# EVALUATION OF STUDENT SUPPORT SERVICES AT THE NAMIBIA UNIVERSITY OF SCIENCE AND TECHNOLOGY CENTRE FOR OPEN AND LIFELONG LEARNING

by

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# DECLARATION

I, Lukas Shikulo, declare that "**EVALUATION OF STUDENT SUPPORT SERVICES AT THE NAMIBIA UNIVERSITY OF SCIENCE AND TECHNOLOGY CENTRE FOR OPEN AND LIFELONG LEARNING**" is my own original work, and that all the sources that I have used or referred to have been documented and acknowledged by means of complete references.
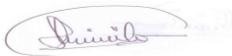

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# DEDICATION

This thesis is dedicated to my lovely children, Remedy Tangi, Rejoice Iyaloo and Janine Etuna who had to complete their school home works without the necessary guidance from me and my beloved wife, Helena Magano Shikulo who was supportive and understanding during my studies.

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*'Knowledge is in the end based on acknowledgement.'* (Ludwig Wittgenstein)

# ABSTRACT

Quality and effective student support service (SSS) is a critical demand in the ever-changing landscape of distance education. It is common knowledge that distance education students need continuous support during their studies in order to cope with academic demands while attending to other key activities. This study set out to evaluate the implementation of SSS at the Namibia University of Science and Technology Centre for Open and Lifelong Learning (NUST COLL) at different regional centres across Namibia. The objectives of the study were to: identify problems and challenges experienced with the current implementation of SSS, determine the needs of the distance students and propose recommendations for the improvement of SSS at the regional centres.

In an attempt to realise the objectives of the study, the study incorporated both quantitative and qualitative research design to collect data, by making use of questionnaires, open-ended questions and interviews. The participants included 8 regional coordinators (RC) who were purposively selected and 109 distance students who were selected through stratified and convenience sampling techniques from seven COLL regional centres.

It was evident from the findings that most students opted for distance education as it allows them to work and study. Furthermore, many students have been studying for many years without getting any qualification. While NUST was providing different SSS, the findings brought to light some challenges such as the shortage of technological tools, understaffed regional centres, and unavailability of support services on weekends and public holidays and lack of collaboration between marker-tutors, lecturers and regional face-to-face tutors. It is proposed that the current model of SSS should be redesigned to respond to challenges facing distance education students at the regional centres. A model for implementation of SSS was developed to pave the way for effective implementation geared towards reducing the dropout rates and increase success rates.

Key terms: Implementation of student support services, technological tools, model for implementation, regional coordinators, academic demands, increase success rates, regional centres, distance education, regional centres, and dropout rates.

## ACRONYMS AND ABBREVIATIONS

CES – Centre for External Studies

COLL – Centre for Open and Lifelong Learning

CUS – Computer User Skills

DE – Distance Education

ICT – Information Communication Technology

SSS – Student Support Services

RCs – Regional Coordinators

UNISA – University of South Africa

NUST – Namibia University of Science and Technology

UNAM – University of Namibia

PoN – Polytechnic of Namibia

OU Open University

OU UK Open University of the United Kingdom

ODL – Open and Distance Learning

NAMCOL – Namibia College

NIED – National Institute for Educational Development

IOL – Institute of Open Learning

IUM – International University of Management

SPSS – Statistical Package for the Social Science

NOLNET – Namibia Open Learning Network Trust

VLE – Virtual Learning Environment

TLE – Traditional Learning Environment

OERs – Open Educational Resources

WIL – Work Integrated Learning

Referencing abbreviations:

*et al. – et alia* – among others

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# CHAPTER 1: INTRODUCTION AND BACKGROUND

## 1.1 INTRODUCTION

The provision of quality and effective student support services (SSS) is a critical demand globally in the ever-changing landscape of distance education. Distance education students need continuous support during their studies hence the University of South Africa (UNISA) (2010: 7) acknowledges that students' learning journeys in a distance education mode are characterised and shaped by many interrelated factors such as learner support systems. This study took interest in the implementation and provision of student support services at the Namibia University of Science and Technology Centre for Open and Lifelong Learning (NUST-COLL). As Möwes (2010: 01) stated, the SSS model used at the NUST-COLL (formerly known as Polytechnic of Namibia [PoN]) is based on a broad definition of student support and fits an institution that views support as a holistic function to address students' needs and provides the much-needed services for students to succeed. It is argued that NUST-COLL regional centres would have the most effective SSS if they were redesigned from the perspectives of students and the regional coordinators in order to enhance student learning.

Within a distance setting, learning is a challenging task for many students as they have many responsibilities that include family, work and community services. Distance students are also isolated from fellow students and campus activities; hence the need for effective provision and implementation of support services to promote flexibility and enhance learning. Effective SSS address students' challenges and thereby reduce dropouts and increase success and graduation rates.

Higher education in Namibia started in the 1980s (PoN, 2014: IV; Ministry of Higher Education, Vocational Training, Science and Technology, [MHEVTST], 1998: 61-62). Prior to that, all Namibians wishing to pursue higher education had to go to South Africa or other countries abroad. The PoN has its roots in the establishment of the Academy for Tertiary Education by Act No. 13 of 1980. Five years later, Act No. 9 of 1985 was promulgated and this led to the establishment of the academy consisting of a university component (the present University of Namibia), a technikon or

technical branch, and a college for out-of school training (COST) (PoN, 2014: IV). Shortly after independence in 1990, the three components were split into two independent higher education institutions, namely, a university and a polytechnic. Act No. 18 of 1992 that established the University of Namibia, placed the technikon and COST under the auspices of the new university until the promulgation of the Polytechnic Act. The PoN was established through Act No. 33 of 1994 by the Parliament of Namibia. It started its operation as an independent and autonomous institution in January 1996 (PoN, 2014: IV). The Polytechnic of Namibia (currently known as Namibia University of Science and Technology, NUST) was established to contribute to the Namibian development by providing tertiary technological career-oriented education at internationally recognised standards (MHEVTST, 1998: 73). The Polytechnic of Namibia was then renamed as the Namibia University of Science and Technology (NUST) through Act No. 7 of 2015, of the Parliament of the Republic of Namibia.

In 1998, the Centre for Open and Lifelong Learning (COLL) was set up within the polytechnic to accommodate students who could not attend full-time and part-time classes at the PoN main campus in Windhoek (Möwes, 2010: 2). COLL was then tasked to design and offer distance education programmes that encouraged meaningful learning (Möwes, 2010: 2). By implication, COLL designs study guides and other academic activities such as assignments to facilitate learning and explain concepts in different courses. Currently there are three modes of study that students at Namibia University of Science and Technology (NUST) can register for, namely full-time, part-time or distance (NUST, 2017: 16). NUST as a dual-mode public institution recognises the equal importance of the open and lifelong learning programmes and the more conventional programmes of full-time on-campus studies and research (Möwes, 2005: 1). The course content for both full-time and distance programmes is planned and developed by the same academic staff for students who will receive an identical qualification upon completion of their studies. Furthermore, students are able to move between study modes at their convenience. This flexibility encourages students to migrate to COLL regional centres once they find employment far from the Windhoek main campus.

To assure quality in terms of content, all NUST students, irrespective of the mode of study they are registered in, write the same examination at the end of the semester marked by the same markers. COLL employs full-time academic staff, drawn from the academic schools and departments at the NUST main campus, on a part-time basis to offer tutorials and develop quality assured instructional materials, which are delivered through print-based, multi-media and eLearning methods. However, the regional coordinators contract tutors with qualifications and industry experience from the local industry to provide academic support to the regional COLL students. These regional part-time tutors are not trained on how to handle and facilitate distance students, and in most cases, they do not communicate with the full-time lecturers who are involved in setting the examination papers at the end of the semester. A significant number of regional distance students are admitted through the mature age entry scheme and they really need responsive student support services for them to cope with academic and social demands of a high institution like NUST.

