thus rendering the annual review ineffective. In the similar vein, the strategies of collecting student feedback were found not to be effective and that impact negatively the module evaluation due to the low response rate. The study concluded that the quality assurance for eLearning programmes requires a different organisational approach from the conventional education.

ii. QA in a USA institution

In a quest to establish a process to assure quality in eLearning, the University of Houston-Clear Lake (UHCL) gathered stakeholders, including students, faculty staff, administrators, industry representatives who employ graduates and the university community to define quality eLearning programmes (Kidney, Cummings & Boehm 2007). The stakeholders established the course standards and developed a set of

quality assurance. Perspectives differed widely in defining course quality. For learner's quality was "easy accessibility with correctly working links, good usability, accurate & thorough instructions". For the teaching staff quality included the ability of being "easy to teach, quick preparation for semester, easy to update new information, intuitive course management" and the administrators regarded quality as accurate & valid information, boosting enrolments, free from problems that might yield institutional liability and enhance the institution's reputation" (p.18).

In addition to the above, UCHL employed other Quality Assurance strategies which consisted of eight factors that were grouped in three general categories, namely:

1. Team review:
    a. instructional plan review,
    b. Web design review.
2. Staff review:
    a. Editing,
    b. Usability and accessibility,
    c. Maintainability,
    d. Copyright,
    e. Infrastructure rigor, and
3. Peer review:
    a. Content rigor.

Below we discuss these three categories.

1. Team review

a. *Instructional plan review*: during this stage the instructional designer presents the summary of the plan to the management team consisting of senior instructional designer, project manager, quality assurance evaluator, teachers and management

members. The plan covers all the details related to the course such as: the learning objectives, modules involved, learning materials & activities, assessment activities. The team checks whether the course benefited from quality instructional design guidelines.

***Web design review*:** At this stage a team of web developers and graphic artists develop a prototype of the course according to the instructional plan in the institution's Learning Management System with the links to all the relevant sites such as course applications, student support and finance. The review tests the effective functionalities of the links and identifies the potential problems that might affect the students or teachers on the programme. The web design review is important in shaping the quality of eLearning platforms (Kidney, Cummings & Boehm 2007).

The instructional and web team review enhances the programme quality as it helps the project manager to keep track of the course progress in the early phase of development, identify needs for professional development of the team members and review the process, strengths and weaknesses of the existing standards and policies that may come to light and that can be modified.

2. Staff review

The quality assurance evaluators, who are staff members, receive all the course materials both print and online for total review. The evaluators look at the course materials from the learner's perspective, check the accessibility, usability, functionality, copyright infringement, infrastructures and edit the content of the eLearning programme. After that, reports are compiled on the ease of navigation, finding, and understanding programme information.

The concept "user-centred" design, according to Garret cited in Kidney, Cummings & Boehm (2007: 22), is recommended for application as from the beginning of the course production for process improvement. User-centred design is a philosophy and a process (Katz-Haas 1998). The user is at the centre of the design and much emphasis is placed on the cognitive factors such as perception, memory, learning, and problem solving that affect human interaction with eLearning platforms. Katz-Haas (1998) further indicates that user-centred design requires the understanding of the prospective user's goal, objectives, abilities, skills, and tools, thereby impacting the

design and development of the eLearning programme. Hence, strengthening the user-centred design knowledge, skills and understanding of the instructional and web designers enhanced the online course qualities at UHCL (Kidney, Cummings & Boehm 2007).

The University invested in a staff proof-reader and editor who ensures that each programme is reasonably free from spelling, grammar errors and inappropriate language, style, and usage. Editing helps to portray professionalism in writing and presentation as expected from the students. In addition, a knowledgeable staff reviewer reviews the impact on the institutional infrastructures with much emphasis on the server performance, bandwidth issues and submission of course assignments.

3. Peer review

The review of the content, rigor, andragogy is regarded as important to ensure the quality of the eLearning. Peer review can be conducted by external or internal experts to ensure that the programme have timely, accurate, and complete information. That will help in maintaining the academic rigor of the eLearning programme for certification and accreditation. However, it was reported that faculty members voiced objections to peer review with some arguing that it is not consistent with academic freedom and that it was cumbersome to execute with no academic reward (Kidney, Cummings & Boehm 2007).

iii. Quality Assurance in China

Zang and Cheng's (2012) model for the evaluation of quality of eLearning in China consists of the following four evaluation activities:

- planning evaluation,
- development evaluation,
- process evaluation and
- product evaluation.

Planning evaluation analyses the market demand, feasibility, course objectives, target student groups, finance, and quality assurance when preparing an eLearning course plan. While in the development evaluation, the blueprint of the programmes is

analysed. Zang and Cheng (2012) further reported that the blueprint deals with the "formation of the course team and its members' roles, course background, course introduction, course objectives, learner analysis, requirements for learning facilities and skills, course modules/units, learning materials, assessment and examination, communication and collaboration in learning, learner support services, teaching model(s), course materials writing schedule, quality assurance, and copyright issues" p.73.

This is followed by the analysis of the creation of the eLearning platform and course Web site, instructional design, learning resources, assignment and examination arrangements, and the recruitment and training of the teaching staff. Process evaluation deals with the evaluation of the process of course delivery which includes the overall evaluation, technical support, Web site utilisation, learning interaction, resource utilisation, learner support, assessment, and flexibility. Zhang and Cheng (2012) further state that process evaluation mainly uses learner and teacher's feedback and the programme coordinator's monitoring of the eLearning tutorials. Finally, the product evaluation deals with the effectiveness of the course, teaching, and learning.

2.13 QUALITY DETERMINANTS IN THE IMPLEMENTATION OF eLEARNING

Several national, regional, and international agencies have developed Quality and QA guidelines for eLearning. However, Jung and Latchen (2007) point out that several institutions apply the same quality criteria of conventional face-to-face programmes to eLearning. It could possibly be due to the lack of existing internal quality assurance procedures amongst the new entrants in the eLearning field (Endean, Bai & Du 2010). Institutions tend to adopt recognised quality standards to address their QA needs (Zang & Cheng 2012).

The following are some of the QA guidelines: The European Association of Distance Teaching Universities established E-xcellence, which offers a self-assessment tool with 33 benchmarks in the following six categories: curriculum design, course design, course delivery, staff support, student support and strategic management (Jung 2010). In the United States of America (USA), the Commission of Institutions of Higher Education developed the Best Practices for Electronically Offered Degree and

Certificate Programmes with the following quality components: institutional context and commitment, curriculum and instruction, faculty support, student support, and evaluation and assessment.

The Open University of China, on the other hand, adopt the quality indicators in the following five quality areas: development of teaching resources, management of teaching processes, learning support services, instructors' support services, and finally, learning settings (Du, Yang, Yin & Zhang 2009, as cited in Jung et al. 2011). With the aim to assist institutions in search of quality assurance for continuous improvement of their eLearning programmes, The Sloan-Consortium published the following elements of Quality: The Sloan-C Framework with the following five pillars of quality: learning effectiveness, access, student satisfaction, faculty satisfaction and cost effectiveness (Moore 2002).

The National Association of Distance Education Organizations (NADEOSA) of South Africa developed 212 quality elements in the following 13 Quality criteria: policy and planning, students, programme development, course design, course materials, assessment, learner support, human resource strategy, management and administration, collaborative relationships, quality assurance, information dissemination and results (NADEOSA 2005). The NADEOSA quality criteria are also used as a framework in the quality collaboration between NAMCOL and the Botswana College of Open Distance Learning (BOCODOL) (Keendjele 2018).

Hadullo, Oboko and Omwenga (2018b), established that the following eight factors determine the quality of eLearning: course design, course support, social support, administrative support, course assessment, learner characteristics, and institutional factors. These factors are in line with Phipps & Merisotis' (2000) views on the seven quality benchmarks in eLearning which reflect common factors found across QA studies. These are: institutional support, course development, course structure, teaching/learning, student support, faculty support, and evaluation and assessment. As stated by Jung (2011) a closer analysis of the various quality frameworks reveal that they mainly focus on common grounds, even though different wording is used. The following section addresses the quality determinant factors with the aim to elaborate what each factor represents.

i. Course Design

Wright (2014) opines that, institutions that offer eLearning should provide a good LMS and adequate course information. In addition, rich and relevant content with the use of multimedia should always be incorporated in eLearning courses so as to boost academic self-efficacy (Lim, Park and Kang 2016) and to improve learning and keeping students engaged (Muuro 2014). Similarly, Mtebe and Raisamo (2014) call on instructors to develop quality course content that are appropriate to students' knowledge, skills, and abilities on the use of the LMS as well as to meet intended educational benefits.

During the development of the eLearning materials, institutions are advised to engage a team approach involving subject matter experts, instructional designers, web programmers and graphic artists to enhance course design (Wang 2006). Additionally, the evaluation of the course should utilise comments from external reviewers, learner inputs, faculty evaluation and current relevant research to enhance the course design. The development of modern eLearning programmes is much more than digitalising books and lecture notes, hence more audio-visual forms of content should be used.

Gibbs and Gosper (2012) opine that the development of the online course materials is mostly done rapidly resulting in the eLearning content being developed from piecemeal linked resources. This results in the risk of diverse quality delivery within modules as resources are drawn from different files (Uppal et al 2018). Educators mostly adapt to the structures presented by technology and the marketplace, which are restrictive and lead to pedagogical weak designs for learning (Gibbs and Gosper, 2012). They call therefore on educators to find ways to communicate and articulate their teaching and learning needs to ICT staff including the software developers. That will ensure more effectively the successful interaction of learning content and technology, putting more emphasis on learning. Leading to teaching and learning. They call on more emphasis to be placed on learning rather than delivery in the aspects of learning technologies and learning management systems.

A descriptive survey by Mutisya & Makokha (2016) revealed that most of the course modules were not interactive, a thing that resulted in low quality in eLearning. They further state that 60% of the online course modules was made up of just uploaded

lecture notes and teachers merely using the LMS as a documentary repository to upload lecture notes, power point presentations and recommended readings.

Shulman (1986) detailed that teacher and tutors have the content knowledge (CK) in their subjects, however they require the knowledge on how to teach the content effectively, pedagogical knowledge (PK). Shulman further demonstrates that when the teachers are able to connect the content knowledge with the appropriate pedagogical knowledge, that results in pedagogical content knowledge (PCK) which guides the teachers on the best method to teach the specific subject content.

The effective use of the ICT in the teaching of subject content is influenced by the technology knowledge (TK) possessed by the teacher (Mishra & Koelher, 2006). Additionally, teachers with Technological Content knowledge (TCK) need to have knowledge about the technology tools that can be used within the teaching of a particular subject content state Mishra and Koelher. Therefore, teachers with the content knowledge, pedagogical knowledge, and the technological knowledge will be able to select the appropriate ICT tools when designing e-content for teaching and learning. This is known as Technology Pedagogical Content Knowledge (TPCK or TPACK). Accordingly, the quality course content has a positive effect on the students' satisfaction towards the use of the LMS system (Hadullo, Oboko & Omwenga 2017).

ii. Content Support

It has been discovered that the more the students participate in the eLearning platforms, the more they will experience deep learning which enhances learning experiences. Hence, tutors are required to design teaching and learning activities that fit all the aspects of the curriculum to ensure the successful implementation of eLearning as well as the enhancement of the students' participation (Mbodila, Mkabile & Ndebele 2019). They further call upon the teachers to use the transformative power of eLearning to create discussion forums which demonstrates the proven teaching and learning educational strategies.

It has also been proven that reminders and announcements help online students to keep updates with course issues (Wright 2014). Just as timely feedback and interaction with tutors via emails, chatrooms and collaborative activities improve the content support to students (Queiros & de Villiers 2016) it also generally boosts

learning, whereas the lack of timely feedback is reported to cause anxiety and reduce enthusiasm and engagement (Çakiroğlu 2014; Mbati 2012).

It is important to provide the course participants with some guidelines on the course, information on the due dates for the completion of the activities and weight of the assessments. These will enable the students to structure and plan their learning activities (Aisami 2015). Irrespective of the mode of learning, the learning outcomes should be clear to the students and the eLearning platform should clearly communicate the learning outcomes to the students to avoid confusion (Mbodila, Mkabile & Ndebele 2019). In addition, teachers are expected to set the learning objectives and goals before setting any eLearning activities. Each learner engagement should be linked to a learning outcome and should also be measured for summative or formative assessment purposes.

iii. Social Support

Research has also shown that participation through online communities enables students to share experiences and stimulates a degree of cognitive engagement. The quality of eLearning programmes is influenced by student-teacher contact, prompt feedback and interaction between students (Queiros & de Villiers, 2016; Rekkedal & Qvist-Eriksen, 2004). This is referred to as social presence (Bharuthram & Kies 2013; Cook, 2012) or learning communities in the online context and it enhances mutual support and exchange of ideas amongst the students (Phelan 2012).

Additionally, Arkorful & Abaidoo (2014) note that the use of eLearning platforms such as discussion forums, offer opportunities for relationships between teacher-students and student-student. Social presence creates a sense of community among students-teacher and student-student, and it also encourages positive attitudes towards eLearning, enhances engagement, student satisfaction and improves retention (Carlson & Jesseman 2011; Geri 2012; Mbati, 2012; Leong 2011). Similarly, research has also shown that frequent participation in discussions and online platforms could lead to improved attainment of learning outcomes, learner satisfaction and higher levels of actual learning (Mbodila, Mkabile & Ndebele, 2019).

Various social support such as informational, supportive, instrumental, and emotional support are mainly provided from peers, forums, chat and eLearning group work

(Munich 2014; Weng & Chung 2015; Queiros & de Villiers, 2016). Social presence can be implemented via online discussion forums (ODFs). Well-designed online discussion forums can foster learner-centred instruction and implement constructivism via active engagement (Samuels-Peretz, 2014).

Due to the distance between students and teachers, the online discussion forums provide more thoughtful, critical, informative, and extensive interaction than synchronous communication (McGinley, Osgood, & Kenney 2012). Since students have the time to reflect and craft contributions before posting, that reduces vulnerability (Carlson & Jesseman 2011). Not all the students participate in online discussion forums (ODFs). A study in South Africa state that students who are not fluent in English, do not participate in online discussion forums in fear of being misunderstood (Bharuthram and Kies 2013). In Ghana, Asunka (2008) reported that students were reluctant to initiate discussion threads. This is supported by Freeman (1997) who suggest that being anonymous may encourage participation on the online discussion forums.

iv. Administrative Support

It has also been suggested that the administrative support in learning institutions should include admission and enrolment services, counselling services and guidance for funding which should be provided to students (Jung 2012; Makokha & Mutisya 2016).

v. Course Assessment

Assessment is a critical component in any education system; hence any assessment activity should be aimed at measuring the learning objectives, and ought to be relevant, feasible, accurate and congruent with the objectives and content of the course (Quality Measures Rubric Standards (QM) 2014; Wright 2014). In eLearning, teachers experiment with new ways of teaching, therefore, assessment is vital as it will prove whether the teaching is done effectively (Carnevale 2001). Students should be given links to the institutional policies on grading and evaluation as that will enable them to keep track on the fairness of the assessment activities and criteria (QM 2014). Similarly, the number of assignments and due dates should be reasonable (Wright 2014).

Assessment in eLearning usually consist of continuous assessment tests, assignments, and end of semester/year examinations. However, O'Reilly (2000) advocates for alternative assessment or authentic assessment methodologies which are more formative, such as group support projects, co-authored papers, online debate, peer review and self-review. Be that as it may, feedback is an essential component of assessment (Entwistle, in Mbodila, Mkabile & Ndebele 2019), and should be provided to students timeously. In addition, Thompson's (1997) reported in his study that the provision of non-constructive feedback on the assessment work was one of the contributing factors to student attrition. Hence the need to implement sound monitoring systems to ensure the provision of constructive and timeous feedback. Chawinga (2016) notes that it is of outmost importance for institutions to safeguard the students' grades and assessment, as well as ensure the release of the assessment outcomes on time. Constant feedback and communication in eLearning enhance the students' experiences.

vi. Learner Characteristics

> *"The instructional value of any technology is only as good as the quality of its implementation and the skill and comfort levels of its users"* (Mayes cited in Queiros & de Villiers 2016:173).

The success of eLearning depends heavily on the students' motivation and engagement (Jung, 2011 & 2017). Hence, it is crucial that the students possess the needed computer skills and get training to equip them with the required skills to use the LMS and all the other ICT related to eLearning. The starting point in the implementation of eLearning are the students and facilitators and not the computer as observed in many educational institutions (Wang, 2006). Learning culture is a social process which involves behavioural change.

Literature shows that many students are more exposed to technologies and are more skilled compared to their teachers on the use of technologies. They are reported to spend more of their free time on Facebook, Nintendos, surfing internet on smartphones, sharing videos on YouTube (Quinlan cited in Chigona & Dagada 2015). Wang, Shannon, and Ross, (2013) believe that technologically proficient students are more likely inclined to prefer and cope with eLearning and that they are more likely to

have higher motivation. They further noted that novice students come to the eLearning environment without any computing skills, which leads to anxiety and loss of control.

However, students are required to master digital literacy, first by learning to use email, discussion forums, and internet searches (Mbati 2012). For that reason, institutions are advised to determine the learner's technological readiness (Coopasami, Knight & Pete 2017). That should then be followed by improving the students' and the teacher's knowledge and skills through training workshops and seminars to prepare them to take up eLearning as well as to increase the rate of technology acceptance by the users (Hadullo, Oboko & Omwenga 2017; Mayoka 2014). It was further found that students value a stable and easy to use eLearning environment (Uppal etc. 2018). This is in line with the findings by Dabbagh (2002) that students are frustrated when they must navigate in and out using different passwords and having difficulties to download materials.

Furthermore, Ehlers (2004) in a study on the quality of eLearning from the learner's perspective, Ehlers reported that most important students value the interactions between learner-to-learner and the learner-to-lecturer as that keep them leading towards their goals of learning. Students are reported to appreciate learning from others, "…. collaborativeness is an evidence base best practice in teaching and learning which recently integrated to the web 2.0". (Ehlers, 2004 p.3). Another quality determinant as identified by is Ehlers (2004), is the information possibilities which are available to students. Ehlers reported that students want to be provided with access to as much information related to the institution including the tutor qualifications, course content, industry where they can apply their skills.

vii Instructor characteristics

The attitude, knowledge and understanding of the teachers have an influence on the adoption and implementation of eLearning (Mbodila, Mkabile & Ndebele 2019). Literature confirms that the teachers are likely to resist the use and adoption of eLearning if they do not understand the meaning or see the value brought about by eLearning to education (Al Senaidi, Lin & Poirot 2009). This is in line with the Technology of Acceptance Model, which emphasizes that users will not adopt eLearning unless they discover its usefulness (Davis 1989).

Instructors who are not trained in the use of the LMS and eLearning, will not be able to provide adequate support to students. This is supported by Mbodi et al. (2019) who argues that lecturers at institutions of learning have a challenge to create an online teaching and learning environment which can support diverse identities and ensure successful participation. Wang, Cowie & Jones (2008) in Taiwan, grouped the challenges encountered by the teachers into, personal and technological challenges. Personal challenges refer to the commitment and time required to develop effective pedagogical eLearning techniques. While technological challenges are related to the teachers' limited technical skills and facilities which deter the effective use of technology.

The teacher's experience, age and background are strong determinants of eLearning adoption and integration in institutions of learning (Mbodila, Mkabile & Ndebele, 2019). Therefore, the profiling of teachers should be done for institutions of learning to determine those at entry or advanced stages of adoption and integration to provide them with adequate individualised support. Besides, the quality of online programmes in education is strongly correlated with how the professional development approaches respond to the needs on the online teachers (Baran & Correia, 2014, p. 96). In addition, Roy & Boboc (2016) opined that due to the unique nature on online learning, there is a need for continuous professional development and reinforcement in terms of instructional strategies and student-teacher interactions.

Staff reported that online teaching involves much workload than face-to-face teaching as its preparation requires about three times more preparation time (Dabbagh, 2002). This can be compared to the fact that it takes lesser time to speak during face-to-face compared to the time spend crafting a thought in writing. Therefore, in line with the Sloan-C Quality framework, Mayoka & Kyeyune (2012) and Kisanga (2016) recommend that instructors must be provided with training, motivation, and incentives to enhance their participation in eLearning. Sinha, Rosson, Carrol & Du (2010) documented a number of professional development communities for teachers, among others, (a) Communities of Practice, (b) Professional Learning Community and (c) Teacher Professional Development. They further stated that the Teacher Professional Development consist of the following three methods: online courses, online communities and self-directed learning. Upon which teachers can improve their

professional knowledge and skills by enrolling for online courses, collaborate with peers and partake in self-directed learning. This is in support with the view by Roy & Boboc (2016) that teachers should be proactively involved and take initiatives for own learning to enhance their competencies and skills for online teaching.

In addition, extant literature states that a strong teaching presence is crucial in eLearning, as their availability and accessibility help to reduce anxiety, motivate learner participation, and improve learning experiences and computer self-efficacy levels. Moreover, Pule (2014) added that the academic staff are in a better position to detail appropriate procedures and process to drive the quality assurance systems in the institution, hence their involvement in the policy development and review are crucial. Similarly, Mlanga (2008, 215) warns that the lack ownership of the quality assurance policies by academics, might seriously implicate its implementation.

vii. Institutional factors

The most cited institutional factor is poor ICT infrastructure such as lack of or poor computer laboratories, ICT technical support units, lack of ICT policies that sets milestones in place, lack of support from head of institutions (Kisanga & Ireson 2015; Onasanya et al. cited in Mbodial, Mkahile & Ndebele 2019). Funding, policy, and infrastructure are key pillars for the success of eLearning (Bagarukayo & Kalema 2015; Kashorda & Waema 2014). When funds are available the laboratories will be equipped with enough computers, strong connectivity and adequate training and incentives will be provided to the facilitators, course developers and students. This is supported by Makhokha (2016) cited in Kenya and Azawei, Parslow and Lundqvist, (2016), who state that lack of computers, insufficient internet connectivity hinders the quality of eLearning and reduces the implementation rate of eLearning systems in any institution. Congruent with Makhokha (2016), Spector (2013) viewed that the lack of internet access and devices become a barrier to the progress of technology enhanced learning, thus widening the digital divide.

Collaboration between strategic departments within an academic institution is vital to ensure proper resource allocation, continued research on available technologies and their correct use and maintenance (Mbodila, Mkabile & Ndebele 2019). Equally Russia and some other European countries embarked on projects to provide access to ICT

especially to the poor and they created incentives for businesses to invest in ICT supported study programmes for their staff (Rubin 2010).

Computer laboratories should always be maintained and fully functional for teachers and tutors to use them. Computer network should be on, all the time, as that will improve and motivate the use of the LMS by the teachers and students (Matipa & Brown 2015). Undoubtedly, institutions with clear policies on eLearning will guide adequate resource allocation to enhance the successful implementation of eLearning. Prior to the implementation of eLearning, each educational institution needs to determine its readiness (Coopasami, Knight & Pete 2017). eLearning readiness determines whether an institution and its students are psychologically and physically prepared and have the equipment to implement eLearning (So & Swatman 2006). Extant literature further states that by measuring an institution's eLearning readiness, it informs of what is required to optimally facilitate eLearning in that setting.

An institution that is ready to implement eLearning, will provide the ideal environment in which continuous learning can take place (Borotis & Poulymenakou 2004; Chapnick 2000; Djamaris, Priyanto, & Jie 2012; Psycharis 2005; Karmakar & Wahid 2000). In addition, Ehlers (2004) reports that the counselling and provision of advice to students before they enter the online programmes is an important aspect of quality. Importantly, for the successful implementation of eLearning, it is vital to establish the students' readiness for eLearning. Hence, formal evaluation needs to be conducted to identify the possible hindrances, training needs, ICT and content related issues that need to be attended to (Maphalala & Mpofu 2018).

Extant literature recommends the following for the improvement of eLearning in institutions of learning (Makokha & Mutisya 2016; Maphalala & Mpofu 2018):

- An eLearning coordinator with the required skills should be appointed to assist teachers with the development of eLearning content as this will contribute to the quality of teaching.
- Teachers should be provided with training on how to create interactive content in their modules on a continuous basis.

- Users should be encouraged to form support structures in the form of communities of practice where they will share ideas and experiences in eLearning.
- Students should be trained on how to use ICT for academic purposes.
- Users trained in and motivated to use eLearning more interactively.
- Teachers should be encouraged to prepare online teaching materials and content offline and upload them. They can use the open-source programme Poodle, which is the offline version of Moodle.
- Institutions of learning should make it mandatory for students to have a laptop or tablet before admission in the university. Institutions can partner with the private sector to finance and make the devices affordable.

  Institutions of learning should prioritise eLearning and set aside more funds for ICT infrastructure, capacity building, attitude change and awareness creation

2.14 QUALITY IN EDUCATION AND ITS IMPLICATIONS

This section discusses the concept of quality and quality assurance (QA) in education. It also defines quality and quality assurance and further elaborate of QA approaches. The literature reviewed on the conceptualisation of quality and QA in education addresses the following sub-questions of this research study:

- What are the experiences of academic staff, tutors and students involved in eLearning at NAMCOL on quality in eLearning?
- What quality assurance standards, processes and mechanisms are in place to assure quality eLearning?

The notion of quality development and its history started prior to the medieval times with the advent of the concept of university (Machumu & Kisanga 2014), hence, these are not necessarily new concepts. Nowadays quality is generally considered a major issue for modern education since it can be used as an evaluation of excellence (Ajmera 2014). Quality in education is related to producing exceptional standards, fitness for purpose, effectiveness in achieving institutional goal and meeting customers' needs (Green 1994).

Due to the multidimensional nature of quality, its definition is heavily dependent on a given context (operational context). To this effect, Kadhila, Nyathi and Van der

Westhuizen (2013:195) state that each educational institution has the ultimate task of defining quality with its stakeholders, as no definition of quality will fit or be best for every situation.

Sir John Daniel, the Chief Executive Officer of the Commonwealth of Learning in Mishra (2007) defines quality as “fitness for purpose at minimum cost to society.” Similarly, Machumu and Kisanga (2017) opine that quality is something which fulfils the stated purpose (fitness for purpose) and achieves what it is intended to do (Machumu & Kisanga 2017). Materu, (2007) and Kadhila et al. (2013) state that quality has several dimensions including meeting the commonly agreed precepts or standards. Hence, Harvey and Green (1993) refer to quality as that which is exceptional, consistent, value for money and fit for the purpose, and as transformation. Quality refers to a notion of attaining a specified purpose, thus representing fitness for purpose and is always bound to satisfying customers (Kadhila et al. 2013). Other scholars have alluded that eLearning is fit for its purpose if it attains the intended learning outcomes and conveys the effective teaching and learning activities which increase the overall performance of its users (Oboko & Omwenga 2017).

Odukoya, Chinedu, George, Olowookere and Agbude (2015) concur with the above view, when they observe that quality in educational institutions is a multi-dimensional concept which embraces activities such as student admission, promotion and certification process, staff recruitment and promotion, curriculum development, teaching, learning, research, infrastructural development, equipment, community development and related issues. Quality is lacking if the institution fails to meet the expectations of its stakeholders, or the standards agreed upon (Keendjele 2018).

2.14.1 Factors that affect quality in higher education

Materu (2007) maintains that there are various elements which have an impact on quality in educational institutions, some of which are: institutional mission and vision, expertise of the staff, governance and leadership, the teaching and learning environments, admission and assessment criteria and the employability of its graduates. Scholars such as Odukoya, Chinedu, George, Olowookere and Agbude (2015) and Kadhila et al. (2013) agree with Materu that in an educational institution, quality is embedded in all the functions and activities from its mission, its management,

teaching, learning, assessment, students, training and the quality of its staff. Teay (2012) is therefore, of the opinion that the knowledge and skills attained by the graduates as well as their social performance reflects the quality of education at the institution.

Murmura, Casolani, and Bravi (2016) stand out as proponents of a customer service orientation applied to institutions of learning. Similarly, Wang (2014) argues that education provides a service. Both Wang (2014) and Murmura, Casolani, and Bravi (2016) opine that education would benefit from an evaluation system based on feedback from the main customers once they have experienced it. In this case this is feedback from the academic staff, tutors and students. Wang further denotes that it is difficult for the consumer to measure the quality of services in education as it involves both the process and the outcome of the service, and often focuses on the comparison between the expected and the actual performance. Wang (2014) identifies the following as quality determinants of service quality in education: reliability, responsiveness, communication, credibility, competence, access, courtesy, security, understanding/ knowing the customers and tangibles.

Based on the above perspectives, the different considerations have emerged regarding quality ranging from quality as a measure for excellence, to quality as perfection, quality as value for money to quality as customer satisfaction, quality as fitness for purpose and quality as transformation (Harvey & Green 1993). Equally, the South African Higher Education Quality Committee (CHE) (2004) maintains that quality encompasses fitness for purpose, value for money, and individual and social transformation, within an overarching fitness of purpose framework. Be that as it may, quality in education is based in attaining, maintaining, and improving institutions' excellence in teaching, learning and research. It further points out that quality concerns making the best use of resources (efficiency/value for money) and being accountable to its stakeholders.

It is important to note that the varying definitions of quality are due to differences in culture, purpose, history of the institutions and the changing landscape of the education systems. It is always crucial to define the concept of quality within the context. However, in this thesis, quality relates to what education institutions have set to achieve in terms of their visions, missions, and goals.

2.15 DIFFERENT APPROACHES TO QUALITY ASSURANCE

Literature reports that over the years extensive experimentation has taken place internationally with quality assurance and how it is implemented. Extant literature reveals that there are different approaches and methods to enhance quality assurance which can be employed by quality assurance systems. Educational and quality assurance agencies can adopt one or more of the approaches according to its context (Woodhouse, 1999). Some of the main quality assurance approaches such as accreditation, assessments, audits and benchmarking are outlined below.

Accreditation

Accreditation is a quality assurance method organised mostly externally by a statutory body. Harvey (2004; 2012:3) define accreditation as the "… establishment of the status, legitimacy or appropriateness of an institution, programme or module of study …", which is bound to a certain time limit. During the accreditation process, statutory bodies evaluate the quality of the education institution as a whole or certain educational programme to certify them as having met the set standards. The process examines the mission, resources, process, and procedures used in the institution. Therefore, the accreditation process makes judgements on whether the institution meets the set quality standards and upon the satisfactory compliance with the set criteria and standards, the institution is awarded a license which is time bound.

The accreditation of the educational institutions by the accreditation agencies, is regarded as a main pillar of QA (Schomaker, 2015). Accreditation is mostly done on the institutions, departments and specific programmes to ensure the quality of graduates. Schomaker further underscores that there is adequate evidence that accreditation contributes to the quality of the institution, quality of study programmes and the quality of the students. Hence it enhances the quality of the educational institution. Newton (2002:43) warns against the risk of ritualism and tokenism in external quality arrangements, with participants primarily engaged in learning the "rules of the game" in preparation for the accreditation visits. Hence, this can lead to a culture of compliance and neglect the pursue to real quality improvement.

Audit

Harvey (2012) regards audit as a process that check whether procedures are in place to assure quality, integrity or standards of provision and outcomes. The audit processes are aimed at checking whether there are internal and external practices and procedures in place, to assure quality of education (Harvey & Askling 2003). Likewise, Keendjele (2018) refers to quality audit (QAu) as a quality management system aiming to establish if quality mechanisms exist and work effectively. According to Kirkpatrick (2005) the institutional audit includes the following common procedures: self-study or self-evaluation, peer review by an expert panel, the use of relevant statistical information and performance indicators, such as completion rates, overall grades, profitability and surveys of key stakeholders such as students, graduates and employers. He further opines that the best QA practices combine internal self-audit with external assessments. Dill (2000a) argues that Academic audits are carried out at the institutional level and focus on those processes implemented by an institution to assure and improve the quality of teaching and learning.

Assessment

Assessment generally refers to methods used to judge the performance of an individual, group or organisation" (Harvey 2004; 2012:1). It is also viewed as an internal or external assessment aiming at confirming if set quality standards are being met (Materu, 2007).

Self-evaluation/self-assessment

Mishra (2006) equates self-assessment as looking at yourself in a mirror and she emphasises that real quality is the one that is assessed by self. This is a process where the staff members are required to identify their strength and weakness. Equally, Kadhila et al (2013) reported that self-evaluation is the main process in QA, through which institutions evaluate their performance based on the set quality standards.

Staff tend to be more self-critical and reflective during self-assessment and develop a plan to address the identified limitations (Pule, 2014). It aims to assist the teachers and academic staff to improve their teaching and scholarly services to the benefit of students. Mishra notes that self-assessment is an indicator for continuous

improvement. Self-assessment could be used by academic staff in transforming their teaching, stated Pule (2014).

Assessment of learning

Assessment is an integral part of teaching and learning and it serves to determine the extent to which the students have achieved the learning outcomes (Angus & Watson, 2009). Through assessment, the teachers establish what the students know and their skills. The forms of learning assessment can be diagnostic, formative or summative. Diagnostic assessment is used to determine the students' entry levels in the academic programme.

Formative assessment takes place as during the teaching-learning process and it is aimed to provide feedback and correctives at each stage (Bloom, 1996). Formative assessment monitors learning and provides guidance for the modification of teaching and enhanced learning. Teachers and tutors provide feedback during formative assessment which can assist students to improve their understanding of the subject matter (Black & William, 2009; Wood, 2010). Summative assessment is the other form of learning assessment, which is aimed to measure the success of the students at the end of the study unit.

Bench marking

Benchmarking is an approach which can be used for quality assurance. According to Oliver (2005) benchmarking is a continuous systematic process of searching and recognising the best practices and implement them for the purpose of improvement. Institutions engage in exchange of best practices and information at national and international level. Schofield (2006) asserts that the desire to learn from one another and share information about good practices is a common quality assurance method among educational institutions. Institutions use the benchmarking to set targets which are geared towards continuous quality improvement over time.

Jackson & Lund (2000) reported that benchmarking involves the following activities:

- Comparing one thing with the other
- Creating criteria to evaluate difference between two things and determine which one is better
- Identify the direction for change

- Implement the required change

Mishra (2006) reported that benchmarking inculcates competition and constant comparison and further said it is criticised for being a system of imitation. Moreover, what has worked in one institution when replicated in another institution might not produce the same results.

2.16 QUALITY ASSURANCE AND ITS EFFECTS IN EDUCATION

Machumu and Kisanga (2014) strongly propose that any discussion on QA in education should consider the evolution of quality by highlighting the theories and concepts underpinning QA. Generally, quality assurance is multidimensional and is also defined differently by different scholars. They further refer to QA as a set of measures taken by an institution to demonstrate to its clients that it has a capacity to deliver goods and services of the desired standard. Standards are the indicators of the level of requirements that must be met by institutions or programmes to be accredited by a quality assurance or accrediting body. Therefore, each education institution should set standards for all its programmes (Materu 2007).

Similarly, the Commission for University Education of Kenya defines QA as “the means in which an institution can guarantee that the standards and quality of its educational provision are being maintained and/or enhanced; it is the means through which an institution confirms that conditions are in place for students to achieve standards set by an institution” (Machumu & Kisanga 2014:150). In the same vein QA is the planned and systematic review process of an institution or programme to determine whether acceptable standards of education, and related aspects are being met, maintained and enhanced (Hayward as cited in Njiro 2016:107 and Materu 2007: 4).

The Association of South-East Asian Nations (ASEAN) (2004:20) describes QA as the systematic, structured, and continuous attention to maintenance and improvement of quality. This organisation continues to aver that QA is a way of preventing mistakes or defects in the manufactured products and services which are delivered to the stakeholders. In the same vein, the International Organisation for Standardisation (ISO) 9000 defines QA as "part of quality management focused on providing confidence that quality requirements will be fulfilled".

Be that as it may, QA in education is about meeting set standards and producing graduates that are marketable and can make significant contributions to the socio-economic development of their communities. It is with that consideration that Materu (2007) argues that educational institutions are just as good as their academic staff as they are the ones responsible for producing the needed services to their communities. This is in line with the notion that a quality culture cannot be implemented from above (Njiro 2016) but needs a strong leadership for starting and promoting the QA process which will encourage a relationship of top-down and bottom-up ideas. Consistently, Mishra (2006) opines that quality should be a bottom-up approach and all staff members from the heads, teachers/tutors, support staff, general workers and students should be conscious of why they should worry about quality of teaching, learning, programmes, products, services at their institutions. Hence a framework of standard development should lead to more flexibility and inspire innovation instead of streamlining and homogenising individual efforts and thus losing the much-needed social acceptance (Njiro 2016).

Consistent with Materu's (2007) view, Teay (2007) summarises QA as a systematic measurement which consists of procedural activities that are implemented to ensure that services meet the set standards. In this way, an expert body inspects and monitors the extent to which the standards are met. QA is further associated with the notion of prevention of defects right from the beginning of the process of a product or service delivery, whereas quality control (QC), on the other hand, is viewed as a process which involves the detection and rejection of defects, and it focusses on the output. It also aims to establish conformity with set standards and ensure corrective steps if conformity is not achieved.

Furthermore, Teay (2007) summarises 'quality system' (QS) as the organisational structure, procedures, processes, and resources needed to implement quality management. Similarly, Nyoku (2006) points out that QA is applied to prevent defects from occurring, rather than focusing on the finished products. As a result, systems and strategies are developed to monitor quality at all stages of production, since the emphasis is on 'prevention' than 'cure'. Hence, Total Quality Management (TQM) places emphasis on prevention by examining all steps of production to ensure total quality of production process (Odukoya et al. 2015:252). It is in this context that some

African writers such as Bunoti, 2012 and Bosu & Amakyi (2014) affirm that QA helps educational institutions to achieve their vision, mission, and goals.

2.17 CONTEXT OF THE STUDY: AN OVERVIEW OF QUALITY ASSURANCE AND ELEARNING IN NAMIBIA

In this section, the background information regarding the Namibian education system is provided. It begins with a brief overview of the demographic and socio-economic context. It then focuses on relevant policy and legislation on quality assurance systems and concludes with an exposition of emerging trends in the Namibian eLearning landscape.