Daniel, Kanwar and Uvalic-Trumbic (2009: 24) stated that open and distance learning is an effective way of reaching out to a large number of students; hence, the NUST-COLL (formerly known as Polytechnic-COLL) established nine regional centres to cater for the high demand for distance education. The majority of regional distance students are working full-time, and need academic and administrative support to succeed in their studies. NUST-COLL regional centres are headed by the regional coordinators (RC) who possess extensive educational management and distance education experience. They manage and ensure the implementation of SSS at the regional level and contract tutors with relevant qualifications and industry experience to facilitate learning activities. Currently, NUST-COLL regional centres cater for students in a number of programmes at different levels, that is, four honours degrees, 13 Bachelor's degrees, three Bachelor of technology degrees and four national Diplomas. NUST-COLL regional students and other students at the NUST-COLL main campus in Windhoek are supposed to receive similar academic and administrative support services since they write the same assignments and examination papers in their respective programmes. As a matter of fact, the distance education students studying through NUST-COLL main campus are not academically isolated since they have access to more resources such as the library, internet and academic staff for guidance.

The researcher is convinced that the implementation of adequate quality student support at the regional centres would put the performance of distance students on par with that of the full-time students.

Distance students need a lot of support since they do not attend classes on a daily basis like full-time students. Brindley and Paul (2004: 40) state that one significant challenge facing distance institutions is the convenient and effective provision of support services for the isolated students. Simpson (2002: 06) views activities and services provided to distance students as geared towards overcoming barriers to learning and promoting student success rate. To address the challenges faced by distance students, NUST-COLL regional centres offer student support services in the following key areas:

- Library services and computer laboratory services ;
- eLearning services;
- administration (registration, payments, processing requests and liaising with colleagues on main campus);
- face-to-face tutorials/Saturdays tutorials;
- academic advice/counselling for course/programme selection;
- accessing internet (email tutors, online journals, or sending assignments online);
- issuing study materials to students and orientation;
- examination and test administration; and
- Listening to CDs/DVDs using head phones and webcams.

SSS are a critical and necessary component for distance education students. Mbukusa (2009: 186-188) emphasise that, due to a significant number of barriers facing distance students at the regional level (especially in rural areas), both academic and administrative support services should be in place to enhance learning. The NUST-COLL regional centres provide such services to distance students in spite of low success and graduation rates and a high attrition rate. The current study focuses on understanding the views of students and regional coordinators with the objective of increasing success rates and providing well-rounded programmes.

## 1.2 MOTIVATION FOR THE RESEARCH

Most of the literature on the distance education component of support services tends to focus on how to plan and implement academic and administrative support services for different distance education providers. While the NUST-COLL regional centres implement student support services to enhance learning and success rate, there is little research on the actual implementation of student support services at the centres. The researcher is particularly concerned with the uniform implementation of student support services at the regional centres, and believes that the way the student support services are implemented at regional centres might be the contributory factors in the high dropout rate and low success and throughput rates.

It is acknowledged that this study in not novel per se. A similar study was conducted by Möwes (2005) at the University of Namibia (UNAM), external studies. The focal point for Möwes' study was to evaluate the student support services, provided at the University of Namibia northern campus. Unlike this study which was conducted at different NUST-COLL centres with students doing different study programmes, Möwes' study concentrated on second- and third-year B.Ed. students from the same campus. Möwes' (2005: i) study provided evidence that, indeed distance education students valued the provision of SSS. However, a gap in Möwes' study is that it did not delve deeper into how well the SSS can be implemented. By understanding the problems associated with the implementation of SSS at different NUST-COLL regional centres from the perspectives of both students and regional coordinators, the provision of SSS can improve. On the recommendations, I concur with Möwes, (2005: ii) that the University's Centre for External Studies (CES) should pay more attention to SSS that help reduce barriers that prevent distance education (DE) students from accessing quality higher education. It is my considered view that the effective implementation of SSS should be done in response to the problems experienced by the DE students themselves and the regional coordinators who are the student support services implementing agents. Furthermore, the educational landscape and dynamics such as the use of technology and the increased number of DE students have changed in the twelve years since Möwes's study was done; hence the new methods of implementing SSS should be adopted from the students' and regional coordinators' perspectives.

Models of good practice exist in western institutions, but Priyadarshini (1994: 462) points out that these are not always appropriate for other countries and cultures. NUST-COLL regional centres are different from each other in terms of cultures, technology, distance from the centre, climatic conditions and road infrastructure, among others. Sewart (1993: 11) argues that the management of SSS needs to take account of the student needs and expectations as expressed by them. This study sought to evaluate the implementation of SSS at the NUST-COLL regional centres from the perspectives of students and regional coordinators (RCs). In order to contribute to the body of knowledge, the study was carried out in Namibia where the topic is under-researched and there is paucity of literature on the subject. It is hoped that the research will lead to a greater understanding of how the current SSS at the NUST-COLL regional centres can be implemented to enhance learning and success rates. In turn, the recommendations of the study are expected to reduce the student dropout rate, and consequently, increase the completion rate or number of students graduating after the normal four to six years of study. It is hoped that this study will fill the gap of the limited available knowledge on the topic under investigation and provide possible solutions to the problems facing the NUST-COLL regional students. Furthermore, the researcher believes that overcoming barriers to equitable access to learning can be achieved through an effective implementation of SSS, which is done from the perspectives of students living in all the regions across Namibia.

## 1.3 AN OVERVIEW OF STUDENT SUPPORT SERVICES

This section is divided into five parts and highlights related literature on SSS. The first part highlights the development of open and distance education; the second part looks at the theoretical framework for the study; the third part discusses the need for student support services; the fourth part outlines the importance of technology in the provision of student support services in distance education; and the fifth part describes the student support programme offered by the NUST-COLL regional centres.

### 1.3.1 Development of Open and Distance Learning

Already in 2002, Simpson (2002: 1) noted:

> open and distance learning (ODL) is more than 150 years old and dates back perhaps to the early days of social revolution – the 'Penny Post' (the ability to send a letter anywhere in the UK at a standard rate of one old penny) with Isaac Pitman's correspondence courses in shorthand.

This is a clear testimony that distance education started a long time ago, but kept the same objective of educating those who are not necessarily confined to the classroom for instruction. In essence, this constitutes an education that takes place and reaches all irrespective of the geographic location and could be enhanced by use of modern technologies.

According to Heydenrich and Prinsloo (2010: 5), the history of distance education has been documented and researched in the past. The model of open and distance learning used at the Open University (OU) in the United Kingdom has been successful and has been replicated by many other distance education institutions in the developed world and a few in the developing countries. However, Kember (2007: 113-115) argues that it does not meet the different needs and characteristics of students from developing countries. Continuous research in the area of distance education, especially SSS, will possibly yield solutions to contemporary issues. However, solutions to the current challenges facing DE students should be developed in the correct settings of the developing countries such as Namibia.

Open and distance learning (ODL) is increasingly becoming a preferred means of enabling governments and institutions in both developed and developing nations to increase access to education, and thereby respond to the demands for equity of opportunity to participate in learning and meet the ever-changing human resource needs. NUST-COLL regional centres were established to reach people living and working in remote areas who cannot access conventional education and training (PoN, 2014: 4).