2.17.1 Demographic context

Namibia is geographically located in Southern Africa with a total area of 825,615 square kilometres. Angola, Zambia, Botswana, and South Africa share borders with Namibia, while the Atlantic Ocean is on its western borders. Namibia has a great geographical diversity characterised by sand dunes, game parks, mountains as well as open dry lands.

According to the World Population Prospects (2019) the total population in Namibia was 2,448,301 in 2018, of which 1 262 165 are female and 1 186 136 are male. About 59.5% of the population falls in the 15-64 years age bracket with, 36.9% between 0-14 years of age while 3.6% are either 65 years or older. More than half (57%) of the total number of Namibian citizens reside in rural areas, while 43 % are in urban areas. Namibia is a country with diverse ethnic and linguistic groups, where 11 different languages are spoken (eLearning Africa Report, 2019).

About 1 million people in Namibia live without electricity, only 51.8% of the population have access to electricity. According to UNESCO UIS report, in 2014 about 80% of the high schools in Namibia are electrified and only 58% primary schools have electricity (UIS database, 2015; UIS Survey on ICT in Education; UIS Regional Survey on Africa).

Namibia's technology (ICT) infrastructure is rated among the best in Africa (http://www.ist-africa.org/home). However, according to the World Economic Forum Global Information Technology report (2018-2019), Namibia ranks 83 out of 121

economies using the Networked Readiness Index (NRI). The NRI "aims to measure the ability of countries to leverage information and communication technologies for improved competitiveness and wellbeing" (p.17). NRI (2019) underscores that availability of technology in a country is only of importance insofar as its population and organisations have access, resources, and skills to use it productively. Although the Namibia is commended for having good telecommunications infrastructure, a lot still needs to be done to ensure that most of the community benefit from the developments in ICT (Afunde 2015).

2.17.2 Overview of the ICT policy for education in Namibia

Over the past few years, there has been a growth in the Information and Communication Technology (ICT) infrastructure in Namibia. The telecommunications switching and transmission network was digitalised in 1999 with a state-of-the-art underground fibre-optic cabling which improves access to advanced technologies and applications.

In addition to efforts to employ ICT infrastructure in the country, the Ministry of Education (MoE) brought about greater emphasis on ICT in education. The MoE developed the ICT Policy for Education in 1995, which was revised in 2004 to reflect the developments in pedagogy, research, technology, and partnerships in the education sector. The policy was finally launched in 2005. The development of an ICT policy in education is seen to be crucial as ICT plays an important role in preparing individuals in school for the workplace. The then Minister of Basic Education, Hon John Mutorwa in his foreword in the ICT Policy for Education, states that ICT provides advantages in the delivery of equitable and quality education, "thereby providing an opportunity to improve the lives of our people" (MoE 2005).

According to the ICT Policy for Education (http://www.etsip.na/docs/ict_web.pdf), ICTs have a crucial role to play in the Namibian education system; whether directly as a subject or indirectly as a tool to support and enhance the effectiveness of teaching and learning. Therefore, all teachers are expected to make use of ICTs in their teaching. The policy further spells out its objectives with the aim of using of ICT to improve the quality of teaching and learning in schools, colleges, universities, vocational centres, and adult education centres.

These objectives are summarised below and aims (MoE 2005: 4):

- To produce ICT literate citizens.
- To produce people capable of working and participating in the new economies and societies arising from ICT and related developments.
- To leverage ICT to assist and facilitate learning for the benefit of all students and teachers across the curriculum.
- To improve the efficiency of educational administration and management at every level from the classroom, school library, through the school and on to the sector.
- To broaden access to quality educational services for students at all levels of the education system; and
- To set specific criteria and targets to help classify and categorise the different development levels of using ICT in education.

The policy has five development levels with specific goals which are used to measure progress in the implementation of ICT in education.

A study carried out by the MoE, and UNESCO revealed that Namibia has good telecommunications infrastructure and some expertise in the use of ICT for education, including open and distance learning, eLearning, educational broadcasting, and blended learning. However, these have not been extensively used for teacher education and training (MoE 2013). The information on the implementation of ICT in secondary schools in Namibia is not well documented (Ngololo 2010). That concurs with the researcher's experience, that there is limited literature on ICT in education in Namibia.

2.17.3 National policy framework governing Quality Assurance in Namibia

This section discusses the relevant policies and legislations governing quality assurance in education in Namibia since they influence institutional quality assurance systems.

The constitution of the Republic of Namibia

The Namibian constitution guarantees basic education for all and access to education without discrimination and without compromising quality. The government has set the strategic goals for institutions of learning in the policy Towards Education for All. These goals are access, equity, quality, democracy, relevance, efficiency, and effectiveness (Government of Namibia 2007). Hence institutions of learning are required to develop and provide quality programmes and services which respond to the needs of the nation through innovation in a quest towards achieving socio-economic development (MoE 1993).

Higher Education Act

The Higher Education Act (Act No. 26 of 2003) led to the establishment of the National Council of Higher Education (NCHE) to promote a coordinated higher education system, enhance access to higher education and ensure quality higher education, and advice on the allocation of funds to public Higher education Institutions. The NCHE accredits the programmes offered at institutions of higher learning, including at NAMCOL. It also monitors the quality assurance mechanisms of the institutions of higher education and gives advice to the Minister of Education on quality promotion and assurance in Higher education (NCHE 2009:3)

Namibia Qualifications Authority (NQA) Act 29 of 1996

The Namibian Qualifications Authority (NQA) was established by act of parliament, Act No 29 of 1996. The NQA Act provides for the establishment of the National Qualifications Framework (NQF) which is used to manage qualifications in the country and benchmark them against international standards. The NQF has ten levels which are based on learning outcomes. The quality assurance of curriculum design, programme development, instructional activities, and assessment at the institutions of education are guided by the NQF (NQA Act No. 29 of 1996). This ensures that qualifications offered by different institutions in the country meet the minimum standards as set up by the NQA (NQA Act No 29 of 1996:2).

Higher Education Policy document: Investing in People, Developing a Country

In 1998 the '*Investing in People, developing a Country*' policy was adopted, and it aimed at enabling the Ministry of Education to lead and co-ordinate efforts to develop an equitable and sustainable education system. This policy calls on institutions of learning to develop quality programmes which respond to the needs of the nation and internationally recognised standards. It further urges institutions of learning to evaluate their accomplishments in a quest to maintain quality in their programme offerings (Ministry of Education 1993:33).

Education and Training Sector Improvement Programme (ETSIP)

The government's *Vision 2030* development policy was adopted in 2004 with the expectation that "Namibia should join the ranks of high-income countries and afford all its citizens a quality of life that is comparable to that of the developed world" (Government of Namibia 2007:1). In response to *Vision 2030*, a fifteen-year Strategic Plan (2006-2020) called Education Training Sector Improvement Programmes (ETSIP) was developed for the education and training sector. ETSIP run in three five-year cycles. The key aim of ETSIP is to improve the quality, effectiveness and efficiency of the education and training sector as well as to attain equitable social development through education and training (2007:1).

Namibian College of Open Learning Act

The Namibian College of Open Learning (NAMCOL) is a semi-autonomous educational institution created by an Act of Parliament (Act 1 of 1997) which falls under the jurisdiction of the Ministry of Education of Namibia and is governed by a Board of Governors. The Act directs the administration and control of NAMCOL's affairs. According to NAMCOL (2017:1) mission, "We are committed to providing wider access to quality educational services for our students and other customers, using a variety of open learning methods". Thus, wider access and quality programmes and service are the NAMCOL's key objectives.

The Namibia Qualifications Authority accredits professional programmes and some of the programmes are already registered on the National Qualifications Framework. The current secondary education study materials conform to the curricula of the

Namibian Junior and Senior Secondary Certificates and examinations are the same as those administered in the formal school system.

Quality Assurance Agencies (QAAs)

The Namibia Qualification Authority (NQA) and the National Council of Higher Education (NCHE) are the National Quality Assurance Agencies (NQAAs) in Namibia. These bodies are established through an Act of parliament as key agencies responsible for guiding and regulating the higher education sector in the country. Both the NQA and the NCHE are directly accountable to the Ministry of Higher Education. The NCHE was founded with the objective of establishing a coordinated Higher education system and promote quality assurance in institutions of Higher education in the country (NCHE 2009: 17).

Similarly, the NQA was established with the following objectives that are related to quality in education (NQA Act No.29 of 1996:2) especially:

- to set-up and administer a national qualification framework.
- to be a forum for matters pertaining to qualifications.
- to set the occupational standards for any occupation, job, post, or position in any career structure.
- to set the curriculum standards required for achieving the occupational standards for a given occupation, job, post, or position in a career structure.
- to promote the development of, and to analyse, benchmarks of acceptable performance norms for any occupation, job, post, or position.
- to accredit persons, institutions and organisations providing education and courses of instruction or training of meeting certain requirements.
- to evaluate and recognise competencies learnt outside formal education.
- to establish facilities for the collection and dissemination of information in connection with matters pertaining to qualifications.
- to inquire into whether any qualification meets the national standards.
- to advise any person, body, institution, organisation, or interest group on matters pertaining to qualifications and national standards for qualifications.

As part of its mandate, the NQAAs are responsible for conducting external quality assurance (EQA) for institutions of higher education in the country.

Be that as it may, the mandates discussed above, confirm that the government has put in place legal guidelines and bodies to address quality and quality assurance issues in the Namibian education sector.

2.17.4 Quality Assurance practices in the Namibian Open and Distance Learning Education system

Quality assurance in institutions of learning has become a leading agenda in the light of the prevailing global dynamics where students from all over the world can study in any country of their choice (Wirth, 2006 & Grifoll 2010).

This section unpacks the QA practices in the public ODL institutions in the Namibia since that was relevant to the study. The University of Namibia (UNAM) and Namibia University of Science and Technology (NUST) are dual-mode public institutions, while NAMCOL is a single-mode institution only offering open learning programmes. The Centre of Life Learning (COLL) at Namibia University of Science and Technology (NUST) and the Centre of Distance eLearning (CoDeL) at the University of Namibia (UNAM) are responsible for offering open learning programmes at the respective institutions.

Internal Quality Assurance

These institutions have established units responsible for the promotion of a culture of quality and general coordination and management of quality assurance activities (UNAM 2015 & NUST). Interestingly the participating institutions have Quality Assurance policies in place. In addition, institutional Quality Assurance committees are in place which ensure the implementation of the policies and inspections which include client climate assessments, and professional practice evaluations. Each department is further required to establish a Quality Assurance Committee which implements and manages QA policy at the departmental level. Even though there are procedures for ensuring quality in the ODL material development, administration, and student support, these are not documented (Kadhila, Iipumbu & Tuaundu 2019).

It is important to state that self-evaluation is conducted for each faculty followed by peer or group evaluation (UAM 2015). Professional Boards and bodies evaluate the related professional programmes according to the criteria and standards for quality continuous assurance and improvement. While the non-professional postgraduate and undergraduate programmes are evaluated every five years according to the institutional self-evaluation guidelines.

Each faculty is responsible for the internal moderation of its final assessment during each examination session. Similarly, examination papers, scripts and thesis are subjected to external moderation according to the institutional rules and regulations (UNAM 2015). Self-improvement Plans are developed based on the feedback from the self-evaluation.

Provisions of the required infrastructures and facilities to support teaching and learning in the ODL programmes have some challenges that impact on the quality-of-service delivery. IT infrastructure, including internet connectivity and low bandwidth has also been identified as a challenge even though the educational institutions provide most students with internet devices although some rural areas do not have internet connectivity or cell phone coverage. In concurrence with earlier extant literature, Queiros & de Villiers (2016), and Chigina and Dagada (2015) postulate that technology illiteracy and lack of appropriate devices is found to hinder the adoption of ICT among some academic staff and students in Namibia. However, the improvement of teaching performance through enhancement of teaching skills seems to have been left to individual academics (UNAM 2015).

External Quality Assurance

Kadhila, Iipumbu and Tuaundu (2019) found that NQAAs use generic criteria to accredit both conventional face-face and the ODL including online programmes. This practice was found to be biased towards face-face delivery. These scholars reported that educational institutions are discouraged to apply for accreditation of fully online programmes as the existing criteria do not cater for that mode of delivery. Hence the recommendation for NQAAs to develop different criteria for quality assurance of the ODL programmes which include eLearning.

2.17.5 Overview of eLearning in Namibia

The Namibia Open Learning Network Trust (NOLNet) eLearning Standing Committee was established to coordinate the eLearning activities of all the partners, which include all the public and state-funded Open Distance Learning educational bodies in the country. Staff members from the partner institutions have been trained on content development for eLearning. The NoLNet eLearning committee continues to provide eLearning expertise and training to partner institutions (NoLNet 2018).

Most educational institutions mainly offered face-face programmes with some components of online. Some faculties were slow to embrace eLearning. However, some have an online presence with course outlines and content uploaded on the LMS. The Centre for Open and Lifelong Learning (COLL), at NUST introduced the online submission and assignment assessment on Moodle LMS platform (NUST 2018). Tutors were trained to provide the assessment feedback and marks online, which resulted in an improved turn-around time. This initiative has proven to be fruitful during lockdown when institutions are pressed to take up eLearning.

During the Covid-19 pandemic lockdown, the assessment of all undergraduate and postgraduate coursework at the University of Namibia were conducted online (UNAM 2020). These assessments were moderated by the Heads of Departments and electronic external moderation was also done to ensure quality. UNAM acknowledged that all the students did not have access to technology, therefore, alternative assessment methods were provided to cater for those students who had no access. In addition, the institution introduced staff training in online pedagogy.

Considering the above discussion, it is prudent to aver that the educational institutions in Namibia have tried their best to make sure that their students receive internet gadgets. Yet, network remained a challenge, as some students were from remote areas with low internet bandwidth to no network coverage at all.

NAMCOL has developed video lessons in Mathematics, Physical Science, Entrepreneurship, English, and Life Science on topics that are perceived as challenging to the students. These lessons are broadcast on the Namibia Broadcasting Corporation (NBC), the national television channel (NAMCOL 2009, 2012, 2017). The lessons are also put on DVDs and distributed to all the NAMCOL

centres and to conventional schools on request. In addition, 190 radio lessons were developed and recorded, with focus on topics that were deemed challenging in the various subjects. These were broadcast on NBC national radio, UNAM radio, Ohangwena community radio, Karas community radio, Radio Live and Base FM (NAMCOL 2013). In response to the national contemporary socio-economic challenges, the College developed and broadcast thirty radio programmes in the following topics: child protection, how to save water and managing distance learning (NAMCOL 2017).

The Certificate in Early Childhood Development (CECD) programme is offered in blended mode, students can choose to do it online or opt to receive printed study materials. The CECD online started with 30 students in 2016 followed by 41 and 54 students during the 2018 and 2020 academic years respectively (NAMCOL 2020).

At the beginning of 2019, the NAMCOL introduced its first post-graduate qualification, Post Graduate Diploma in Open Schooling Operations and Management (PDOSOM), which is a fully-fledged online programme (NAMCOL 2020). Students apply, register, and receive all learner support services online. Assignments and other forms of assessment are submitted and marked on the Moodle Learning Management System. In addition, with the cancellation of face-face vacation workshops due to COVID-19, tutors' notes are posted on Moodle platform and assignments for the core courses are submitted and marked on Moodle (NAMCOL 2020).

In addition, NAMCOL adopted the Notesmaster Namibia learning platform and developed interactive learning materials for the secondary education subjects as from 2014 (NAMCOL 2015). The content is created on subjects' content which are perceived as difficult. Since the introduction of the platform, more than 5000 resources including interactive notes, assignments and marking guides have been published as Open Education Resources under Creative Commons (Nitschke and Louw 2020). The lockdown due to COVID-19, saw schools resorting to eLearning. In the quest to fast-track the development of e-content for the secondary education level, NAMCOL entered into agreement with the MoE, to train teachers on the development of subject content which was loaded on the Notesmaster platform (NAMCOL 2020).

2.18 CONCLUSION

The literature reviewed in this chapter is evident that institutions across Africa strive to introduce eLearning in the educational institutions. Literature generally agrees that eLearning, if implemented appropriately, have the potential to widen access to education as well as improve the quality of teaching and learning. Several literatures reviewed in this study acknowledge the challenges that institutions, staff and students experienced with regard to eLearning, with access and technological skill being among the common.

Nonetheless, besides numerous challenges experienced in the quality of eLearning in most educational institutions in the developing countries, there was clear attempts to implement quality improvement in the delivery of eLearning; hence, the conclusion that in most cases the implementation and the continuous review of QA initiatives in eLearning brings about some levels of improvement in the quality of teaching and learning of eLearning.

The next Chapter presents the research paradigm and the research design and methodology used in the study.

CHAPTER 3: RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

This chapter presents the epistemological basis underpinning this study. It outlines the research methodology and research design employed in this study. Lichtman (2013) opines that research methodology is the overall collection of methods and procedures or rules that guide the conduct of the research within a well-defined epistemology. The chapter further focuses on the approach used in the research design, the selection of the sample, data collection and the data analysis methods.

3.2 PHILOSOPHICAL OVERVIEW

Research philosophy is an important part of research methodology. Research philosophy is classified as ontology, epistemology, and axiology. These philosophical approaches enable to decide which approach should be adopted by the researcher and why, which is derived from research questions (Saunders, Lewis, & Thornhill, 2009). The important assumptions are present in research philosophy which explains about the researcher's' view regarding the world. These assumptions will determine research strategy and the methods of that strategy.

3.2.1 Ontology (Quality and Quality Assurance)

Ontology is based on the nature of reality. It is classified based on objectivism and subjectivism. The first aspect of ontology, objectivism portrays the position that social objects persist external to social actors. Secondly, subjectivism is concerned on the social phenomena which are emerged from the perceptions and consequences of those social actors concerned with their existence. The study analysed the experience-based views on the ontologies of quality and quality assurance in eLearning at NAMCOL.

3.2.2 Epistemology (Science of knowing)

Constructivist epistemology is an epistemological perspective in philosophy about the nature of scientific knowledge. Constructivists maintain that scientific knowledge is constructed by scientists and not discovered from the world. Constructivism believes that there is no single valid methodology and there are other methodologies for social science: qualitative research. It thus is opposed to positivism, which is a philosophy

that holds that the only authentic knowledge is that which is based on actual sense and experience.

3.3 RESEARCH PARADIGM

This study adopted the constructivist paradigm as the main purpose of the study was to gain deeper understanding of the material developers, tutors, student support staff, IT staff, Quality Assurance Officer and students' experience on the quality of eLearning at NAMCOL. A Constructivist view on how knowledge is acquired (epistemology) is premised on the basis that reality is viewed as multiple, understandable, and constructed through the subjective experiences of individuals. Creswell (2013) affirms that knowledge is constructed through the subjective views of participants. Constructivists believe that reality is created and given meaning through beliefs, experiences, and interaction with other people.

Hence, I conducted the study in the field where the participants work to be close to the participants and gain an understanding of their reality. Creswell (2013) affirms that this allows the researcher to collaborate with the participants and become an insider. Congruent with Creswell, Pontero (2005) posits that deeper meaning can be discovered when there is interaction between the researcher and the researched. Although researchers are actively engaged in the research process through the constructivist paradigm, they do not necessarily control the process (De Vos, Strydom, Fouche, & Delport, 2011). Due to the close involvement, the values and beliefs of the researcher cannot be eliminated from the research process. Hence, the language use in constructivism is more personalised and narrative (King & Horrocks, 2010).

Knowledge is constructed through social interaction; therefore, reality is perceived differently by different people (De Vos et al.2011). Therefore, the researcher discovers multiple realities as perceived by different participants on the research topic. Therefore, I used quotations from the participants as evidenced in identified themes to present the participants' perspectives (Creswell, 2013).

On methodological traits, the constructivist depends more on interviews and observations. The researcher observes and listens to people's views and discover patterns to develop theories or proposals from the data rather than formulating a theory from one's perspectives or existing theories. A Constructivist paradigm tends

to be more qualitative in nature. According to McMillan and Schumacher (2014) qualitative studies provide detailed descriptions and analysis of a particular practice, therefore by using qualitative methodologies the researcher was able to explore and describe the research problem.

Through literature review, the researcher found qualitative methodologies to be mostly appropriate for this study. The following sub-section will therefore outline the qualitative methodology as the appropriate approach for this study.

3.4 THE APPROACH OF THE STUDY

The qualitative approach was deemed to be more appropriate to this study since the purpose of the study was to gain a deeper understanding of the quality found in eLearning as perceived by the key stakeholders at NAMCOL. The advantage of the qualitative research approach is that it enabled the study to be conducted in its natural settings and relied on the views of the participants on the phenomenon under investigation (McMillan & Schumacher, 2010 and Creswell, 2013). Qualitative research allows a deeper understanding of the research topic in terms of the meaning that the participants ascribe to them rather than the preconceived meaning of the researcher (Creswell, 2013). It seeks to understand the given research problem from the perspective of the participants who are directly involved, in this case the participants were the developers, student support staff, tutors, IT staff, Quality Assurance Officer and students. It is an investigation that uses a predefined set of procedures seeking answers to the research questions. However, Creswell (2013) warned that the research process for qualitative research is emergent, which may lead to the researcher changing the questions, data collection methods, participants, and the site of study.

The researcher was interested in gaining an insight into the experiences of the participants regarding the quality assurance in eLearning, by understanding the participants from their own point of view in their own voices (McMillan & Schumacher, 2014). Hence this involved multiple realities and diverse views as people held different meanings about the same phenomenon (McMillan & Schumacher, 2014). The researcher studied the research problem at the site, NAMCOL, and engaged the participants in their natural settings. The introduction of quality assurance in education is regarded as a complex issue as it may appear different at the macro level than at

the micro level (Abeya, 2014). Furthermore, studying the introduction of quality assurance in eLearning is a complex and multifaceted process which involves the perspectives of different stakeholders as well as require the collection of data from different sources. The major data collection methods in qualitative research studies are observations, interviews, questionnaires, document review and the use of audio-visuals (McMillan & Schumacher, 2014: 369). For this study, the researcher used multiple forms of data collection, which included face-face interviews with one-on-one as well as focus group discussions, observations, and document analysis. This provided in-depth understanding of the quality assurance in eLearning. The amounts to the qualitative study as being descriptive rather than predictive in nature.

The study aimed at gaining the participants' view on their experiences on the quality and quality assurance approaches in eLearning at NAMCOL. The researcher selected the case study design to enable the gathering of rich information and in-depth understanding of the research problem.

3.5 CASE STUDY RESEARCH DESIGN

Research design is a detailed plan or blueprint for conducting a study. This study adopted a qualitative case study design to explore the research problem in anticipation of finding answers to the research questions. In the same vein, Yin (2009 & 2014) defines a case study as an empirical inquiry that explores contemporary phenomenon in its real-life situation to arrive at a large amount of wealth of information. Furthermore, a case study binds the case by time and place, using in-depth data collection methods and a variety of data sources (Creswell, 2013 and Patton, 2015). In support of this, Henning, Van Rensburg & Smit (2013) opine that the designs of case studies enable the researcher to gain in-depth understanding of the research problem as well as those being studied. Creswell went ahead to state that a case study enables the researchers to gather accurate information which are not distorted as they are studying current and real-life cases that are in progress.

Given the various understandings of case studies, the suitability of a case study emerged strongly. Using a case study method, the researcher was able to explore the perception of the participants with regard to quality in eLearning at NAMCOL. The case study narrows the scope of the study and allows for the collection of in-depth information on the research topic. Although NAMCOL offers different programmes at

different modes, not all the programmes could take part. This study was limited to the current and former students registered at NAMCOL during the 2016 -2019 academic year on programmes which offered eLearning content. The scope of the study was further narrowed to only students, tutors, programme developers, IT and Student support staff who are involved in eLearning took part as participants.

A case study also allowed the researcher to use multiple sources of data and data collection techniques, in the form of face-face interviews, focus group interviews, observations and document analysis resulting in the researcher gaining in-depth information on the phenomenon under study. The representative multiple data sources involved in quality assurance in eLearning at NAMCOL were selected for this study. This included the students, tutor, programme developers, Quality Assurance Officer, IT and Student support staff. The inclusion of more data sources increased the representativeness and comprehensiveness and rich data on the quality assurance systems and practices in NAMCOL eLearning programmes. Eventually, that enabled the researcher to compile a report reflecting on descriptions and themes based on the perspectives and experiences of the participants.

The next section deals with sampling and sample inclusion criteria.

3.6 SAMPLE AND SAMPLING METHODS

Creswell (2013) opines that the success of any study depends on the selection of appropriate participants. Sampling is the process used to select relevant participants of the population for the study.

Saunders & Lewis (2012) define population as the complete set of group members. From this perspective, the population for this study comprised of all people who had been engaged in the development and delivery of eLearning at the NAMCOL. This study identified six categories of participants. These included programme developers who coordinates the development of eLearning materials, student support officers who coordinate the student support services including the technical support to students, tutors who were trained to develop and assist students with eLearning, Quality Assurance Officer who coordinate the overall QA activities at NAMCOL, technical staff in the Information Technology (IT) department who were responsible for the general IT related matters and two sets of students: (i) students who registered for the

Certificate in Early Childhood Development (CECD) and (ii). Secondary Level students who used the eLearning materials and services developed and offered at NAMCOL.

There were two programme developers who were responsible for the development of the study curriculum and material, 3 students support whose titles are called Distance Education Coordinators and they were responsible for the student support services, one QA Officer and 2 IT staff members involved directly in eLearning. In addition, 123 students had already done the online Certificate in Early Childhood Development, 40 students had enrolled for the online Post Graduate Diploma in Open School Operation and Management (PDOSOM) programmes, while 1 670 students used the NotesMaster platform during the 2018-2019 academic year. A total of 15 tutors were involved in the online programmes for tertiary programmes, of which 10 of them were involved in different eLearning programmes at the college, as they were not restricted to one programme only.

This research used the purposeful sampling method to select the participants for the study. The Purposive sampling guides for participants to be selected because of some defined characteristics that made them custodians of the data needed for this study (Patton, 2015). The key participants who were selected were perceived to possess adequate experience and rich information needed for the study (Creswell, 2013 and McMillan &Schumacher, 2014). Accordingly, the selection of the institution and the participants was regarded as “information-rich” and was able to provide data on quality assurance mechanisms at the institution. Hence, I sought to find programme developers, student support officers, IT, QA Officer, tutors and students who had directly engaged on eLearning, and in particular the online programmes at NAMCOL. These participants except the Quality Assurance Officer, tutors and students, were assumed to be dealing with eLearning service delivery in their daily office activities.

Consequently, 10 participants were selected to take part in the semi-structured one-to-one interviews. The sample included two programme developers, two student support, one IT staff members, one Quality Assurance Officer, and four tutors (teachers involved in online and eLearning). While 15 students were purposively selected to take part in focus group interviews. There were 2 focus groups: one group of students on the tertiary programme and another group for students registered for

both tertiary and Secondary Education programme. The list of selected students was collected from the officers managing the Notesmaster and eLearning portal respectively. The participants were contacted and invited to participate in the study and take part in the face-face interview. These participants were intentionally selected to gather rich information and attain a deep understanding of quality and quality assurance measures on eLearning at NAMCOL.

Data was gathered from (a) programme developers, (b) student support officers (c) IT staff, (d) QA staff, (e) students, (f) tutors (g) policy documents, strategic plans, statistical abstracts, self-evaluation and audit report, quality monitoring manuals and guidelines and (h) observations. The sample was selected based on the researcher's knowledge of the population involved in the study. McMillan & Schumacher (2010) supports this approach by stating that it is appropriate to select the sample based on one's own knowledge of the population and the nature and the aims of the research. Therefore, the judgement used in the selection of the sample in this study was informed by the assumed experience and knowledge of the participants in quality and quality assurance in eLearning at NAMCOL.

The 10 individuals for the one-on-one interview and the two groups for the focus interviews could be regarded to exclude views as its sample size was small compared to a quantitative sample with large samples. Although, the small size of the sample is a limitation, the power and logic of purposeful sampling is based on in-depth study of the case which fosters deeper discussions yielding rich information (McMillan & Schumacher, 2014 & Patton, 2015).

3.7 SITE SELECTION

Participants and sites are selected based on their ability to purposefully inform a deeper understanding of the research problem (Creswell, 2013). The study was conducted at the Head Office of the Namibian College of Open Learning (NAMCOL) in Windhoek. This was selected because all the participants except the tutors and students are based there. Most tutors in the population also resided in Windhoek. However, several students were scattered across the country. Permission was granted to access and conduct this research at NAMCOL and across the country. Hence, the Secondary Education Tutor and three students on focus discussion groups were selected from those based a minimum of 200 km outside Windhoek. This was done to

gather views and experiences from participants who were not close to the Head Office, where it is assumed, all resources are based, in terms of experts and facilities. The researcher was previously a manager in the department of tertiary programmes at the head office and had good relations with most staff members at the NAMCOL Head Office. It was an advantage to access the site as well as making a judgement with the selection of the sample.

The following section discusses the data collection methods.

3.8 DATA COLLECTION METHODS AND INSTRUMENTS

In this study qualitative method data collection methods were used. De Vos, Strydom, Fouche & Delport (2011) suggest that researchers collect data through examining documents, observing behaviour, and interviewing participants. The use of multiple data collection instruments develops a rich understanding of the study phenomenon and enhance the quality of the research findings (McMillan & Schumacher, 2006). Similarly, multiple data collection methods facilitate triangulation of data collected during the study to increase the validity of the findings.

Based on this, the study used interviews, observations, and document analysis as methods of data collection. Before the implementation of the chosen data collection methods, the researcher first secured permission from the relevant authorities to conduct the study and access the facilities and documents. The researcher clarified the purpose of the study to the participants and secured their consent to participate in the study. The data collection instruments which were used in this study are described below.

3.8.1 Interviews

Interviews were the main data collection method and were used to gather rich information from the research participants in this study. The interview data collection method has the capacity to access the attitudes, perspectives and opinions of the interviewees. Similarly, interviews can greatly be affected by the emotional state of the interviewee at the time of the interview and responses can be distorted due to bias, anger or lack of awareness (Patton, 2015).

In this study face-to-face semi-structured interviews were conducted to elicit relevant information on the perception of the participants regarding the quality and quality assurance practices eLearning at NAMCOL. The various aspects covered in the interview questions were shared with the participants in advance for them to acquire the appropriate information. Interviews allow participants to express their personal views on the research phenomenon, enriching the collected data. The interview process is dynamic as it allows the researcher to engage actively with the participants and grant opportunity to probe the interviewee thereby unlocking more responses (Gay, Mills & Airasian, 2009). In addition, the researcher can observe and interpret the non-verbal gestures and body language of the interviewee during the interview.

Semi-structured interviews used in this study, began with the introduction of the topic followed by follow-up questions. This allowed participants to provide detailed opinions and explanations on the research topic. The interviewer developed an interview schedule with the questions and topics, which guided the interview. Refer to **Appendix X** for the Interview schedule.

The interviews with the staff and tutors were conducted in a conversational style. Other questions emerged from the conversations which were guided by the aims of the research study. Interviews with the staff members were held at the College where the participants worked preferably in their offices, while the interviews with the tutors were held at the agreed venues, which were at their places of employment. The interviews lasted for about 45 minutes to 1 hour.

3.8.2 Focus Group Discussion

The researcher interviewed eight students in the CECD (TP) only group. While the second focus group consisted of seven students who registered for both CECD and Secondary Education. The groups were homogeneous with features related to the research aims. Participants in the focus group sessions were issued a letter of consent before the meeting and were asked to sign the Consent letters to participate in the study. Each group comprised of 8 and seven participants respectively who were interviewed together. Two students participated in the focus group discussions telephonically, one in each focus group. The focus group discussions provided information on the students' experiences of quality in eLearning at NAMCOL. Focus group discussions were conducted after the one-on-one interviews and institutional

document analysis. In addition, their information was used for triangulation to verify the data collected through the one-on-one interviews and document analysis.

Semi-structured and open- ended questions were posed to the groups to facilitate discussions. The researcher encouraged all the participants to share their views on the topic to get more and rich information from the groups. Data from the focus group discussions included comments made by participants in response to the facilitator's questions as well as comments from the other participants. The discussions were recorded on the audio recorder and the researcher also made notes. Focus group discussions provided an opportunity for the participants to learn from each other (Bless & Higson-Smith (2004). As the facilitator of the group interviews, I had to manage the outspoken participants to stop them from dominating the discussions. The group discussions were scheduled for 90 to 120 minutes and took place at the Jetu Jama Centre.

3.8.3 Recording of interviews

The researcher used a digital voice recorder to record all the interviews with the consent of the participants and then transcribed the recorded interviews. However, the names of the participants were not recorded in the transcriptions, only pseudo names were used. All the transcriptions were stored in encrypted folders on the researcher's password-protected laptop.

Concurrently, pen and paper were used to record interview notes. Patton (2015) opines that a researcher in qualitative studies should use tape recorders and take notes during field work. Field notes serve as back-up should the recorder fail to operate properly or if recordings are erased erroneously.

3.8.4 Document Analysis

Relevant documents were obtained and analysed. Document analysis entails the study of written documents and activities as recorded at an earlier stage (McMillan & Schumacher, 2010). The studied documents provide records of activities which could not be observed while in the field (Stake, 1995). In concurrence, Keendjele (2018) states that document analysis obtains the 'behind-the-scenes look' that might not be covered by interviews or observations. Document review is interpretive research as it

describes, interpret, and explains what has already happened (Murangi, 2017) and the data obtained is regarded to be stable and exact (Yin, 2009).

Data from documents in this study were used for verification, corroboration and augmentation of information obtained through interviews and observations. The researcher sought and was granted consent (Creswell, 2013) by the institution to study official and public documents related to quality and quality assurance in eLearning at NAMCOL on condition that confidentiality was maintained. The following documents were identified for analysis: policies on quality assurance and eLearning, vision and mission statements, quality audit and self-evaluation documents, guidelines for developing eLearning programmes and supporting students, tutor reports, annual reports, minutes of meetings and other relevant documents. The researcher looked for information relevant to the research study. Documents were analysed to discover the information related to the policy intentions on quality assurance in eLearning, history of eLearning, financial resources, learner, and tutor profiles.

In the annual reports and tutor reports, the researcher acquainted herself with what has been reported related to eLearning activities and related to quality matters. The studying of the Quality audit reports aimed to confirm the extent to which the institution had complied and conformed to the set quality criteria.

Due to time constraints, it was not possible to study all the documents in depth during the onsite visit, hence permission was obtained to remove some of the documents from the site in order to continue with the analysis. However, highly confidential documents were only analysed onsite.

3.8.5 Observations

McMillan & Schumacher (2014: 376) states that observation is the way through which the researcher sees and hears what is occurring in the natural setting in order to obtain a rich understanding of the phenomenon under study.

The researcher chose to observe the physical setting, activities, participants' interactions, and conversations related to the research phenomenon. As recommended by Creswell (2013) and Patton (2015) for observation, the researcher identified the programme developers, student support officers and tutors as they were engaged in eLearning activities on the LMS and eLearning platforms. The researcher

also browsed the LMS and student portal to confirm whether they were available and conformed to the set eLearning quality standards. Three sessions of observations were conducted at each selected setting which lasted for four to six hours per session. Hence the researcher adopted the status of a non-participant observer to collect data.

Being a non-participant observer, the researcher did not take part in activities, neither did the researcher provide suggestions or comments on the activities. During observation, the researcher was friendly and did not interfere with the operations, just watching and taking field notes.

Armed with an observational protocol which guided the researcher on what to observe, the researcher took field notes during and after the observations, which included not only what the researcher had seen or heard but also reflections on what had happened. The notes were dated and described the settings, participants present, activities and interactions that were observed while the reflective notes depicted the researcher's experience, ideas and judgements during the observations. At the end of the observations, the researcher thanked the participants and briefed them on how the collected data will be used as well as how they could access the research report.

The focus in each setting was on the activities and behaviours of participants which were related to the research phenomenon. In the department of programme and material development, the researcher focused on the processes and systems of developing eLearning materials in relation to quality assurance. In student support department and tutor engagement, the focus was on the provision of learner support activities to students doing eLearning, assessment, resources, available facilities, staff complement in relation to student population, morale and adherence to set quality criteria in eLearning.

3.8.6 Data Handling

Due to the large volume of field notes and transcripts, the management of data in this study was crucial. Each interview recording was saved in a separate file. Transcribed, typed document analysis notes and observation field notes were stored on the researcher's password protected laptop. All notes were marked and dated using the pseudo names allocated to the interviewees.

Hard copies of the collected data, which included CD-ROMS containing recorded data interview recordings and filed notes were stored in a lockable cabinet at the researcher's house for a period of minimum five years in case a need arises to double check certain data. In addition, the back-up soft copies of these documents were stored at the researcher's house in a lockable cabinet. After five years, the hard copies will be destroyed, and the electronic copies will be permanently deleted. The next section presents the data analysis strategies and procedures adopted in this study.

3.9 DATA ANALYSIS

Data analysis is the "systematic study of data so that its meaning, structure, relationships origins are understood" (Van der Merwe, 2005:39). Qualitative data analysis is an ongoing inductive process which organises data into categories, coupled with identifying patterns and relationships among categories (Creswell, 2013; Henning et al. 2013 and McMillan & Schumacher, 2014). Inductive analysis is the synthesises of data, starting from specific data and ending with categories and patterns. This study adopted the approach for data analysis which involves the following steps, namely: data preparation, data transcription, data coding, data categorising, and pattern discovery (McMillan & Schumacher, 2014). Figure 3.1 presents a visual flow of steps adopted in this study.

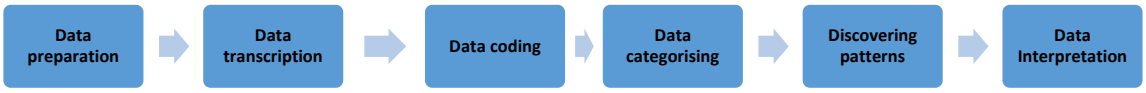

Figure 3.1: Steps in Qualitative Data Analysis Plan

Source: Adapted from McMillan & Schumacher (2014: 394)

3.9.1 Data Preparation

In this study large amount of data was collected through individual interviews, focus group discussions, document analysis, observations, and field notes. Hence, it was crucial for the researcher to be familiar with the data and strategise as to how each type of data would be handled. In addition, the researcher also read and reread the

field notes and summaries before the beginning of the formal data analysis (Kadhila, 2012).

3.9.2 Data Transcription

The data transcription process commenced alongside the data collection period. The researcher converted the interview audio recordings, handwritten field notes made during interviews, document analysis, focus group discussions and observations into a word document. The transcribed data were recorded verbatim and recorded the actual words as spoken by the participants. Kadhila (2012) opines that a transcription of all the audio and field notes enables the researcher to have a complete view of what had happened and minimises biasness of the data analysis. The researcher then studied the transcriptions to get an overall view of the collected data. This was followed by the manual analysis, where the researcher broke the data into bits and pieces (Henning et al. 2013) by taking apart words, sentences, and paragraphs to interpret and theorise the data.

3.9.3 Data Coding

The construction of the codes may be based on the themes, ideas, concepts, topics or phrases found in the data. Coding involves the reading of the data and ascribing codes to the ideas that have been identified. The researcher read and reread each transcription to gain understanding of the data and identify units of meaning. For initial coding, the researcher used the audio recording alongside the transcriptions to ensure accuracy. Different codes were constructed which included colour coding. Codes were developed based on the predefined codes which the researcher expected to find according to the literature review as well as the codes that emerged from the new ideas which transpired from the collected data. Codes were assigned to ideas representing units of meaning. This was a strenuous process, going between the transcripts, field notes, audio recordings and the literature.

3.9.4 Data Categorising

Categories represents the first level of induction and equally “codes are put together to form the category” (McMillan & Schumacher, 2014:405). As a result, categories give meaning to the combined codes. The researcher studied the codes and grouped

those with related meanings to form a category, upon which the researcher then labelled the category to capture the main idea. McMillan & Schumacher, (2014) opine that qualitative research studies have between four to eight categories. The coding process enables the reduction of the data into manageable groups and ease retrieval and gathering of texts related to a particular idea.

3.9.5 Discovering Patterns

After categorisation, the researcher thoroughly examined the data to determine the relationships or connections that had emerged within and across the categories (Creswell, 2013). In search for patterns, the researcher tried to understand the links among the various aspects of the participants' experiences, values, perspectives and actions related to quality and quality assurance in eLearning. As a researcher, the researcher had to look back and forth among the codes, categories and patterns for confirmation of relationships and to determine how well the collected data address the research problem. In the quest to establish patterns which would illuminate the research problem, the researcher deployed the following techniques. The researcher searched for discrepancies, situations or participants' views that contradict the pattern. In the use of triangulation, the researcher cross validated among data sources, data collection techniques and time periods. The data from the different sources and techniques was compared to confirm whether the same pattern kept recurring. In addition, the researcher arranged the categories in order of occurrence, this enabled the researcher to identify changes from one time to another (McMillan & Schumacher, 2014:407).

3.10 DATA INTERPRETATION

In this step the researcher determined the meanings of the categories and patterns, subsequently highlighted the lessons learned. The lesson learnt was used to compile the narrative report, which is line with the qualitative reporting style, to describe the research findings in detail. The language of the participants was presented in the narrative through the use of quotes separated from the text, embedded brief quotations within the narrative and inclusion of paragraphs from the field notes or interviews (McMillan & Schumacher, 2014). In this study the results were discussed,

interpreted, conclusion drawn, and recommendations made based on the findings of the literature review.

The next section describes the way in which trustworthiness, reliability and validity were achieved in this study.

3. 11 VALIDITY AND RELIABILITY

Reliability, trustworthiness, and validity are the cornerstones of any research study. One of the challenges for qualitative researchers is how to persuade the readers that the research findings and conclusions are worth believing (Verma & Mallick, 2009; Lincoln and Cuba, 1985). To achieve trustworthiness, enhance quality and credibility of the study, in planning this study, enough care was taken to ensure that this important concern was taken care of. This was done to ensure trust in the data collection and data analysis methods to assure confidence in the outcome of the study.

Validity determines whether the research measures what it intended to test or how truthful the research results are McMillan & Schumacher (2010) states that reliability is the extent to which the results are consistent over time and also the replicability of the research findings (Henning et al. 2013) if conducted in the same setting. Whereas Clark (1999) stresses the notion that a given question should have the same meaning for different participants.

This study applied the following strategies throughout the research process to ensure trustworthiness of the study: triangulation, a pilot study, verification of raw data, maintaining confidentiality.

3.11. 1 Triangulation

Extant literature define triangulation as the use of multiple data sources to verify collected data (Creswell, 2013; McMillan & Schumacher, 2014). The use of interviews, document analysis, focus group discussions and observation in this study allowed for methodological triangulation. This enabled cross-checking of data from multiple sources to establish corroboration (Merriam, 2009:216). Similarly, the inclusion of a wide variety of participants, namely the programme developers, student support officers, Quality Assurance officer, tutors and students, allowed for data source triangulation. The viewpoints and experiences from the different participants could be

compared against each other to identify similarities and divergence. In addition, direct quotations from interviews and focus group discussion and field notes were used in the data analysis in order to ensure transparency and trustworthiness. Hence, the application of triangulation enhanced the validity and reliability of the collected data.

3.11.2 Pilot Study

According to Gay et al. (2009: 116), a pilot study is a "small-scale trial of a study conducted before the full-scale study." The authors likened the pilot study to a dress rehearsal, which is meant to identify any problems and suggest possible improvements to the research tools and procedures. The pilot was conducted using purposive sampling of two staff members and one learner. The participants of the pilot study were chosen because they had similar features to the population of the main study. They did not form part of the studied group. Verbal consent was sought from them to participate in the pilot.

During the pilot study the questions in the interview schedule, the document analysis checklist and the document analysis checklist were tested for appropriateness. Changes were affected to the research tools after the pilot study. The piloting helped to ensure that the data collected was consistent with the questions asked.

3.11.3 Verification of raw data

A high-quality tape recorder was used to audio-record the interviews and verbatim quotes were noted to ensure accuracy. The researcher provided hard copies of the interview transcripts to some of the participants for factual verification and corrections, to enhance credibility. After the data analysis, the findings will be shared with some participants, peers, and experts in the field of eLearning for critical comment. The feedback was used to modify the data accordingly. All the changes made to the documents are noted for any possible future reference if need be.

3.11.4 Maintaining confidentiality

Pseudo names were used in this study to maintain anonymity and confidentiality. This put the participants at ease and encouraged full participants to enhance trustworthiness of the data collected.

3.12 ETHICAL CONSIDERATIONS

Research ethics constitutes moral principles and rules that must be adhered to, to ensure that the rights and welfare of the participants are protected. This study considered ethical issues as it focused on investigating and describing quality and quality assurance in eLearning at NAMCOL. The main ethical issues considered in this study were informed consent, voluntary participation, anonymity and confidentiality, privacy.

In line with the requirements, the researcher sought written permission from NAMCOL to conduct research, by engaging students, tutors, staff attached to the institution and to use the available documents. Approval was granted and the researcher used that letter of approval to apply for permission to conduct research from the College of Education Ethical Clearance Committee.

Identified respondents were issued with consent letters to solicit their participation. This letter detailed the purpose of the study, data collection and recording methods as well the nature of one's participation. It was stated in the letter that participation was strictly voluntary and the right to withdraw at point during the research process. Consent was sought from each participant to audio record the interviews and they were assured of their privacy and confidentiality.

The researcher ensured the privacy and confidentiality of the participants by avoiding mentioning the names of the participants, instead pseudo names were used (McMillan & Schumacher, 2014). In so doing, participants could not be linked to any of the information that was given during data collection. Consent forms were issued to each participant to complete as proof that they agreed to participate in the study. The collected data was solely used for research purpose. Participants were informed as to how they can access the final report of the study.

The data from the audio recordings, field notes and transcriptions were safely stored away and could only be accessed by the researcher and the study supervisor. Back – up copies of all the computer files were made and safely stored in a lockable drawer. Data was kept for a period of five years after which it would be discarded.

To maintain integrity, the researcher disclosed any personal relationship that might be of conflict to interest.

3.13 LIMITATIONS AND DELIMITATIONS OF THE STUDY

As with many qualitative studies responses was to be dependent on the respondents' willingness to reflect honestly on their perceptions on quality in eLearning at NAMCOL. Furthermore, the small sample size and the qualitative nature of the study, might have reduced generalisability of the findings. The findings of this study were not to be generalised to other institutions. The purpose of this study was to explore quality assurance in eLearning at NAMCOL. However, the findings could be used to modify their practices.

3.14 DELIMITATIONS

Delimitations are those characteristics that limit the boundaries of the study (Simon, 2011). This study was restricted to the research questions: quality and quality assurance in eLearning at NAMCOL. This study did not cover other modes of learning such as print-based, hence only staff and students who were directly involved in eLearning at the College were eligible to take part in the study.

3.15 CONCLUSION

This chapter provided a discussion of the research approaches, design and data collection methods, data analysis techniques that were used in this study. The research was a case study that deployed qualitative methodologies to explore the perception and experiences of the participants on the quality of eLearning at NAMCOL. The utilisation of interviews, focus group discussions, document analysis and observations were discussed in detail. Accordingly, the chapter accounted for the reasons of the chosen methods. The reason for choosing purposive sampling was discussed.

Issues associated with trustworthiness and credibility of the study were also discussed. Similarly, ethical matters which were considered to protect the participants during the research study.

In the next chapter, the empirical data collected in the study will be presented and discussed.

CHAPTER 4: PRESENTATION OF RESEARCH DATA

4.1 INTRODUCTION

The chapter presents empirical findings based on the data collected to answer the research questions (Section 1.10). This case study addresses the research questions: 1) What are the experiences of staff and students on the enhancement of quality assurance (QA) in eLearning spaces at the Namibian College of Open Learning (NAMCOL)? and 2) How can the experiences of the NAMCOL staff and students on teaching and learning in eLearning be harnessed to design a quality assurance model? With the six research sub questions:1) What are the views of people (programme developers, distance education coordinators, IT Technical staff, tutors, and students) involved in eLearning at NAMCOL on quality in eLearning? 2)How do institutional policies support QA in eLearning at NAMCOL? 3)What quality assurance standards, processes and mechanism are in place to assure quality in eLearning at NAMCOL? 4) To what extend have participants engaged in quality assurance in eLearning at NAMCOL? 5) What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance? 6)What strategies can improve the quality and QA of eLearning at NAMCOL.

The focus of the data gathering was on determining the experiences of the participants regarding the quality and quality assurance in eLearning at NAMCOL. The data was collected using three interview schedules for the student focus groups, tutors and academic staff respectively as explained in Chapter 3. The results obtained from analysis of institutional documents, observation of eLearning platform and semi-structured interviews are presented in this chapter.

The first section of this chapter describes the coding system of the sources (4.2). The researcher used codes to denote the students, tutors, academic staff, and institutional documents to ensure anonymity of sources. The second section presents the description of the profiles of the participants (4.3). Data from the interviews, documents and observation of eLearning portals are presented according to the emerging themes that were established during the data analysis (4.4). A total of six themes were identified which are in relation to the research questions of this study. That is followed by the conclusion of the chapter.

4.2 DATA ANALYSIS OVERVIEW

The researcher attempted to understand the views from the participants during data analysis. Therefore, in a quest to determine the general ideas and tones of the students and staff as advocated by Creswell (2015) the researcher used the following steps of data analysis as suggested by McMillan & Schumacher (2014, p.394): data preparation, transcription, coding, categorising, pattern discovery and interpretation.

Table 4.1 provides the system of codes used for staff and institutional documents availed for this study to guarantee anonymity of participants and the analysed documents.

Table 4.1 Meaning of staff and document codes

Staff	Staff Codes	Document Codes
Student Support	S1	Document1 D1
Student Support	S2	Document2 D2
Programme Developer	S3	Document3 D3
Programme Developer	S4	Document4 D4
IT	S5	Document5 D5
Quality Assurance Officer	S6	Document6 D6
Tutor 1	T1	Document7 D7
Tutor 2	T2	Document8 D8
Tutor 3	T3	
Tutor 4	T4	
Focus Group 1: Students registered for CECD programme	FG1	
Student Focus Group 2: Students who registered for tertiary and secondary programme	FG2	

Table 4.1 shows that six staff members (S1, S2, S3, S4, S5, S6) referred to as academic staff, four tutors (T1, T2, T3, T4) and two groups of students participated in the study. Documents such as eLearning policy, Quality Assurance Policy, Quality Assurance Guidelines, ICT Bring own device, House Style Manual, Tertiary

Programmes Policy Guidelines, Assessment Policy, Learner Support Manual, Strategic Plan and Annual Reports were analysed.

The data collection process involved making appointments with the identified tutors, academic staff and students. It was not difficult to identify the participants. However, the other point to mention here is that some students who agreed to be interviewed, engaged at one or the other times in both the secondary and tertiary programme at NAMCOL. All the attempts to secure appointment with the students who have only enrolled for the secondary programmes did not materialize. As those contacted expressed not being comfortable to talk about the research topic because their eLearning engagement were limited to only a few visits on the eLearning sites which they have done on a voluntary basis. Hence, the researcher interviewed two focus groups, one with students on the CECD programme only and the second group of students enrolled for both the secondary and tertiary programmes.

4.3 FINDINGS ON BACKGROUND INFORMATION

This section presents the findings about the background information of the participants. The aim of gathering the background information on the participants was to establish any relationship between the background information and their experiences about the quality assurance in eLearning at NAMCOL. The first set of questions in the interview required the participants to provide information regarding their age, gender, employment status, academic qualifications, area of specialization, number of years related to involvement with eLearning,

Table 4.2 presents the profile of the participating staff members in terms of their current academic qualifications, position in the institution, qualification in eLearning and duration engaged with eLearning.

Table 4.2 Profile of participants

Core Duties	Staff Codes	Employment	Highest Qualification	Qualification in eLearning	Years engaged in eLearning	Gender
Course Coordination and provision of student & tutor support	S1	Full time	Master's degree	Yes – short courses	7	Female
Course Coordination and provision of student & tutor support	S2	Full time	Master's degree	Yes –short courses	3	Female
Material Development	S3	Full time	B Degree	Yes -short courses	7	Female
Material Development	S4	Full time	Master's degree	Yes -short courses	7	Female
System settings and provide IT Support	S5	Full time	Master's degree	Yes -short courses	3	Female
Coordination of QA activities	S6	Full time	B Degree	No	Not directly involved	Female
Tutoring and moderating	T1	Part-time	PhD	Yes -PhD level	6	Female
Tutoring and course writing	T2	Part-time	Master's degree	Yes -short courses	5	Female
Tutoring and course writing	T3	Part-time	Diploma	No	2	Male
Tutoring, course writing, moderating	T4	Part-time	PhD	No	5	Female
Students	FG1					25% Male & 75% female
Students	FG2					14% Male & 86% female

Table 4.2 indicates that 60% of participants were employed permanently and on a fulltime basis at NAMCOL while 40% were all tutors who were employed on a part-time basis. These tutors were employed at other educational institutions on a full-time basis and only engaged with NAMCOL after working hours.

Most of the participants were female (80%). Morley (2003) opines those females are more caring and that is reflected in their quality of teaching. This finding is supporting Morley's view that the inclusion of women in the responsibility of quality gives them an opportunity to enhance quality in teaching and learning.

Academic qualifications and years of experience in eLearning were used as major indicators of the quality of the academic and teaching staff in NAMCOL. Most of the staff participants (70%) had obtained higher qualifications, which were master's and doctoral degrees and 30% at lower level. The findings showed that only one staff participant obtained a formal academic qualification in eLearning related field,

nonetheless, all the other staff participants had done short courses in eLearning. The underlying assumption derived from the findings was that the higher the qualification of staff members, the better the quality of education they offer. NAMCOL set a minimum educational qualification requirement for its academic and teaching staff as an instrument for quality assurance. The institution currently offers programmes mostly at certificate and diploma levels with one at a degree and another at post-graduate level. For the registration on the national qualification framework and accreditation, the staff members possess the required qualifications. All the staff participants possessed more than 10 years of experience in the education system, however, their involvement in eLearning range from 2 years to 7 years. The combination of the qualifications and years of experience enabled the staff participants some degree of expertise in eLearning.

4.4 THEMES EMERGED FROM ADDRESSING RESEARCH QUESTIONS

This section represents the presentation and analysis as gathered from the document and responses of the participants regarding the research questions. The responses of the participants were captured as expressed during the interviews.

This study was informed by the following main research question and sub-questions:

1. What are the experiences of staff and students on the quality and quality assurance (QA) in eLearning at the Namibian College of Open Learning (NAMCOL)?
2. How can the experiences of the NAMCOL staff and students on teaching and learning in eLearning be harnessed to design a quality assurance model?

The following are the research sub questions:

1. What are the views of people (programme developers, distance education coordinators, IT Technical staff, tutors, and students) involved in eLearning at NAMCOL on quality in eLearning?'
2. How do institutional policies support QA in eLearning at NAMCOL?'
3. What quality assurance standards, processes and mechanism are in place to assure quality in eLearning at NAMCOL?
4. To what extend have participants engaged in the quality assurance in eLearning at NAMCOL?

5. What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance?
6. What strategies can improve the quality and QA of eLearning at NAMCOL

Based on the analysis of data collected during the interviews, six themes emerged from the responses of the various participants in this study**.** The emerging themes and sub-themes in this study are presented in table 4.3 These themes are presented as major findings.

Table 4. 3 Themes that emerged

Themes	**Which Research question/s it addressed**
1. Awareness and knowledge about the policies related to QA in eLearning	**SRQ 2**. How do institutional policies support QA in eLearning at NAMCOL?'
2. Views of the participants about the quality of eLearning	**SRQ 1**. What are the experiences of people (programme developers, distance education coordinators, IT Technical staff, tutors, and students) involved in eLearning at NAMCOL on quality in eLearning?',
3. Existing quality standards/ systems/ mechanisms to ensure quality eLearning	**SRQ** 3. What quality assurance standards, processes and mechanism are in place to assure quality in eLearning at NAMCOL?
4. Participants' engagements in Quality Assurance in eLearning	**SRQ** 4. To what extend have participants engaged in the quality assurance in eLearning at NAMCOL?
5. Challenges in the eLearning development and implementation	**SRQ** 5. What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance?
6. Strategies to improve the quality and QA in eLearning	**SRQ** 6. What strategies can improve the quality and QA of eLearning at NAMCOL

4.4.1 Awareness and knowledge about QA assurance policy guidelines in eLearning

This theme attempted to find out whether the participants were aware of the policies which guide the quality and quality assurance in eLearning at NAMCOL. This theme addressed the following sub question: *How do institutional policies support QA in*

eLearning at NAMCOL?' The responses were presented and analysed as uttered by the participants.

4.4.1.1 Views from academic support staff

Responses from academic support staff indicated a general awareness of the policies that addressed Quality Assurance in eLearning at NAMCOL. The policies were Quality Assurance, eLearning, Assessment, Safety & Security of Assessment. NAMCOL embarked on continuous professional development sessions to sensitise the full-time staff *members about the institutional policies including the QA and eLearning policies (S1, S6).*

The staff who were full time employed said they knew about the Quality Assurance Policy; however, they were more familiar with the procedures in the House Style Manual for the development of e-content than the policy. One of the staff responsible for programme development (S4) said:

> …*the Quality Assurance Policy is for me more general, it does not say much on the development of the eLearning, but I am more familiar with the House Style Manual than the policy.*

Another participant (S2) in support of the above stated that she was never in a position which required her to know the policies but was always guided either by the Annual plan or the guidance provided in the departmental procedures. She further mentioned:

> *There are guidelines for the development, but I am not sure whether that came from the policies and which policy if so. (S2)*

The same view was reiterated by another staff (S1) who said that they rather depended on what has been agreed in the department, to ensure that all the programmes are running the same.

> *There is no policy specifically for student support in eLearning, but in the division, we know what to do.*

However, participant (S4) confirmed that the eLearning policy provides guidance on certain quality assurance matters. She said:

> *"The eLearning policy address the moderation, editing and design of the eLearning content within the set standards. It tells what kind of software to be used such as Moodle and Turn-it-in"* S4

Participants (S3, S4) further opined that they mainly follow the guidelines that are set out in the eLearning policy. Some of the full-time employed participants said though policies exist, they do not refer much to them but rather use the guidance from the supervisors and the procedures in the various manuals (S2, S3, S4).

> *There are guidelines for the development of materials, in our division we have the House Style Manual with guidelines on all the operations in the divisions,* remarked S4.

In response to the question whether there was any institutional quality framework that guides eLearning, the staff (S4) said**:**

> *Currently in my opinion we do not really have a quality framework for eLearning specific, but we have the colleges strategic plan and then we have our eLearning strategy that has been based on the strategic plan*.

Participant (S4) pointed out that there was no specific quality framework at NAMCOL but rather eLearning strategies as outlined in the institutional Strategic Plan.

4.4.1.2 Views from Tutors

However, the participating tutors were not aware of the existence of such policies at NAMCOL. Except one tutor (T1) who mentioned that there is a Policy on assessment, she said:

> *...I am aware of the Assessment policy, even though it contains a section on copyright, it is not clear on plagiarism. They need to revise the topic on plagiarism very quick.*

She further mentioned that efforts were made to uphold quality in their work and said:

> *NAMCOL is very, very strict on enhancing the quality compared to other institutions that I worked with in the country.*

The tutors in the study reported that none of them were contacted by NAMCOL to participate in the development of the QA policy and eLearning policy. The academic

staff members confirmed that students and tutors were not asked for input towards the development of the eLearning and Quality Assurance policies.

The tutors responsible for eLearning indicated that they provided the service to NAMCOL on a part-time basis, and they were not aware of specific policies for the development, teaching and assessment in eLearning. They were however, provided with a template which they used for the development of eLearning content and the rest were general guidelines which were mostly communicated verbally during training sessions. One tutor who was responsible for the development of content, provided the researcher with the template, however, the others could not affirm whether they were provided with such a template. Participant T3 provided the researcher with a document containing guidelines on how to provide constructive feedback for formative assessment, which was shared during their training session.

On the question whether tutors have been provided with standards that guided their eLearning activities, all tutors responded that their employment contract outlined duties and responsibilities of the tutors. However, the researcher established that the contract being referred to seemed to be the same contract used for all the tutors, be it for conventional or eLearning programmes. The contract does not contain specific guidelines on eLearning.

Tutor (T1) stated that she was not aware of criteria for development of eLearning material, she further explained:

> *"I do not have knowledge of what everybody sees as quality eLearning. It is important that all know what the institution regard as quality eLearning and what it expects from us to deliver quality eLearning*."

The other tutor (T4) affirmed the sentiment:

> *"We depend on our own experience of teaching, and I know some of my colleagues who do not have teaching background struggle"*

Tutor (T2) who has been involved in both content development and facilitation of the eLearning programmes, stated that there were standards for the development of the online materials. She elaborated:

We used the Team approach which I belief is according to NAMCOL policies. The team consisted of the writers, content editors, language editors and instructional designer.

Tutor(T3) confirmed the use of team approach and the checking of each other's work for quality assurance purposes.

Furthermore, two tutors mentioned that for every activity they were expected to submit a written report to the coordinator highlighting their observation made during the conduct of such activity. Tutor (T4) further added that:

One thing about NAMCOL is, they have reports. After you have completed a task, you must submit the reports. For example, after marking of assignments, we submit a report on the performance of the students, highlighting the student challenges and achievements as observed while marking. Otherwise, you cannot claim your payment.

However, one of the tutors (T4) indicated that the policies are not clear on how to support the students.

As a lecturer, I find myself in the vacuum, I do not know how to handle certain cases as the policies are not clear on how to handle those cases.

The tutors (T1, T4) shared the same sentiment in stating that the tutors were left to their own discretion in that every tutor can develop teaching/learning activities and assess students in whatever way they deem best.

Only one tutor (T1) expressed knowledge of the existence of the Assessment Policy, the others have no idea about its existence. All other tutor participants explained they were expected to set 2 assignments for the formative assessment and 2 examination question papers for the summative assessment without guidelines on how to set the tasks. Tutor 2 further explained:

...the tutors use their own discretion on the setting of the assignments and examinations, there are no guidelines that's why you will find that there are no consistencies in the set papers.

As far as students are concerned there was a general awareness about one policy guidelines on the implementation of *Tertiary Programmes.* One student in FG2 pointed out:

> *We have a policy guideline on Tertiary Programme which is loaded on the LMS. This policy guideline contains information on admission requirements, progression, assessment, up to graduation*.

4.4.2 Theme 2: Views of the participants about the quality of eLearning at NAMCOL

This theme was aimed to address the following research question: *What are the views of participants on the quality of eLearning at NAMCOL?*

When the participants were asked about their experiences of quality in eLearning at NAMCOL, many first responded by explaining quality based on their understanding.

4.4.2.1 Quality eLearning as viewed by participants

Participants had the following to say:

> *Quality is when a product is at the level where it is supposed to be,* said S2.

This view was supported by S3 who stated that quality was rated by whether it served its purpose, she further elaborated:

> *Quality is when the product or service serve its purpose and is fulfilling the quality standards. Is it relevant? Does it speak to the specific need or objective that I need to address?* (S3)

Participant S5 pointed out that a quality online programme should have an effective Learning Management System (LMS) on which students should be able to navigate easily on the platform. There should be a tutor presence, who should interact daily with students. Similarly, S4 indicated that the e-content information needs to be clear on the platform for students not to be asking a lot of questions as to where, what, how. Some participants further made the following utterances on what quality eLearning is:

> *LMS should be user friendly. (*S4)

*The level of the language used should be appropriate to the target audience and material must be designed in such a way that students will not struggle to understand. (*S3)

*eLearning platforms should frequently send reminders to students on due dates of discussion, submission of assignments. (*S1)

Tutor 1 and 4 opined that a quality eLearning programme should be well structured and based on the syllabi. They further said the programme should have a course evaluation for both student and teachers' input. T1 added that the evaluation enables the institution to determine the quality of the programme. Participant T2 expressed concern that she is not aware of any quality guidelines for online learning programmes at NAMCOL. Nevertheless, she stated that in her opinion, a quality online programme should create a classroom environment. She pointed out:

…when students are on the LMS, students must get a feeling of being in a classroom.

Students described quality eLearning as based on the support they received from the institution; these are some of their comments:

Quality eLearning is when NAMCOL help us to be able to access the eLearning portals for us to pass the course, FG1

When the tutors and coordinators attend to our problems and guide us on what to do, that is quality. FG2

Quality is when what we are learning at NAMCOL will make me a better teacher, I want to be able to use the study materials at my workplace and not just study irrelevant things. Uttered one student in FG2

In addition, all the participating categories were in unison that a quality eLearning programme should have the following features: effective training for all involved, access, activities and support. These features emerged as sub-themes and are further presented herein below as expressed by the participants in the study.

4.4.2.2 Training in eLearning

There was a general agreement by all participants that training was vital to ensure quality eLearning that would equip the eLearning users with skills to appropriately engage in eLearning content (S1, S3. S4, T2, T3, FG1). Furthermore, students, tutors and support staff stated that training was provided. However, they had varying views on the effectiveness of the training. According to the students the duration over the years varied, once-off training of 3 – 6 hours for some groups and two students stated that they had a three-hour training on a Saturday once every month.

Two students said they only had a one-day training, in which they were not given enough time to learn about the LMS and portal. Another student in FG2 said:

> *Not much time was given to learn about the portal, we only had one day training which was not enough to learn the portal and eLearning.*

Contrary, another student in FG1 stated that in three hours they were taught to navigate and manage to go around the portal. She further indicated that the training covered the following topics:

- introduction for eLearning
- how to log on the portal
- internet,
- connected to Moodle
- how to submit assignments

Participant (S1) affirmed that students were provided with training ranging between 6-8 hours. She said:

> *…. students who are struggling usually called the office and we have been assisting them telephonically. It's true sometimes while on the phone they run out of credit and the phone is cut off, that is sad though.*

Staff (S3) added that a video on how to engage the eLearning platform, is posted on the platform for student use.

Tutor participants pointed out that at the beginning of their contract they received training which was conducted by the academic staff. Three of the tutor participants

(T2, T3, T4) said that they had no knowledge about eLearning, and their first encounter with eLearning was at NAMCOL when they were invited to attend training on eLearning as tutors. They explained that the initial training ranged between 3- 5 days and covered the following topics:

- introduction to the learning platform,
- how to navigate on the platform,
- learning about all the icons,
- turn-it-in
- how to mark and grade assignments online. Two of the tutors stated that they were provided with different links to OER

Tutors agreed that the training was provided to ensure that they delivered quality teaching and learning in eLearning. According to one participant (T2):

> *Tutor training was provided because NAMCOL wanted to make sure that we are equipped with the skills to make sure that we know and provide quality eLearning services to the students.*

Another participant (T4) supported the view and even went further to provide more explanation of the training. She elaborated:

> *…during the first session in training, we looked at eLearning lessons and identified their strong and weak points. Then we used that to create our lessons. I liked the insertion of videos and creation of links in my lessons. The training really helped me to strive towards developing quality e-content.*

4.4.2.3 Access to eLearning

All the participants generally agreed that access is a determining factor of quality in eLearning. Two student participants in FG1 and FG2 respectively indicated that they received tablets and data from NAMCOL when they enrolled for the eLearning programme. On top of that data was loaded monthly on their devices, making it possible to access the learning portal. This was confirmed by the Academic staff (S1 and S3) who said that the first cohorts of online students were provided with tablets and monthly internet data of 2GB. S1 reported that the group was small with 30

students registered for the Certificate in Early Childhood Development (CECD) and NAMCOL could provide them with the devices at no additional cost to students.

On the other hand, most students who participated in the study reported that they had to secure own devices and data. In support of this, a student in FG1 lamented:

> *mmm…(sigh), no laptop, no data nothing, we are left on our own.*

The participating academic staff (S1, S3) confirmed that only students who enrolled during the first two years were issued with devices, and as from 2016 academic year, students and tutors had to secure own devices. S1 further explained:

> *Students and tutors were expected to have own laptops or tablets and internet, otherwise it will be difficult for them to be on the online programmes.*

This situation resulted in several students dropping out as some were only using work laptops and internet and as soon as they changed the place of employment, they could not continue with the studies due to lack internet and laptop participants (S1, S3) observed. Several students changed to conventional learning even though they initially enrolled for the online mode S1 reported.

In addition, three students reported that they had prior knowledge of computers, hence they found it easy to log and navigate on the platform, whereas another student in FG2 stated that the log-in process was complicated at the beginning and at times she failed to log in. She further revealed that the administrative staff members were not well knowledgeable with the eLearning system and struggled to help them, but with time they mastered the system and could assist the students faster. Another student in FG 1 confirmed:

> *…at the beginning I think the coordinator was also learning, because it took longer for them to help you. But later as a student you could see that they became confident with the eLearning and will help you quickly.*

Staff (S1, S2, S3, S4, S5, S6) responded that they have access to the computers and internet as NAMCOL provides laptops and computers to all its full-time staff members. Staff S3 remarked:

> *Access to me as a staff member is not an issue.*

I can access the learning management system wherever I am as long there is internet, said (S1).

On the question whether NAMCOL provided tutors with devices, participating tutors said:

> *...when we were developing the course content, I was given a laptop and a dongle for access to internet. The dongle had problems to connect, and I mostly used my private internet.* (T3)

Tutor (T4) responsible for tutoring said:

> *When NAMCOL started with the first student cohort of online CECD, I was given a dongle for internet connection with monthly 10GB data. After that group up to date we were expected to use own data for internet*.

Another tutor (T1) said:

> *We are told that having access to internet is a requirement to be contracted as a tutor.*

The tutors (T1, T2, T4) indicated that they would log on to the learning platform daily, even though the NAMCOL guideline stipulates that the tutors would be remunerated for a maximum of four hours per week only. Technically they were required to spend 4 hours per week on the platform. Tutor(T4) reported that she preferred to log on the platform every morning before 9h00 to attend to urgent student queries and then again between 16h00 – 20h00.

4.4.2.4 Activities on eLearning

Tutor participants agreed that the quality e-content must be more conversational. Participant (T2) stated that the uploaded materials should contain more movements and explaining voices. S1 and S3 agree, that the learning content on the eLearning platform should consist of activities that capture the attention of the students. S1 further said:

> *...e-content must capture the attention of student with things such as fun activities and videos to motivate them or make it easier for them to understand the concepts*. (S1)

In agreement, tutors stated:

> *You cannot have an eLearning platform created just to deposit books.* (T4)
>
> *Materials should not be loaded as text mainly but should have movements and voice over. That could also include a video of a tutor explaining the concepts.* Explained T1

Tutor participants explained that their roles in eLearning at NAMCOL were developing online subject content and video, development of assignments, setting & marking of quizzes and online assignments and upload them on the learning platform and creating discussion forums. T3 expressed that:

> *We facilitate learning by creating discussion forums as well as moderating the students' post. It is good because as a tutor I also learn.*

Tutors (T2, T3 &T4) claimed that it was easy to navigate on the platform as there are pop-ups.

> *I like the pop-up, so there is no hustle, everything is on the home page,* said T4.

According to some students, activities on the eLearning platforms were appropriate and the language was regarded to be easy to understand. Some students remarked:

> *They use straightforward English,* FG1
>
> *…information is well structured on the platform, and it is clear what we need to do for the week,* said FG 1.

On the contrary, one student in FG2 found the online content to be difficult to follow, she therefore uttered:

> *…to be honest, I could not understand the content on the system, so I made copies of the study guides from a friend who was doing the print learning. I worked better that way. I even compared the content on the eLearning system to that in the book, it was different. The book explains more and had pictures*.

Another student in FG1 affirmed the sentiment expressed above that the online content is not comprehensive, and she said:

...the pictures in the books are not found in the e-content. They gave a lot of links instead of just explaining something. You must follow a link and that finished the data and some of the information was not even useful.

Academic support staff (S1, S2) affirmed that the language used in the eLearning programmes, was at the appropriate level, while S3 added that the language and concepts used depended on the level of the qualification. All the participating tutors on the other hand, agreed that the language used in all the eLearning programmes was appropriate and correct.

Tutors (T2 and T3) stated that the information on the platform was accurate, and they found no errors, whereas T1 opined that she found information that she did not agree with, however, when she took it up with the NAMCOL staff they were open to ideas and made the necessary changes. Similarly, T4 tutor stated that some of the information on the platform in her subject were outdated and need to be updated and localized.

On a different note, tutor (T1) indicated that the course materials of one of the postgraduate programmes were well structured, arranged in modules, units, subunits and activities. In addition, she said:

The well-designed online programmes motivated the students and that contributes to a high retention rate in the programme and quality output.

However, the tutor mentioned that the course material in one of the other courses, were not structured in e-books and were not user friendly towards the students. Tutor (T1) further stated that students expressed their frustration to her in that course. She said…

…students are looking for a content which is referred to in the assignment, but then when they must go on the portal, they must look for 30 minutes to get that content.

Responses from students indicated that videos and notes were loaded on the platforms, however, they were only on certain topics. FG2 said:

When you play the video and read the notes, it helps to understand. Video is better than reading.

On the question what activities they engaged on in the eLearning platforms, FG2 named the following: *discussion groups, assignments,* and *quizzes.* Responses from students indicated that videos and notes were loaded on the platforms, however, they were only on certain topics.

Staff (S1) confirmed the above and elaborated on the advantage of varying eLearning activities as follows:

> *There are varying activities on the platform for students to help them understand the work. The activities are divided into weekly tasks to enable students to learn small chunks of work to ensure mastery. Discussion groups help, because different students do post their views to respond to a question on the discussion platform and they learn from each other.* Explained S1

Students had varying opinions on their participation in discussion forums, following were some of the responses:

> *I took part in discussion groups, because when you post, the peers or the tutor will also respond on how they understand the matter which helped me to learn,* expressed FG1.
>
> *Sometimes we had topic discussion and we responded on the topic,* FG1 uttered.
>
> *I just read what others were saying and did not write,* (pause followed by a sigh) *…. I am shy and maybe I will make a mistake,* remarked *FG2*
>
> *I only tried once to take part, but the network was very poor, and I did not have enough data to connect,* expressed FG2

Students responded that face-face workshop was held for all the registered students, at the beginning of the first semester. Thereafter, no meetings were conducted with eLearning students. Information was disseminated via brochures, emails.

The responses of tutors (T1, T2, T3 & T4) confirmed that most students do not participate in discussion forums except in the cases when the discussions lead to awarding of assessment marks. Hence, they resorted to grading most of the discussion forums. In that way all the students were forced to post their contributions to the topic at hand. Tutor 4 said:

hmmm…one thing that I have encountered is that there is a low-level participation in discussion forums when they are not graded. When they are graded, students will participate, and they will also comment on each other's posts.

All the tutors confirmed that they never had a webinar with their student groups. Tutor (T4) stated that she tried to schedule class meetings with her group, however, students were not available. T4 explained that:

...many students were unable to take part because the scheduled time slots were not convenient to most of them.

4.4.2.5 Support to students

Students had varied views on the effectiveness of support they received from the various staff members. Here are some of the statements made:

I just found myself into this eLearning because I wanted to study. When I applied and came for late registration, I was told that the materials for distance learning were no more available and if I want to study, I will be put on eLearning. First, I did not know what it was. With the help of my fellow students, here I am, I like it and will soon graduate. remarked a student in FG2

Some tutors were active on the portal and when you post queries on topics which you did not understand, they responded in a short time, FG1

*The IT staff helped me to connect my laptop on the Wi-Fi, but the Wi-Fi is strong around the library. The IT people were very friendly, and they help you immediately.*FG1*.*

The coordinator was the best, she will help you. When she promised to come back to you, she honestly kept her word. That encouraged me to work hard, because she was always patiently guiding us, reported FG2.

The above expression was in line with Tutor (T3) who claimed that she would log on to the platform immediately after she had noticed incoming mail and responded immediately to the student queries. She shared the following:

I am an online student myself and expects my teachers to respond promptly, therefore, I do the same with my students too. She further said *Students are*

only at certain times at the computers and therefore they want to get responds at those times.

Some students complained that in some of the subjects, tutors did not provide support to them.

...even if you post questions on the portal they did not respond. Tutors are a problem, said a student in FG1 with a sigh.