To ensure that the content and quality of study programmes are not compromised, SSS have been introduced to ensure effective learning (PoN, 2014: 3).

The researcher's view is that effective learning should be measured by how well the distance education students perform and the throughput rate.

## 1.3.2  Theoretical framework of the study

The theoretical framework of this study is based on Moore's theory of transactional distance (Moore, 1993). The theoretical framework is discussed in detail in Chapter 2. Furthermore, the importance of planning for SSS in distance education is briefly highlighted.

### 1.3.2.1 A theory of transactional distance

Transactional distance theory assumes that the most profound impact on distance education is pedagogy and not the physical or temporal distance that separates teacher/instructor and learner/student (Gorsky & Caspi 2005: 03). In other words, distance is not confined geographically, but also by the variety of transactions that occur between students and lecturer or students and materials, institution and other students, that is the extent to which dialogue exists. Moore (1993: 23) defined "transactional distance" as "a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner". This definition remains relevant to the current practice of distance education. The extent of transactional distance in a distance educational programme is a function of three key variables: structure, dialogue and learner autonomy (Moore 1993: 24-31). In the context of the transactional theory, several transactions take place between people that are involved in a DE programme. These transactions can be between: learner and course materials, the learner and tutors, the learner and other learners and also between the learner and the institution itself, like the NUST. "Transaction", in this sense, implies that two parts are involved in an action that involves both of them in some form of communications and also some form of contract or agreement (Möwes 2005: 14). Applied to distance education, it signifies the communication between the institution (DE provider) through its academic/administrative staff or course materials and the students.

In general, the theory of transactional distance examines the interplay between dialogue, structure, and learner autonomy and how these three variables interact to either increase transactional distance, the feeling of connectedness and a measure of efficiency in reducing miscommunication, or to decrease transactional distance (Shearer, 2009: 1). Shearer further states that the theory implies that, as dialogue increases, structure decreases and transactional distance decreases. In other words, transactional distance can be reduced or overcome if there is more dialogue between students/learners and lecturers/tutors.

The provision of SSS in my view, should lead to effective learning and promote success rate among distance students. However, this depends on how well the SSS are planned and implemented. Moore (1993: 24) states that "a dialogue is purposeful, constructive and valued by each party. Each party in a dialogue is a respectful and active listener; each is a contributor and builds on the contributions of other parties". The direction of the dialogue is towards improved understanding of the student. Structure expresses the flexibility of the programme's educational objectives, teaching strategies and evaluation methods (Moore, 1993: 26). In other words, structure describes the extent to which an educational programme can accommodate all learners' individual needs. Furthermore, Moore (1993: 27) wrote: "the greater the structure and the lower the dialogue in a programme, the more autonomy the learner has to exercise." In other words, the learner rather than the teacher or institution determines the goals, learning experiences, and the evaluation decisions of the programme in the teaching/learning relationships. It is therefore of paramount importance that DE institutions should consider the three variables when designing and implementing SSS to promote flexibility and success rate.

1.3.2.2 Planning for student support services in distance education

Every country is unique in terms of cultures, societal principles, technology and the quality of basic education. To promote success and enhance learning, the factors that should be taken into consideration include planning, organising and administering SSS in distance education. It is also critical to ensure that the student support system put in place integrates student needs, the requirements of the course content, institutional context and the type of technology to be used in order to provide an efficient service to the students.

Tait (1995: 236) confirms that "social, cultural, economic and technological issues provide a range of factors in planning student support which ensures that each institution has a unique task and no general schemes can be drawn up on international or even national basis." Sewart (1993: 11) concurs that a learner support system can only be conceived in relation to the country and context in which it is set. Additionally, it is possible to transfer the learner support system between distance institutions or elements that make up course production, but the same cannot be said for the implementation of SSS. In other words, the implementation forms will greatly depend on different factors such as geographical environment and technology. Unlike Sewart (1993) and Brindley and Paul (2004), Tait (2000: 9) seems to provide the most comprehensive and practical framework to be considered when developing the student support system in a distance education setting. In his view, six core elements that institutions should take into account in planning SSS for distance learner are: characteristics of the students, the demands of the academic programmes and courses, the geographical environment, the technological infrastructure, the scale of the programme, and the requirements of the management.

### 1.3.3 The need for student support services

Students' needs and demands are ever-changing because of the evolving environmental, economic and technological dynamics; hence, the SSS should also be adjusted continuously through evaluation strategies in order to be responsive to the problems that arise. Simpson (2002: 5) points out that: *students + teaching materials + student support = successful students.* SSS are a critical element in the process of offering distance education programmes. The following factors are some of the justifications as to why it should be implemented by all distance education providers: isolation of the students, retention and the success rate for the students studying through distance mode as compared to full-time students. Since most distance students either have full-time employment and/or live far away from the regional centres, student support is of paramount importance for enhancing academic success.

### 1.3.4 Importance of technology

Moore (2013: 123) supports the usage of information communication technology (ICT) because it has transformed many areas of distance education. Through ICT, students spend less money on buying books, travelling to campus library and even making important requests. Students can now use technology to access libraries electronically, view their assignment marks and financial statements and email their assignments. Technology has become a global phenomenon which is viewed as a tool that can potentially overcome the constraints of traditional classroom spaces and limited access to learning. In other words, it ensures that students have unlimited access to learning materials and do not have to be physically in classrooms in order to learn.

### 1.3.5 Student Support Services offered by NUST-COLL regional centres

Tait (1995:235) highlights the common of learner support as "the whole range of services both for individuals and for learners in groups which complement the course material and which are often perceived as the major offerings of institutions using distance education". This study sought to determine the effectiveness of the implementation of SSS using the case of NUST-COLL regional centres. In an effort to make higher education more accessible COLL offers the following SSS at the regional centres: face-to-face tutorials/Saturday tutorials, library and computer centre, facilitation of student academic issues, orientation and other activities and finance related issues.

### 1.4 STATEMENT OF THE PROBLEM

Although the NUST-COLL regional centres offer academic and non-academic support to distance students in order to enhance learning, success and completion rates, there is still a very low success rate and a high dropout rates among distance students. According to Tyobeka (2012: 68), success rate at the Polytechnic of Namibia dropped from 68% to 59%, which is not a good indication of expected results of an institution. Many students fail their courses, dropout or take many years longer than the official time to complete their study programmes. Most distance students register for the same number of courses per semester as the full-time

students at the NUST, with the expectation that these two groups should be able to complete their study programmes and graduate at the same time. However, in most cases, this is not the case due to the high failure rate among other factors. Qakisa-Makoe (2005: 44) argues that DE students like any other students need support as they embark upon life experiences especially when they go through a big challenge of attending a university; hence, the application and implementation of SSS is more important to the NUST-COLL regional centres. Attending a university is a challenge to most DE students as they need to strike a balance between their studies and other responsibilities such as family, work and community activities.

If the NUST COLL regional centres are to achieve their mission of providing the most appropriate, flexible and effective learning and teaching media and support services valued by most students, then they need to evaluate the implementation of support services to guide improvement of both process and outcomes, to ensure that goals are met and to make judgements about which support services best support student needs. Evaluation of academic and non-academic support services should be a continuous exercise, which should provide valuable feedback on which student support services should be improved to solve the problems of the day.

In order to evaluate the implementation and responsiveness of SSS to students' challenges at NUST-COLL regional centres, the following main research question is formulated:

**How effective are student support services at the NUST-COLL regional centres?**

To guide the researcher in answering this main question, the following sub-questions are posed.