Participating tutors (T1, T2, T3, T4) were concerned that students usually would want immediate responses, while they were also busy with their full-time responsibilities as their engagement with NAMCOL is on a part-time basis.

Students find time to log on the system at mid-night as MTC, the mobile network service provider avail 'happy hours' which gives free network for certain hours. During those odd hours, students expect you to respond to their queries immediately and that is not possible. Said tutor (T4).

On the support to tutors and students, the full-time academic staff (S1, S3, S4) who participated in the study, claimed that they tried to assist tutors and students where possible and address their needs when they expressed them to the offices.

*When e-content developers communicate with me that they do not have access to internet, I will communicate to the facilitator to arrange for the developer to work from the Computer Based Learning Centres (CBLC). (*S4)

…we advise the students on how to get cheaper data packages, said S1.

The college has established eight computer centres across the country, with computers and internet connectivity for our students, and at each computer centre there is a facilitator who can help our students. (S1)

All our campuses have an upgraded strong Wi-Fi for the students and recently we provided all the regional offices with new computers for the resource centres. All these were aimed at creating a conducive learning environment for quality learning for our students. S5 expressed.

The participating tutors and students confirmed that on NAMCOL campus there is the CBLC with internet connection and access to Wi-Fi. However, tutors (T2, T3) mentioned that they mainly needed connections after hours when they had to attend to NAMCOL activities as they were engaged in their fulltime employment during the day.

4.4.3 Theme 3: Existing quality standards/ systems/mechanisms to ensure quality eLearning

The theme addressed the research sub-question *What quality assurance standards, processes and mechanism are in place to assure quality in eLearning at NAMCOL?*

The sub-themes that emerged from this theme are existing policies, leadership, student support, recruitment, training, tools, moderation, team approach, monitoring & evaluation, assessment, audits, reporting, review cycles, each of which are presented below.

4.4.3.1 Existing policies that ensure QA in eLearning

At this juncture the researcher has contacted document analyses to establish the existing policies that supports quality assurance in eLearning. As a result, the following documents were accessed on the intranet of NAMCOL and were analysed for the purpose of this study: eLearning Policy (D1), Quality Assurance Policy (D2), Quality Assurance Guidelines (D3), ICT Bring your own device Guidelines (D4), House Style Manual (D5), Tertiary Programmes Policy Guidelines (D6), Assessment Policy (D7), Learner Support Manual (D8), Strategic Plan (D9) and Annual Reports (D10).

The above institutional documents respectively provide guidelines on development of programmes & study materials (D5), provision of learner support (D3, D6 & D8), staff development (D3), provision of ICT to academic staff for teaching and learning (D3 and D4) and quality assurance (D2 & D3). The study focused on these documents to establish and understand the guidelines for quality assurance in eLearning in relation to 1) planning, designing, developing and delivering of programmes, provision of student support, provision and nature of feedback (D8). The researcher found that the policies, except for D1, made no specific reference on how quality assurance in eLearning must be conducted, but give general guidelines for the development and implementation of all programmes offered at NAMCOL. For this study, the following

policies have been selected for presentation as they appear to be more applicable to eLearning.

a. eLearning Policy

The analysis of the eLearning Policy indicates the objectives of the eLearning Policy at NAMCOL to be as follows:

- *improve the quality of teaching and learning*
- *develop of lifelong learning skills via eLearning*
- *promote the use eLearning by students and tutors*

The policy (D1) outlines the following principles for the development and implementation of eLearning:

i. *Academic integrity and excellence: To ensure quality and excellence in eLearning and adherence to the National Council of Higher Education, Namibia Qualification Authority and Namibia Training Authority guidelines.*

ii. Relevance: To ensure the relevance of eLearning in line with market needs.

iii. Responsiveness: To be responsive to both societal and national developmental needs

The policy further guides on the nature and frequency of training to be provided to the tutors:

> *eLearning unit will be responsible for training the tutors in the technical and pedagogical use of eLearning technology. Different forms of training will be offered on a continued basis and according to the needs identified and in line with the institutional strategic plan (p.8).*

b. Quality Assurance Policy

The analysis of this document (D2) provides a framework for the assurance of quality in the operations at NAMCOL. According to document D2, NAMCOL has adopted the National Association of Distance Education Organisations of South Africa's (NADEOSA) Quality Criteria for Distance Education (1999) and other internationally recognised quality criteria. The benchmarking and evidence-based approach is

adopted to assure quality. NAMCOL evaluates its performance against national and international standards.

According to this policy, quality assurance and management of quality are done through the following approaches (D2):

• Self-Evaluation

• Internal Quality Monitoring and Evaluation

• Programme Reviews

• Institutional External Audits

• Quality Awareness Campaigns

• Programme Accreditation

• Registration of Qualifications on the National Qualification Framework (NQF)

The policy highlights the importance of feedback from key stakeholders in terms of planning for improvement and enhancement of quality in operations.

> …*outcomes and feedback from stakeholders (including students, staff, employers, and the community, as appropriate) provide the basis for analysis and conclusions on which improvements are planned* (QA Policy p. 9).

c. Assessment Policy

Assessment Policy (D7) provides clear guidelines on the following aspects that affect quality: assessment methods, types and criteria to consider when administering and managing assessment, maintenance of academic integrity and avoidance of dishonesty, cheating and plagiarism, though not with specific reference to eLearning. Institutional documents (D2, D6 and D7) referred to effective formative assessment that use various tools and approaches. In addition, explicit guidelines for quality assurance in terms of evaluating, monitoring, moderation and editing are documented (D3, D7).

However, the tutors responsible for eLearning indicated that they did not have specific policies for the development, teaching and assessment in eLearning. They said they were provided with a template which they used for the development of eLearning content and the rest were general guidelines which were mostly communicated

verbally during training sessions. One tutor who was responsible for the development of content, provided the researcher with the template, however, the others could not affirm whether they were provided with such a template.

Tutors responsible for facilitating teaching and learning through eLearning, stated that they have not seen the assessment policy, however, they were provided with guidelines during training that grading, and feedback must be specific and not vague (T1,3,4). Tutor (T3) shared with the researcher a document with guidelines on how to provide constructive feedback for formative assessment, which was shared during their training session.

Visit to the eLearning portal, showed that extracts from the policies and guidelines were posted for the students to adhere. For example, policy statement on plagiarism (D6), feedback provided by some tutors to the students (D3, D8), however, the researcher could not establish whether, all relevant staff members used the policies and guidelines, or they only waited for guidance from their supervisors.

Students confirmed that they were issued with the institutional document D6, which outlined certain aspects such as student responsibilities, assessment structure, course fees, appeal procedures, a number and type of assessment activities to be undertaken, policies on refunds, progression rules among others. The document was available on the institution's website.

Participant S6 confirmed the existence of the policies that are relevant to QA in eLearning

> "*Mm… one is Quality Assurance Policy which provide guidance in the development and implementation of the internal and external QA procedures and practices. There is also the eLearning Policy which guide the development and implementation of quality eLearning programmes, and the Assessment Policy.*"

4.4.3.2 Leadership support

Budget allocation of NAMCOL reflected the importance of achieving the strategic goal related to the provision of quality eLearning programme (D9, D10). NAMCOL acquired technical infrastructure such as dedicated servers for eLearning and Wi-Fi

access was installed at all her campuses (D9). In this way students on campuses could access Wi-Fi (S3, S5). Participant S5 further explained:

> *eLearning is one of our critical services. It must be up 24/7, it must be accessible all the time anywhere. We have implemented the Hyper converged solution. It is like a replication of the service. If the hard drive on this server crash, it will automatically start running on the other server environment, that is to avoid having a down time as it is a critical service. Meanwhile it gives us time to figure out what went wrong. And we have virtualized using a V-M ware (it's a virtualization software), it means a service is not dependent on the hardware.*
>
> *With the COVID-19 outbreak, it has become easier to get funds towards the implementation of eLearning. The Executive Management have realised the importance of eLearning,* said S3.

4.4.3.3 Student Support

NAMCOL has developed a range of services delivered on Web, ranging from student information about course admission requirements, fee structure, scholarship applications, online applications, course registration to assessment and related procedures among others. Students were given the option to either apply for admission manually or online (S1, S2). Technical support is arranged to be provided within 24 hours (S1, S4). The researcher was able to observe the online orientation service on the eLearning platform.

4.4.3.4 Recruitment

According to documents (D3, D8) and participants (S1, S3, S4), NAMCOL has established qualifying criteria for the recruitment of academic support staff, writers, tutors and moderators. The main criterion used was the expertise in the subject content and not per say the technology. Staff (S1) narrated that several tutors who were skilled in engaging eLearning platforms, gained those experiences either by having been students on eLearning platforms or by having been facilitators at other institutions. However, three of the tutors (T2, T3, T4) stated that they did not have any knowledge about eLearning, and their first encounter with eLearning was with NAMCOL when they were invited to attend training on eLearning which ranged

between 3-5 days. Upon recruitment, tutors and moderators responsible for eLearning were provided with training aiming at capacitating them with the required skills and technical knowhow (S1, S2, S3, S4, T2, T4).

As for students, there were set admission requirements for each programme and the students were expected to meet the requirements before they could be admitted into the programme (FG1, FG2). Participant S2 indicated that the admission requirements were the same for both online and print-based programmes.

4.4.3.5 Training

NAMCOL has embarked on training for staff members. Tutors responsible for eLearning were trained on how to mark and grade assignments online (S1, S3, T1, T2, T3, T4). The online marking was confirmed by the researcher on the eLearning platform. In addition, participant S3 mentioned that NAMCOL has embarked on virtual training for staff members in collaboration with the Commonwealth of Open Learning. Participants (S2, S3) cited that the following courses were offered to interested staff members: e-content development, online assessment setting and use of Open Education Resources. Efforts were made to encourage staff members to enrol for virtual short courses and those involved in eLearning were part of the groups that went through the training.

Furthermore, NAMCOL introduced virtual training courses for teachers on online facilitation and 80% of the tutors enrolled and completed the course (S2). Teachers were required to pay an enrolment fee of N$500. Participant (S2) further said:

> *Most of the tutors were eager to enrol for the online facilitation training programme because they wanted to gain a better understanding on how to mark online*.

Staff (S4) remarked

> *I will not say staff and tutors have received adequate training, but they have received training. One basically become an expert through doing and learning by yourselves. That's why the college started offering the short courses. Tutors and content developers were encouraged to enrol.*

Most participants revealed that they took initiatives to learn on their own through Future Learn on MOOCS, to upscale their skills (S1, S2, S3, S4, T1, T3). One further said:

> *Technology is dynamic and we need to keep abreast with the latest development for us to be able to succeed in eLearning,* remarked S3.

Participant S4 was busy doing massive open online courses (MOOCS) and a diploma in open school management. Another participant S1 revealed that she completed a certificate on how to design online courses. S1 added:

> *I can design any course that I am given on an eLearning platform. So, it has really helped me, I have skills that I can confidently say that I am able to use…. but I think I have attained 60% technical skill* in the development of online resources

Participant (S5) had done an online course on '*Use of different tools to facilitate Online learning'.* This is what she said about the benefit of that training:

> *"This online course helped me, when I am doing settings, I now have a better understanding of how the system needs to be set up to accommodate all the different tools and all the various types of content, for the users to have a best experience of the system."*

She further indicated to have gained understanding on how the system settings they configure might affect the users at the front-end: hence, the training equipped her with the necessary skills to set up the system and make it more user friendly.

Students were provided with crush training to guide them on how to engage the LMS portals. There is a video on the platform which guides the students on how to submit assignments which was also viewed by the researcher for the purpose of the study.

4.4.3.6 Tools

Full time staff including those dealing with eLearning, were provided with 4GB laptops and stable internet connection at work. NAMCOL has established 8 computer centres with internet connection across the country, for use by students and tutors at no additional cost (S1, S4, S5). Participant S4 shared those efforts were made by NAMCOL to explore zero rating access, but none of the local service providers were

offering it. Zero rating implies access to eLearning resources at no cost, data in this case is not needed for access.

The participants indicated they were using Moodle as an LMS for teaching and learning (S1, S2, S3, T1, T2). They were using asynchronous technology for tutor-student interaction. The Moodle system automatically sends out alert messages to students who have not yet accessed the courses to remind them to do so. However, the extent to which this facility was used, is not documented.

Pursuant to ensure academic integrity in assessment as per document (D2), NAMCOL has put measures in place such as Turnitin software to curb plagiarism and examination irregularities (S1, S2). Tutors (T1, T2, T4) confirmed to have used the Turnitin for assignment submission and grading and found it easy to use. Turnitin software, according to S3 and T1, ensured quality of assessment work produced by testing that student demonstrate understanding of the subject matter and do not just reproduce work done by others. The researcher could view tutors' comments and students' grades on Turnitin. Staff (S1 & S3) said they were able to monitor the marking process and did not have to wait for the submission of the marked assignments after 2-3 weeks. Through Turnitin, students work was monitored, and level of plagiarism were immediately detected, and necessary steps were taken to address the misbehaviour (S3, T1).

4.4.3.7 Moderators

Moderators are subject experts who monitor the quality of teaching and provide guidance to the tutors (S1, S3, T1, T4). Moderators would quality check 20% of marked assignments and examination scripts. However, if the marking has not met the set standards, then the tutor would re-mark all the scripts (S1, S2, S3). Students FG1 reported that the policy (D6) made provision for students to appeal and apply for re-marking of assignments and examination scripts. Academic support staff and Moderators also monitored the discussion forums and the online facilitations to assess the quality of the input and output (S1, S3, S4, T1, T4) and as a result provided the required advice to the tutors.

4.4.3.8 Team Approach

Staff (S3 and S4) reported that Team of writers, content editors, language editor and instructional designers were contracted to develop the online content. The content was moderated by 3 different content experts. All team members gave approval of the content with instructional comments which were to be incorporated by the initial developer or writer. Once the content went through the process of peer review, language editing, quality assurance check, then it would be published and loaded on the learning platform for accessibility by the users (S3 and S4).

> *Subject experts are in a better position to make a judgement on the quality of the subject e-content and that way ensuring quality,* S4 further pointed out.

4.4.3.9 Monitoring and Evaluation

Participants (S1, S2, S3, S4, T1, T2, T4) reported that they received formal and informal evaluation reports from students and tutors and efforts were made to address the concern raised to enhance the quality of teaching and learning process. In some programmes, students completed the course evaluation at the beginning and end of the programme (S1, FG).

Tutors (T1, T2, T3) responded that their activities were monitored by the programme coordinator. In addition, as tutors they logged on the eLearning system and monitor the students' activities, they could view when last each student accessed the system and whether they have submitted their assignments (T1, T2, T3, T4). Tutors' performance was evaluated by their students too (FG2, S1).

The eLearning System Administrator monitors the effectiveness of the software and determine whether there is a need to upgrade the software (S3, S5).

4.4.3.10 Assessment

The formative assessment was done on the eLearning system through the submission of assignments, participation in discussion forums and quizzes (S1, S2, S3). Though all the courses included assignments, some students raised concern that not all the courses had quizzes on the platform and the number of discussion forums differed from course to course (FG1, FG2)

However, the summative assessment which is the final examination is written in person under strict invigilation, as NAMCOL did not have an established system to conduct the online summative assessment. Participant S1 pointed out that:

> *The examination results could be used as a measure to assess the effectiveness on the eLearning.*

Some students expressed concern that though they were taught online, the NAMCOL expected them to travel to the examination venues to write the examinations in person (FG1, FG2). In contrast, some students (FG1, FG2) supported the writing of the examination in person as they did not have devices and stable internet connection to enable them to take online examination. One student participant said:

> *I am glad NAMCOL decided to let us write the examination on paper, because I was worried that I might not write the online examination as I struggled to write my assignments on the cell phone. Data is expensive and internet is not stable in our area.* Expressed a student in FG1.

Participant (S1, S2) mentioned that records of student assessment results are secured on the Integrated Tertiary System (ITS). ITS records are password protected and the researcher could only view the information with the permission of the Students System Administrator.

4.4.3.11 Internal and External Audit

The Namibian Qualification Authority (NQA) is a statutory body responsible for the quality assurance and accreditation of all the institutions of higher learning in Namibia (S6). The programmes at NAMCOL are audited every third year (D1).

> *NQA ensures that the teaching and learning meets the set quality standards by evaluating the College every third year when the institution applies for the programme accreditations with the quality assurance regulatory body. In preparation for the external audits, the Quality Assurance Office usually hold a pre-audit meeting to guide the team on which documents to gather and have prior discussions on the audit criteria*. said S6.

During the audit management, academics, tutors and students were interviewed to express themselves on the quality of teaching and learning and the support provided

to them, and the auditors logged on to the eLearning system to evaluate its functionality (S1, S2, S3, S4, T1, T2, FG2).

> *With the audit of last year, I arranged for the expert on the audit team to log on to the eLearning platform, provided him with all login credentials. To my embarrassment, he could not log on, the eLearning coordinator tried everything she could but to no avail and could only it fix the following day. Imagine, what the students do go though, and such things can cause them to drop out. (S6)*
>
> *Last year I attended the NQA audit, they mainly questioned me on my engagement with NAMCOL especially on eLearning***,** revealed T2.
>
> *I was invited for the interview by NQA, they asked me on how many assignments we are required to submit and how long does it take to get feedback from the tutors. They also wanted to know whether NAMCOL gave us financial support,* elaborated FG.

Academics further revealed that after the receipt of audit report, the institution compile an action plan to address the recommendations made by the external auditors. Participant S6 added:

> *Quality Assurance Committees in each department have the responsibility conduct self-evaluation and submit a report on the progress they have made in addressing the recommendations from the audit.*

4.4.3.12 Reporting

Participating staff responded that they report on eLearning activities in each quarterly report (S1, S3, S4). One participant said:

> *We report about eLearning on a quarterly basis and then Director uses our reports to compile the institutional reports to the Board of Governors and the line ministry in government.*

The same view was echoed by staff (S6):

> *NAMCOL report to governments for accountability. It is also required to submit the quality assurance reports to Botswana Open University (BOU) and NQA, the accreditation body.*

There are established committees such as: Academic Advisory Committee and eLearning Committee, which ensure that the policies and procedures regarding eLearning are implemented accordingly (S1, S3, S4, S6).

4.4.3.13 Review Cycles

As a quality assurance measure, the curriculum review is scheduled every third year (S3, S4). The review process is informed by comments from tutors, industry, students (S3, S5). Participant S3 said:

> *When we review the programme, we are guided by the input from the students who have done the programme, tutors and employees. That enable us to remove content which is no more relevant and to include contemporary subject related topics.*

4.4.4 Theme 4: Participants' engagement in quality assurance in eLearning

This theme was aimed to determine the extent to which the participants engaged in quality assurance activities in eLearning and responded to the research sub question: *To what extend have you engaged in the quality assurance in eLearning at NAMCOL?*

When asked how they engaged in the quality activities, participants first voiced their understanding of what Quality Assurance is and then elaborated on the QA activities in which they engaged. The following sub-themes emerged from the collected date: understanding of quality assurance, policy development and implementation, audit, monitoring and evaluation.

4.4.4.1 Quality Assurance

Participating tutors and academic support staff generally expressed their understanding of QA as a process that determines the effectiveness of the set standards to achieve quality. The participants uttered some of these expressions:

> *QA are the methods and steps that you are taking to make sure that whatever you are producing is of an acceptable standard*, stated S1.

> *Certain criteria which are put in place to measure the quality of a specific piece of work or activity you do*, S4 pointed out.

…having variables that you are testing to ensure that a certain standard that you have put there is met. We must do monitoring, reflection and see how we improve, T1 explained.

QA for me is to make sure that this service or the product that you provide is of excellent quality. And that is why I keep on asking what the standards and guidelines for online quality assurance are? (T4)

On the other hand, in the focus groups, only one student expressed her view about QA while all the other students explained their engagement in activities related to QA instead. Student in FG1 explained QA as:

*QA is making sure that the study materials and classes which NAMCOL provide to students is of quality***.**

4.4.4.2 Engagement in the development and implementation eLearning QA policies

The participating tutors reported that none of them were contacted by NAMCOL to participate in the development of the QA policy, eLearning policy and Assessment policy. Tutor (T3) said:

No, I have been doing work for NAMCOL for about 7 years now, but I was never called to give input in the QA policy or any other policies.

The academic staff (S1, S2, S3, S4, S6) confirmed that students and tutors were not asked for input towards the development of the policies.

On the involvement of the full-time staff in the development of the related policies, the academic staff responded as follows:

I cannot remember having been involved in the development of the Quality Assurance Policy. I think when I joined the college that policy was already in existence, stated S1.

I know about the QA policy, but I was not involved in its development or revision, that is usually done by the managers and the Deputy Director. But I am familiar with the quality assurance procedures, said S4*.*

I coordinate the development and revision of the QA policy, and even recently we developed the QA manual with inputs from all the divisions. I am not able to tell as to how divisional heads involve people in their divisions when their revise the policies, explained S6*.*

I served on the committee which developed the eLearning policy, so I know it very well, S4 pointed out.

4.4.4.3 QA Audit

Participant S3 revealed that in the pursuance to promote quality assurance, NAMCOL has a memorandum of understanding with Botswana Open University (BOU). Each directorate developed quality action plans for each year to enhance continuous improvement. Consequently, the directorates conducted self-evaluation and submitted the quarterly reports for management consideration (S6). In addition, S6 elaborated that NAMCOL conducts the internal quality assurance audits based on the common quality criteria as agreed upon between NAMCOL and BOU. The participant further explained that heads of directorates were expected to involve their staff members in the audit and self-evaluation. She further said:

...the collaboration calls for biennale audits between NAMCOL and BOU which are preceded by self-evaluation. …heads of directorates were expected to engage their staff members in the self-evaluation and internal audits as they are the technocrats and not just the managers.

On the question about the awareness of the internal self-assessment and the common quality criteria between NAMCOL and BOU, some of the participants (S3, S2) had the following to say:

I have been with the college for more than five years and do not know the common quality criteria. The QA committees usually comprises of the managers and Deputy Directors. They should include all the staff members at all the levels if they want us all to be aware of this, S3 said.

Yes, all the academic staff in the department met and we had to respond to the progress made on the set quality action plans. I am aware that the action plans were based on the previous quality assurance recommendations from

NQA and BOU. However, I am not so sure whether I have seen the common quality criteria you asked about, said S2.

Tutors (T4, T2) mentioned that they were aware of the collaboration between NAMCOL and BOU as they were called in for interview during audit by BOU, but they did not have any knowledge about the common quality criteria.

Two tutors (T1 & T2) were invited to participate in the external QA audit conducted by the regulatory body, NQA.

Tutors (T1, T4) shared that they were called in for external audit.

I was invited to be interviewed during the audit by NQA and it was more on my role as a tutor for NAMCOL which included some eLearning questions, said T1.

Another participant said:

In the absence of clear eLearning quality standards in the college, I am not sure whether we do justice in the audit of eLearning programmes. ……mmm just tell me against what do you audit it against? ……what are the quality standards? remarked T4

In addition, tutor (T2) mentioned to have taken part in the online survey on the use of eLearning materials. In support of the above, two students agreed to have taken part in the similar survey on the use of eLearning. The students said:

*I received an online link through email to participate in the survey, which was about the use of the NAMCOL eLearning materials, which I did. But they did not give us the feedback. (*FG1)

I completed the questionnaire about eLearning last year, said participant in FG1.

4.4.4.4 Monitoring and Evaluation

Tutor participant (T2) mentioned that when she developed the e-content for CECD, there were three writers for each subject, however, each was responsible for the writing of a certain section of the subject content. After writing they swapped the

work, and content edited each other's work. In that way they quality assured the work themselves. As stated in her own word:

> *We used the Team approach for the development of the eLearning materials. The team consisted of the writers, content editors, language editors and instructional designer.*
>
> *They pick up what I have missed out*, expressed T2.

T4 confirmed the use of team approach and the checking of each other's work when they developed the content.

Participants (S1, S2, S3, S5) reported that they were able to follow the activities in which the tutors and students engaged on the platform. This was done for the purpose of monitoring and evaluation. One staff said:

> *eLearning System has a build in monitoring system which enables me to log on the platforms and monitor the tutors and students who logged on, monitor the type of activities engaged with and the duration,* explained S1.

Another key point, academic staff (S1, S2, S3) responded that they monitored the quality of assignment marking as from the onset, since the marking is done online. If they find that the marking did not comply with the set marking standards, then the moderator would be alerted to guide the tutor-marker accordingly.

Both tutors and academic staff agreed that moderators were appointed for each subject. Tutors agreed that they received reports from moderators on the quality of their marking. Tutor (2) further said:

> *The previous year, the moderator instructed me to re-mark questions 2 & 4 in assignment 1, maybe it is because she was not happy with the way I initially marked them. I just had to do it.*

An academic staff (S2) concurred that 20% of the marked assignments and examination scripts were moderated. Once the moderator detected that the standard of marking was not satisfactory, then the tutors were instructed to re-mark the assignments/scripts without additional payment. Participant (S2 and S3) further mentioned that moderators also monitored the discussion forums. According to the

participants, moderation was conducted mainly to ensure the quality of the work done by the tutors. One academic staff said:

> *Tutor-markers are monitored to ensure that whatever the tutors are giving out to students are of good quality.* (S3)

According to S1, the tutors also monitored the student activities on the eLearning platform (S1). In support, tutor (T3) stated that she used the gradebook, to monitor the performance of students in her subject, and that enabled her to identify those who have not done the assessment activities. Tutor (2) added:

> *I sent individual reminders to those with outstanding assessment activities, for them to submit*.

Two tutors (T1, T2) said for every activity they are expected to submit a written report to the coordinator. For example, after marking or moderating of assignments, they submit a report on the performance of the students, highlighting the student challenges and achievements as observed while marking.

Participants (S1, S2, S4) stated that the feedback from the tutors and students serve as a medium of assuring quality. Staff (S1) further said:

> *In some courses we have more than two tutors for each subject. At the end of the course, I ask the subject tutors to share their experiences about the quality of the content, design, activities and anything which can help us improve*.

Another participant S3 said*:*

> *Some students and tutors provide formal or informal feedback of the quality of the design, activities, support. Immediately, we use that to make changes if need be.*

Tutors (1 & 4) confirmed the openness of the coordinators, to accept their input.

> *…the coordinator whom I worked with is open, she always considered our feedback and suggestions,* said T4*.*

In response to their participation in quality assurance measures in eLearning, most students who participated in the study, reported that they did not take part in surveys

on the effectiveness of teaching-learning in eLearning only two indicated to have taken part in the survey on the use of eLearning (FG1, FG2) nor have they been engaged by the college on issues related to the quality of eLearning.

4.4.5. Theme 5: Challenges in the eLearning development and implementation

The participants revealed various challenges that they regarded as a barrier to the quality development and implementation of eLearning. This theme addressed the research sub question: *What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance at NAMCOL?*

It was clear from interviews that the lack of adequate skilled staff in the development of interactive eLearning content was a challenge. As a result, several content developers simply cut and paste content from books and websites. One academic staff (S3) explained:

> *Development of online learning resources requires technical skills in terms of knowing the different available technologies to make learning resources interactive. It requires more than just computer technics.*

The other participant S4 remarked:

> *Most of the tutors do not have pedagogical training for online teaching.*

Staff (S1, S2, S3) opined that online content development is a new area for the local teachers and that create a challenge in the development of quality content resources.

> *Our online content developers are really struggling, they know the subject content, but do not have the skills on how to convert the content in online format, which is not a repetition of the textbooks,* explained S3.

Tutor (T4) highlighted that the best subject content tutors were not the best technology experts. She further explained that the tutor might have the subject expertise, however the same tutor would not have the technological skills to convert that content in good e-content. Similarly, a very good technology expert may lag in subject content. T1 further said

> *…you need the content experts to be trained and become skilled in technology and technology facilitation, the other way around too*.

The above was confirmed by the participant (S5) tasked with the responsibility of administrating the eLearning System, who stated that though she was well skilled with IT, she was not exposed to how the system settings, for which she is responsible, were experienced by those doing eLearning. She explained*:*

> *...I mainly provide support, to enable people to have access to the platform. I did not have to experience what the users whom I am providing access do experience when they use the system.*

Students (FG1, FG2) further reported that most of the tutors did not provide comprehensive feedback which could help them improve their performance in assessment work, but only awarded grades. They regarded lack of feedback from tutors on assessment work as negatively influencing the quality of their learning. On the contrary, tutors stated that only few students attended to the feedback provided with the marked assignments, many students did not pay much attention to the feedback given on their assignments and that was observed when students repeated the same mistakes in subsequent assignments (T1, T2, T4).

The responses of the student participants also revealed the challenge related to the lack of devices and internet connectivity. Student in FG1 elaborated:

> *Getting a computer or laptop is a problem, but one can always use a laptop from friends or work on computers. But the internet is a bigger problem, only certain places have internet then I am required to travel to the nearest place and pay for transport to get internet connection and submit my assignments.*

Participants (S1 and S3) reported that there were several students who did not have devices and had difficulties to connect to the learning management system. S1 and S2 further stated that they could only advise students as to how to get the affordable internet. They referred them to Telecom to get the student internet package or to use the internet and computer facilities in the NAMCOL resource centres.

Tutors mainly reported about the high cost of data for internet connectivity, as they were required to acquire own data (T2, T3, T4)

> *I experienced that a lot of students many a times asked for extension of assignment due dates, because of internet connection that failed them. We*

*must admit that we do not have internet coverage everywhere in the country. (*T4)

The internet accessibility for our end-users in the country is a challenge as it is payable when they use data. (S4)

The study revealed that rural internet connectivity was a problem. Staff concurred that students had a challenge to access and download large learning materials as they did not always have enough data for internet connection and, at times, they had to travel long distances to areas with coverage to download study information.

On another note, tutor (T1) stated that student and tutor readiness is vital for eLearning to be a success. She explained:

You can have a well-designed programme, if the students do not have what it takes to participate, the readiness to participate then it will be in vain, because at the end of the day students will be frustrated and they withdraw and leave the course. That is one thing that I have seen with the second group on the programme which I tutor. Students were not ready to learn online, they did not know the depth and aspects of learning online. So, student readiness plays a very important role. (T1)

Another participant (S1) said:

...it is difficult, taking people who are used to print system to eLearning system, you will have to deal with resistance due to the fear of technology or fear of not knowing. (S1)

Participating staff (S2) noted that there were tutors who needed training to be able to engage the eLearning LMS. The other participant (S3) added that tutors and students frequently needed to be reminded to get on the platform in order not to lag. Academic staff (S1, S2, S3) observed that most tutors were not comfortable with LMS and online marking, they needed to be reminded to mark the assignments.

Some students shied away from accessing LMS to use the platform for uploading assessment work, but rather opted to use emails in submitting work, as explained below:

Internet connection remains a challenge for both tutors and students. You will find that students create WhatsApp groups and send assignments via e-mails instead of loading on the platform, S2 pointed out.

Staff expressed concern that it appeared several students did not complete the work themselves but asked someone to complete the work for them and upload it on the platform. By doing that, students were disadvantaging themselves as they would not learn anything from that practice.

That robbed students from learning, as their assignments were completed by other people then themselves, stated S3.

Tutors regarded time as another challenge. Tutors reported that it took time to prepare e-content compared to preparing a lesson for a conventional face-to-face session. Similarly, on the LMS, tutors claimed they were required to read each post and type responses which was time consuming. They stated that online grading of assignments took more time and typing feedback to ensure tutor-marking made it even worse (T1, T2, T4). Tutors were concerned that they are only allocated four hours per week for which they could claim for payment, but they spent more time on providing support.

…online grading of assignments took more time and typing feedback to ensure tutor-marking made it even worse if compared to conventional face-face tutoring, despite limited time allocated to us for these activities, T2 pointed out.

They further explained that they were employed at NAMCOL on a part-time basis, but the students expected them to respond immediately to their queries. however, they could only attend to students after working hours since they are full time employed somewhere else (T2, T3).

Students did not realise that we are working a part-time basis as they expect us to respond to their queries any time anywhere. Also, our time to work for NAMCOL are limited to four hours only of which we are required to claim for payment. However, the time we spend in providing support is far more than that, lamented T4.

Participating staff (S1, S5) also found that communication or close collaboration between the departments responsible for the programme implementation, namely

department for content development and the one for student support needed to be strengthened to apply the same quality principles.

> *The course designers have their own ideas, and we will inform the tutor that this is what we expect from them, but when the tutor gets into the course, they find something else. That's where you find conflict coming in that there are really no set standards,* S1 explained.

Participant S3 referred to attitude toward technology and eLearning as a challenge. Some tutors and academic staff involved in eLearning showed lack of interest and commitment in advancing eLearning as a mean for teaching and learning, despite the training provided to them.

> *Some will show interest during training and the interest die when they leave the training room. This applies to both full time and part time staff. Some see eLearning as additional work,* elaborated S4.

Almost all tutors interviewed revealed that they were not provided with set quality standards for eLearning to follow. However, they all agreed to have used some tools, which included course objectives, certain templates or contracts which provided guidance on activities to carry out (T1, T2, T4). They echoed it was clear that they were expected to produce high quality work as emphasized during training. Participants (T1) uttered that

> *…although there are no set standards, there is an "unwritten" expectation by NAMCOL to produce high quality work*.

Participant (T4) further stated:

> *...it will be beneficial to have a set of quality standards which we could all follow as tutors.*

Although there were challenges, the participants in this study believed the benefits of eLearning at NAMCOL outweighed the challenges. They said:

> *I can study and communicate with the tutors any time,* said a student in FG2.

> *I can get feedback from the tutors and coordinator at any time.*

We can submit our assignments in the comfort of our home, without having to travel to the NAMCOL campus

Participant T3 added

I don't need to travel to NAMCOL campus, I can do all the teaching activities remotely

Most students are gradually becoming comfortable with online learning and just need to be supported to get the gadgets, said S4*.*

4.4.6 Theme 6: Strategies to improve the quality and QA in eLearning

This theme addressed the research sub question*: What strategies can improve the quality and QA of eLearning at NAMCOL?*

Participants in this study proposed various strategies that could be deployed to enhance the quality of eLearning at NAMCOL. The strategies proposed by the participants have been presented in the following two sub-themes: enhancement of access and setting of quality standards.

4.4.6.1 Enhancement of access

Participating students regarded the enhancement of access to the eLearning content, accessibility to online tutors and the provision of the appropriate gadgets or devices as effective strategies to enhance the quality of eLearning. Student in FG1 explained:

...for me quality eLearning should be accessible, it must not be expensive to register for the course. Without laptops or tablets and internet we as students cannot get the education we need, then we cannot talk of quality education or eLearning.

Another student FG2 affirmed that the affordability of the online study programmes may also enhance the quality of eLearning:

eLearning must be cheaper than the distance programme, because we are not provided with any study guides as with the normal distance groups. We must get our own internet and own laptops.

Tutors agreed with students that availability of appropriate gadgets and accessibility thereof by students and tutors as well as reliable internet connection would enhance the quality of eLearning at NAMCOL. T1 said:

> *As an institution of learning with high enrolment figures, NAMCOL can negotiate with the internet service providers to come up with student rates and influence the service providers to widen connectivity across the country.*

Another participant S4 further suggested:

> *NAMCOL must negotiate with the internet providers to provide students with internet connectivity at zero rate for accessing educational resources.*

Similarly, participant (S1) remarked:

> *… to provide to the students what they need, such as devices and access to online academic publications to help the students. The institution should subscribe to e-resource libraries and provide access to the students. Many students stay at towns or villages with no libraries, and we cannot expect from them to submit quality work or attain quality learning unless institutions avail access to resources.*

Participant T3 suggested*:*

> *A simple questionnaire at the beginning of the eLearning programme can be administered for each group to determine the student readiness to engage in eLearning. This can help NAMCOL on how to best support the students.*

All the participants (S2, S3, S4, S5, S6, T1, T3, T4, FG1, FG2) agreed that accessibility to eLearning through the availability and affordability of appropriate devices as well as reliable infrastructure enhances the quality of eLearning. They opined that the institutions must attempt to avail the necessary equipment and infrastructure to facilitate access for both students and tutors to eLearning.

4.4.6.2 Setting of quality standards

a. Timeous Feedback and Feedforward

Students indicated that timely and constructive feedback and feedforward from tutors and administrative staff on students' work and queries would enhance quality in eLearning. Student in FG1 elaborated:

When students post questions about incorrect balance on their accounts or questions about blocked access to the eLearning system, then staff members must answer quickly. Because at times, waiting on responses delay us also to submit the assignments.

When tutors mark our assignments, they must also give feedback which will help the student understand where they went wrong and how they can improve, then you can talk of quality in eLearning, expressed FG2.

b. Development of Quality guidelines

Participants (S2, T1, T4) suggested that NAMCOL should develop quality guidelines and standards to clearly guide the development and implementation of eLearning. They further proposed that these guidelines be communicated to all involved in the development and delivery of eLearning to ensure the maintenance and enhancement of quality. They identified the need to hold discussions among all involved on the quality aspects of eLearning.

If the quality guidelines are there and known by everyone then it's going to be easy, because we will know what to do and what to look for during our engagement with eLearning. Said T2

… all stakeholders involved in the development and delivery of eLearning, for example IT with the technical expertise, learner support, content developer and the instructor must meet on a regular basis through the development and implementation stages to discuss the quality issues and what is expected from each group. Said S5

If we can just sit together and discuss the quality criteria together so that we all have a common understanding of what we expect from both tutors, students and from the institution. We should have the knowledge of what everybody sees as quality assurance and what the institution expects from us to do to deliver quality teaching and learning, T4 pointed out.

Another participant elaborated

With the quality standards or indicators, it will be easy to measure or evaluate the quality of eLearning. It is of outmost importance for NAMCOL to have

standards for ensuring quality eLearning within its context. Then evaluation could be done against the set standards, uttered T1.

c. Provision of Training and Support

Participants expressed those efforts must be made to provide continuous and adequate training for tutors, academic staff and students to effectively engage eLearning. They believed that the provision of training would ensure the enhancement of quality and quality assurance. Additionally, participant T2 explained:

Tutors and students must be given adequate training related to their role with eLearning resources. (T2)

Training, training, training for students, uttered S3.

Furthermore, participant (S4) pointed out:

Staff development through training is vital for quality assurance. Most staff members need skill development related to eLearning, because their initial teacher training was done before the advent of eLearning.