**Sub-questions**

1. What are the students' perceptions about the importance and accessibility of support services available at NUST-COLL regional centres?
2. To what extent do student support services at NUST-COLL regional centres respond to barriers, expectations and needs of distance students?
3. Which student support services at NUST-COLL regional centres are more effective?

4. What are the international trends and practices on the provision of student support services to distance education student?

5. How can the existing student support services at the NUST-COLL regional centres be improved?

## 1.5 AIM AND OBJECTIVES OF THE RESEARCH

The main aim of the research is to evaluate the implementation of student support services at the NUST-COLL regional centres.

The objectives of the study are formulated as follows:

1. To identify the problems with the existing provision of student support services at the NUST-COLL regional centres.

2. To determine the needs and challenges of distance education students at the NUST-COLL regional centres.

3. To critically probe the current practices on student support services at NUST-COLL regional centres.

4. To explore ways of improving student support services provision at the NUST-COLL regional centres.

## 1.6 SIGNIFICANCE OF THE STUDY

Students join the university from different educational, social, economic and technological backgrounds; hence, the different levels of preparedness, motivation and goals to succeed in their studies. Moore (2012: 167) believes that all students should receive orientation upon entering study programmes to reduce the need for individual counselling at a later stage. The researcher believes that appropriate and effective SSS will lead to a higher success rate and reduce student dropouts; thus there is a need to evaluate implementation of the current support services at the NUST-COLL regional centres. A model of improving SSS was developed to help COLL enhance support service delivery and improve performance of the distance education students. It was anticipated that this research study would be of great value to the NUST-COLL regional centres and other institutions of distance education endeavouring to understand and contextualise the provision of SSS. Specifically, it is assumed that the findings of the study will:

1. Contribute towards achieving the mission of the NUST in general and that of NUST-COLL in particular. At the regional level, it is important to provide effective support services that may counteract barriers, attend to students' needs and expectations, assist with logistics and solve problems arising from the distance between the student and the campus.
2. Guide NUST-COLL to strengthen the existing SSS at the regional level.
3. Highlight the importance of SSS provision to other institutions offering distance education in Namibia, namely the University of Namibia (UNAM), Namibia College of Open Learning (NAMCOL) and the Institute of Open Learning (IOL).

## 1.7 RESEARCH DESIGN AND METHODOLOGY

Generally, researchers have different beliefs and ways of understanding and interacting with their surroundings. As a result, the ways in which research studies are conducted vary. However, certain standards and rules guide the researcher's actions and beliefs. Such standards can be referred to as a paradigm. This section highlights the research paradigm, research design and methodology adopted in this study. Furthermore, data collection activities, data analysis, validity and reliability as well as ethical considerations are briefly discussed.

### 1.7.1 Research paradigms

The nature of enquiry for this study was informed or influenced by both the positivist (quantitative) and interpretivist (qualitative) paradigms. Hutchinson (1988: 124) states that "positivists view the world as being 'out there' and available for study in a more or less static form". Additionally, Gall, Borg and Gall (1996: 18) define positivism as "the epistemological doctrine that physical and social reality is independent of those who observe it, and that observations of this reality, if unbiased, constitute scientific knowledge". This study aims to evaluate the effectiveness of implementation of the current SSS at the NUST-COLL regional centres from the perspectives of students and the regional coordinators. The emphasis here is placed on measures to determine which SSS are the most effective and which ones should be improved.

In other words, the study seeks to explore the relationship between the effectiveness of the current provision of SSS and the students' expectations and needs with regard to SSS. Equally important, the researcher looked beyond quantitative information by employing the interpretivist paradigm. The basic assumptions guiding the interpretivist paradigm, according to Mertens (1998: 11), are that knowledge is socially constructed by people active in the research process, and that researchers should attempt to understand the "complex world of lived experience from the point of view of those who live it". The reality to be studied to determine the SSS that are most effective and which ones should be improved should be done in the context students' subjective experiences. The regional coordinators who manage the implementation model of SSS were interviewed to share the experiences and challenges they encountered during the implementation of SSS at the regional level. The views and proposals from both the students and regional coordinators are interpreted within the context of different NUST-COLL regional centres.

The research design of this study blended both the qualitative and quantitative dimensions as the most suitable way to achieve the purpose of the study. McMillan and Schumacher (2006: 404) and Monyatsi, Steyn and Kamper (2006: 431) collectively agree that a combination of qualitative and quantitative designs yields comprehensive and rich data. The researcher adopted both interpretive and positivist paradigms to guide the nature of his enquiry along three dimensions: ontology, epistemology and methodology. Denzin and Lincoln (2003: 34) describe the three dimensions as follows:

- Ontology: It is concerned with the nature of reality and what actually really exists; for example, how we think the social world is constituted is our ontology.
- Epistemology: It is the branch of philosophy that seeks to analyse the nature of knowledge and how it is acquired and validated. It is the philosophy that underpins the researcher's approach to getting information.
- Methodology: The methods used in a study to search for knowledge or guide the process of acquiring empirical knowledge.

Through the interpretivist paradigm, the researcher viewed the students' subjective experiences as an indispensable essence of what was real for them. This highlighted the meaning of students' interactions with different SSS offered at the NUST-COLL regional centres. Furthermore, in line with the positivist approach, the researcher acknowledged that the SSS could not be manipulated because their manifestations had already happened; therefore, the choice of an objective and epistemological stance towards the unchanging support services was employed. In other words, the students' needs and expectations with regard to the provision of SSS were used to evaluate the student support services at the COLL-regional centres.

### 1.7.2 Qualitative and Quantitative methodologies

Johnson and Christenson (2008: 51) view the use of mixed methods approaches as a strength when conducting research in education. In fact, they see the combination of qualitative and quantitative research methodologies as complementary. Ary, Jacobs and Sorensen (2010: 561) also point out that using both approaches has a potential to expand and broaden the depth of a study. That is to say, both perspectives have strengths and limitations; hence a combination of the two would increase the reliability of the findings. It is in this context that the researcher opted for a combination of qualitative and quantitative methodologies in order to get a clearer picture as to whether SSS really worked for students in terms of responding to the challenges that they faced at the NUST-COLL regional centres.

Qualitative methodology focuses mainly on understanding meanings of concepts, insights into problems, and the perspectives or worldviews of the people involved (Merriam, 1998: 6). Furthermore, Creswell (2003: 18) argues that in terms of this methodology, researchers often validate knowledge claims based primarily on the constructivist perspectives like the multiple views of different participants with the intent of developing a pattern. This study tried to understand the views of the participants without imposing his own views or wanting to arrive at a predetermined outcome. This was an interpretivist paradigm since the most effective SSS and the ones to be improved were informed by the students' subjective experiences and not the researcher's. The interpretivist paradigm helped to explain the subjective reasons and meanings behind the students' interactions with SSS as well as the regional coordinators' experiences in implementing SSS at the regional level.

Questionnaires with open-ended questions and documents such as journals were used to understand the views of the participants and determine whether students' needs and expectations had been met and their satisfaction with the existing SSS.

The quantitative approach was used to determine the relationship between the independent variable: SSS; and the dependent variable: students' expectations and needs. In this approach, the researcher used post-positivist claims for developing knowledge that is, cause and effect by employing strategies of inquiry such as surveys to collect data on predetermined instruments that yield statistical data. The independent variable, namely SSS was evaluated by using students' expectations and needs through questionnaires. The questionnaires used had checklists and scales to measure the quality of existing SSS against students' needs and expectations.