Participant S3 expressed the following:

NAMCOL has done well by introducing the online facilitator training, however, that is done on voluntary basis. NAMCOL should consider making it mandatory for all the tutors to take online courses, because that helps to better understand technology in teaching and learning.

d. Benchmarking for quality eLearning

Participants (S3, S4, S1) expressed that NAMCOL did not have documented dedicated quality criteria for the development and implementation of eLearning. As a result, some quality standards used were sourced through benchmarking against the best practices in the field. They further expressed:

The few things mentioned on the quality criteria which we applied were benchmarked against other institutions' best practices and we made use of the criteria set by the Commonwealth of Learning and specifically BC Campus, however we did not document standards for the College. Said S3

Although we look at some best practices, situations differ in countries. We are up coming and growing our eLearning, it's a learn by doing thing. At the end of the day, we copy and adapt the best practices from various institutions to build our eLearning and enhance its quality, and it is up to us to compile our standards and document them for usage by all involved with eLearning. S4

4.5 CONCLUSION

This chapter presented the findings from the interviews, document analysis and observations according to the themes that emerged from data analysis. Emerging themes were discussed to address the main research question and sub-questions. The six themes emerged from the data collection: knowledge about the policies, participants' views on the quality of eLearning, existing quality standards and systems to ensure quality eLearning, participants' engagements in quality assurance in eLearning, challenges in the development and implementation of quality eLearning, and strategies to improve the quality and QA of eLearning at NAMCOL.

The responses to the interview questions presented insight into the participants' views regarding the research questions and sub-questions of the study. The findings are an effort to highlight the literature and to identify gaps regarding quality assurance of eLearning that need improvement. These are elaborated in the next chapter as the next chapter presents the discussion and findings.

CHAPTER 5: INTERPRETATION AND DISCUSSION OF FINDINGS

5.1 INTRODUCTION

The purpose of this study was to explore the experiences of the key stakeholders on the quality and quality assurance (QA) in eLearning at NAMCOL. The preceding chapter 4 presented the analysis of the empirical findings from the individual interviews, focus group interview and document analysis. In this chapter, the main findings that emerged from the analysis of the collected data are interpreted and discussed under the broad themes as well as the research questions outlined in Chapter 1. The discussion of the findings is done in relation to the literature pertinent to QaQA in eLearning. The findings were clustered under the following six broad themes: i) awareness and knowledge of policies guiding QA in eLearning; ii) participants' views of quality eLearning; iii) existing quality standards/ systems/mechanisms to ensure quality eLearning; iv) participants' engagement in quality assurance in eLearning; v) challenges in the development and implementation of eLearning; and vi) strategies to improve the quality and QA in eLearning. Therefore, the following sections present in detail the interpretation and discussion of the key findings under the six themes as well as the related research questions. The findings are discussed in the context of the literature reviewed in Chapter 2.

5.2 Theme1: Awareness and knowledge about the policies related to QA in eLearning

This section addresses research sub-question 2: '*Which institutional policies support QA in eLearning at NAMCOL?'*

There was a general agreement by *the academic staff*, who are in full-time employment of NAMCOL, to have knowledge of the following policies which are related to quality assurance in eLearning: quality assurance, assessment, eLearning, safety & security of assessment and OER. NAMCOL has uploaded the policies on the intranet and staff members were encouraged to access these policies. Academic staff stated that the institution conducted induction for new staff members which involved some of the key policies, including quality assurance policy and procedures. They further mentioned that NAMCOL also held the continuous professional development sessions for all its full-time staff members, which were meant to create awareness among staff members of the various institutional policies and activities. However, even

though, the academic staff were aware of the policies, they indicated that they mainly relied on the guidelines and manuals developed in their respective departments in ensuring quality in their activities. Therefore, the participant academic staff indicated that the departmental manuals and guidelines enabled them to ensure quality in the development and implementation of eLearning. Only one staff indicated that she used the eLearning policy to guide her activities in the development of course content.

The above findings based on the views of the academic staff could mean that these staff members were aware and possessed knowledge of policies at NAMCOL that were related to quality assurance in eLearning at the institution. It could be argued that the departmental manuals and procedures/ guidelines were based on the stipulations of the relevant policies, therefore, it could be construed that the relevant staff members aligned their activities on eLearning with the guidance provided in these policies. In this way, therefore, it could be concluded that the relevant academic staff members applied quality assurance in eLearning in accordance with the set procedures, manuals and ultimately the relevant policies. The presence of formal quality assurance policies is one of the critical factors in the establishment and sustainability of quality mentality in eLearning as noted by Ossiannilsson (2012) and Jung, Wong & Belawati (2013). Hence, NAMCOL was found to have the policies in place as advanced by literature. However, the existence of policies can only add value to any learning situation if key stakeholders are aware of them and implement them accordingly. In the same manner if there are no mechanisms in place to monitor and ensure the proper implementation of policies then the existence of these policies is void.

On the other hand, *the participant tutors*, who were contracted on a part-time basis, expressed a general lack of awareness of the existence of policies referred to in the previous paragraph. Only 25% of the participating tutors expressed knowledge of the assessment policy. However, they stated that they received a template which they used for the development of e-content and that the academic staff, who are full-time employees, provided general guidelines to them during training sessions on how to conduct their activities about eLearning. They also indicated; this could be a challenge for those who did not attend the training sessions as most instructions were communicated verbally. Based on the above views of the tutors, it appeared that tutors were not aware of the policies' existence regarding eLearning nor were they well informed about those policies. It could, however, be argued that the templates and

guidelines they were provided with for use in dealing with eLearning activities, might have been based on the policies, which they were not aware of. It is on that basis that the extant literature argued that most quality issues in eLearning in the developing countries were linked to the lack of operational eLearning policies (Tarus, Gichoya & Muumbo 2015; Makokha & Mutisya 2016).

The findings therefore pointed to the need for inducting and sharing of all necessary/ relevant documents with tutors who are responsible for eLearning in one or other ways to ensure their activities are consistent with the stipulations of the guiding documents and thereby enhances quality of all eLearning activities. In addition, tutors revealed that they mainly depended on their background expertise as teachers in terms of facilitating teaching and learning in eLearning. This could pose some challenges to those who did not have any teaching background as they might lack the pedagogical skills even though they were subject experts. This could raise issues about the quality of teaching and learning through eLearning at NAMCOL.

Furthermore, the findings revealed that the tutors depended on the guidance from the different academic staff members (programme coordinators) in developing e-content and facilitating teaching and learning. This could lead to the provision of quality inconsistency in the development of product and service, where one might find that in the same programme, some modules are well developed compared to the others. The findings further pointed to the need for the provision of the relevant quality guidance or quality assurance related documents and policies to tutors involved in eLearning. It could further be surmised that if the tutors knew the content of the relevant policies, they would be in a better position to contribute to the review process thereof and in turn, contribute towards the quality improvement. As stated earlier, the presence of the formal quality policies is critical in the establishment and sustainability of the quality mentality (Ossiannilsson, 2012; Jung, Wong & Belawati 2013). Therefore, in the pursuit for enhancement of the quality mentality and implementation, all the policies should be shared with all the key stakeholders including the tutors. This will guarantee quality assurance in the activities the tutors are responsible for, mainly eLearning.

Students expressed a general lack of knowledge of the above-mentioned policies, however, they all agreed to have been given the policy guidelines for the tertiary programmes and tutorial letters. Students noted that most critical information about

their programmes was presented in this policy guideline ranging from admission to graduation and they expressed their satisfaction that the policy guideline contained all the necessary information. Students expressed that this document could be easily read and provided students with policy information at one go. Students further indicated that there would be no need to provide other policies to students, as those policies might contain information, which is more applicable to academics than to students. In this way, students might be reluctant to read those policies as they might regard reading them timewasting. In my opinion it is commendable that the institution has compiled a policy, which combines all relevant information for the students and the policy has been provided to all students. However, it is critical that the policy of quality assurance or some parts that are relevant to students' activities be shared with students so that students are well informed of all matters that relate to their studies, especially quality assurance. Ehlers (2004) emphasises the importance of student access to critical information regarding their studies as one of the quality determinants for students in eLearning.

The findings also indicated that though students were provided with the abridged policy guidelines most were not aware of the content and therefore could not elaborate on what the policy says on specific issues. This could be attributed to the lack of interest of what policies are stipulating or students lack understanding of the importance of policies regarding their studies. Ignorance of policies might have repercussion on their performance as they may overlook critical aspects or requirements of their studies. This situation, therefore, calls for the need for the institution to spent efforts to compel students to know the content of the critical policies that are related to their studies. This is consistent with the views by Aisami (2015) that the provision of critical information on the study activities to students is important as it enables them to structure and plan their studies accordingly.

5.3 Theme 2: Views and perceptions of the participants about the quality of eLearning

The research question which addresses this theme is:

'What are the views of participants on the quality of eLearning at NAMCOL?'

The participants were asked to state their view on the quality of eLearning at NAMCOL. Interesting, participants explained quality eLearning according to how quality relates

to them. This is in line with the notion by Harvey and Green (1993) and Kadhila et al. (2013), that quality is multi-dimensional, and its definition depends on the operational context. Similarly, Etedali and Feiznia (2011) affirm that quality is seen differently by different people and its definition is contextual as interest and priorities influences its definition.

5.3.1 Experiences of Academic staff (full-time staff members)

According to the participant academic staff quality is when the product and service serve its purpose and fulfilling the set quality standards. The academics indicated that e-content was aligned to the syllabi and the subject contents and activities were designed with the objective to provide the necessary knowledge and skills to students to attain the required learning outcomes. They further explained that with the introduction of new programmes, the input of industry players contributed towards the programme development to ensure relevance of the programmes content to the industry. It can therefore be argued that NAMCOL strived to ensure the quality of its subject contents by aligning these with the industry need, thus equip the students with the knowledge and skills which are required in the work environment.

Academics further stated that all full-time staff were provided with either laptops or desktops and access to internet to enhance or facilitate the provision of eLearning. They further indicated that the institution established computer centres with internet connection in some towns in the country for tutors and students' use for eLearning purposes. The establishment of the computer centres partly conformed to the recommendation by Maphalala and Mpofu (2018), that institutions must invest in eLearning centres for students, where students can go and engage in eLearning activities with either installed devices or their own devices. Maphalala and Mpofu further stated that the eLearning centre should be reserved for eLearning activities to hopefully promote the adoption of eLearning. It appears the institution has made some investment for relevant infrastructure to facilitate and promote eLearning among students. This could mean that students were enabled to engage in eLearning in the area where they leave. However, though computer centres were established in some parts of the country, Namibia is a vast country, and many students will have to travel hundreds of kilometres to access the established computer centres, which is an

impediment to some students to access these invaluable facilities for their studies due the high travel cost.

Participant academics further indicated that WIFI connection was made available at all the NAMCOL regional and sub-regional campuses to boost access to eLearning. In addition, they explained that the first cohort of student intake for the eLearning programme were provided with tablets and data for internet connection to facilitate student engagement in eLearning. Academics also made a reference to LMS, which would send reminders to students on due dates for assessment activities and registration. They indicated that the eLearning platform contained updated information on admission, scholarship, assessment, contact details of personnel responsible for each programme. They said a video was also uploaded depicting how to navigate on the platform. According to academics, the provision of appropriate information, facilities and equipment reflected quality provision of a programme. These findings are in line with the literature by Wright (2014) that institutions that offer eLearning should provide a good LMS and adequate course information. In addition, Lim et al. (2016) the use multimedia should be incorporated in the relevant eLearning content to boost academic self-efficacy.

According to the participant academics, eLearning programmes consisted of different learning activities that required students to be at the centre of learning and be responsible for own learning. They stated that students were actively engaged in learning through the various learning activities such as quizzes, assignments and discussion forums. In this way, students were enabled to acquire skills that would allow them to think independently and constructively engaged in eLearning. Academics collectively expressed that all these were put in place to enhance access to eLearning and facilitate teaching and learning to that effect. Based on the above findings, it could be surmised that the academic staff associated quality eLearning with the provision of required services and relevant information for students through LMS, the alignment of e-content with the demand and needs of the industry as well as the provision of relevant facilities and equipment that, in their views, enhanced the access and engagement with eLearning. It could therefore be argued that the academics agreed that eLearning at NAMCOL possessed quality to enhance teaching and learning which in turn enhances students learning experiences. Furthermore, the findings on the presence of the various teaching and learning activities on the

eLearning platform is consistent with the literature that tutors are required to design teaching and learning activities that fit all the aspects of the curriculum for students to experience deep learning (Mbodila, Mkabile & Ndebele 2019).

5.3.2 Experiences of Tutors (part-time staff members)

Participant tutors revealed that quality in eLearning was imbedded in the structure of the programme itself. They reported that in most courses the subject content were well packed in e-books, which made it easy to locate various contents. However, one tutor reported that in one of the programmes the subject content was not packaged in e-books and units, which made it extremely challenging to find information. This could be attributed to the absence of eLearning standards which could guide the content developers on how to package content across all programmes. Tutors further opined that the evaluation at the end of each course also serve to determine the quality of the programme for improvement purpose. Tutors indicated that the tutors' and students' input were sought in the evaluation process of the programme. I therefore assume that tutors perceived eLearning at NAMCOL as of an appropriate quality since input was sourced from them (tutors and students) as key stakeholders through programme evaluation process for improvement purpose. In this way, the programme was made to be able to respond to student needs and in turn, enhance teaching and learning experiences. The findings support the literature by Zhang and Cheng (2012) which highlighted the importance of gathering feedback from students and teachers during the evaluation of the programmes as this enhances the product and service quality in eLearning programme if implemented.

In congruence with the academic staff, the tutors said that the e-content was self-instructional, which presents the tutor presence on the platform. It could, therefore, be argued that the tutor presence on the platform, though symbolic or virtual, gave students a feeling of being in a classroom environment and somehow reduced the feeling of isolation. This is in line with the view that the quality of eLearning programmes is influenced by student-teacher contact (Queiros & de Villiers 2016; Rekkedal & Qvist-Eriksen 2004).

5.3.3 Experiences of Students

Students, on the other hand, described quality according to the support they received from the institution in terms of eLearning. They viewed quality eLearning when the

institution enabled them to have access to the platforms to facilitate learning. Students also perceived as quality when tutors and administrators attended to their queries promptly and provided appropriate guidance. Students reported that eLearning made learning flexible, as they were able to study and engaged tutors and peers at any time without having to travel to the campus. This supports the extant literature that eLearning increases access to education since many students can enrol for courses and have the flexibility to engage course materials at any time, cutting down on time and resources spent on traveling (Pappas 2008; Mbodila, Mkabile & Ndebele 2019). However, my observation is that many NAMCOL students still have to travel to get to nearest villages/towns with internet coverage to access internet and computers at computer cafe, as a result, this situation hinders the flexibility of eLearning in those communities with no internet coverage.

Students expressed satisfaction that the e-content in most modules could be applied at the workplace and thus enhanced their performance at work. Based on that, it can be argued that eLearning programmes at NAMCOL could respond to student needs and, thus present value for money in terms of quality as students were able to enhance their skills and knowledge and apply these at their workplace, this could lead to value addition at the workplace. Differing, some students indicated that some subjects contained a lot of irrelevant information which was regarded as not useful.

Furthermore, based on perspective of participating students, student support emerged as one of the features for quality eLearning. There was a general appreciation among students for the support which they received from the institution. The students were positive about the support they received from the academics in terms of eLearning. It could therefore be surmised that the students found eLearning at NAMCOL useful mainly because of the support they received from the academic staff and tutors. One could therefore assume that students were likely to perform well in their studies as they were receiving appropriate support from academicians and tutors as appropriate student support has been associated with enhancement of learning experiences. Kisanga and Ireson (2015) refer the provision of appropriate student support as one of the most cited institutional factors that determine the quality of eLearning.

Despite appreciation voiced by majority of students, there were however some students who expressed dissatisfaction with the support received. In this way, one

could argue that not all tutors or academics were helpful enough in providing support to students. This finding is consistent with the study at Jomo Kenyatta University of Agriculture and Technology, which revealed that about 60% of the study participants indicated that they did not receive support from tutors on the LMS and thus found it difficult to engage the studies (Hadullo, Oboko and Omwenga, 2018b). This situation could lead to poor learning experience of students, which in turn, would lead to poor academic performance of students. This finding therefore points to a need for the institution to have mechanisms in place that enable the institution to monitor the nature or quality of student support provided by its academics so that remedial measures are taken, if need be. In this way, NAMCOL would assure the quality improvement of student support, which is likely to improve student academic performance in return.

Furthermore, students generally agreed that access was a determining factor of quality in eLearning. Findings found that the first cohort were provided with tablets and monthly internet data during the duration of study programme which made access to learning easy. However, most students who participated in the study lamented that they were required to secure own devices. They were further concerned that many links given depleted their data when accessing them. The inability for most students to secure own devices and, as a result, having to use the devices of relatives or employers, made it difficult to access learning materials timeously. This situation could lead to students missing out on learning opportunities by not being able to participate in learning activities timeously thus compromising the quality provision of eLearning. In the same vein, Queiros and de Villiers (2016) reported that the lack of access to internet and computers from home was a barrier to eLearning in South Africa. The sentiment has been supported by eLearning Africa Report (2019) which states that the high cost of internet results in only 7% households having access to internet connectivity in the least developed countries. Namibia being a least developed country, experiences a similar situation where many households do not have access to internet connection, thus limiting student access to eLearning programmes.

This finding further revealed the need for the institution to facilitate the provision of devices which could enable the students to access and participate in eLearning programmes at anytime and anywhere. The lack of appropriate gadgets for students would lead to poor learning experience which in turn results to poor academic performance. It is in that context that Pappas (2008) cautioned that institutions need

to have mechanisms and plans in place to enable users to access eLearning. Unlike in the developed countries were the majority of students have devices and internet connectivity at home, at NAMCOL the majority of students do not have own devices and depend on other's mercy to use their gadgets or travel to places to catch internet.

With the above utterances on quality from the various participants, it was interesting to note that everyone explained the concept of quality according to how it best fit them (their perspectives) and their experiences. It could be concluded that the academic staff described the quality eLearning with the focus on the quality of systems, processes and procedures as well as the infrastructure put in place to assure quality of eLearning at NAMCOL. Students on the other hand, explained quality of eLearning according to their learning experiences, and the academic support received that enhances the teaching and learning. The above utterances tie in well with the notions expressed by Harvey and Green (1993) that quality is value for money, fitness for purpose and transformation. It could be assumed in congruence with Ehlers (2004) that quality development should always consider the different perspectives and meanings of the stakeholders. The expression about the lack of internet activities in some parts of the country and the lack of appropriate gadgets among students undoubtedly impact on the quality of eLearning at NAMCOL.

5.4 Theme 3: Existing QA

Institutions are expected to exhibit practices which they deploy to continuously improve their eLearning. This sub-theme attempted to explore the existing quality assurance policies, systems, mechanisms and procedures which might be in place at NAMCOL. It further assessed the extent to which the participants engaged in quality assurance in eLearning. The findings from the interviews and document analysis revealed a variety of existing measures, among others: policies, leadership support, team approach, audits, monitoring & evaluation, training, reporting (on quality) and review cycles. Based on the findings it appeared that NAMCOL has put up a mix of measures to guide quality assurance in eLearning. Observation has shown that NAMCOL has formalised its quality assurance systems through policies, staffing structures, systems, and procedures that support the implementation of quality assurance in eLearning. It could, therefore, be assumed that the existing QA mechanisms could enable NAMCOL to deliver quality eLearning. The findings are

interpreted according to the input from the participating groups (academic staff, tutors & students)

5.4.1 Policies

i. Academic staff's view on policies

In addition, the findings of the study revealed that NAMCOL has had policies in place, which guide quality assurance, assessment and eLearning. The views expressed by the academic staff who were in full-time employment of NAMCOL indicated a general awareness of the policies. On the question as to the participants' engagement in the development and implementation of the policies related to quality assurance in eLearning, there was an agreement among most academics that they did not participate in the development of the policy and stated that only managers and directors were involved in the development process. However, they indicated that they were more familiar with their departmental procedures. It should, however, be noted that one staff member pointed out that she has coordinated the review of the quality assurance policy. Contrary to the above finding, Mbodila (2020) accounts that most institutions do not have policies to promote eLearning.

As far as the engagement of the staff in policy development was concerned, it came out clearly that staff were not engaged in the development of policies but rather dealt with the set procedures in carrying out the activities. It could, therefore, be surmised that staff might have limited knowledge about the related quality assurance policies but rather relied on the set procedures to assure qualities in the eLearning activities. Based on this finding, it has become critical that effort be made to engage staff members in the crucial activities of policy development. In this way the capacity of staff would be enhanced through content knowledge of the related policies, and they would be able to make significant contribution to the improvement of such policies through reviews.

Moreover, the interviewed academics pointed out that the development of policies was done at management level by the managers and directors. This is what the literature terms as a top-down approach to This situation could be regressive that staff members who were technocrats were purportedly not involved in the development of policies which they were supposed to implement in carrying out their activities. The lack of staff

engagement in the policy development could cause a miss-match between the practice and related policies. Mhlanga (2008) further cautioned that when academics lack ownership of the quality assurance policies that poses a serious consequence on its implementation. It is therefore important that NAMCOL spends efforts to engage all relevant staff in the development of policies in eLearning to ensure policy knowledge and quality/ effective implementation among staff members. The finding is contrary to the view of Mishra (2006) that quality should be a bottom-up approach and all staff members should be involved in all quality related activities. It should, however, be noted that one staff member indicated that she coordinated the review of the quality assurance policy, therefore, it could be assumed that she was well informed and could make contribution towards the improvement of the policies and related procedures.

ii. Tutors' view on Policies

The views expressed by the interviewed tutors (part-time staff) indicated a general lack of awareness of the existence of the specific policies for the development, teaching and assessment in eLearning. This revelation presented a sharp contrast of views between the full-time academics and tutors (part-time) where the academics indicated a general awareness of the existence of the specific policies. This situation could lead to the argument that the institution has not done enough to sensitise the part-time staff members of the existence of the quality assurance, assessment policies and other related policies. The lack of awareness of related policies could lead to inconsistency in the delivery of eLearning that could compromise the quality of teaching and learning and, as a result, might have negative impact in students' learning experiences. It is therefore critical that the efforts be spent in sensitising all staff involved in eLearning about the relevant policies to ensure awareness creation and adherence. Tutors play a vital role in the delivery of eLearning as they develop the e-content, facilitate and assess eLearning. Hence the

5.4.2 QA Structure

The interviewed academics also pointed that quality assurance structures existed at NAMCOL. Academics further revealed that NAMCOL has established a Quality Assurance Office as well as QA committee in each department. The QA Officer's role was limited to consolidation of the quality assurance reports, application for

accreditation, coordination of the review of policies and arrangement of the external audits for the institution. The QA committees in each department had the responsibility of steering quality assurance in the department. No quality activities were carried out by the Quality Assurance office on the teaching, learning and assessment activities in eLearning, but mainly await the self-evaluation reports from the departments. Based on the above findings the institution has established the quality assurance structure with the QA office and QA committee in each department. And the two structures were tasked with the main responsibilities of coordinating the QA activities of the institution, while the committee steered the QA matters at departmental level. However, findings revealed that the QA office never conducted quality assessment on the teaching, learning and assessment activities in eLearning. But rather coordinated the compilation of the self-assessment reports. Based on the above findings, it appeared that the custodian of QA of the institution did not make effort to assess the quality regarding the teaching, learning and assessment of eLearning, but rather relied on the self-evaluation reports from the departments. There could be an element of misrepresentation of the status of the quality of quality assurance at departmental level through self-evaluation since self-evaluation may not be subjective. It is therefore crucial that the QA office make concerted efforts to verify the findings presented through the self-evaluation reports.

Moreover, some academics, indicated that they were not actively involved in quality assurance matters of their department, but it was rather the responsibility of managers and members of the quality assurance committees. They further mentioned that these were also responsible for the drafting of the self-evaluation quality reports of their departments. This revelation ties well with the expression made earlier that quality assurance matters were dealt with mainly by management members and the rest of staff were not actively involved. It appears that only members of QA committee and management were actively involved in quality assurance arrangements. It is surmised, therefore, that the handling of QA at NAMCOL followed a top-down approach. Regarding this finding Njiro (2016) further suggests that a strong leadership is required for starting and promoting the QA process which will encourage a relationship of top-down and bottom-up ideas. It could be argued that the lack of staff involvement in quality assurance might be detrimental to the implementation of programmes including eLearning as the implementation of the programmes might not be aligned with relevant

policies. Also, staff might be deprived of the opportunity to acquire the necessary knowledge and technical know-how relating to QA and make significant contribution to the improvement of the related policies and procedures in eLearning. This is in line with the view by Kadhila et al (2013) that self-evaluation is a key process in QA, through which participants evaluate their performance according to the agreed upon quality standards, hence this finding deprives the technocrats in eLearning the opportunity to self-evaluation which could enable them to identify shortcomings and work towards addressing them.

This situation calls for an urgent need for NAMCOL to explore effective ways to actively engage staff members in QA for eLearning to deliver quality products and service. Similarly, Pule (2014) opines that academic staff are in a better position to detail appropriate procedures and process to drive the quality assurance systems in the institution hence their involvement in the policy development and review are crucial.

Notwithstanding the above findings, a group of participating academics from one department pointed out that they were actively involved in the quality assurance activities including self-evaluation exercise and preparation of the report. It could be assumed that activities in the specific department might be aligned with the relevant eLearning policies and procedures. The academics in this department were also likely to contribute to the improvement of the quality assurance policies and procedures. This could be construed that quality assurance at NAMCOL was not consistently applied or implemented across the institution based on the findings that some staff members were not involved in AQ. This is consistent with the view by Keendjele (2018) that had QA been consistently and continuously applied across the institutional operations, all staff members could have been acquainted with QA mechanisms in their operations and they would have ensured that the QA was applied by all stakeholders.

5.4.3 Infrastructures

In addition, the findings further pointed to the existence of the following infrastructures and facilities at NAMCOL, among others, dedicated server for eLearning, establishment of eight computer centres with internet connection across the country, WIFI access at all eleven campuses of NAMCOL including the learning support centres, Moodle as an LMS, software applications such as Turnitin, Gradebook,

Microsoft 365, video editing software and hyper converged solution to ensure that the eLearning portal is accessible 24/7. It seemed that some academic staff possessed knowledge of the various technology tools for online learning at NAMCOL and used them frequently for quality enhanced teaching and learning. This is congruent with Mishra & Koehler (2006) that effective use of ICT in the teaching of subject content is influenced by the technology knowledge (TK) possessed by the teacher.

Moreover, Bada and Suhonen as cited in Mbodila, Mkabile & Ndebele (2019) opine that the increasing adoption of Learning Management System (LMS) assists eLearning and enables teachers to monitor each learner's participation and track their progress for continual feedback and improvement. However, the researcher observed that though the LMS has monitoring facilities for student progress, tutors and academics monitored the progress of the students based on the submission of assignments only and did not monitor the general performance of students. Which could make it difficult to provide appropriate feedback to student based on their performance for improvement. Therefore, it is important for the academics to utilise all facilities in the LMS for the enhancement of teaching and learning quality for eLearning in general.

In addition, some academics further reported that with the outbreak of COVID-19, management realised the importance of eLearning and hence it became easier to get funds towards the implementation of eLearning. It appeared that the leadership of NAMCOL realised the importance of eLearning during the outbreak of COVID-19 pandemic, thus committed funds towards the acquisition of required facilities and infrastructures to enhance the provision of quality eLearning programme. It could further be assumed that NAMCOL management committed their support for quality eLearning, hence the investment. This commitment is in line with the opinion of Makokha & Mutisya (2016); Maphalala & Mpofu (2018) that institutions of learning should prioritise eLearning and set aside more funds for ICT infrastructure, capacity building, attitude change and awareness creation.

5.4.4 Systems, processes, and tools

Furthermore, the findings from the academic interview and document analysis indicated the various tools and processes that were in place to evaluate the quality of eLearning. These included the periodical curriculum reviews, team approach, student

evaluation of tutors, moderation of assessment activities, monitoring and evaluation of tutor activities, periodical reporting, implementation evaluation of the strategic plan and quality audit by external regulatory body.

It appeared that the institution conducted periodical programme reviews and quality audits aiming at assessing the quality of the programmes being offered including eLearning. Its participants shared that input was sought from industry (employers of graduates), students and tutors which was used to guide the review process. It is therefore my assumption that this activity aimed to ensure that the programmes remain relevant and address the expectations of the stakeholders. It could be construed that programmes offered including eLearning were found to be relevant and have met the set quality standards.

Furthermore, the participant academic staff and tutors stated that they used a team approach during the development of e-content, a practice which is in line with the stipulation of the eLearning policy as confirmed by the researcher. It was found that the team consisted of the writers, content editors, language editors and instructional designer. This ensured synergy and collaborative efforts among the team members as everybody would bring input to fill the possible gaps left by colleagues and that ensured quality of the content. Wang (2006) supports the finding of the use of the team approach as it enhances the quality of the course design.

In the same vein, the findings showed that the institution has employed various measures to assess the quality of the service provided for teaching and learning in eLearning such as moderation of set assignments and examinations, moderation of marking of assignments and examination scripts and monitoring and evaluation of tutor facilitation by the academics. Moderation reports were compiled and shared with the respective tutors for corrective measures to be taken. Based on the above findings as derived from the interviews and document analysis, it is my argument that the activities involved in eLearning are quality assured and can therefore be assumed that NAMCOL offered quality eLearning which may enhance the learning experiences of the students. However, through observation a gap was identified of a lack of set standards for the setting of interactive assessment tools on the eLearning platforms. Similarly, it was also not clear as to who ensured the incorporation of the inputs emanating from the moderation as assessment activities as lamented by a moderator

that at times the shortcomings identified during moderation creeped through to the final product-result. It could therefore be surmised that the institution employs measures to set standards for the development of interactive assessments.

In the same vein the input emanating from moderators meant to improve the quality of assessment were considered. Therefore, the institution should put mechanisms in place to ensure the incorporation of the inputs from the moderators to enhance quality.

Further findings highlighted the progress made on the implementation of strategic plan/objectives about eLearning and the reporting thereof as quality measures used by the relevant department. Findings indicated that strategic plan was used as a guide to implement the set objectives for eLearning. Therefore, one concludes that the institution has planned developmental strategies for eLearning.

5.4.5 Recruitment criteria

Further findings based on document analysis and interviews revealed that NAMCOL employed a set of recruitment criteria for the position of tutors, student support coordinators, programme developers, editors and other academic staff responsible for academic programmes. Findings further indicated that recruitment criteria were employed to recruit appropriately qualified academics and other staff members involved in eLearning. It was found that all the participants were in possession of the required academic qualifications. In that way, it could be argued that the hiring of qualified staff enhances the quality of eLearning. It could then be surmised that the selection recruitment criteria significantly contributed to the quality enhancement of eLearning given the fact that the implementers of eLearning were appropriately qualified. This notion is in line with the literature by Levy (2003) about the importance of recruiting appropriately qualified staff to ensure quality of online teaching and learning.

5.4.6 Training

i. Academic's views on training

Findings revealed that NAMCOL has embarked on virtual training for staff members on eLearning in collaboration with the Commonwealth of Open Learning. Efforts were made to encourage staff members to enrol for the virtual short courses on online

learning. In this regard it was revealed that NAMCOL made significant investment for the participation of staff members in virtual training at no cost. It is my assumption, therefore, that NAMCOL management was committed towards the professional development to capacitate staff with the required skills in pursuit for quality enhancement in eLearning. This finding is consistent with the literature that advocate institutions should provide training to teachers and students to boost the adoption of effective eLearning (Chigona & Dagada, 2015; Tarus, Gichoya & Muumbo, 2015).

In addition, most of the interviewed academics revealed that they took own initiatives to learn and upscale their skills through Future Learn on MOOCS to keep up with the latest technological developments and improve the delivery of eLearning. The willingness shown by academics to improve their professional knowledge and upscale their skills by enrolling for online courses, collaborate with peers and partake in self-directed learning could be taken as a sign of positive attitude towards embracing quality eLearning. The above findings are backed by the view of Roy and Boboc (2016) that all academics should be proactively involved and take initiatives for own learning to enhance their competencies and skills for online teaching, to ultimately provide quality eLearning.

Furthermore, a staff with ICT expertise and no pedagogical skills or teaching training, shared that she enrolled for virtual course in the development and teaching of online content. The training equipped her with better skills on how to provide appropriate ICT technical support to tutors and students. It can be assumed that staff see the value of integrating the newly acquired pedagogical knowledge with the already possessed technology knowledge to identify the appropriate tools to support the content design and teaching for eLearning. This is in line with Shulman (1986) and Mishra & Koelher (2006) that staff need to have the content knowledge, pedagogical knowledge and technology knowledge for the design of effective teaching.

ii. Tutors' view on Training

Findings based on the views of the interviewed tutors indicated that tutors were provided with general guidelines on quality assurance during training sessions. They stated that they used the guidelines to ensure quality in their activities. In addition, tutors signed contracts which outlined their responsibilities and the expectation of

NAMCOL from them. Based on these findings, one could argue that the alignment of activities with the set guidelines would ensure quality in the activities performed by the tutors, provided that the guidelines were informed by policy stipulations and related procedures. This practice could suggest the existence of QA systems and procedures in the institution.

Most interviewed tutors reported that their first formal engagement with eLearning was with NAMCOL when they were contracted (on a part-time basis) and invited to attend training on how to facilitate and develop e-content. It came to the fore, through findings, that several tutors were qualified in their subject field, but inexperienced in eLearning and this lack caused doubt whether they could deliver quality eLearning. This finding is consistent with the literature that the limited inclusion of ICT in the teacher training curriculum resulted in many not having the necessary skills to integrate it in education (Edemoh & Ogedebe 2014; Anene, Imam & Odumuh 2014).

As a case with academic staff, however, the findings showed that NAMCOL committed itself to the provision of training to equip its tutors (part-time staff) with the required skills in the quest to provide quality eLearning. It was found that tutors have been trained to mark online assignments on Turnitin and provided immediate feedback to students. This means that tutors in this study designed assessment activities which were graded and recorded using the Gradebook to allow students to monitor their progress online. To this effect, the study found that NAMCOL offered virtual training on online course facilitation for its tutors and 80% of the tutors on the eLearning programme successfully completed the virtual programme. Moreover, interviewed tutors indicated that through self-training they kept themselves abreast with technology relating to teaching and learning through blogs, YouTube and LMS to enhance their online teaching skills. The findings are in line with the view that the unique nature on online learning, requires continuous professional development and reinforcement in terms of instructional strategies and student-teacher interactions (Roy & Boboc, 2016).

Tutors expressed their satisfaction with the online training as they found it useful in the development and facilitation of e-content. The willingness of tutors to upscale their skills through self-training and short courses offered by NAMCOL, is a sign of motivation and urge to improve the delivery of eLearning. It could therefore be argued that the institution provided its tutors with training opportunities for skills enhancement

in the development and facilitation of eLearning to ensure quality delivery of the programme.

Notwithstanding the above, the tutors expressed the need for NAMCOL to provide more training which would focus on the usage of mobile phones as teaching and learning device since most of the students were found to have mobile phones. In the same vein, some tutors recommended for training in the use of the technology tools for development of interactive online subject content and development of different online assessment activities. Based on these views, it is my assumption that tutors did not possess adequate skills for use of available technology tools which could be used to enhance online teaching and learning in equitable manner. The above serves as clear evidence that tutors have vested interest and showed an appreciation in the use of technology in advancing teaching and learning. It is therefore important that NAMCOL explores ways to acquire the required software and provide training interventions to capacitate its tutors for the provision of quality and equitable eLearning. This is in line with the views of Mishra and Koelher (2006) that tutors need to have the technology knowledge which will enable them to select the most appropriate ICT tools for the effective development and teaching of content for eLearning.

iii. Students' view on training

Participant students indicated that they were provided with crush training, which varied in duration, to guide them on how to engage the LMS portal. In addition, a video was uploaded to guide students how to navigate the portal. However, some students lamented that not sufficient time was provided for the training, hence they felt the training was ineffective in providing the required technical know-how mainly on how to navigate and effectively engage the LMS. On the other hand, other students expressed satisfaction with the duration of the training and effectiveness thereof. During interviews with students, it came to the fore that students joined the eLearning programmes with different levels of computer literacy with some being computer illiterate, hence the one-size-fit all training programme or orientation could not address their needs. The students who felt that they were not well equipped to effectively engage the eLearning platforms seemed to experience challenges with the learning of e-content, thus compromising the quality of learning and the learning experiences.

Coopasami, Knight & Pete (2017) advise institutions to determine the learner's technological readiness before the start of the programme, which should them be followed by skills training workshops and seminars for students to prepare them to take up eLearning as well as to increase the rate of technology acceptance by the users (Hadullo, Oboko & Omwenga 2017; Mayoka 2014).

5.4.7 Quality Evaluation and Quality Audit

Document analysis revealed it was mandatory for all education programmes to be accredited and registered by NQA. Therefore, participant academics further mentioned that NAMCOL the is mandated to report to government and to the national quality assurance regulatory body (NQA) on the quality of the programmes and services being offered. After each quality audit, directorate developed quality action plans to address the quality gaps which were identified during the external and internal quality audits, while self-evaluation was conducted to assess progress made regarding action plan. Document analysis and participants revealed that in the pursuance to promote quality assurance, NAMCOL has a memorandum of understanding with BOCODOL now known as Botswana Open University (BOU) for peer review which focus on the quality of the holistic operation of the institution. Based on the MoU, the two institutions conducted peer review on the quality of their and compiled reports based on their findings which formed part of the subsequent quality action plans. It could be argued that the institution reported to government for accountability purpose and further funding for programme delivery. Furthermore, one assumed that the institution needed to satisfy its market and funders, therefore, communicated its achievements and challenges encountered on the delivery of eLearning for further support.

Interviewed students stated that they conducted tutor evaluation through completion of the appropriate evaluation forms during face-to-face workshops and also participated in a survey on the effectiveness of eLearning. However, the students were concerned that they did not receive feedback regarding the outcome of the evaluations and the survey in eLearning nor were they informed about the follow up actions based on the outcome of evaluation studies. Therefore, they felt that their recommendations were not considered by the institution and, as a result, they believed that the failure to address their recommendations hampered improvement. It could be surmised that the

lack of evaluation/survey feedback to students may signify that the institution did not value input from students, and it might not have made efforts to address the quality concerns raised by students. Undoubtedly, this might negatively affect quality improvement of eLearning. It is, therefore, important that the institution provides feedback on the outcome of the evaluation/surveys meant to assess the effectiveness of eLearning and address the recommendations emanating from the evaluation exercises. The student participation in the evaluation of education programme is in support of the view by Wang (2014) and Murmura, Casolani, and Bravi (2016) that education would significantly benefit from an evaluation system based on feedback from the main customers once they have experienced it.

Moreover, the participating academics and tutors indicated that they were engaged in the external quality audit by the regulatory body, where they expressed themselves on the quality of teaching and student support provided to students in all NAMCOL programmes including eLearning. Likewise, interviewed students reported that they participated in the external quality audit conducted by external regulatory body at the institution, during which they shared their views regarding the quality of support and services they received from the institution. One could conclude that the quality assessment by the external regulatory body served to ensure that the teaching and student support in eLearning meet the set quality standards and the students' needs and aspirations. This in turn, would promote quality enhancement in eLearning. This is in line with the views of Dill (2000a) who argues that Academic audits are carried out at the institutional level and focus on those processes implemented by an institution to assure and improve the quality of teaching and learning. On the contrary, the NQAAs was found to use generic criteria to accredit both conventional face-face and the ODL including online programmes (Kadhila, Iipumbu and Tuaundu, 2019). The practice was found to be biased towards face-face delivery; hence the need for the NQAAs to develop different criteria for quality assurance of eLearning programmes in order to accurately assess quality in eLearning.

5.4.8 Assessment activities

Interviewed academics and tutors mentioned that the assessment structures consisted of formative and summative examination in each subject. The formative assessment included assignments, quizzes and discussion groups forums among

others as confirmed by the students. They affirmed the availability of videos and notes, however, these were provided in certain subject topics only. Participants indicated that summative examinations were conducted venue-based in controlled environment with trusted invigilators. However, there is no policy or prescribed standard format given for the assignment and examinations setting. Tutors mainly relied on a format agreed upon with the coordinators and/or on their own experiences. Some tutors mentioned that this practice or the lack of standard format has led to inconsistency in setting assessment activities and could compromise the quality in the assessment of students. In the absence of the standard format for setting assessment, one can argue that the assessment activities at the institution followed different formats which may have a negative impact on the quality of assessments. It is advisable that the institution devices a standard format for setting assessment tools to enhance and maintain quality and consistency of assessment outcomes.

It appears that students were engaged in various assessment activities in eLearning which would stimulate learning interest. Moreover, it seems that students were provided with the platform to collaborate with each other to enhance their understanding of the subject contents and exchange learning experiences. Nonetheless, students had varying opinions on discussion forums and their participation in such discussion forums. Some students revealed that they participated in discussion forums, because they learnt from posts of their peers and tutors, while others shied away from posting comments on the discussion platforms due to language barriers and fear of being ridiculed for providing incorrect information. On same topic, tutors stated that most students did not contribute to the discussions unless they were for grading purposes. As a result, tutors converted the discussions into mark awarding exercises.

Literature states that well-designed online discussion forums can foster learner-centred instruction and implement constructivism via active engagement (Samuels-Peretz 2014). In the similar vein, Arkorful & Abaidoo (2014) note that the use of discussion forums, offer opportunities for relationships between teacher-students and learner-learner, which creates a sense of community among students-teacher and learner-learner and enhance student satisfaction as well as improve retention (Carlson & Jesseman 2011; Geri 2012; Mbati 2012; Leong 2011). However, the findings on the non- participate on the forums because of language barrier, are not peculiar to

NAMCOL only, literature reported that a study in South Africa revealed that students who are not fluent in English, do not participate in online discussion forums in fear of being misunderstood (Bharuthram and Kies 2013). Similarly, in Ghana, Asunka (2008) reports that students were reluctant to initiate discussion threads and therefore do also not participate in discussion forums.

However, students who do not participate in discussion forum due to the above-mentioned reasons, could have deprived the rest of the group the opportunity to learn from their learning experiences. The non-participation of students is highly likely to limit the community of learning. It is, therefore, critical that concerted efforts are made to upskill the tutor in the well-designed student activities as well to encourage all the students to participate in the discussion forums. This would enhance community of learning among students and tutors, thus boost their learning experiences. This could include the use of pseudo names or anonymous during the discussions. On this basis, Freeman (1997) suggests that being anonymous may encourage participation on the online.

Another aspect which was revealed by findings regarding assessment, was that tutors graded and recorded using the Gradebook and that allowed students to monitor their own progress online. In addition, the student information including the assessment grades were stored on a password protected system, and students accessed their performance records at any time. It can be assumed that the institution put measures in place to ensure safety and security of assessment related information and thus maintained confidentiality of student information. This practice is consistent with the view of Chawinga (2016) that it is important for institutions to safeguard the students' grades and assessment as well as ensure the release of the student assessment outcome on time.

5.5 Theme 4: Challenges in the quality development and implementation of eLearning

This theme addressed the research sub question: *What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance at NAMCOL?*

5.5.1 Challenges encountered by academics

Academics reported that eLearning was a new field in the country and there was an acute lack of adequately skilled staff in the development of interactive eLearning content and the facilitation thereof. It was further stated that several content developers simply cut and paste contents from books and websites without aligning it to e-content. It is my assumption that the lack of expertise in the development of interactive eLearning content and the facilitation thereof has a negative bearing on the quality of the e-content and the learning experiences of students. The issue of the cut and paste of content from other sources could lead to the mismatch between the course content and the learning outcomes, which in turn hampers the attainment of the required knowledge and skills by students. It is therefore critical that the institution strengthen the capacity building for all involved in the development and facilitation of e-content.

The finding supported the literature that improving the quality of eLearning remains a challenge (Hadullo, Oboko & Omwenga, 2018b) predominantly in developing countries due to inadequate academic staff and poorly trained staff (Aung & Khaing, 2016)). Moreover, this is not different from the scholarly findings that most eLearning initiatives in developing countries lack the desired quality which contribute to the slow growth of eLearning (Ssekakubo, Suleman, & Marsden 2011; Kashorda & Waema 2014; Tarus, Gichoya, & Muumbo 2015; Makokha & Mutisya 2016; Chawinga 2016).

The study further revealed that the best subject content experts were not necessarily best technology experts and vis-versa. The lack of pedagogical skills might be detrimental to the effectiveness of facilitating the learning content. This situation calls for the institution to spend efforts in providing the required skills and technical know-how in this regard. Furthermore, NAMCOL should create platform and develop strategies that would facilitate close collaborations between content and technology experts for cross fertilisation of skills. This sentiment is supported by the view of Mishra & Koelher (2006) that teachers with the content, pedagogical, and technological knowledge are able to select appropriate ICT tools for teaching and learning in eLearning

The negative attitude of certain staff members towards technology and eLearning were mentioned to be a challenge. Some staff at the institution and tutors involved in

eLearning were reported to have shown lack of interest and commitment in advancing eLearning as a mean for teaching and learning despite the training they had received. Negative attitude could compromise the quality of services rendered and support provided to students. It could also undermine efforts spent to advance the effectiveness of eLearning. It is, therefore, incumbent upon NAMCOL to explore appropriate interventions aiming at improving the attitude of affected staff. Correspondingly, the above finding on attitude challenge was also reported among teachers and students in Uganda (Kasse and Balunywa, 2013).

Another challenge which was identified by the academics was the weak communication and lack of close collaboration between the departments responsible for development, implementation and ICT in terms of eLearning. The low collaboration between the key departments may lead to uncoordinated efforts which could cause gaps in the operation of the relevant departments that deals with activities which are intertwined. Furthermore, this challenge may cause duplication of efforts and increase cost. All these short comings are disadvantageous to quality assurance. The institution should devise strategies to employ cross cutting departmental team approach, which would ensure quality throughout the developmental to the implementation stage of the programme. This is consistent with the view by Mbodila et al. (2019) which highlights the importance of collaboration between strategic departments within the educational institution to ensure exploration of available technologies and its correct usage.

5.5.2 Challenges encountered by Students

Students noted that the lack of internet access and appropriate devices especially became barriers to quality implementation of eLearning. It was reported that some students dropped out of the programmes due to the inability to access the LMS as they had no appropriate devices and they resided far from NAMCOL campuses which made it impossible to use the established computer laboratories. Findings also revealed that some students use the internet and computers at the place of employment and once they change employment it became a challenge to continue with the studies due to lack of internet and computers. This is congruent with the study findings by Oye, Salleh, & Iahad, (2011) that most leaners who use eLearning embark on their learning at their workplaces and only one third of these persons said that they used eLearning in the comfort of their homes. Correspondingly, Bates cited in Mbodila,

Mkabile and Ndebele (2019) that the implementation of eLearning continues to be a challenge for the off-campus students compared to those on campus with 24/7 Wi-Fi access. Therefore, though eLearning has many advantages, the dropout rates have been high compared to the conventional studies opined Phipps and Merisotis (1999) and the lack of appropriate tools could be one of the contributing factors.

Furthermore, students reported that connectivity was a challenge as the internet connection in the country was not widespread and the cost of internet data was unaffordable for many students. That prevented several students from downloading large learning materials. It is clear that the lack of appropriate devices and internet connection are a serious deterrent for eLearning since those devices and connection are a pre-requisite for effective online learning. This finding is congruent with the view by Spector (2013) that the lack of internet access and devices become a barrier to the progress of technology enhanced learning, thus widening the digital divide. This situation, therefore, points to the need for NAMCOL to make investment in the provision of appropriate devices for students and spend effort to ensure the availability of internet connectivity, mainly in areas where her students reside.

Students further revealed that most of the tutors did not provide comprehensive feedback on their assignments but awarded grades only, although tutors received training and written guidelines on how to provide constructive feedback on assessment. Similar finding was observed in a study at JKUAT, where students complained about the lack of constructive feedback from facilitators (Hadullo, Oboko and Omwenga, 2018a). This was regarded to have negatively influenced the quality of their learning. In the same vein, students indicated the lack of subscription to journals and resources for referencing purposes, which deprived them from quality learning materials. The lack of the provision of comprehensive feedback deprives students from enhancing their learning. This situation calls for stringent measures to monitor and evaluate the conduct of tutors in handling assessment and ensure the provision of constructive feedback to students on the assessment work. It is also incumbent upon the institution to make additional resources available for student access to widen the reading and enhance the learning experiences.

5.5.3 Challenges encountered by tutors

Unlike the academic staff who were provided with the laptops and internet connection, which they used for eLearning by the institution, the tutors acquired these tools by themselves, the matter which posed some challenges to some tutors – to get the required devises or gadgets on their own. It is my conclusion, therefore, that the tutors who are expected to be in constant contact with students have not been granted the necessary tools, which may cause a constraint in the provision of the necessary support to advance eLearning. Tutors were concerned about the high cost of internet connectivity as they were required to acquire own data. At times they had to rush through the internet to save on the use of data and that compromised the quality of their work as they were unable to surf on the internet to search for appropriate teaching aids and best teaching practices. Congruent with Makhokha (2016), Spector (2013) views the lack of internet access and devices as a barrier to the progress of technology enhanced learning, thus widening the digital divide. It is therefore critical that the institution considers meeting the tutors halfway in providing at least data for internet connection. In this way, tutors will be enabled to spend more time in providing online support to students as well as exploring the relevant sites to search for appropriate teaching tools and contents.

Tutors further mentioned that the student and tutor readiness was important for eLearning, and it was discovered that several students and tutors were not ready to participate in eLearning. The lack of readiness caused frustration, which in turn, led to the withdrawal of students and tutors from the eLearning programme. It could be argued that when students and tutors entered the eLearning programme without knowing the depth and aspects of online learning then that would lead to frustrations and withdrawal from the programme. The finding is in line with So & Swatman (2006) view that eLearning readiness determines whether institutions and students are psychologically and physically prepared and have the required devices to implement eLearning. Similarly, Coopasami, Knight & Pete 2017 opine those educational institutions should determine its readiness prior to the implementation of eLearning. It is, therefore, crucial that the institution conduct diagnostic assessment at the start of the programme to determine the technological competence levels of both students and tutors which will inform the kind of training interventions to be implemented for skills improvement. In addition, conducting orientation workshops for both students

and tutors will enlighten them on the aspects of online learning and ease the use of eLearning programmes.

Literature affirms that it is vital to establish the students' readiness for eLearning. Hence, formal evaluation needs to be conducted to identify the possible hindrances, training needs, ICT and content related issues that need to be attended to (Maphalala & Mpofu 2018).

Feedback and academic dishonesty: Contrary to what was reported by the students, tutors stated that only a few students attended to the feedback which they provided with the assignments, while many students did not pay attention to the feedback given and, as a result, they tended to repeat the same mistakes in subsequent assignments. In addition, tutors were grossly concerned that, it appeared that, several students did not complete the assessment work themselves, but someone else would do the work for them and this led to academic dishonesty. Students are expected to demonstrate honesty during their engagement with formative assessments. Lack of honesty would compromise the quality of learning and cast a shadow on the academic integrity, which ultimately causes doubt on the quality of graduates being produced. It is therefore crucial that the institution put stringent measures in place that would curb dishonesty and unwanted behaviours of students regarding assessments.

Time constraint: Time was reported to be another challenge, as tutors spent more time to prepare e-content, read each post and type responses to each student's post. It appears tutors did not have sufficient time to spent on other teaching and learning activities besides the mentioned activities as much time is spent in those. This seems to have caused frustrations on the side of tutors as they were unable to cover all scheduled activities in the allotted period. Similarly, Wang, Cowie & Jones (2008) document that one of the personal challenges encountered by the teachers was the commitment and time required to develop effective pedagogical eLearning techniques. In addition, tutors mentioned that online grading of assignments took more time and so did the typing feedback also while they were only remunerated for limited hours which, they felt, did not commensurate with the hours spent on the eLearning platforms providing student support. This situation points to the need to consider sufficient time allocation to tutors in relation to the number and intensity of the assigned activities as well as their remuneration package. Similarly, Dabbagh (2002) reports that online

teaching involves much workload than face-to-face teaching as its preparation requires about three times more preparation time. As a result, the Sloan-C Quality framework, Mayoka & Kyeyune (2012) and Kisanga (2016) recommend that teachers must be provided with motivation, and incentives to enhance their participation in eLearning.

5.6 Theme 5: Strategies to improve the quality and QA in eLearning

This theme was aimed to respond to the research sub question**:** *What strategies can improve the quality and QA of eLearning at NAMCOL?*

The strategies have been presented into two sub-themes, namely enhancement of access and setting of standards.

i. Enhance Access

Regarding the participants' opinion on the strategies to improve the quality and QA in eLearning, the view that cut across most of the responses was that the institution should implement strategies that will enhance accessibility to eLearning by making provision of gadgets and internet through collaboration, among others, with the internet providers and gadget companies that will be affordable for students. Similarly, a collaboration between Mount Kenya University and Telkom facilitated the issuance of sim cards with data for internet connection to students, even though there was a problem of slow connectivity (Ngalomba, 2020). In Tanzania, Ngalomba (2020) further reports that the government introduced reduced taxes on computer items which saw a good number of students securing own laptops and computers.

Participants in all categories opined that the institution should subscribe to e-resources to provide students access to online reference materials. It can be assumed that for the institution to subscribing and providing students access to a wide range of electronic journals for reference purposes will broaden their learning and enable them to submit quality formative assessment activities.

Participants were of the view that NAMCOL should administer questionnaires at the beginning of the eLearning programme to determine the level of student and tutor readiness for engagement in eLearning. It can be argued that the information could be used to guide NAMCOL on the provision of effective support to students and tutors to

ensure quality teaching and learning in eLearning. This is consistent with the view that for the successful implementation of eLearning, it is vital to establish the students' readiness for eLearning and provide an ideal environment where continuous learning can take place (Borotis & Poulymenakou 2004; Chapnick 2000; Djamaris, Priyanto, & Jie 2012; Psycharis 2005; Karmakar & Wahid 2000). In the same vein, Ehlers (2004) emphases the importance of counselling and provision of advice to students before they enter the online programmes is an aspect of quality.

ii. Setting of quality standards

Responses from participants indicated that academic staff, tutors and students need to be provided with continuous training to effectively engage eLearning and thus enhance the quality and quality assurance in eLearning. Such training could help to standardise quality assurance activities. Furthermore, participants suggested that the institution should make it mandatory for all tutors and academic staff to take online courses instead of it being voluntary.

Tutors suggested that online students need orientation before they start with the eLearning programmes. They further indicated that the orientation programmes should include the use of technology for collaborative learning, basic internet use, how and where to get help, course description, assessment and progression. One could argue that the provision of orientation enhances the student and tutor readiness for eLearning which could reduce the withdrawal rates and increase student performance.

Participants suggested benchmarking with other institutions to ensure that the quality assurance practices in eLearning are in line with what other online institutions are doing. This proposal ties well with the statement by Wang (2006) that best practices should be understood as benchmarked for quality online education.

Students indicated that timely and constructive feedback from tutors and administrative staff should be re-enforced.

Participants further suggested that NAMCOL develops quality guidelines and standards which clearly guide the development and implementation of eLearning. It was further advised that the standards and guidelines be communicated to all involved in the development and delivery of eLearning to enhance and maintain its quality.

The participants believed that the timely and full implementation of the proposed strategies would undoubtedly enhance quality and promote quality assurance in eLearning at NAMCOL.

CONCLUSION

Chapter 5 interpreted and discussed findings from this research study in relation to the literature reviewed in Chapter 2. The structured discussion was guided by the conceptual framework of the study and emerging themes with sub-themes summarised in Chapter 4. The discussion of findings as presented in Chapter 5 were mapped according to the main research questions and sub-questions of this study respectively.

CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This final chapter of the thesis summarises and reflects on the major findings of the study. The presents the overview of the research process (6.2), followed by the summary of the thematic analysis (6.3), consolidated key findings and recommendations (6.4), contribution to the body of knowledge (6.5), recommendation for further research (6.6) and limitations. A model of quality assurance in eLearning is also presented.

6.2 SUMMARY OF THE RESEARCH PROCESS

The purpose of the study was to explore the quality assurance practices in the development and implementation of eLearning at NAMCOL in order to determine how the quality in eLearning might have been enhanced. It further aimed to create an eLearning quality model that would improve the quality of eLearning programmes at NAMCOL.

The following main research questions were formulated:

1. What are the experiences of staff and students on the quality and quality assurance (QA) in eLearning spaces at the Namibian College of Open Learning (NAMCOL)?
2. How can the experiences of the NAMCOL staff and students on teaching and learning in eLearning be harnessed to design a quality assurance model?

Moreover, the study sought and responded to the following auxiliary research questions:

- What are the views of people (programme developers, distance education coordinators, IT Technical staff, tutors, and students) involved in eLearning at NAMCOL on quality in eLearning?
- How do institutional policies support QA in eLearning at NAMCOL?
- What quality standards, quality assurance processes and mechanism are in place to assure quality in eLearning at NAMCOL?

- To what extend have participants engaged in the quality assurance in eLearning at NAMCOL?
- What are the challenges experienced in the development and implementation of eLearning in relation to quality assurance?
- What strategies can improve the quality and QA of eLearning at NAMCOL?

The study used the technological acceptance model (TAM) which is theoretical background underpinned by PDPP evaluation model to identify the determinants of quality and quality assurance practices which enhance quality in eLearning.

The study used a qualitative research approach that was underpinned by a quality assurance cycle conceptual framework to explore experiences of participants. The qualitative approach was deemed to be more appropriate for this study as it enabled the researcher to conduct the study in its natural settings in which the participants operated at NAMCOL in order to gain a deeper understanding of quality in eLearning as experienced by the key stakeholders at NAMCOL (Denzin & Lincoln 2011). This study was designed as a descriptive case study using qualitative research approaches to collect data. My interest leaned towards the exploration of what the programme developers, student support officers, tutors and students had to say about their experiences and views on the quality assurance of eLearning services and products at NAMCOL.

This study is situated in the constructivist paradigm which recognises that there are multiple truths in academia. Truth is subjective because it is constructed based on the person's experiences (Denzin & Lincoln 2011). Therefore, the researcher used open-ended questions that prompted the participants to construct meaning from their experiences. The researcher relied on the views of the participants regarding the quality practices in eLearning at NAMCOL.

The sampled respondents consisted of programme developers who coordinated the development of eLearning materials, distance education coordinators who were responsible for student support and provision of technical support to students, tutors who were trained to develop e-content, teach and facilitate eLearning, technical staff in the Information Technology (IT) department who were responsible for the general IT related matters and students who registered for the Certificate in Early Childhood Development (CECD) online programme and secondary education level who used

the eLearning materials and services developed and offered at NAMCOL. With regard to document analysis as a data collection method, all the relevant documents such as quality assurance policy, assessment policy, eLearning policy and other relevant reports and guidelines related to quality assurance in eLearning were obtained and analysed. The data collected was presented and analysed in Chapter 4. Data was further interpreted and discussed through the use of thematic analysis in Chapter 5.

6.3 SUMMARY OF THE MAIN RESEARCH FINDINGS

The main findings as discussed in chapter 5 are presented in this section. The findings will be summarised under the themes as outlined in chapter 4 and 5 which answered the main and sub-research questions of the study.

6.3.1 Demographic data

The study comprised of ten staff members of whom 60% were academics employed permanently on a fulltime basis at NAMCOL while 40% were tutors who were employed on a part-time basis. Of the total number of staff participants in the study, 90% were female and 10% male. The data shows that 70% of the staff had obtained higher academic qualifications, which were masters and doctoral degrees and 30% at lower level. One of the participating tutors obtained a formal academic qualification in eLearning related field, nevertheless all the other participants had done short courses in eLearning. The academics and tutor participants displayed reasonable years of experience, ranging from 2 to 7 years in eLearning. On the other hand, the focus group discussions consisted of a combined total of 15 students, of whom 80% were female and 20% male.

6.3.2 Awareness about policies guiding quality in eLearning

The research has revealed that NAMCOL has put in place some policies to regulate its eLearning activities. This serves as evidence that the institution has recognized the importance of having policies and procedures in place, in order to ensure that the eLearning programmes are implanted according to the set standards. There was a general knowledge among academics who are full-time staff members at NAMCOL, about the policies related to the quality assurance of eLearning. They could access the policies on the intra-net and continuous professional development sessions were held to create awareness among full time staff members about the various institutional

policies and activities. Even though the academic staff were aware of the policies, they indicated that the development of policies was done at management level by the directors and managers. In contrast, tutors who are part-time staff expressed lack of awareness of the eLearning and quality assurance policies. Nevertheless, they indicated that they received templates and guidance on how to conduct the eLearning activities. Similarly, students also expressed general lack of knowledge of the policies related to eLearning, however, there was a general agreement among students that they have received policy guidelines for the tertiary programmes and tutorial letters which guide them on how to engage in their studies.

6.3.3 Experiences of the participants of the quality of eLearning

In terms of this theme the academics expressed the relevance of the programmes being offered since with the introduction of each programme, industry players including employers and graduates provided input on the curriculum in order to ensure its relevance to the industry. Students confirmed the above claim by expressing satisfaction that they could apply the learning experiences in their workplace. Full-time academics expressed satisfaction with their engagement in eLearning as they have been provided with the required devices such as gadgets and internet connectivity. In contrast, tutors and student lamented that they did not have all required devices and internet connection as they were expected to provide for themselves. They cited constraints such as high cost of devices and internet and lack of internet coverage in some areas of the country act as hindrance to engage eLearning successfully. There was a general agreement among academics and students that LMS contained updated information with regard to all aspects of eLearning programme e.g., admission, scholarship, registration and assessment activities.

Furthermore, the study revealed that tutors and very few students provided input in terms of the quality of the eLearning programme through the evaluation process/survey. Hence, they agree that most of the e-content was found to be self-instructional and presenting a tutor presence. The majority of students expressed appreciation for the support received from academics and tutors, however, there were some students who expressed dissatisfaction with the support they received.

6.3.4 Existing QA measures

The study revealed that a variety of existing measures have been put in place to guide quality assurance in eLearning. These were quality assurance committees established in each department, infrastructures and facilities among others: dedicated server for eLearning, established computers centres with internet connection in some parts of the country, WiFi at all its campuses, Moodle as LMS, software applications such as Turnitin, Gradebook and hyper converge solution to ensure that the eLearning portal is accessible 24/7. The study further revealed these additional quality assurance measures such as: periodic curriculum reviews, quality audits, team approach, content editing, language editing, student evaluation of tutors, moderation of assessment, monitoring and evaluation of teaching and learning, and periodical reporting on the quality of eLearning activities.

Findings further pointed to the deliberate set of recruitment criteria that were employed to recruit appropriately qualified staff members to carry out eLearning activities. As a result, findings showed that 70% of academic staff including tutors responsible for eLearning programmes were in possession of higher academic qualifications, ranging from master's to doctoral degrees. The study also revealed that the institution provided training and study opportunities to staff members and in particular those that are involved in eLearning. However, some interviewed academics and tutors stated that they took own initiatives to develop and upscale their skills in order to keep up with the latest technological developments and improve the delivery of eLearning.

The findings further indicated that the institution provided training to students on how to engage LMS. However, a considerable number of students expressed doubt about the effectiveness of training citing the inadequate training period which impacted on the quality of training. The study also revealed that students joined the eLearning programme with various levels of competencies. Consequently, it was found that the one size-fit all training programmes could not effectively address the student needs.

Although findings revealed that students engaged in various eLearning assessment activities, such as discussion forums among others, most students were found to be reluctant to participate in discussion forums except when these activities were for grading purposes, thus defeating the purpose of discussion forums. Though students participated in various evaluative initiatives and surveys on the effectiveness of

eLearning they expressed concern that it seemed that their recommendations were not considered, since they did not receive feedback regarding the outcome of the evaluation or the survey. Similarly, tutors who were tasked with moderation and content editing, also expressed concern that they never received feedback on whether their recommendations were indeed considered as the material were never returned to them to confirm that the corrections/recommendations were affected despite their names appearing as moderators and editors in the final document.

6.3.5 Quality development and implementation challenges in eLearning

The study brought to the fore the following challenges that were viewed to have deterred quality in eLearning:

Lack of quality standards or quality framework for eLearning- the study points to lack of standards which leads to inconsistency in the way how the different academics guide their e-content developers and facilitators.

Scarcity of relevant expertise-lack of adequately skilled staff for the development of interactive e-content and facilitation thereof. It was found that the best subject content experts were not necessarily good at technology and other way round. This shortcoming led to some tutors cutting content from print and websites and pasting on the eLearning portal.

Time constraint - tutors expressed concern that eLearning activities were time consuming.

Low remuneration rate - Tutors lamented that the remuneration did not commensurate with the demand of their activities as such they viewed as a demoralizing factor.

Lack of collaboration among key departments - the study revealed the lack of coordination and collaboration among content developers, student support coordinators and IT staff and this caused frustration and duplications of efforts.

Academic dishonesty – the study further revealed that some students' assessment activities were sometimes done by other individuals than themselves, and this could compromise the quality of graduates.

Lack of devices and internet connection - findings revealed that internet connectivity was sparsely spread in the country and both tutors and students lamented about the

unaffordability of internet data. Consequently, some students dropped out as they could not afford devices and network fares.

Lack of access to journals and additional reference materials - students were concerned about the lack of subscription to journals and additional resources for referencing purposes, thus this deprived them from quality learning.

Lack of constructive/comprehensive feedback – the findings point to the lack of constructive feedback on the assessment activities which was highly likely to negatively affect the quality of learning.

Lack of readiness and commitment among students and tutors - lack of readiness for participation in eLearning among students and tutors led to the withdrawal of these from the programmes. Similarly, the negative attitude of certain staff members towards eLearning resulted in them not showing commitment to advance technology in teaching and learning.

Findings indicated a general agreement among participants that the above identified challenges negatively impacted the quality of eLearning at NAMCOL.

6.3.6 Proposed strategies to improve the quality and QA in eLearning

The participants proposed the following as strategies to improve the quality of eLearning at NAMCOL:

- Enhancing accessibility for eLearning by making gadgets and internet more accessible through collaboration with the related service providers.
- Subscribing to e-resources to enrich teaching and learning.
- Determining the level of students' and tutors' readiness to engage in eLearning to provide appropriate support.
- Providing continuous training to capacitate tutors and students with the appropriate skills to enable them to cope with the ever-changing ICT.
- Strengthening and fostering close communication, cooperation, and collaborations among the departments responsible for the development of e-content, facilitation of content and ICT to ensure quality in all aspects of eLearning
- Developing quality guidelines and standards for eLearning programmes based on the best practices benchmarked with other institutions.

- Participants believed that the implementation of the above proposed strategies would go a long way to enhance the quality of eLearning at NAMCOL.

6.4 CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER PRACTICE

On the basis of the findings of the research study, the following conclusions were drawn regarding the participants' experiences in quality assurance system in eLearning at NAMCOL. Based on the conclusion, recommendations are made to address deficiencies experienced with regard to quality assurance in eLearning in the institution.

6.4.1 Awareness about policies guiding quality in eLearning

NAMCOL developed and implemented eLearning programmes in order to enhance the teaching and learning experiences among its students. During the study it was observed that NAMCOL has employed some quality assurance initiatives to enhance the quality in eLearning. Among others, there are written policies on eLearning, assessment and quality assurance. In addition, templates and guidelines were provided to the e-content developers and facilitators on how to engage with eLearning. The full time employed staff (academics) confirmed awareness of the abovementioned policies, however, they were not involved in the development of those policies as the development was allegedly done at management level. In the similar vein, tutors (part-time academics) lacked awareness of the eLearning and Quality assurance policies. However, students were provided with a synopsis of the policies which summarised policy issues ranging from admission to graduation related to their programme. Therefore, the lack of awareness/ knowledge of quality assurance related policies could have a negative implication on its implementation as this could translate in a lack of ownership of such policies by the key stakeholders.

The success of policies in any institution heavily depends on the knowledge of such policies which is possessed by staff members at all the hierarchical levels in the institution and how they apply them in their daily professional undertakings.

Recommendations for practice

- Since NAMCOL use part-time staff as tutors/facilitators for eLearning programmes, it has become critical that the institution provides a thorough induction to tutors on the policies and guideline documents related to eLearning.
- There is a need to engage all staff members in the development and review of the quality assurance and related policies to eLearning. The technocrats would be in a better position to contribute to towards the review of such policies for quality improvement.
- Research needs to be conducted to establish the needs of academics involved in eLearning regarding quality assurance of eLearning in the institution.

6.4.2 Experiences of quality eLearning

Quality is multi-dimensional and is defined according to the operational context. Hence, each participating category defined quality eLearning according to how it related to them. According to the participants' experiences on quality in eLearning, the institution seemed to have done fairly to ensure quality of teaching and learning. The recognition and appreciation of the institution for the input of the various stakeholders especially the industry players on the curriculum can go a long way in assuring quality learning. Students also expressed satisfaction with the ability to apply some learning content in their place of employment. The provision of laptops and internet to all its full-time staff members, and the establishment of computer centres with internet at its regional and sub-regional offices could be regarded as a move to quality enhancement. However, the high cost of appropriate devices and internet connection was regarded as a barrier to quality eLearning by tutors and students as these were required to source their own devices and internet data. In addition, students expressed dissatisfaction with the nature of student support provided by some academics and tutors.

The quest for quality is crucial in online teaching and learning, therefore is incumbent on NAMCOL to create a conducive teaching and learning environment to guarantee the full participation of the key stakeholders to achieve quality. Furthermore, the improvement in the morale of academics, tutors and students could possibly impact positively on the quality culture of eLearning that NAMCOL aims for.

Recommendations

- There is a need for the institution to facilitate the acquisition of devices and internet by partnering with the service providers for reduced internet and laptops/tablets cost for its students and tutors. This should include negotiation for reduced taxes on devices and internet used for educational purposes.
- It is crucial for the institution to put mechanisms in place to monitor the nature of student support provided by its academics and tutors to assure quality student support.
- It is important to train staff, academics, and support staff on the quality assurance mechanisms and on how to incorporate these in the day-to-day eLearning activities.

6.4.3 Existing quality assurance measures

The Namibian government has established a regulatory body tasked with the responsibility of ensuring that education institutions develop and implement quality programmes. Hence, external quality audits were conducted by the regulatory body in which students, tutors and academics participated. According to the participants' perspectives the institution employed a number of quality assurance measures to ensure quality eLearning such as: recruitment of qualified academics and tutors, team approach for the writing of e-content, establishment of LMS and computer laboratories with internet connectivity among other. In addition, with the outbreak of COVID-19, the leadership of the institution commitment more funds towards eLearning and its imperatives.

Provision of training was regarded as one of the QA measures and as such participants indicated that they were provided with training on the development and facilitation of e-content. Moreover, students also stated that they were provided with orientation on the use of the LMS. However, students expressed doubt on the effectiveness of the training as the one-size-fit all training intervention seemed not to have effectively addressed their training needs.

Additional reading materials for students was also considered to be one of the quality measures for eLearning. However, participant students pointed out the lack of access to journals and contemporary referencing resources in eLearning programmes.

Evaluation of e-content (curriculum development) is crucial for assuring quality in eLearning, however, the study pointed to the low student involvement in the review of the curriculum. Although very few students participated in the surveys with regard to effectiveness of eLearning, they reported that their recommendations seemed not to have been considered as they were not provided with feedback on the outcome of this surveys.

Furthermore, findings pointed to the establishment of quality assurance teams in each department, which dealt with the QA activities at departmental level. This included compilation of progress reports on quality assurance matters. However, involvement of academic staff in the preparation of such quality assurance progress reports was left to the individual departments for implementation, resulting in some departments only making it a management task while it was revealed that staff members at all levels were included another department.

Moderation of assessment activities, evaluation of e-content and teaching and learning were conducted as quality assurance measures of eLearning. However, the findings show no evidence of using the outcome of moderation, monitoring and evaluation in a structured way to improve eLearning. In the same vein the moderators and editors claimed not to have received feedback in terms of the recommendations they have made through the moderation and evaluation process.

Recommendations

- There is a need to establish standards for eLearning teaching and learning.
- It is important for NAMCOL to establish readiness level of students and tutors for eLearning to develop and provide appropriate training/orientation programmes.
- There is a need for the institution to commit resources towards subscription to journals to provide students with access to contemporary e-resources.

- It is highly recommended that students be involved in the evaluation of e-content development and programme review and that student input be considered for the improvement of programme and related study material.
- It is crucial that all academics are equally involved in quality assurance activities. This points to the need for the institution to ensure that all staff

members demonstrate a sense of responsibility towards quality assurance, particularly of eLearning.

- There is a need for the institution to put in place mechanisms that facilitate confirmation that the input of the moderators and editors are considered for quality improvement.

6.4.4 Challenges facing eLearning

Despite measures which the institution seemed to have put in place to assure quality, the study revealed a number of challenges that were encountered in the engagement with eLearning at NAMCOL, which were found to negatively impact the quality of eLearning. Some of these challenges are listed as follow:

Scarcity of relevant expertise- for the development of interactive e-content and facilitation thereof.

Unrealistic remuneration perks – as tutors indicated that they were remunerated for limited hours then those that they spend to provide support on the eLearning platform.

Lack of collaboration among key departments- findings point to the existence of close cooperation among the three departments dealing with eLearning. This was found to hamper effort in assure quality eLearning.

Academic dishonesty –the study revealed that some students seemed to submit assessment work done by other people. This could cast doubt on the authenticity of the assessment outcome and quality of graduates.

Lack of constructive/comprehensive feedback – the findings point to the lack of constructive feedback on the student assessment activities which was likely to affect the quality of learning.

Lack of quality standards or quality frame - the study points to the lack of standards which leads to inconsistency in course development and facilitation.

Findings indicated a general agreement among participants that the above identified challenges negatively impacted the quality of eLearning at NAMCOL.

Recommendations

- There is a need to provide continuous training on the development and teaching of online e-content and make it mandatory for content developers and tutors/facilitators.
- Concerted effort needs to be spent to create a platform and develop strategies that would facilitate close collaborations between subject content and technology experts for cross fertilization.
- The institution should make effort to develop and implement award systems that would appropriately compensate tutors to commensurate their effort.
- Efforts should be made to foster and strengthen close collaboration and coordination among departments that deals with eLearning to ensure quality eLearning.
- The institution should devise strategies to educate students to value their own effort towards academic achievement and to refrain from indulging in practices that lead to academic dishonesty.
- There is a need to put mechanisms in place to enforce and monitor the provision of constructive feedback to students on their assessment work.
- There is a need to establish standards for eLearning teaching and learning.

6.5 CONTRIBUTION TO THE BODY OF KNOWLEDGE

The study contributes to the body of knowledge by documenting the experiences/view of students, tutors and academics on the quality in eLearning. The study revealed the gap in the literature about the experiences of the academics and students on the quality of eLearning. Many studies done focused on the use of ICT in education in developed countries, however, there is a gap in the literature on the quality of eLearning as experienced by key stakeholders (students, tutors and academics) particularly in developing countries (Anene, Imam & Odumuh 2014). This study fills the gap by providing literature on the analysis of the views and experiences of the academics, tutors and students on the quality in eLearning. The study further proposed the quality assurance model for adoption to ensure quality eLearning.

6.6 MODEL FOR QUALITY ASSURANCE IN ELEARNING

The study proposed a model (Figure 6.1) for the quality assurance in eLearning aiming at enhancing the identified strengths and addressing deficiencies in the current practices as found in the study. The proposed model is cyclic and makes provision for the following phases: Planning, which includes establishment of quality standards among others, evaluation of technology, course design, teaching and learning, support, assessment and evaluation.

The model proposes that the institution need to do thorough planning to ensure the implementation of quality eLearning programme. The first phase further suggests the establishment of quality standards based on the benchmarked best practices as well as the input from staff and students. It is important to assess the availability and reliability of technology for use by the target group: hence this phase is very crucial for eLearning. This phase is followed by the design of the course which is based on the set quality standards and guided by the market demand. The course structure is to be developed in a responsive way informed by feedback from a wide variety of stakeholders including industry players, graduates and current students, academics, and general public. In addition, the team approach is proposed to quality assure the course blueprint during the course development process.