### 1.7.3 Sampling and Population

This study targeted the population of 860 senior (second to final year) students studying at nine NUST-COLL regional centres and all nine regional coordinators. A sample of 300 senior students (out of 860 students) and nine regional coordinators was selected to participate in the study. Stratified random sampling was used to determine the number of students per centre based on the centre's total enrolment and gender. Chiromo (2009: 17) defines stratified sampling as a sampling technique that involves dividing the population into homogenous subgroups such as boys and girls, race, rural and urban schools and age. The stratified sampling technique is used to establish a greater degree of representativeness in situations where populations consist of subgroups or strata. Having done that, the sampling was used within different strata to ensure representatives of the samples were proportionate. Since NUST-COLL regional centres are situated in urban and rural areas, and this type of sampling technique would promote representativeness of participants from the selected regional centres. As guided by the researcher, the regional coordinators used simple random sampling to select students at their respective centres. Kumar (2011: 203) defined simple random sampling as a method whereby each participant in the population is given an equal and independent chance of selection. Chiromo (2009: 17) notes that every sample chosen in a random manner should prove to be

unbiased and representative of the population. This technique ensured that all students had an equal opportunity to participate in the study.

### 1.7.4 Methods and procedures of data collection

As mentioned earlier, the research design incorporated both qualitative (interpretivist) and quantitative (positivist paradigm) methods where the relevant data were collected through the use of a questionnaire. In other words, a mixed methods approach was employed in this study. Closed (structured) questions with designed checklists and scales, and open-ended questions were used. The open-ended questions were used to determine whether students' needs and expectations were met, and whether they were satisfied with the current provision of SSS at the NUST-COLL regional centres. Regional coordinators were interviewed to share their experiences in implementing SSS at the regional level through a short structured interview. They explained the problems they experienced at the regional level as they managed all support services. The questionnaires were distributed to students through their respective centres and collected during the second semester registration period while the regional coordinators were interviewed face-to-face during the quarterly meetings at the main campus in Windhoek.

### 1.7.5 Data analysis

The collected data were analysed with the assistance from NUST Department of Statistics using Statistical Package for the Social Sciences version 23 (SPSS) software. The independent variables for the study were the SSS (academic and administrative), while the dependent variables were the students' expectations and needs. The regional coordinators' experiences on how they managed, provided and implemented the SSS at the regional centres guided the interpretation of students' perceptions; hence they were deemed to be useful in making recommendations. To test the linearity of dependence of variables, Pearson's Chi-square test ($x^2$) was used. According to Chiromo (2009: 78), a chi-square is a non-parametric statistical test which is used to test directly for goodness of fit or indirectly as a test for independence. The findings of the study were presented in the form of tables, graphs

and percentages for discussion purposes. The researcher went beyond the presented results, and critically interrogated issues concerning the best practices in ODL for the effective implementation of SSS at NUST-COLL regional centres.

### 1.7.6 Validity and reliability

Reliability refers to the degree of consistency with which an instrument measures what it is designed to measure, and how the test is administered in the study, the consistency of the researcher's interactive style, how data is recorded, analysed, and interpreted (Matee, 2009: 175). In other words, reliability refers to the dependability and predictability of a measurement instrument, meaning the extent to which an instrument yields the same results when repeated for different participants in different setups. According to Ridenour and Newmann (2008: 39), the basic purpose of reliability is to help researchers get the measure of validity. Reliability is demonstrated by the existence of high consistency and stability of measurement. There should be a link between questions (questionnaire) and the objectives of the study (face validity) through a wider range of issues to be measured such as academic support and non-academic support services. In the context of this study, the researcher considered the instruments used like the questionnaire to be reliable as there was consistency in the empirical findings made.

Smith (1991: 106) defines validity as the degree to which the researcher measured what he set out to measure. In other words, validity in this study refers to the ability of a questionnaire to measure what it was designed to measure. Similarly, Babbie (1989: 133) argues that validity refers to the extent to which an empirical experience or information received  adequately reflects the real meaning of the concept under consideration.

The researcher tested the validity and reliability of the instruments by conducting a pilot study on a sample of 8 DE graduates from NUST-COLL who graduated during the period, 2012-2015. The result of the pilot study was used as guidance to modify the research instruments for collecting valid and reliable data.

### 1.7.7 Ethical Considerations

Burton and Bartlett (2009: 29) states that ethics should be a central consideration for all education researchers to guide how research is carried out. This research prioritised the rights of the respondents by employing high confidentiality of data that was collected and not using any identifiable information. Before any data could be collected, the researcher applied for ethical clearance as per the UNISA ethical code of conducting research. All the respondents signed a consent form, and their names were not used during the study or in any document to ensure anonymity. With the ethical clearance certificate from UNISA, the researcher applied for authorisation to use the name of Namibia University of Science and Technology from the registrar and the director of NUST-COLL to collect data from the regional centres, and permission was granted since this was purely for academic research. To adhere to the ethical standards in this regard, the researcher agreed not to disclose any confidential information availed for the purpose of the study in a manner that would tarnish the image of the institution.

### 1.8 DEFINITION OF KEY CONCEPTS

### 1.8.1 Student Support Services

Simpson (2002: 7) defined SSS as academic and non-academic support aimed at increasing retention and graduation rates. These are academic and administrative activities designed to assist, support and guide distance education students in the learning process. The purpose of SSS is to enable students to progress successfully and complete their studies. In this regard, NUST-COLL regional centres offer activities such as tutorial classes, library services, internet services, orientation programmes and others to all students.

### 1.8.2 Distance Education

This is the type of education which uses a variety of media, namely print, electronic and other technologies to promote access to instructional materials and room to study while involved with other responsibilities, such as work, family and community activities. Through distance education, DE students study the same programme as

full-time students and are expected to demonstrate the same level of competencies after completing the programme.

## 1.9 CHAPTER DIVISION

The study is organised in the following way:

Chapter 1 outlines background to the study, the research problem and research questions. It also presents the motivation for and objectives of the study, briefly discusses the theoretical framework and research design and methodology.

Chapter 2 presents the detailed theoretical framework for this study, the state of distance education in Namibia and the need for student support services at distance education institutions. The chapter further highlights student support services offered at NUST-COLL regional centres and the trends in dropout, success and retention rates.

Chapter 3 reviews international literature, theories on distance education and scholarly discourse on distance education and practices in open and distance learning at different institutions. Factors to consider when developing student support services and how to enhance support services are outlined.

Chapter 4 discusses the research methodology and design, data collection, data analysis, reliability and validity as well as ethics in research.

Chapter 5 presents and discusses the findings of the study.

In Chapter 6, conclusions are drawn, recommendations for improving the implementation and provision of SSS at NUST-COLL regional centres are proposed and areas for further research are suggested.

## 1.10 SUMMARY

The first chapter of this thesis highlighted the background to the study as well as the motivation for the study, followed by a brief overview of literature. The review highlighted the importance of student support services as a necessary support mechanism to respond to the academic needs of distance students. The section was followed by the problem statement, research questions and the objectives of the

study. The last part explained the research design, methodology and methods, the study sample and sampling techniques, data collection strategies, ethical considerations, and finally, the key concepts used in the proposal were defined. The next chapter explores the need for student support services in open and distance learning.