The quality of the eLearning programme depends on the quality of the responsible staff, hence the teaching and learning phase advocates for the ability of academics and tutors to demonstrate the Technological Pedagogical Content Knowledge (TPACK). Similarly, the student preparedness to pursue eLearning and the strategies and mechanisms employed to address the student preparedness are important aspects. Additionally, the model proposes collaborative teaching and learning as literature identified this as a key aspect in quality eLearning.

The model proposes the provision of guidance and student counselling to enhance learning. Continuous staff development and upskilling through training for staff and students is suggested to improve the quality of teaching and learning as well as to keep up with the ever-changing ICT. The model further proposes that NAMCOL ensures access to eLearning through fostering collaboration with service providers for affordable devices and internet connectivity. Responsive feedback and feedforward to student and tutors' query will enhance teaching and learning.

Assessment system shall adopt an integrative approach to ensure that the assessment activities address the learning objectives and create a community of learning. Timely and constructive feedback is proposed to be essential for effective eLearning. Systems must be put in place to regularly evaluate the assessment practices to ensure its validity and reliability. The final phase of the model involves the systematic evaluation of the programme output which includes students and academics satisfaction, retention rate, graduation rate, employability of graduates and the effectiveness of quality assurance systems. The outcome of the systematic evaluation of the programme will be used to review the set quality standards for overall improvement of the quality of eLearning. Each phase must be subjected to continuous evaluation.

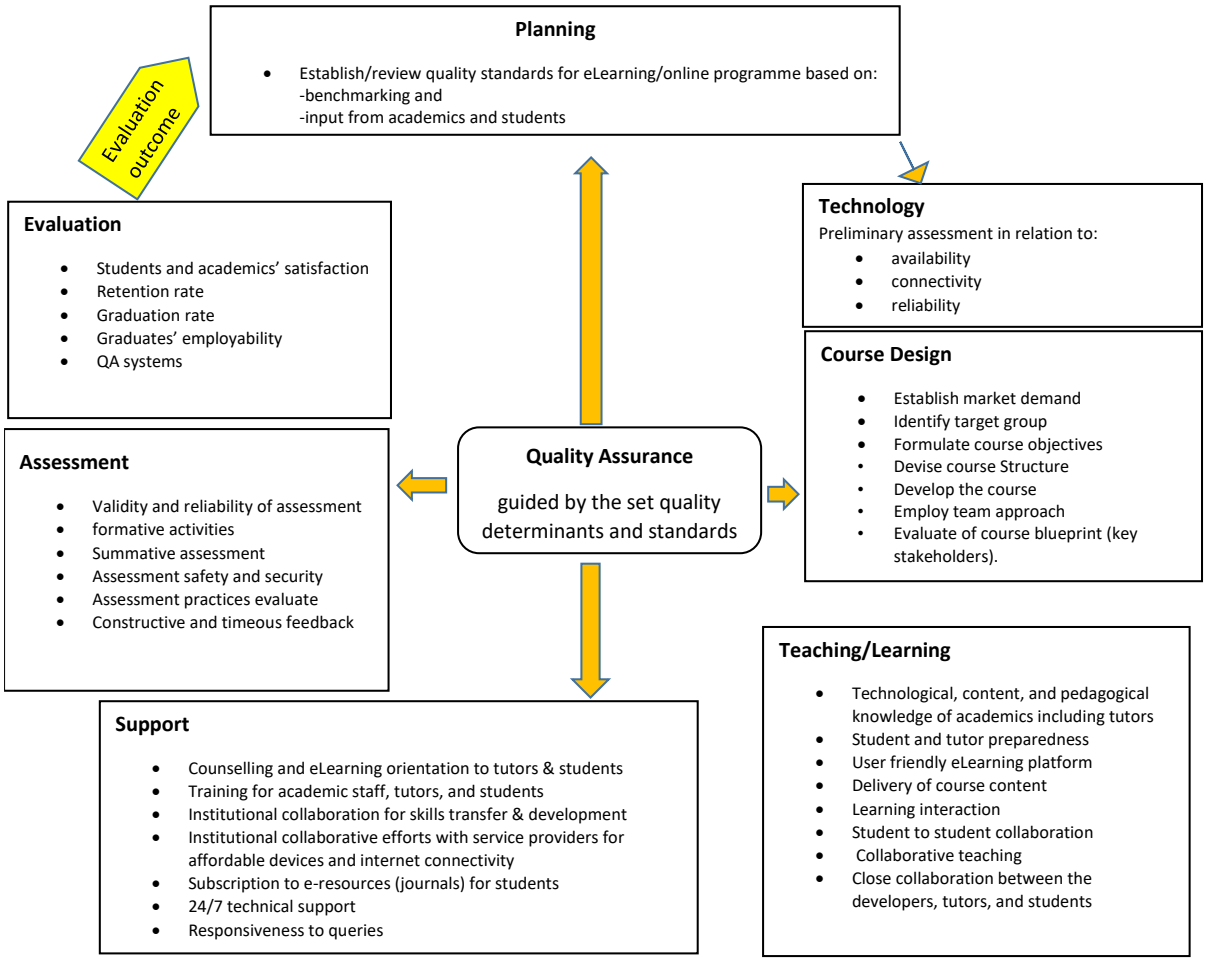

Figure 6.1: Quality Assurance Planning Cyclic Model (QAPCM) (Ndeshimona & Nyoni, 2022)

6.7 RECOMMENDATION FOR FUTURE RESEARCH

In this section, the following are some proposals for future research in the area of quality eLearning**:**

- Themes from this study could be used to construct a survey about the quality of eLearning at the institution using a quantitative approach.
- An empirical study to further investigate and document the effectiveness of eLearning at the institution could be conducted**.**
- A study could be undertaken on the functional relations between the departments responsible for course design/development, tuition, and ICT regarding assuring and ensuring quality of eLearning.
- A study to examine the extent to which student counselling can lead to improved quality of eLearning.

6.8 LIMITATION

The research design was a case study designed to gather in-depth-information on the phenomenon under investigation. The study consisted of a small sample and purposeful sampling was used to select the academics, tutors and students for the interviews. The participants were selected based on their willingness to participate and involvement in eLearning at NAMCOL for an extended period beyond six months. As a result, the study could not get students registered only at secondary school level who have engaged the NAMCOL eLearning activities for over continuous period. As those contacted expressed that they were not comfortable to talk about the research topic because their eLearning engagement were limited to only a few visits on the eLearning sites which they have done on a voluntary basis. Finally, two student focus group sessions were organised, the first focus group consisted of students registered only for the tertiary programmes, while the second focus group consisted of students who registered on both the tertiary and secondary level programmes.

The study focused on the experiences of academics, tutors and students at NAMCOL, Namibia. Therefore, the results may not be generalised to institutions in other countries since they might have different social cultural set ups.

6.9 CONCLUSIONS

eLearning has become an increasingly important teaching and learning mode in educational institutions. The quality assurance of eLearning, however, is essential for the quality eLearning courses or programmes. QA is achieved by complying with strict and consistent commitment to certain standards that achieve uniformity of a product to satisfy specific national and international quality standards or user requirements. This research was underpinned by two main research questions:

1. What are the experiences of staff and students on the enhancement of quality assurance (QA) in eLearning spaces at the Namibian College of Open Learning (NAMCOL)?

2. How can the experiences of the NAMCOL staff and students on teaching and learning in eLearning be harnessed to design a quality assurance model?

Findings revealed that NAMCOL has put in place quality assurance measures for its eLearning programmes such as recruitment of qualified academics and tutors, team approach for the writing of e-content, establishment of LMS and computer laboratories with internet connectivity among other. However, participants indicated deterrents that could hinder the effective implementation of quality eLearning programmes including the need for the lack for continuous training, the lack of quality standards for eLearning, lack of mechanisms to ensure the inclusion of recommendations from moderators, evaluations, student readiness. Therefore, there is a need for concerted efforts to put in place quality check mechanisms to address the challenges as they emerge for continuous quality improvement in eLearning.

> *Move the institution from external controls to an internal culture of quality, poor quality is very expensive* (Bates, 2012)

REFERENCES

Afunde, N.L. (2015). An investigation of the integration of ICT in teaching of science subjects at the Namibian College of Open Learning. Submitted in partial fulfilment of the requirements for the degree Master of Education. Faculty of Education University of Namibia. Windhoek.

Ahmad, S.A. (2012). Essentialities for e-learning: The Nigerian tertiary Institutions in question. *Academic Research International*, 2 (2), 286 – 219.

Aisami, R.S. (2015). Learning styles and visual literacy for learning and performance, *Procedia-Social and Behavioral Sciences*, 176, 538-545.

Al-Azawei, A., Parslow, P. & Lundqvist, K. (2016). Barriers and opportunities of e-learning implementation in Iraq: A case of public universities. The International Review of Research in Open and Distributed Learning, 17(5). doi: http://dx.doi.org/10.19173/irrodl.v17i5.2501

Alessi, S. & Trollip, S. (2001). *Multimedia for Learning Methods and Development*. Boston: Allyn and Bacon.

Alkharang, M. & Ghinea, G. (2013). E-learning in Higher Educational Institutions in Kuwait: Experiences and Challenges. *International Journal of Advanced Computer Science and Applications (IJACSA)*. 4(4),1-6.

Allen, I.E., & Seaman, J. (2010). Class differences: Online education in the United States, 2010. Babson Survey Research Group. Retrieved from http://files.eric.ed.gov/fulltext/ED529952.pdf

AL-Senaidi, S., Lin, L. & Poirot, J. (2009). Barriers to adopting technology for teaching and learning in Oman. *Computers & Education*, (53), 575-590.

Amin, F. M. H. & Salih, N. K. (2017). New Model to Achieve Software Quality Assurance in E-Learning Application. *International Journal of Computer Science,* 14(3), 65-69.

Anene, J., Imam, H. & Odumuh, T. (2014). Problem and Prospect E-learning in Nigerian Universities. *International Journal of Technology and Inclusive Education*, 3, 320-327. 10.20533/ijtie.2047.0533.2014.0041

Arkorful, V. & Abaidoo, N. (2014). The role of e-learning, the advantages and disadvantages of its adoption in Higher Education. *International Journal of Education and Research,* 2.

Association of Southeast Asian Nation (ASEAN) (2004) Standards and Quality Bulletin Volume 18, November. Retrieved from http://www.asean.org/?static_post=asean-standards-and-quality-bulletin-volume-18-november.

Asunka, S. (2008). Online learning in higher education in Sub-Saharan Africa: Ghanaian university students' experiences and perceptions. *The International Review of Research in Open and Distance Learning*, 9(3),1-13.

Aung, T.N., & Khaing, S.S. (2016) *Challenges of implementing e-learning in developing countries: A Review*. In T. Zin, J.W. Lin, J.S. Pan, P. Tin, & M. Yokota (Eds.), *Genetic and evolutionary computing* (pp. 405-411). Cham: Springer.

Azawei, A., Parslow, P. & Lundqvist, K. (2016). Barriers and Opportunities of E-Learning Implementation in Iraq: A Case of Public Universities. *International Review of Research in Open and Distributed Learning,* 17(5),126 - 146

Babbie, E. (1992). *The practice of social research*. California: Wadsworth Publishing.

Bagarukayo, E. & Kalema, B., (2015). Evaluation of e-learning usage in South African universities: A critical review. *The International Journal of Education and Development using Information and Communication Technology*, 11(2),168-183.

Baloyi, G. (2014a). Learner support in open distance and e-learning for adult students using technologies. *Journal of Communication*, 5(2),127-133. doi: http://dx.doi.org/10.1080/0976691x.2014.11884832

Baloyi, G.P. (2014b). Learner Support in Open Distance and E-Learning for Adult Students Using Technologies. *Journal of Communications*, 5(2),102-112.

Baran, E. & Correia, A. P. (2014). A professional development framework for online teaching. *TechTrends*, 58(5), 95-101.

Basak, S.K., Wotto, M. & Bélanger, P. (2016). A framework on the critical success factors of E-Learning implementation in Higher Education: A review of the literature. *International Journal of Educational and Pedagogical Sciences*, 10

Bates, A.W. (2005). *Technology, E-Learning and Distance Education*, New York, Routledge.

Bates, A.W. (2008). *Transforming distance education through new technologies* in Evans, T., Haughey, M., and Murphy, D. (eds.). *The International Handbook of Distance Education Bingley*, U.K.: Emerald Press.

Belawati, T., Baggaley, J. & Dhanarajan, G. (2010). *Distance Education in Asia:* the Pandora Guidebook.

Bharuthram, S. & Kies, C. (2013). Introducing e-learning in a South African higher education institution: Challenges arising from an intervention and possible responses. *British Journal of Educational Technology,* 44(3), 410-420.

Blackmom, S.J. & Major, C. (2012). Student experiences in online courses: A qualitative research synthesis. *The Quarterly Review of Distance Education,* 13(2), 77-85.

Bless, C. & Higson-Smith, C. (2004). *Fundamentals of social research methods: An African perspective.* Lusaka, Zambia: Juta Education (Pty).

Bolton, A. (1995). A rose by any other name: TQM in higher education. *Quality Assurance in Education*, 3(2),13-18.

Borotis, S. & Poulymenakou, A. (2004). e-Learning readiness components: Key issues to consider before adopting e-Learning interventions. In J. Nall, & R. Robson (Eds.), Proceedings of world conference on e-Learning in corporate, government, healthcare, and higher education (pp. 1622-1629). Chesapeake, VA: AACE.

Bunoti, S. (2012). The quality of higher education in developing countries needs professional support. http://www.intconfhighered.org (Retrieved on 15 September 2017).

Buthelezi, C.T.N. (2005). Educators' perceptive of the implementation of the Integrated Quality Management System (IQMS) in secondary school within the Umlazi District of KwaZulu-Natal. M.Ed Dissertation. Kwadlangeswa: Faculty of Education. University of Zululand.

Çakiroğlu, Ü. (2014). Evaluating students' perspectives about virtual classrooms regarding seven principles of good practice. *South African Journal of Education*, 34(2), 1-19.

Carlson, J. & Jesseman, D. (2011). Have we asked them yet? Graduate student preferences for web-enhanced learning. *The Quarterly Review of Distance Education,* 12(2), 125-134.

Casey, D.M. (2008). A journey to legitimacy: The historical development of distance education through technology. TechTrends: *Linking Research & Practice to Improve Learning,* 52(2), 45-51.

Castle, K. (2010). *Study Skills for your Masters in Teaching and Learning*. London: Sage.

CEC. (2003). Commission Staff Working Paper: e-learning: Designing Tomorrow's Education. A Mid-Term Report as requested by the Council Resolution of 13 July 2001.SEC2003 905 Brussels. 30 July 2003. http://ec.europa.eu/education/archive/e learning/doc/mid_term_report_en.pdf

Cele, V.Z. (2008). The management of the implementation of Integrated Quality Assurance policies: The case of Integrated Quality Management System (IQMS) in secondary schools in KwaZulu-Natal. M.Ed. Dissertation. Pretoria: Faculty of Education. University of South Africa.

Chawinga, W.D. (2016). Increasing access to higher education through open and distance learning: Empirical findings from Mzuzu University, Malawi. *The International Review of Research in Open and Distributed Learning*, 17(4),102-112.

Chigona, A. & Dagada, R. (2015). Empirical study on e-learning adoption at institutions of higher learning in South Africa. *Journal for New Generation Sciences*, 13(3), 34-48.

Chua, A. & Lam, W. (2007). Quality assurance in online education: The universitas 21 global approach. *British Journal of Educational Technology*, 38(1), 133-152.

Clark, L.S. (1999). Learning from the field: The journey from post-positivist to constructivist methods. Paper presented to the International Communication Association, San Francisco.

Commonwealth of Learning. (2009). Quality assurance toolkit for distance higher education institutions and programmes. Vancouver, BC: The Commonwealth of Learning.

Compeau, D.R. & Higgins, C.A. (1995). Computer self-efficacy: development of a measure and initial test. *MIS Quarterly*, 19(2), 189-211.

Cook, V. (2012). Learning everywhere, all the time. The Delta Kappa Gamma Bulletin, Professional Development, Spring 2012.

Coopasami, M., Knight, S. & Pete, M. (2017). e-Learning readiness amongst nursing students at the Durban University of Technology. Health SA Gesondheid, 22,300-306.

Council for Higher Education Accreditation. (2002). Accreditation and assuring quality in distance learning. Washington, DC.

Creswell, J.W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches,* (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd ed. Thousand Oaks, CA: Sage.

Crosby, P.B. (1979). *Quality Is Free*, McGraw-Hill, New York, NY.

Dadzie, P.S. (2009), ―E-Learning and e-library services at the University of Ghana: prospects and challenges‖, *Information Development*, 25 (3), 207-217.

Dagles, I. (2008). The Research on the quality of the System of Primary and Secondary Education. Athens: Pedagogical Institute.

Datuk, T.S. & Ali, A. (2012). *Issues & challenges in implementing e-learning in Malaysia: Open University Malaysia*. Copyright © UNITEM Sdn. Bh.

Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of Information Technology, *MIS Quarterly*, 13(3), 319-340.

Dawson, C. (2002). *Practical Research Methods: A User-Friendly Guide to Mastering Research Techniques and Projects*. Trowbridge: Cornwell Press.

de Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. (2011). *Research at grassroots: For the social sciences and human service professions*. (4th ed.). Pretoria: Van Schaik.

Deepwell, F. (2007). Embedding quality in eLearning implementation through evaluation. *Journal of Educational Technology & Society*,10 (2), 34-43.

Deming, W.E. (1986). *Out of Crisis*, MIT, Cambridge, MA.

Denzin, N.K. & Lincoln, Y.S. (2011). *The Discipline and Practice of Qualitative Research. The Sage Handbook of Qualitative Research. 4th ed.* Thousand Oaks, CA: Sage.

Denzin, N.K., Lincoln, Y.S. (2000). *Introduction: the discipline and practice of qualitative research*. In N.K. Denzin & Y.S. Lincoln (Eds). *Handbook of qualitative research (2nd ed.).* Thousand Oaks: Sage.

Department of Education, Republic of South Africa. (2003a). Integrated Quality Management System. Collective Agreement Number 8 of 2003.Education Labour Relations Council. Pretoria: Government Printers. pp. 1-22.

Department of Education. Republic of South Africa. 2003b. Integrated Quality Management System Training Manual. Pretoria: Government Printers. Pages 5-10.

Department of Education. Republic of South Africa. 2003c. Integrated Quality Management System. IQMS for School Based Educators. Pretoria: KZN Government Printers. pp. 3-10.

Department of Higher Education and Training. (2018). Statistics on Post-School Education and Training in South Africa [Online]. Available: http://www.dhet.gov.za/Research%20Coordination%20Monitoring%20and%20Evaluation/6_DHET%20Stats%20Report_04%20April%202018.pdf

Dhlamini, J.T. (2009). The role of Integrated Quality management system to measure and improve teaching and learning in South African Further Education and

Training Sector. Doctoral Thesis. Pretoria: Faculty of Education. University of South Africa.

Dill, D. (2000a). Designing Academic Audit: Lessons learned in Europe and Asia. *Quality in Higher Education*, 6(3), 187-207.

Djamaris, A., Priyanto, A. B. & Jie, F. (2012). Implementation of elearning system readiness: Indonesia context. In Management of innovation and technology (ICMIT), 2012 IEEE international conference on, IEEE. http://dx.doi.org/10.1109/ICMIT.2012. 6225824.

Dwyer, D. Barbieri, K. Helen, M. (1995). "Creating a Virtual Classroom for Interactive Education on the Web", available from World Wide Web http://www.igd.fhg.de/archive/1995_www95/papers/62/ctc.virtual.class/ctc.virtual.class.html

Edemoh, J.O. & Ogedebe, P. (2014). Prospects and Challenges of e-learning with Nigerian Universities. Paper presented at the 6th Annual International Conference on ICT for Africa 2014, Yaoundé, Cameroon.

Edwell, P. (1993). Total quality & academic practice. *Change*, May-June, 58-64.

Eger, L. (2015). Is Facebook a Similar Learning Tool for University Students as LMS? *Procedia Social and Behavioral Sciences,* 203 (2015), 233 – 238.

Ehlers, U.D. (2004). Quality in eLearning from a learner's perspective. European Journal for Distance and Open Learning. Retrieved from http://www.eurodl.org/materials/contrib/2002/Online_Master_COPs.html

Ehlers U.D. & Pawlowski, J.M. (2006). *Quality in European e-learning: an introduction. In Handbook on Quality and Standardisation in E-Learning*. Springer, Berlin.

Ehlers U.D. (2009) Understanding quality culture. *Quality Assurance in Education* 17: 343–363.

Ehlers, U.D. & Hilera, J.R. (2012). Special Issue on quality in e-learning. *Journal of Computer Assisted Learning, 28*(1), 1-3. doi: 10.1111/j.1365-2729.2011. 00448.

Ellis, R. A., Ginns, P. & Piggott, L. (2009). “E-Learning in Higher Education: Some Key Aspects and Their Relationship to Approaches to Study.” Higher Education Research and Development 28 (3): 303–18.

Endean, M., Bai, B. & Du, R. (2010). Quality standards in online distance education. *International Journal of Continuing Education and Lifelong Learning, 3*(1), 53-73.

Etedali, M.M., & Feiznia, M.A. (2011). Issues in E-Learning Quality Assurance. Second Kuwait Conf. on E-Services and E-Systems, April 5-7.

Ezeugbo, C.O. & Asiegbu, E.C. (2011). Challenges in the application of e-learning in continuing Education Programmes (CEP) in Nigerian Universities: Exploring teachers’ perspective. Ghana Journal of Education and Teaching (GHAJET), 12, 267-275.

Freeman, M. (1997). Flexibility in access, interaction and assessment: The case for web-based teaching programs. *Australian Journal of Educational Technology, 13*(1), 23-39.

Fry, K. (2001). E-Learning markets and providers: some issues and prospects‖, Education & Training, 43 (4/5), 233-239.

Gallagher, M. (2001). *E-learning in Australia: Universities and the new distance education.* Paper presented at the OECD/Japan Seminar e-learning in Post-Secondary Education, Tokyo, 5-6 June 2001.

Gay, L.R. (1996). *Educational Research, (4th ed.).* New York: Macmillan Publishing Company.

Gay, L.R., Mills, G. E. & Airasian, P. (2009). *Educational research: Competencies for analysis and application.* Upper Saddle River, NJ: Pearson.

Geri, N. (2012). The resonance factor: Probing the impact of video on student retention in distance learning. *Interdisciplinary Journal of E-Learning and Learning Objects,* 8, 1-13.

Gibbs, D., & Gosper, M. (2012). The upside-down-world of e-learning. *Journal of Learning Design,* 1(2), 46-54.

Government of the Republic of Namibia. (1999). Presidential Commission on Education, Culture and Training. Gamsberg McMillan: Windhoek.

Government of the Republic of Namibia. (2002). Education for All (EFA): National Plan of Action 2002- 2015. Windhoek: Government of the Republic of Namibia.

Government of the Republic of Namibia. (2004). Windhoek: Ministry of Education, Arts, and Culture.

Government of the Republic of Namibia. (2006). Namibia Vision 2030: Policy Framework for Long Term-National Development. Windhoek: Namprint.

Government of the Republic of Namibia. (2007). Education and Training Sector Improvement Programme (ETSIP): Planning for a Learning Nation: Programme Document: Phase 1 (2006-2011). Windhoek: John Meinert.

Government of the Republic of Namibia. (2012). Namibia's Forth National Development (NDP 4). Windhoek: National Planning Commission.

Govindasamy, T. (2002). Successful implementation of e-Learning Pedagogical considerations. *Internet and Higher Education*, 4, 287–299.

Grifoll, J., Huertas, E., Prades, A., Rodríguez, S., Rubin, Y., Mulder, F. & Ossiannilsson, E. (2010). *Quality assurance of e-learning.* Helsinki: European Association for Quality Assurance in Higher Education.

Gunawardena, C.N. & McIsaac, M.S. (2004). Distance education. In D. H. Jonassen, *Handbook of Research in Educational Communications and Technology* (2nd ed., pp. 355-395). Mahwah, NJ: Lawrence Erlbaum Associates.

Guri-Rosenblit, S. (2005). 'Distance education' and 'e-learning': Not the same thing. *Higher education,* 49(4), 467-493.

Hadullo, K., Oboko, R. & Omwenga, E. (2017). A model for evaluating e-learning systems quality in higher education in developing countries. *International Journal of Education and Development using ICT,* 13(2), 185-204.

Hadullo, K., Oboko, R. & Omwenga, E. (2018a). Factors affecting asynchronous e-learning in developing countries. A qualitative pre-study of JKUAT University. *International Journal of Education and Development using ICT,* 14(1), 152 -163.

Hadullo, K., Oboko, R. & Omwenga, E. (2018b). Status of e-learning quality in Kenya: Case of Jomo Kenyatta University of agriculture and technology postgraduate students. *International Review of Research in Open and Distance Learning,* 19(1), 138–159. https://doi.org/10.19173/irrodl.v19i1.3322.

Harasim, L. (2000). Shift happens: Online education as a new paradigm in learning. *The Internet and Higher Education, 3*, 41-61.

Harvey L. (2004-2012). *Analytic quality glossary: Quality Research International*. Available url: http:// www.qualityresearchinternational.com/glossary/, Accessed on 2016/06/02.

Harvey, L. & Green, D. (1993). Defining Quality. *Assessment and Evaluation in Higher Education*, *An International Journal,* 18(1), 9-34.

Harvey, L. (2007). Epistemology of Quality. *Perspectives in Education*, 23 (3),1-13.

Harvey, L. & Askling, B. (2003). *Quality in Higher Education. In: Begg, R. (ed.). The Dialogue between Higher Education Research and Practice*. Dordrecht: Kluwer Academic Publishers (pp. 69-83).

Harvey, L. & Green, D. (1993). Defining quality. *Assessment and Evaluation in Higher Education,* 18(1), 9-34.

HEFCE, (2005*) HEFCE e-Learning strategy*. Available at: http://www.hefce.ac.uk/pubs/hefce/2005/05_12/05_12.doc (Accessed: 16 August 2017).

Henning, E., Van Rensburg, W. & Smit, B. (2013). *Finding your way in Qualitative Research, (9th ed).* Hatfield: Van Schaik Publishers.

Hole, D. (2001). ISO 9000 Quality System handbook. (4th Edition)**.** Butterworth-Heinemann, London.

Hongmei, L. (2002). Distance education: pros, cons, and the future. Paper presented at the annual meeting of the Western States Communication Association, Long Beach CA.

Howitt, D. & Crammer, D. (2011). *Introduction to Research Methods in Psychology*. Harlow: Pearson/Prentice Hall.

Hubackova, S. (2015). History and Perspectives of ELearning. *Procedia - Social and Behavioural Sciences,* 191, 1187 - 1190.

Iipinge, S.M. (2010). Integration of ICT in the preparation of teachers at colleges of education in Namibia. (Unpublished doctoral thesis. UNAM, Windhoek).

Illeris, K. (2000). *Adult Education in the Perspective of the Students (ed.).* Copenhagen: Roskilde University Press.

Illeris, K. (2009). *Contemporary Theories of Learning: Learning theorists in their own words (ed.).* London/New York: Routledge.

Institutions of Higher Learning in South Africa. *Journal for New Generation Sciences,*13(3), 34-48.

International Institute for Educational Planning (UNESCO) (IIEP). 2013. Understating and assessing quality. http://www.iiep.unesco.org/fileadmin/user_upload/Cap_Dev_training/training_Materials/HigherEd/EQA_HE_4.pdf. (Accessed on 21 June 2018).

Ishikawa, K. (1992). *What Is Total Quality Control? The Japanese Way*, Prentice-Hall, Englewood Cliffs, NJ.

Jackson, N. & Lund, H. (2000). *Benchmarking for Higher Education*. Taylor & Francis, Inc., 7625 Empire Dr., Florence, KY 41042.

Jara, M. & Mellar, H. (2007). Exploring the mechanisms for assuring quality of e-learning courses in UK higher education institutions. European Journal of Open and Distance Learning, 1. Retrieved from http://www.eurodl.org/ index.php? tag =120 &article=396&article=261

Jung, I. (2010) The dimensions of e-learning quality: from a learner's perspective. *Educational Technology Research and Development*. Advanced online publication. Retrieved from http://futured.com/documents/OeQLs

Jung, I. (2011). The dimension of e-learning quality: from the learner's perspective. *Educational Technology Research and Development*, 59(4), 445-464.

Jung, I. & Latchem, C. (2007). Assuring quality in Asian open and distance learning. *Open Learning, 22*(3), 235-250.

Jung, I., Wong, T. & Belawati, T. (2013). Quality assurance in distance education and e-learning. *Challenges and solutions from Asia*. Los Angeles: SAGE.

Jung, N. (2017). Korean learning motivation and demotivation of university students in Singapore. *Foreign Languages Education*, *24*(3), 237-260. doi: http://dx. doi.org /10.15334/fle.2017.24.3.237.

Juran, J.M. (1989). *Juran on Leadership for Quality: An Executive Handbook*, Free Press, New York, NY.

Kadhila, N. (2012). Quality assurance mechanisms in higher education institutions in Namibia. Doctoral Thesis. Bloemfontein: Faculty of Education. University of the Free State.

Kadhila, N., Iipumbu, N. & Tuaundu, C. (20019). Exploring mechanisms for assuring the quality of ODL in public Higher Education institution in Namibia (Unpublished Paper, Windhoek).

Kadhila, N., Nyathi, F.S. & Van der Westhuizen, L. (2013). A Proposed Framework for Best Practice in Quality Assurance in Namibia Higher Education Institutions. *Journal for Studies in Humanities and Social Sciences*, *2*(1), 190 - 215.

Kamba, M.A. (2009). Problems, challenges and benefits of implementing e-learning in Nigerian universities: An empirical study. *International Journal of Emerging Technologies in Learning*, 4(1), 66 - 69.

Karmakar, C.K. & Wahid, C.M. (2000). *Recommendations for Bangladesh towards e-learning readiness*. Department of Computer Science. Shah Jalal University of Science and Technology. Available from: http://codewitz.info/papers/MMT_97-102_Karmakar_Wahid%20.pdf (Accessed 8 November 2016).

Kashorda, M. & Waema, T. (2014). E-Readiness survey of Kenyan Universities (2013) report. Nairobi: Kenya Education Network.

Kasse, J.P. & Balunywa, W. (2013, February). *An assessment of e-learning utilization by a section of Ugandan universities: Challenges, success factors and way forward*. Paper presented at the international conference on ICT for Africa 2013, Harare, Zimbabwe.

Katz-Haas, R. (1998). User-centered design and web development. Retrieved 28 May 2020,from http://www.stcsig.org/usability/ topics/articles/ucd%20_ web_devel. Html.

Keegan, D. (1996). *Foundations of Distance Education*. 3rd ed. London: Routledge.

Keegan, D. (2005). The Incorporation of Mobile learning into Mainstream Education and Training. In H. van der Merwe and T. Brown (Eds.), *mLearn 2005: 4th World Conference on Mobile Learning. Mobile technology: The future of learning in your hands*. Cape Town, South Africa: mLearn, 1-17.

Keendjele, F.N. (2018). Collaborative quality assurance in Open and Distance Learning: A case study of Botswana and Namibian open and distance learning colleges. Doctoral Thesis. Pretoria: Faculty of Education. University of South Africa.

Kidney, G., Cummings, L. & Boehm, A. (2007). Toward a Quality Assurance Approach to E-Learning Courses. *International Journal on E-Learning,* 6(1), 17-30.

King, N. & Horrocks, C. (2010). *Interviews in qualitative research:* Sage.

Kisanga, D. (2016). Determinants of teachers' attitudes towards e-learning in Tanzanian higher learning institutions. T*he International Review of Research in Open and Distributed Learning*, 17(5). doi: http://dx.doi.org/10.19173/irrodl.v17i5.2720.

Körkkö, M., Kyrö-Ämmälä, O. & Turunen, T. (2016). Professional development through reflection in teacher education. Teaching and Teacher Education, 55(1), 198 - 206.

Koul, B.N. & Kanwar, A. 2006. Perspectives on Distance Education: Towards a Culture of Quality. Vancouver: Commonwealth of Learning.

Kwan, P.Y.K. (1996). Application of total quality management in education: retrospect and prospect. *International Journal of Educational Management,* 10(5), 25 - 35.

Leong, P. (2011). Role of social presence and cognitive absorption in online learning environments. *Distance Education,* 32(1), 5 - 28.

Levy, S. (2003). Six factors to consider when planning online distance learning programmes in higher education. *Online Journal of Distance Learning Administration, 6 (1)*. Retrieved 5 November 2005

htt: www.westga.edu/-distance/ojdla/spring61/levy61.html

Lichtman, M. (2013). *Synthesizing the best thinking on conducting qualitative research in education. (3rd Edition)*. Los Angeles: Sage Publication.

Lim, K., Park, S. & Kang, M. (2016). Structural relationships of environments, individuals, and learning outcomes in Korean online university settings. The International Review of Research in Open and Distributed Learning, 17(4). doi: http://dx.doi.org/10.19173/irrodl.v17i4.2500.

Lincoln, Y. & Guba, E. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage.

Lorenzo, G. & Moore, J.C. (2002). The Sloan Consortium report to the Nation: Five pillars of quality online education. Retrieved from http://www.sloanconsortium.org/

Machumu, H.J. & Kisanga, S.H. (2014). Quality Assurance Practices in Higher Education Institutions: Lesson from Africa. *Journal of Education and Practice*, 5 (16), 144 – 156.

Mac Keogh, K. & Fox, S. (2009). Strategies for Embedding e-Learning in Traditional Universities: Drivers and Barriers. Electronic Journal of e-Learning, 7 (2): 147-154.

Mahande, R. & Jasruddin, J. (2018). The Conceptual model of user satisfaction for e-Learning Edmodo on Undergraduate students: A Preliminary study, in: Presented at the 1st International Conference on Computer Science and Engineering Technology Universitas Muria Kudus, EAI, Kudus, Indonesia. https://doi.org/10.4108/eai.24-10-2018.2280533

Makokha, G., & Mutisya, D. (2016). Status of e-learning in public universities in Kenya. The International Review of Research in Open and Distributed Learning, 17(3). doi: http://dx.doi.org/10.19173/irrodl.v17i3.2235 .

Maphalala, M.C. & Mpofu, N. (2018). Exploring the E-Learning Experiences of Academic Staff at a South African University. *Progressio South African Journal for Open and Distance Learning Practice*.40(1-2), 40 - 67 https://orcid.org/0000-0002-1078-1985 https://orcid.org/0000-0002

Masoumi, D. & Lindström, B. (2011). Quality in e-learning: a framework for promoting and assuring quality in virtual institutions. *Journal of Computer Assisted Learning*, (28), 27 - 41.

Materu, P. (2007). Higher Education Quality Assurance in Sub-Sahara Africa: Status Challenges, Opportunities and Promising Practices. World Bank Working Paper No. 124. Washington, D.C: World Bank.

Matipa, R. & Cheryl Brown, C. (2015). Influence of Ideological Contradictions when Adopting ICTs to Create Authentic Learning Activities. Paper presented in Cape Town Conference.

Mayoka, K. & Kyeyune, R. (2012). An analysis of eLearning Information System adoption in Ugandan Universities: Case of Makerere University Business School. *Information Technology Research Journal, 2*(1), 1 - 7.

Mbati, L.A. (2012). Online learning for social constructivism: Creating a conducive environment. *Progressio, 34*(2), 99-119.

Mbodila, M. (2020). Online learning–the pandemic cannot change reality. University World News: Africa Edition.

Mbodila, M., Bassey, I., Kikunga, M. & Masehele, L. (2016b). On overcoming transitional challenges of first year students in technology-based educational settings. (*IJMECS),* 8, 28 - 35.

Mbodila, M., Mkabile, B. & Ndebele, C. 2019. Critical success factors for the effective implementation of e-learning in South African higher education institutions. *Journal of Gender, Information and Developmen*t, 8(3), 229 - 249.

Mc Millan, J.H. & Schumacher, S. (2006). *Research in education: Evidence based Inquiry*. Boston: Pearson Education.

Mc Millan, J.H. & Schumacher, S. (2010). *Research in Education: Evidence-based inquiry. 7th Edition*. New Jersey: Pearson Education Inc.

McGorry S.Y. (2003) Measuring quality in online programs. *The Internet and Higher Education.* 6, 159 - 177.

McMillan, J. & Schumacher, S. (2014). *Research in Education: Evidence-Based Inquiry, (7th ed).* Harlow: Pearson Education Limited.

Merriam, S.B. (2009). *Qualitative research: a guide to design and implementation*. San Francisco: Jossey-Bass.

Ministry of Education. (2005). *National ICT policy for education: ICT integration for equity and excellence in education.* Windhoek: Polytechnic Press.

Mishra, S. (2006). *Quality assurance in higher education: An introduction*. Bangalore: National Printing Press.

Mishra, P. & Koehler, M.J. (2006). Technological Pedagogical Content Knowledge: A framework for teacher knowledge. *Teachers College Record*. 108(6), 1017-1054.

Mitra, S. & Hendrikz, J. (2009). Manual for the Tutors of Learning Centres in Open Schools: Commonwealth Edition.

Monnapula-Mapesela, M. (2020). Remote/Online Teaching and Learning Plan. Student letter from Office of Office of the Deputy Vice-Chancellor: Academic & Student Affairs. Rhodes University, 19 April 2020.

Moore, M.G. & Kearsley, G. (1996). *Distance education: A systems view*. San Francisco: Wadsworth Publishing Company.

Moore, M.G. & Kearsley, G. (2005). *Distance education: A systems view* (2nd ed.) Belmont, CA: Wadsworth Publishing Company.

Moore, M.G. & Kearsley, G. (2012). *Distance Education: A systems view of online learning*. Belmont, CA: Wadsworth.

Moore-Hayes, C. (2011). Technology Integration Preparedness and its Influence on Teacher Efficacy. *Canadian Journal of Learning and Technology*, *37*(3), 123-133.

Mpofu, V., Samukange, T., Kusure, L. M., Zinyandu, T. M., Denhere, C., Huggins, N., … Sithole, F. (2012). Challenges of virtual and open distance science teacher education in Zimbabwe. International Review of Research in Open and Distributed

Learning, 13(1): 207-219. Retrieved from http://www.irrodl. org/index. php/irrodl/article/view/968/2083.

Mtebe, J.S. & Raisamo, R. (2014b). A Model for Assessing Learning Management System. Success in Higher Education in Sub-Saharan Countries. *The Electronic Journal of Information Systems in Developing Countries,* 61(7), 1-17.

Mugwanya, R., Marsden, G. & Boateng, R. (2011). A preliminary study of podcasting in developing higher education institutions: a South African casell, *Journal of Systems and Information Technology*, 13: 268-85.

Munich, K. (2014). Social support for online learning: Perspectives of nursing students. International Journal of E-Learning & Distance Education, 29(2): 1-12. Retrieved from http://ijede.ca/index.php/jde/article/view/891/1565 .

Murangi, H.V. (2017). Managing student transition from conventional to open schooling: a case study of Namibia. Submitted in partial fulfilment of the requirements for the degree Philosophiae Doctor Department of Education Management and Policy Studies Faculty of Education University of Pretoria.

Murgatroyd, S. (1991). Strategy, structure and quality service: developing school wide quality improvement. School Organisation 11*(*1) Canada: Athabasca University.

Murmura, F., Casolani, N. & Bravi, L. (2016). Seven keys for implementing the self-evaluation, periodic evaluation and accreditation (AVA) method, to improve quality and student satisfaction in the Italian higher education system. *Quality in Higher Education,* 22(2), 167-179.

Mutisya, D. & Makoka, G.L. (2016). Challenges affecting adoption of e-learning in public universities in Kenya. *E-Learning and Digital Media,* 13 (3-4), 140-157.

Muuro, M., Wagacha, W., Kihoro, J. & Oboko, R. (2014). Students' perceived challenges in an online collaborative learning environment: A case of higher learning institutions in Nairobi, Kenya. *The International Review of Research in Open and Distributed Learning*, 15(6). http://dx.doi.org/10.19173/irrodl.v15i6.1768.

NAMCOL Act. (1997). Windhoek: Ministry of Education.

NAMCOL. (2005). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2007). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2010). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2011). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2012). Quality Assurance Policy. Windhoek. NAMCOL.

NAMCOL. (2014). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2015). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2016). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2016). *Strategic Plan 2016-2020*. Windhoek: NAMCOL.

NAMCOL. (2017). *Annual Report*. Windhoek: NAMCOL.

NAMCOL. (2020). eLearning Policy. Windhoek: NAMCOL.

NAMCOL. (2020). Quality Assurance Policy. Windhoek: NAMCOL.

NAMCOL. (2020). Quality Assurance Policy. Windhoek: NAMCOL.

Namibia University of Science and Technology. 2018. Annual report. NUST. Bulawayo.

National Association of Distance Education Organisations of South Africa. (2005). Quality Criteria for Distance Education in South Africa. Pretoria: NADEOSA.

NCHE. (2012). Annual Report. Windhoek.

Newton, J. 2002. Views from Below: Academics Coping with Quality. *Quality in Higher Education,* 8 (1), 39 – 61.

Ndjone, T.S. (2013). Factors for e-Learning adoption in Tanzania: The Case of higher learning institutions in Mwanza Region. Thesis

Ndume, V., Tilya, F.N. & Twaakyondo H. (2008). Challenges of adaptive e-learning at higher learning institutions: A case study in Tanzania. *International Journal of Computing and ICT Research*, 2(1), 47–59.

Ngalomba, S. (2020). e-Learning: Time for a paradigm shift. University World News, March 26.

Ngalomba, S. (2020). Using WhatsApp to enhance online learning. University World News: Africa Edition. April 23

Ngubane-Mokiwa, S. & Letseka, M. (2015). *Shift from open distance learning to open distance e-learning*. (In Open distance learning (ODL) in South Africa. p. 195), Nova Publishers: New York

Nitschke, J.J. & Louw, W. (2020). The Implementation of Notesmaster as a learning platform for Secondary Education: A case of the Namibian College of Open Learning. *Journal of learning for development,* 7(2), 233 -245.

Njenga, J.K. & Fourie, L.C.H. (2010), The myths about e-Learning in higher educational. *British Journal of Educational Technology,* 41(2), 199-212.

Njiro, E. (2016). Best Practices Standards for Quality Assurance of Open Distance eLearning. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS),* 7(2), 107-117.

Nkunya, M.H.H. (2008). Overview of Higher Education quality assurance system in East Africa. Paper presented at on Edulink Project Introductory workshop on Building Quality Culture with HEIs: European and African Approach, Kampala-Uganda, October. NolNet. (2018). Unpublished Report. Windhoek.

Notar, C.E. & Cole, V. (2010). Literature Review Organiser. *International Journal of Education.* 2(2), E2.

Nyoni, J. (2014). E-readiness of open and distance learning (ODL) facilitators: Implications for effective mediation, *Perspectives in Education,* 32(3), 78-91.

Oboko, R. & Omwenga, E. (2017). A model for evaluating e-learning systems quality in higher education in developing countries. *International Journal of Education and Development using Information and Communication Technology,* 13 (2), 185-204.

Odhimbo, O.O. (2009). Comparative study of the e-learning platforms used in Kenyan Universities: Case study of Jomo Kenyatta University of agriculture and technology, Paper presented at Strathmore ICT Conference, British Columbia, Canada, pp. 1017 – 1026.

Odukoya, J.A., Chinedu, S.N., George, T.O., Olowookere, E. & Agbude, G. (2015). Quality Assurance Practice in African Countries: Lesson from a Private Nigerian University. *Journal of Educational and Social Research, MCSER,* 5(2), 251-260.

Oliver R. (2005). Quality assurance and e-learning: blue skies and pragmatism. *Research in Learning Technology,* 13, 173–187.

Oluwade, D.O. (2012). Status of E-Learning in Tertiary Institutions in Kogi State: It's Implication to Education Planning. *NASHERJ,* 10(1), 91-97.

Ossiannilsson, E. (2012). Benchmarking e-learning in Higher Education: lessons learned from international projects (Doctoral dissertation, University of Oulu Graduate School).

Osuafor, A.M., & Emeji, E.O. (2015). Utilization of eLearning by Science Teacher Educators for Teaching Pre-Service Teachers in Nigerian Colleges of Education. *Asian Journal of Education and eLearning*, 3 (2): 160-167.

Oye, N.D., Salleh, M., & Iahad, N.A. (2011). Challenges of e-Learning in Nigerian: University education based on the experience of developed countries. *International Journal of Managing Information Technology,* 3(2): 39-48.

PAPPAS, C. (2018). 7 Ways Corporate eLearning Globalization Improves ROI [Online]. Available: https://elearningindustry.com/ways-corporateelearning-globalization-improves-oi *[Accessed February 2019].*

Patton, M.Q. (2002). *Qualitative evaluation and research methods, (3rd ed.).* Thousand Oaks, CA: Sage Publications, Inc.

Patton, M.Q. (2015). *Qualitative evaluation and research methods, (4th ed.).* Thousand Oaks, CA: Sage Publications, Inc.

Phipps, R. & Merisotis, J. (1999). What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education. Washington, DC: The Institute for Higher Education Policy. Available at: http://www.ihep.com/org.php/parm=Press/PR15.htm.

Phipps, R.A., & Merisotis, J.P. (2000). Quality on the line: Benchmarks for success in internet-based education. Retrieved September 12, 2017, from http://www.ihep.org/assets/files/publications/m-r/Quality OnTheLine.pdf.

Pityana, N.B. (2007). The history of distance education. Launch of the first distance course, Bachelor in Business Management, Universidade Eduardo Mondlane, Maputo.

Pityana, N.B. (2008). *A decade of development and education in Africa: the promise of Open and Distance learning.* Paper presented at the Keynote address at the 5th Pan Commonwealth Forum on Open Learning of the Commonwealth of Learning, London University and UNESCO, London.

Ponterotto, J.G. (2005). Qualitative research in counselling psychology: A primer on research paradigms and philosophy of science. *Journal of counselling psychology,* 52(2), 126 - 170.

Porter, D. (2000). Learning That Fits: Moving Beyond the Course as the Unit of Instruction. www.canarie.ca/ *(Accessed on 25 May 2016).*

Pule, G.J. (2014). Perceptions of stakeholders about quality assurance in higher education in Botswana. Submitted in partial fulfilment of the requirements for the degree Philosophiae Doctor in Faculty of Education University of Pretoria.

Quality Assurance Agency (2003), Handbook for Major Review of Healthcare Programmes, Quality Assurance Agency for Higher Education, Gloucester.

Quality Matters. (2010). Program rubric. Retrieved July, 2016, from Quality Matters: http://www.qmprogram.org/rubric

Queiros, D. & De Villiers, M. (2016). Online learning in a South African higher education institution: Determining the right connections for the student. *The International Review of Research in Open and Distributed Learning*, 17(5). doi: http://dx.doi.org/10.19173/irrodl.v17i5.2552 .

Qureshi, I. A., Ilyas, K., Yasmin, R. & Whitty, M. (2012). “Challenges of Implementing E-Learning in a Pakistani University.” *Knowledge Management and E-Learning: An International Journal (KM&EL)* 4(3), 310–24.

Rekkedal, T. (2012). Quality assurance in eLearning for European small to medium enterprises. Ebscohost Quality Assurance and accreditation in in Distance education and eLearning: Models, policies and research. Printed via UNISA 25 June 2017.

Rekkedal, T. & Qvist-Eriksen, S. (2004). Support services in e-learning-an evaluation study of students' needs and satisfaction. *European Journal for Distance a*nd Open *Learning*. Retrieved from http://www.eurodl.org/materials/briefs/2004/ Rekkedal -Qvist-Eriksen_EA.htm.

Rhodes, L.A. (1992). On the road to quality*. Educational Leadership,* 49(6), 76-80.

Roy, M. & Boboc, M. (2016). Professional Development Needs of Online Teachers. *Journal of Online Learning Research*, 2(3), 283-302.

SAIDE. (2014). *Learner Support Quality Assessment Survey at NAMCOL*. Retrieved from Windhoek, Namibia.

Samuels-Peretz, D. (2014). Ghosts, stars, and learning online: Analysis of interaction patterns in student online discussions. *The International Review of Research in Open and Distributed Learning*, *15*(3). https://doi.org/10.19173/irrodl.v15i3.1641.

Saykili, A. (2018). Distance Education: Definitions, Generations, Key Concepts and Future Directions. *International Journal of Contemporary Educational Research*, 5(1). 2-17.

Schomaker, R. 2015. Accreditation and QA in the Egyptian higher education system, *Quality Assurance in Education*, 23(21): 49–165. http://dx.doi.org/10.1108/QAE-08-2013-0034 *(Accessed on 12 April 2019).*

Shulman, L.S. (1986). Those who understand knowledge growth in teaching. *Educational Researcher,* 15(2), 4-14.

Simonson, M., Smaldino, S. & Zvacek, S. (2015). *Teaching and learning at a distance foundations of distance education.* Charlotte, North Carolina: Information Age Publishing, Inc.

Simonson, M., Smaldino, S., Albright, M. & Zvacek, S. (2003). *Teaching and learning at a distance*. Columbus: Pearson Education.

Sinha, H., Rosson, M. B., Carroll, J. & Du, H. (2010). Toward a professional development community for teachers. In Society for Information Technology & Teacher Education International Conference (pp. 2390-2397). Association for the Advancement of Computing in Education (AACE).

Sloan Consortium. (2011). *Effective Practices.* Retrieved 16 June 2017, from http://sloanconsortium.org/effective.

South Africa Institute of Distance Education. (2006). SAIDE website: www.saide.co.za.

Spector, J.M. (2013). Emerging educational technologies and research directions. *Journal of Educational Technology & Society*, 16(2), 21-30.

Ssekakubo, G., Suleman, H. & Marsden, G. (2011). Issues of adoption: Have e-learning management systems fulfilled their potential in developing countries? In *SAICSIT '11: Proceedings of the South African Institute of Computer Scientists and Information Technologists Conference on Knowledge, Innovation and Leadership in a Diverse, Multidisciplinary Environment* (pp. 231- 238). Doi: 0.1145/2072221.2072248.

Stake, R. (1995). *The Art of Case Study Research.* Thousand Oaks, CA: Sage.

Stake, R. (2004). *Standards-based & responsive evaluation*, Thousand Oaks, CA: Sage.

Summer, J. (2000). Serving the system: A critical history of distance education. *Open learning,* 15(3), 267-285.

Swedish National Agency for Higher Education. (2008). E-learning quality. Aspects and criteria for the evaluation of e-learning in higher education. Report 2008:11 R. Stockholm.

Tarus, J., Gichoya, D., & Muumbo, A. (2015). Challenges of implementing e-learning in Kenya: A case of Kenyan public universities. *The International Review of Research in Open and Distributed Learning*, *16*(1). http://dx.doi.org/10.19173/irrodl.v16i1.1816.

Taylor, J.C. (1995). "Distance Education Technologies: The Fourth Generation," Australian Journal of Educational Technology, 11(2), 1–7.

Taylor, J.C. (2001) *Fifth generation distance education.* Instructional Science and Technology, 4 (1), 1-14.

Taylor, W.A. and Hill, F.M. (1992). Implementing TQM in higher education. *International Journal of Educational Management*, 5 (5), 4-9.

Teay, S. (2007). AuQS. 2000. QMIPS QMS – Qua*lity Management System for Academic Units*. Bangkok: AU Digital Press.

Teay, S. (2012). AuQS (2000) QMIPS QMS – Quality Management System for Academic Units. Bangkok: AU Digital Press.

Thomas, K.Q. (2001). Local colleges providing online learning programs. *Rochester Business Journal*, 16(43), 28 - 76.

Thompson, E. (1997). Distance education drop-out: What can we do. Learning through teaching, 324-332.

Tinio, V.L. (2002). ICT in education. Accessed 21 July 2016 from http://www.apdip.net/publications/iespprimers/eprimer-edu.pdf.

United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, custom data acquired via website. accessed on 2 July 2020.

United States Agency for International Development. (2014). *African higher education: Opportunities for transformative change for sustainable development*. Retrieved from http://www.aplu.org/library/african-higher-education-opportunities-for-transformative-change- for-sustainable-development/file.

University of Namibia. (2015). Quality Assurance Policy. Windhoek. UNAM.

University of Namibia. (2020). Quality Assurance measures for online/remote assessment during the lockdown. Windhoek. UNAM.

University of Stellenbosch. (2021). *Digital Donor Newsletter*. Summer 2021.

Unwin, T., Kleessen, B., Hollow, D., Williams, J.B., Oloo, L.M., Alwala, J., Mutimucuio, I., Eduardo, F. & Muianga, X. (2010), ―Digital learning management systems in Africa: myths and realities‖, *Open Learning*, 25(1), 5-23.

Uppal, A., Ali, S. & Gulliver, S.R. (2018). Factors determining e-learning service quality. 49(3), 412 -426.

Van der Merwe, A.J. (2005). Towards a reusable process model structure for higher education institutions. A thesis submitted in accordance with the requirements of the degree of Doctor of Philosophy in Computer Science. Pretoria. Faculty of Education: University of South Africa.

Verma, G.K. & Mallick, K. (1999). *Research in Education: Perspectives and Techniques*, Palmer Press, London.

Viner, R.M., S.J. Russell, H. Croker, J. Packer, J. Ward, S. Stansfield, O. Mytton, C. Bonell, C. & Booy, R. (2020). School Closure and Management Practices during Coronavirus Outbreaks Including COVID-19: A Rapid Systematic Review. The Lancet Child & Adolescent Health 4,5:397 – 404. DOI: https://doi.org/10.1016/S2352-4642(20)30095-X.

Vlachopoulos, D. (2016). Assuring Quality in E-Learning Course Design: The Roadmap. *International Review of Research in Open and Distributed Learning,* 17, (6), 84-205.

von Glasersfeld, E. (1992). Constructivism reconstructed: a reply to Su Suchting. *Science and Education,* 1(1), 379-384.

Walimbwa, M. (2008). Integrating e learning in teaching and research in upcoming East African regional Universities. Paper presented at the meeting CNIE Banff, Alberta, Canada. Retrieved from http://www.slideshare.net/Walimbwa/elearning-in-east-african-universities.

Wang, C., Shannon, D.M. & Ross, M.E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education, 34*(3), 302-323.

Wang, D. (2014). Building trust in E-Learning. *Athens Journal of Education, 1(1)*, 9-18. Retrieved from https://doi.org/10.30958/aje.1-1-1.

Wang, Q. (2006). Quality assurance - best practices for assessing online programs. International Journal on eLearning, 5(2), 265-274.

Wang, Q. (2009). Designing a Web-Based Constructivist Learning Environment, *Interactive Learning Environments*, 17(1), 1-13. State of Education Article.

Wang, S.C., Cowie, B. & Jones, A. (2008). Challenges of e-learning for university instructors in Taiwan. In T. W. Chan, G. Biswas & F. C. Chen et al (eds.), The 16th International Conference on Computers in Education (ICCE). *Asia-Pacific Society for Computers in Education,* Taipei, Taiwan; 27-31 October 2008. p.229-236.

Williams, P. (1993). Total quality management: some thoughts. *Higher Education*, 25(3), 373-375.

Winter, R.S. (1991). *"Overcoming barriers to TQM in colleges and universities"*, in Sherr, L.A. & Teeter, D.J. (Eds), *Total Quality Management in Higher Education*, Jossey-Bass, San Francisco, CA, 1991, pp. 53-62. 25.

Wirth M.A. (2005). *EFMD certification of e-learning (CEL)*. Available at: http://www.efmd.org/attachments/tmpl_1_art_051114rojt_att_051114czte.pdf (accessed 27 February2016).

Wirth, M.A. (2006). *An analysis of international quality management approaches in eLearning*. In U.D. Ehlers, & J. Pawlowski (Eds.), *Handbook on quality and standardization in e-learning (pp. 97 -108)*. Berlin: Springer.

Woodhouse, D. (1999). Quality and quality assurance, In: *Quality and internationalisation in Higher Education.* Paris: OECD *(*pp. 29-44).

World Bank. (2002). Constructing knowledge societies: New challenges for tertiary education. Washington, DC: World Bank.

Wright, C.R. (2014). Criteria for evaluating the quality of online courses. Retrieved from https://elearning.typepad.com/thelearnedman/ID/evaluatingcourses.pdf

Yin, R.K. (2009). *Case study research: design and methods.* California: Sage Publications.

Yin, R.K. (2014). *Case study research: design and methods. (7th Ed)*. California: Sage Publications.

Young, M., Perraton, H., Jenkins, J. & Dodds, T. (1980). *Distance teaching for the Third World: the lion and the clockwork mouse. (Incorporating a directory of distance teaching projects)*: Routledge and Kegan Paul Ltd. for International Extension College.

Zang, W., & Cheng, Y.L. (2012). Quality Assurance in E-Learning: PDPP evaluation model and its application. *The International Review of Research in Open and Distance Learning,13(3)*: pp. *65-82.*

Zhang, W., & Jiang, G. (2007). *Evaluation research in distance education.* In W. Zhang, & G. Jiang (Eds.), *Distance education research methods. (pp. 184-197).* Beijing: Higher Education Press.

APPENDICES

APPENDIX A: REQUEST TO CONDUCT RESEARCH AT NAMCOL

Quality assurance practices in eLearning: a case of Namibian College of Open Learning (NAMCOL)

20 July 2019

Dr Harold V Murangi
Office of the Director
NAMCOL
Tel: +264 320 5233
murangi@namcol.edu.na

Dear Dr Murangi

I, Ndeshimona L Afunde, am doing research with Jabulani Nyoni, a professor in the Department of Education, towards a doctoral degree at the University of South Africa. I am inviting you to participate in a study entitled "Quality assurance practices in eLearning: a case of Namibian College of Open Learning".

The research will focus on quality assurance in eLearning using NAMCOL as the case study. The aim of the study is to evaluate the quality assurance practices of eLearning services at NAMCOL and benchmark them against the internationally accepted standards. The last five years has seen a considerable growth in the application of eLearning in your institution and I am sure you will be interested to know the extent to which quality assurance in eLearning services is effective.

Your institution has been purposeful selected as a site for the research because there has been considerable growth in the application of eLearning in the programmes offered at NAMCOL.

The research study will employ the qualitative approach in investigating the quality assurance practices in eLearning and how programme developers, student support officers, IT officers, tutors and student perceive its effectiveness. The qualitative approach will enable the researcher to source information- rich opinions from participants on their experience regarding the quality assurance approaches and the impact these have on the eLearning services. The researcher will collect data

through document analysis, observation and interviewing participants selected through purposive sampling. The information gathered through the study will be kept strictly confidential and will be used for the study purposes only.

The risk anticipated in conducting this study is low due to the fact that the study involves adult participants who are not considered to be a vulnerable research population. Nonetheless, the risk in terms of causing inconvenience to participants in the way of intruding in their busy work schedules cannot be completely ruled out.

Participation in the study is voluntary, and those that are willing to participate will be required to sign an informed consent letter. The data collection procedure will be done before or after hours in order not to interfere with the participants' normal duties. There will be no reimbursement or any incentives for participation in the research.

I believe this study will be of great benefit to NAMCOL because it may provide insights that may enable institution to improve on its quality assurance approaches in eLearning to enhance learner support services. Upon completion of my studies, I intend to have a seminar to brief the participants, the entire NAMCOL community and other key stakeholders. The final copy of the thesis will be submitted to the College for record purposes.

Should you have queries about the manner in which the research has been conducted, please feel free to contact my supervisor Prof J Nyoni at nyonij@unisa.ac.za

Yours sincerely

Ndeshimona L Afunde

Researcher (PhD Student)

APPENDIX B: APPROVAL TO CONDUCT RESEARCH AT NAMCOL

NAMCOL

Jetu Jama Center Independence Avenue Windhoek
Private Bag 15008 Katutura, Windhoek
Tel: + 264 61 320 5111 Fax: + 264 61 216 987 www.namcol.edu.na

01 August 2019

Ms Ndeshimona L. Afunde
P O Box 23756
WINDHOEK
NAMIBIA

RE: REQUEST FOR PERMISSION TO CONDUCT YOUR RESEARCH AT NAMCOL

Your communique received on 31 July 2019 concerning the above subject matter is hereby acknowledged with gratitude.

I have the pleasure to inform you that your request to conduct research on: ***"Quality assurance practices in eLearning: a case of Namibian College of Open Learning"*** towards your doctoral degree is considered positively.

You are requested to submit a copy of your thesis to NAMCOL upon completion of your studies.

I wish you all the best with your academic career.

Yours sincerely,

Dr H V Murangi
CEO

NAMCOL DIRECTOR'S OFFICE
01 -08- 2019
PRIVATE BAG 15008 KATUTURA, WINDHOEK
NAMIBIA COLLEGE OF OPEN LEARNING

All official correspondence must be addressed to the Director.

APPENDIX C: PARTICIPANT INFORMATION SHEET

PARTICIPANT INFORMATION SHEET

6 October 2020

Title: **Quality assurance practices in eLearning: a case of Namibian College of Open Learning**

DEAR PROSPECTIVE PARTICIPANT

My name is Ndeshimona L Afunde, and I am doing research under the supervision of Jabulani Nyoni, a professor in the Department of Education, towards a doctoral degree at the University of South Africa. We are inviting you to participate in a study entitled Quality assurance practices in eLearning: a case of Namibian College of Open Learning.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could enable the researcher to evaluate the quality assurance practices of eLearning services at NAMCOL and benchmark them against the internationally accepted standards.

WHY ARE YOU INVITED TO PARTICIPATE?

You are deliberately elected to participate in this study because you can purposefully provide rich information, which will enhance deep understanding of the research problem. Given your expertise and work experience in the selected department 6 full time staff from NAMCOL, four tutors and six students are expected to participate in this study. All these invited participants engaged in eLearning activities at NAMCOL.

NATURE OF PARTICIPATION

The study will involve audio recording of semi-structured interviews with you and your colleagues, observations and focus groups with the students. I would like to find out your views on the quality assurance practices on eLearning activities, the challenges that you met in your development and implementation of eLearning and your suggestions on what can be done to enhance the quality assurance in eLearning. I intend to have an interview with the eLearning programme developers, student support officers, IT technical staff, tutors and conduct a focus group discussion with students on their engagement with eLearning. I also intend to observe the eLearning portal and eLearning related activities.

I anticipate that an interview and focus group discussion will each last for an hour at most. You will be expected to participate in interviews and focus groups.

Withdrawal: Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet

to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The study seeks to investigate whether the quality assurance approaches engaged by NAMCOL enhance good practices in eLearning. There will be no benefits in monetary terms for those who take part in the study. However, your participation will provide rich information for the problem under investigation. The outcome of the study will provide evidence-based information to the institution which will inform the way forward for the quality assurance practice in eLearning at NAMCOL.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

The researcher does not foresee any negative consequences for you if you participate in the study. The only source of inconvenience could be that your participation may coincide with your other activities in your busy schedule which may require you to divide your time.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher, will know about your involvement in the research. Your answers will be given a code or pseudonym and you will be referred to in this way in the data, any publications or other research reporting methods such as conference proceedings.

Your answers may be reviewed by members of the Research Ethics Review Committee responsible for making sure that research is done properly. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Please keep in mind that it is sometimes impossible to make an absolute guarantee of confidentiality or anonymity, e.g., when focus groups are used as a data collection method. Focus group denotes a group of participants purposefully selected to provide information in a group (during question-and-answer session) required to inform an understanding of the phenomenon under investigation. While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. For this reason, I advise you not to disclose personally sensitive information in the focus group.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard in the study room at my house for future research or academic purposes. Electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. After 5-year information will be destroyed by shredding all hard copies and permanently deleting electronic copies from the hard drive of the computer through the use of the relevant software programme.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

The researcher will not give any incentive to the participants. If it happens that participants incur cost during the conduct of the study, they will be reimbursed by the researcher.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received a written approval from the Research Ethics Review Committee of the College of Education Research Ethical Clearance, UNISA. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Ndeshimona Afunde on +264 61 3205253 or +264 812804048 or email afunde@namcol.edu.na . The findings are accessible for three months after the completion of the study.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Ndeshimona Afunde on +264 812804048 or email afunde@namcol.edu.na.

Should you have concerns about the way in which the research has been conducted, you may contact Prof J Nyoni at nyonij@unisa.ac.za or 0124294474. Alternatively, you may contact the chairperson of the College of Education Research Ethics Committee, Dr Madaleen Claassens at mcdtc@netaactive.co.za.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

_____

Ndeshimona L Afunde

Appendix D: REQUEST FOR CONSENT TO PARTICIPATE IN INTERVIEW

UNISA | college of education

6 October 2020

A LETTER REQUESTING YOUR CONSENT TO PARTICIPATE IN AN INTERVIEW

Dear Participant

This communication serves to request you to consider participating in a research study I, Ndeshimona Afunde, am conducting as part of my research as a doctoral student entitled "Quality assurance practices in eLearning: a case of Namibian College of Open Learning. Permission to conduct the study has been granted by the Department of Education and the Research Ethics Committee of the College of Education at UNISA. You have been purposefully selected to participate in the study because of your valuable experience and expertise relating to my research topic.

I shall provide you with more information about this study and what your involvement would entail if you agreed to participate in the study. In the interview I will solicit your views and opinions on the quality assurance practices deployed in eLearning at NAMCOL.

I would like to assure you that your participation in the study is voluntary. Your participation involves an interview of approximately 60 minutes in length and it will take place in a mutually agreed upon location at a time convenient to you. You may decline to answer any of the interview questions if you so wish. You may as well decide to withdraw from this study at any time without any negative consequences.

With your permission, the interview will be audio-recorded to facilitate collection of accurate information and eventual transcription for analysis. After the completion of the transcription, I will send you a copy of the transcript to confirm the accuracy of our conversation. All information yielded through the interview will be treated with strict confidentiality. I assure you that your name will not appear in any publication of this study and any identifying information will not be reflected in the report, however, with your permission, anonymous quotations may be used. Data collected during this study will be retained on a password protected computer in my lockable office or study room. Although, I do not anticipate any risks to you as a participant in this study, the time set for the interview with you may interfere with your busy schedule, I would, therefore, apologise for any inconvenience that this may cause.

Should you have any question regarding this study please contact me at 0812804048 and/or afunde@namcol.edu.na

Should you accept my invitation to participate kindly complete and sign the declaration form below. Thanking you in anticipation for your assistance in this project.

Yours sincerely

N L Afunde _____ **Date**

Appendix E: Consent to participate in the study

CONSENT FORM

I have read the information presented in the information letter about the study *"*Quality assurance practices in eLearning: a case of Namibian College of Open Learning". I have had the opportunity to ask any questions related to this study, received satisfactory answers to my questions and added any additional details I wanted. I am aware that I have the option of allowing my interview to be audio recorded to ensure accuracy in recording my responses. I am also aware that excerpts from the interview may be included in publications to come from this research, with the understanding that quotations will be anonymous. I was informed that I may withdraw my consent at any time without penalty by advising the researcher. With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Participant Name (please print): _____

Participant Signature: _____

Researcher Name (please print): _____

Researcher Signature: _____

Date: _____

APPENDIX F: CONSENT/ASSENT TO PARTICIPATE IN THIS STUDY

UNISA | college of education

CONSENT/ASSENT TO PARTICIPATE IN THIS STUDY (Return slip)

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits, and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of my interview with the researcher for the study.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print) _____

_____ _____

Participant Signature Date

Researcher's Name & Surname (please print) _Ndeshimona L Afunde

_____

Researcher's signature Date

APPENDIX G: FOCUS GROUP/INTERVIEW CONSENT

UNISA | college of education

FOCUS GROUP/INTERVIEW CONSENT AND CONFIDENTIALITY AGREEMENT

I_____ grant consent that the information I share during the focus group may be used by Ndeshimona Afunde, for the research purpose only. I am aware that the group discussions will be digitally recorded and grant consent to these recordings, provided my privacy will be protected. I undertake not to divulge any information that is shared in the group discussions to any person outside the group in order to maintain confidentiality.

Participant Name (in print): _____

Participant Signature: _____

Researcher Name (in print): Ndeshimona L. Afunde

Researcher Signature:  **Date: _____**

APPENDIX H: INTERVIEW SCHEDULE FOR ACADEMICS

Interview Schedule for Academics and Support Staff

1. Gender and age?
2. What is your highest qualification?
3. What is your main area of responsibility within this College?
4. In your opinion what is eLearning?
5. What eLearning related training have you received? Which skills development interventions have you received in relation to eLearning? How do you rate the training interventions in terms of its effectiveness?
6. In your opinion what is quality and quality assurance? In your opinion what is a quality eLearning programme? What are its features?
7. How in your opinion is quality and quality assurance in eLearning understood at NAMCOL? What aspects of quality do you focus on?
8. Take us through the quality assurance process of eLearning in your department. How do you assure/check quality in your products/services?
9. Are the eLearning material and the content relevant to the intended audience and the curriculum? In your opinion is there a logical progression of topics of the eLearning courses? Is the Learning content appropriately presented on the learning management system? Are there a variety of activities and varying levels of complexity? Does the learning content comply with the quality requirements/standards?
10. What institutional policies, methods and procedures do you have in place to assure the quality of eLearning offerings at the College? Is there any institutional quality framework that guides eLearning? Have you as staff and students been involved in the development or revision of the quality assurance policies related to eLearning?
11. What systems and processes are in place to implement these QA policies and procedures?

12. To what extend do the institution's quality assurance policy, instruments, methods and processes adequately consider the interests and concerns of the academics, students engaged in eLearning?

13. How do you view the quality of eLearning facilitators? In your opinion does the eLearning content encourage effective learning experience of students?

14. Do your eLearning spaces have record-keeping features that enables you to monitor the progress of your users and be able to ensure that those at risk are identified?

15. How do you evaluate whether the students engaged in eLearning achieve the educational objectives of the software? Has the QA process led to an improvement in the quality of teaching and learning? If so, to what extent? Is there evidence of improvement?

16. Do you have enough staff who are adequately qualified for the teaching of eLearning? What is the profile of your academic staff and tutors? In your opinion, do your staff have the adequate training to provide eLearning?

17. How is the motivation of academics and tutors for improving the quality of eLearning? Are their working conditions appropriate?

18. Do you have all the required hardware and software operating the application for eLearning? Does the College provide technical support to student and facilitators in the eLearning programme? What kind of technical support is provided?

19. Have you been engaged in quality assurance exercises such as self-evaluation and quality audits? How often and who initiates it?

20. What in your view are the main challenges in implementing quality eLearning? What would you suggest improving the current quality assurance practices in eLearning?

21. Is there anything else you would like to share on the quality of eLearning at NAMCOL?

APPENDIX I: INTERVIEW SCHEDULE FOR TUTORS

INTERVIEW PROTOCOL FOR TUTORS

Starting time of Interview: _____ Date: _____

Ending time of Interview: _____ Interviewer: _____

1. What is your age?
2. What is your highest qualification?
3. What is your occupation? What exactly is your role with regard to eLearning at NAMCOL?
4. In your opinion, what is quality, quality assurance and eLearning?
5. How did you get involved with the eLearning programmes at NAMCOL? How long have you been involved with eLearning at NAMCOL and at other institutions of learning?
6. What institutional policies, models, methods and procedures are in place to assure the quality of eLearning? What systems are in place to ensure the implementation of these policies and procedures?
7. What eLearning related training intervention have you received from NAMCOL and other institutions (formal or informal)?
8. What is the accuracy level of the information on eLearning platforms in which you are engaged?
9. In your opinion what is quality eLearning programme/service? What hardware and software do you have to ensure quality teaching and learning if eLearning?
10. Is the eLearning content (concepts, vocabulary, interactions) appropriate to the intended audience?

How are the topics presented on the eLearning platform, is there a logical progression? Does the information stimulate curiosity in learning and to what extend does it allow creative problem solving by the users of the NAMCOL eLearning platforms?

11. How do tutors monitor the student assessment and performance for remedial action?

12. How do you evaluate whether the students engaged in eLearning achieve the educational objectives?

13. How often do you provide student feedback and how do you provide it?

14. How do you conduct evaluation of the NAMCOL eLearning activities?

15. Are there any institutional quality standards that guides the development and facilitation of eLearning content and activities?

16. Take us through the quality assurance process of eLearning in your course. How is the quality in your course assured?

17. Have you been engaged in quality assurance exercises (evaluation, quality review, quality audit) in recent years? How often? Who initiated it?

18. What is your level of satisfaction with the performance of NAMCOL in enhancing the quality of eLearning

19. What challenges do you think students and tutors face with eLearning at NAMCOL? In your opinion what are the challenges experienced in hampering the provision of quality eLearning?

20. Do you think that NAMCOL is doing enough/not enough to help tutors and students cope with the eLearning experience?

21. What do you suggest to NAMCOL to improve the quality of eLearning?

22. Is there anything else that you want to share with me regarding the eLearning activities at NAMCOL?

APPENDIX J: FOCUS GROUP INTERVIEW SCHEDULE

Focus Group Student Interview Schedule

Starting time of Interview: _____ Date: _____

Ending time of Interview: _____ Group No_____

1. How accessible is the Internet and Learning Management System at NAMCOL for you? How easy/difficult can you navigate and retrieve information from the NAMCOL eLearning platforms? (Are there icons, menus and directional symbols to enhance independent use?)
2. What eLearning related training intervention have you received from NAMCOL? List 2-3 topics which were covered during training? How do you rate the effectiveness of the training intervention?
3. In your opinion what is quality eLearning?
4. To what extend does the College provide technical support to? And what kind of technical support is provided? Do you have all the required hardware and software operating the application for eLearning?
5. What are your expectations from an e-learning activities?
6. How do you rate the accuracy of the learning content on the eLearning space? What is the accuracy level of the information on eLearning platforms in which you are engaged? Are the eLearning contents (concepts, vocabulary, interactions) appropriate to you?
7. How are the topics presented on the eLearning platform, is there a logical progression? Does the information stimulate your curiosity in learning and to what extend does it allow creative problem solving by the users of the NAMCOL eLearning platforms?
8. Do you engage in any assessment activities on the eLearning platforms? Do you receive any feedback on the eLearning activities, how often and how would you rate its helpfulness?

9. Are you aware of policies on the quality of eLearning or any other policies? Which policies are you aware about at NAMCOL and have you been involved in the development of any?

10. Have you been requested to evaluate the quality of eLearning course, facilitators, academics and platform? Have you been engaged in quality surveys or audits? What were the outcomes?

11. What is your level of satisfaction with the quality of eLearning?

12. What challenges do you face with your eLearning studies at NAMCOL?

    What would you suggest improving the current quality in eLearning?

13. Is there anything else you would like to share on the quality of eLearning at NAMCOL?

APPENDIX K: OBSERVATION SCHEDULE

OBSERVATION SCHEDULE

In the process of collecting data, I will observe the following processes and activities:

- eLearning material development process in relation to set quality criteria
- Material production process in relation to set joint quality criteria
- learning management system (LMS)
- learning content management system
- Availability of required hard and software and other facilities in each selected department
- Provision of student support on the platform.

When engaging the LMS and the learning content used by the students, the following will be observed as adapted from Herselman and Hay (2005).

- ❖ Collaboration with subject experts and peers via moderated on-line discussion groups.
- ❖ Operating in real time students get what they want when they need it.
- ❖ Flexibility
- ❖ complexity of subject matter.
- ❖ Learner control of navigation and resource access.
- ❖ Ability to create links between related topics and themes.
- ❖ Dynamic content.
- ❖ Giving student the ability to contribute to the learning environment for others to benefit from information they found,
- ❖ Regular electronic communication.
- ❖ Electronic posting of learning materials.
- ❖ Accuracy error-free information

- Appropriateness and scope
- Logical progression of topics
- Save/record-keeping features
- Record-keeping features
- Presentation
- Use of appropriate and supportive feedback
- Sound that is clearly understandable, controllable and consistent in quality and
- Technical Information
- The quality of facilitator's guide