## CHAPTER 2: THE NEED FOR STUDENT SUPPORT SERVICES IN OPEN AND DISTANCE LEARNING

## 2.1 INTRODUCTION

During the last few decades, globally, many nations have experienced an increase in the demand for tertiary education from both secondary school graduates and working adults who want specialised training to advance their careers or keep up with changes in their professions. It is my strong conviction that ODL is a cost-effective solution to meeting this demand especially for adults and those that are far from institutions of higher learning. The Government of Namibia ranks educational provision as a top priority and more Namibians are seeking studying opportunities. DE students bring unique characteristics and qualities to the institutions that provide distance education. Guri-Rosenblit (1999: 66) stated that students in distance education are viewed mainly as clients, customers, and consumers of higher education. They are perceived as individuals possessing an enormous range of inclinations, attitudes and perceptions. It is, therefore, important that they are provided with support services. Since most DE students are working adults, who need to study while attending to their daily responsibilities, DE providers should ensure that these students continue working while at the same time getting a much-needed education. Increasingly, distance education is not only for adult students, but a choice even for high-school leavers who prefer studying while at home. It is important to keep DE students engaged in learning activities through dialogue to prevent isolation.

In this chapter, the education system during the apartheid period in Namibia is first explored. Then, the chapter reviews literature on distance education in the context of Namibia and highlights its nature and the need for SSS. It outlines student support services offered at the NUST-COLL regional centres and the trends such as dropout, success and retention rates at the institution.

## 2.2 THEORETICAL FRAMEWORK FOR DISTANCE EDUCATION

The provision of effective SSS is a critical element in distance education. Tait (2014: 05) proposes that student support should be well understood and be integrated with teaching and assessment activities, not separately organised either structurally or professionally but part of the whole planning. Distance education has evolved in both theory and practice, hence Tait (2014: 06) emphasises the importance of integrating technology in distance education to promote learning driven by the digital revolution in a longer term perspective, and more specifically, to link the changes to the student support dimensions of distance and eLearning. He further states and acknowledges the significant continuity in the distancing of learning and human experience from the very beginning of history. This is quite relevant to the contemporary issues whereby student support in distance learning and e-learning should respond. In other words, the human experience of learning and education systems have evolved along with the available technologies, and as such, the SSS should respond to the contemporary challenges faced by the distance students.

Distance education is a dynamic field that calls for the crafting of responsive SSS. Möwes (2005: 08) also acknowledged the growing recognition of the central role of SSS in making distance education more responsive to individual students. The researcher concurs with Nonyongo (2003: 123), that the quality of any learner support structure is informed by the nature and philosophy of the total DE system of the country and the institution concerned but he adds that the SSS should promote student success and reduce dropout rates. Additionally, SSS should respond to the students' needs to study independently; therefore, Moore's (1983) theory of transactional distance has been adopted to undergird this study.

Keegan (1996: 8) contends that distance education is not possible without the development of technology, especially in transportation and communication associated with the industrial revolution. This study focuses more on DE issues associated with teaching-learning transactions, such as using emerging communications technology to improve the success rate. Garrison (2000: 2) questions whether distance education as a field of study provides a synthesis of principles and concepts capable of explaining and predicting developments in

distance education in the 21$^{st}$ century. Furthermore, Garrison (2000: 2) argues that the 21$^{st}$ century represents the post-industrial era where transactional issues (i.e., teaching and learning) will predominate over structural constraints (i.e. geographical distance). The provision of support services refers to bringing the needed support to the students who need it; thus, the establishment of study centres in different towns where a high number of DE students are situated might widen access and bring the regional centres closer.

While it is not the purpose of this study to engage with different theories of education, a short description of some major theories viewed as the foundations of distance education are explored is made below. Perraton (2000: 10) argues that unless research is grounded in a theory, it cannot be much more than data gathering. Educational theory increases the understanding of human behaviour, and enhances practice; hence Lewis (1951: 169) points out that there is nothing as practical as a good theory.

### 2.2.1 Theoretical contributions

Besides the early pioneers of correspondence education such as William Rainey Harper of Chicago, William H. Lightly of Wisconsin, and Hans Hermod of Malmo, who, according to Keegan (1996: 55), wrote about the advantages of this form of education, this section outlines the scholarly contribution of Charles Wedemeyer's theories of independence and autonomy. Wedemeyer (1971: 548) noted that a particular philosophy of teaching and learning usually lies behind the concepts of independent study and learning. To understand the concept of independent learning, Wedemeyer (1973: 73) gave the following definition:

> Independent learning is that learning, that changed behaviour, that results from activities carried on by learners in space and time, learners whose environment is different from that of the school, learners who may be guided by teachers but who are not dependent upon them, learners who accept degrees of freedom and responsibility in initiating and carrying out the activities that lead to learning.

According to Keegan (1996: 59), Wedemeyer, through his concept of independent study, considered that nobody should be denied the opportunity to learn because he/she was poor, geographically isolated, socially disadvantaged, in poor health,

institutionalised, or otherwise unable to place himself/herself within the institution's special environment for learning. In fact, distance education must provide address the issue of access to further education by providing the opportunities for students in remote areas. Wedemeyer (1971: 551) advocated freedom and choice for the learner. In the context of this study, Wedemeyer focussed more on individual students who were geographical isolated as opposed to the group of students in different areas or regions. The current practice of distance education advocates flexibility for students to be able to study from anywhere while attending to other key activities such as work, family and community projects. The researcher believes that SSS should be responsive to issues such as geographical isolation and social disadvantages. The hallmark of Wedemeyer's work was his contribution to the establishment of the British Open University (Sherow & Wedemeyer, 1990: 18).

Another theory to explore in this section is the theory of industrialisation of teaching. According to Garrison (2000: 6), the most coherent, rigorous and pervasive example of DE theory to date is the industrial production model of Otto Peters. Peters (1994a: 111) analysed the structure of distance education and noted the possibility of adopting industrial production techniques such as division of labour, mass production, and organisation to realise economies of scale and reduce unit costs. Considering the structural constraints and the reliance on self-instructional print packages, the adoption of industrial approaches to education was ideal as noted by Peters (1994, cited in Garrison, 2000: 6). Furthermore, according to Keegan (1996: 78), for Peters, the most important aspect was the similarities between the industrial production process and the teaching-learning process in distance education. He analysed the industrial production process and found that not only did this provide a satisfactory basis for an analysis of distance teaching, but that a fruitful explanatory and forecasting theory of teaching at a distance was possible when one considered it as the most industrialised form of teaching and learning.

Peters' core philosophical position can be understood if one looks at his most recent work. Peters (2000: 15) offered a new structure for university education to include three basic forms of academic learning such as self-learning, tele-eLearning and social intercourse. It is obvious that self-learning and tele-eLearning cover the aspect of independent learning, and these two are very much autonomous approaches to learning. The argument here is that communications technology and lifelong learning

demands will precipitate a transformation of the traditional university into an institution of self-study and distance education (Peters, 2000: 20). In fact, the researcher argues that self-study and distance education should provide study opportunities to the majority of people in the 21$^{st}$ century. The challenge, however, is how to ensure high success rates for geographically isolated students, particularly those living in remote areas without electricity and internet connectivity. The other concern is that distance education students need some form of teaching and learning techniques but this theory is not viewed as a theory of teaching nor learning.

Another pioneering theorist who has made substantial contributions to the theory of distance education with his theory of didactic interaction was Borje Holmberg. Holmberg (1989: 43) argued that guided didactic conversation is a "pervasive characteristic of distance education". Holmberg's theory conceptualises distance education as a friendly conversation fostered by well-developed self-instructional materials, which result in feelings of personal relationships between teaching and learning parties, and promote intellectual pleasure and study motivation (Holmberg, 1989: 43). In light of Holmberg's theory of guided didactic conversation, DE materials should present characteristics of easily accessible presentations of study matter, explicit advice to students on the course content issues, promote the exchange of views, and involve the student emotionally to take a personal interest in the subject (Holmberg, 1983: 117). Successful delivery of education is based on effective communication between students and lecturers. In the context of distance education, students and lecturers can have a simulated conversation through the well-written learning materials developed by the course developers. Therefore, my view is that in order to develop learning materials that promote two-way conversations between students and the institution, course developers and instructional designers should possess sound knowledge, understanding and experience of distance education and its dynamics. Figure 2.1 below presents Holmberg's view of distance education as guided didactic conversation.

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                                              ┌──────────────────────────┐
                                              │ By correspondence        │
                                              ├──────────────────────────┤
                                              │ By telephone             │
                                              ├──────────────────────────┤
                                              │ By personal contact      │
                                              └──────────────────────────┘
      ┌──────────┐
      │ Real     │
      └──────────┘

      ┌────────────────────────┐
      │ Distance education as  │
      │ guided didactic        │
      │ conversation           │
      └────────────────────────┘

      ┌──────────┐
      │ Simulated│
      └──────────┘
                                              ┌──────────────────────────┐
                                              │ Internalized conversation│
                                              │ by study of a text       │
                                              ├──────────────────────────┤
                                              │ Conventional styles of   │
                                              │ course authors           │
                                              └──────────────────────────┘
```
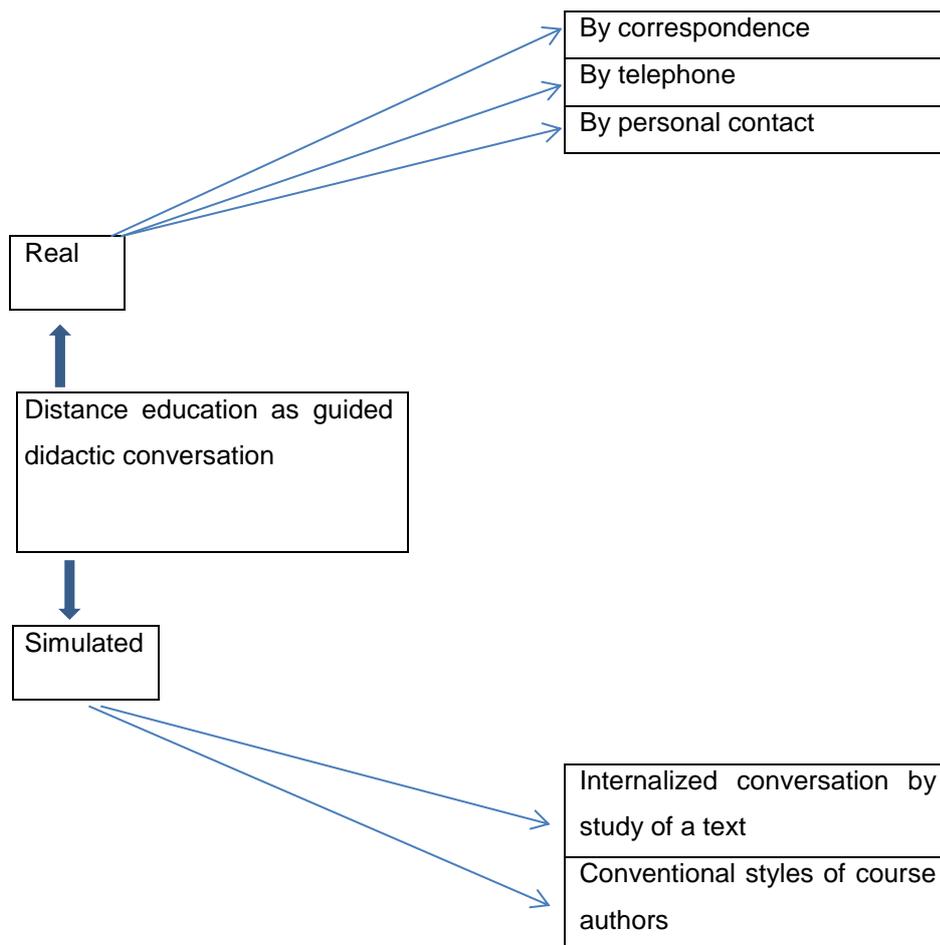
**Figure 2.1: Guided didactic conversation**

**(Source: Keegan, 1996: 95)**

The next section explores the theory of transactional distance by Moore. According to Garrison (2000: 4), the practical and evolving approaches to distance education must be reflected in its theory. For this reason, the researcher viewed Moore's theory of transactional distance as more practical and relevant to the challenges of distance education practices at the NUST-COLL.

**2.2.2 Theory of transactional distance**

Moore's (1993) theory of transactional distance stands as one of the foremost theories in the field of distance education. Moore's theory was considered in this study as a theory that has integrated many other theories and offers a more comprehensive approach to distance education, which is fit for the contemporary

dynamics of distance education in the 21$^{st}$ century. Moore (1993: 20) suggested that transactional distance is not defined in terms of geographical distance, but rather a pedagogical concept that encompasses the separation of learners/students and teachers/lecturers by time and space. In other words, distance is not only confined geographically, but also by the variety of transactions that occur between students and the lecturer (materials, institution and other students). The concept of transaction is derived from Dewey and Bentley (1949) who identified transaction as an element in the learning process and distinguished between transaction and interaction. Dewey and Bentley (1949: 131) suggested that the word *transaction*, as an epistemic notion, should be understood as "unfractured observation". They defined the concept of transaction as follows:

> The knowing known taken as one process in cases in which in older discussions the knowings and knowns are separated and viewed as in interaction. The knowns and the named in their turns taken as phases of a common process in cases in which otherwise they have been viewed as separated components, allotted irregular degrees of independence and examined in the form of interactions (Dewey & Bentley, 1949: 196).

According to Roth (1998: 2), Dewey and Bentley (1949) proposed the adoption of a wholly new "transactional vocabulary" as a precision tool for a new mode of scientific inquiry, whereby inquiry itself was recognised as a species of transaction between inquirer and observed phenomena. It can be argued that the transactional model of the relationship between the inquirer and the observed phenomena is comparable to the relationship between the DE student and course materials. Furthermore, Gorsky and Caspi (2005: 1) narrated that the theory of distance education evolved from basic insights regarding independent learning and learner autonomy (Moore, 1972) into a multidimensional set of interrelated definitions, proposition and construct known as the "theory of transactional distance" (Moore, 1993: 23). Boyd and Apps (1980: 5) explain that transaction connotes the interplay between the environment, the individuals and the patterns of behaviours in a situation. Additionally, Moore (1993: 23) defines "transactional distance" as "psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner." It can also be argued that the separation

between students and the ODL institution leads to special patterns of student and lecturer behaviour.

Furthermore, the researcher argued that the separation affects both teaching and learning; hence, the interpersonal communication between students and lecturers should be compensated through the quality of SSS. Giossos, Koutsouba, Lionaraskis and Skavantzos (2009: 02) refined this definition by stating that the particularities of space and time pertaining to the teacher and learner, which characterise distance learning, create particular behavioural models for the teacher and the learner, psychological and communication distance between them, and insufficient understanding of each other. It is a known fact that in a conventional education setup, lecturers and students are linked by interpersonal communication, which consists of language and non-verbal communication supported by textbooks and other materials. As Keegan (1996: 117) noted, distance education presents a cluster of educational efforts to replace these functions of interpersonal communication by printed, electronic and computer-based interaction. Thus, it is critical that the difference between the interpersonal communication of conventional education and the artificial communication processes of distance education should be compensated by providing a complete learning package, both print and non-print that parallels the provision of conventional education institutions.

Shearer (2009: 1) explains that the theory of transactional distance examines the interplay between dialogue, structure and learner autonomy, and how these three variables interact to either increase transactional distance, the feeling of connectedness, and a measure of efficiency in reducing miscommunication, or to decrease transactional distance. In the context of transactional theory, a number of transactions take place between people that are involved in a distance education programme. These transactions can be between: the learner and course materials, the learner and tutors, the learner and other learners, and also between the learner and the institution itself, such as the NUST. 'Transaction', in this sense, implies that two parts are involved in an action that involves both of them in some form of communication and also some form of contract agreement (Möwes, 2005: 14). Applied to distance education, it signifies communication between the providing institution (DE provider) through its administrative/academic staff or its course materials and the students. Möwes (2005: 14) further states that in addition to

communication, there is a contract involved, with responsibilities assumed by both parties such as students and the NUST.

In other words, the DE institution should provide effective SSS that lead to effective learning and promote success rate among distance students. However, this depends on how well the SSS are planned and implemented.

In an attempt to describe the three factors that make up transactions on distance education, Moore (1993: 24) states that "a dialogue is purposeful, constructive and valued by each party. Each party in the dialogue is a respectful and active listener; each is a contributor and builds on the contributions of other parties." Dialogue and interaction are similar so they are sometimes used synonymously, but Moore further makes a distinction that the term dialogue is used to describe an interaction or series of interactions having positive qualities that other interactions might not have. In other words, the term dialogue in this study refers to positive interactions meant for the improved understanding of the student. There are various reasons why students opt for DE programmes, such as learner independence, flexibility, and choice in how, when and where they study; hence Falloon (2011: 188) highlights that significant research indicates the importance of regular interaction to success in distance learning – whether this interaction is teacher-student, student-student or student-content (Anderson, 2003; Hrastinski, 2008; Levine, 2007; Moore, 1997; Schullo, Hilbelink, Venable & Barron, 2007). Schullo et al. (2007: 2) indicate that an on-going regular interaction between teachers and students in DE programmes through the use of synchronous systems "improves attitudes, encourages earlier completion of coursework, improves performance in tests, allows deep and meaningful learning opportunities, increases retention rates and builds learning communities." Additionally, Giossos *et al.* (2009: 2) state that there is need for dialogue within the context of clearly-defined educational targets, cooperation and understanding on the part of the teacher, which culminates in solving the learners' problems. In other words, dialogue is more than a two-way communication as it takes into account all forms of interactions.

Regarding the moral aspects of educational dialogue, Buber (1965: 184) submitted that the basic movement of genuine dialogue and thus of education itself, is a truly reciprocal conversation in which teachers and students are full partners. In other

words, an educational institution should engage in an active dialogue with the students through the provision of student support services. The academic and administrative student support at the NUST-COLL regional centres in the form of tutorial classes, assignments and tutor-marker comments should translate the course content to be learned into a format appropriate for the students' current state of understanding using available technologies. Dialogue at NUST-COLL regional centres takes place during face-to-face sessions, and in some instances, it is mediated by communications media such as emails, student webmail, mobile phones and eLearning. Moore (1983: 157) describes dialogue as the extent to which, in any educational programme, the providing institution and the students are able to respond to each other. This is normally determined by the content or subject-matter to be studied, the educational philosophy of the institution and the students, and the environmental factors like, the medium of communication. The definition was then further expanded to include learner-to-learner interaction and the creation of knowledge (Moore, 1993: 24). In other words, students should also interact with one another to create new knowledge and make their contributions.

While the researcher concentrated more on the positive attributes of dialogue as a method of constructing knowledge, it is also true that dialogue has its problems. Dron, Seidel and Litten (2004: 163) submit that dialogue will inevitably lead to departures from planned outcomes and result in new, unanticipated learning outcomes. In this regard, Farquhar (2013: 35) argues that a teacher who encourages dialogue and creates low transactional distance is the one who must be willing to slacken structure in the interest of building substance. He further points out that it does not mean that a course with high structure necessarily lacks substance; however, it is worth noting that substance and structure can certainly coexist, but in the absence of dialogue, what counts as knowledge in the classroom will be unilaterally determined by the teacher (Farquhar, 2014: 35). In this context, it would be worthwhile for distance education institutions to employ instructional designers that possess knowledge, skills and ability to design materials that encourage dialogue. Furthermore, from my experience as a manager of distance education, I contend that capable facilitators or tutors working to ensure that opportunities for good dialogue are being maximised are needed during face-to-face tutorials.

Moore (1980: 21) described structure as the extent to which the objectives, implementation procedures, and evaluation procedures of a teaching programme are prepared, or can be adapted, to meet specific objectives, implementation plans, and evaluation methods of individual students.

In other words, structure is a measure of the educational programme's responsiveness to the learner's individual needs. Additionally, Moore (1993: 26) emphasised that structure expresses the rigidity or flexibility of the programme's educational objectives, teaching strategies, and evaluation methods. He further argued that the quality of the programme structure depends on how carefully these elements are constructed. Furthermore, Moore (1993: 26) submitted that structure in a programme is a qualitative variable which is determined largely by the nature of the communications media being employed, and the philosophy and emotional characteristics of teachers, the personalities and other characteristics of learners, and the constraints imposed by the educational institutions. He argued that a recorded television programme, for example, is highly structured because every activity of the instructor/lecturer, the time (duration) provided, and the whole content is predetermined. Farquhar (2013: 31) concurs that the learner's opportunity to articulate questions and receive responses would be blocked or altogether lost. Dialogue in this case does not exist because the programme cannot be reorganised to take account of inputs from the students (Moore, 1993: 26). Similarly, he noted that high programme structure decreases the extent of dialogue, which in turn increases the extent of the transactional distance. Moore (1993: 27) clarified that when a programme is highly structured and teacher-learner dialogue is non-existent, the transactional distance between learners and teachers is high.

While Moore's definition and views on the relationship between dialogue and structure are pertinent to this study, it is also important to understand the critical analysis of transactional distance theory by other researchers and authors. From the findings of other studies, Gorsky and Caspi (2005: 5) submitted that dialogue should not be viewed only as in-class and synchronous, but also as out-of-class, both synchronous and asynchronous. Accordingly, three types of dialogue were identified: in-class discussion, out-of-class face-to-face interaction, and out-of-class electronic communication. Similarly, two dimensions of structure were identified and defined: course "delivery-implementation," which includes teaching methods, learning

activities, and pace; and course "design-organisation," which includes attendance, objectives, and choice of readings, requirements, deadlines, and grading (Gorsky & Caspi, 2005: 5). As Farquhar (2013: 31) argues, DE course designers should consider in advance whether the subject matter can accommodate weaker structure in exchange for greater opportunities for dialogue. It is also my view that distance students should be trained in study skills and time management in order to reap maximum benefits of the course content.

The third variable of transactional distance theory is learner autonomy. Moore (1993: 27) opined: "the greater the structure and the lower the dialogue in a programme, the more autonomy the learner has to exercise." Giossos *et al.* (2009: 2) defined learner autonomy as the extent to which the learner exerts control over learning procedures. Moore and Kearsley (1996: 8) emphasise that it is important for distance education organisations to know what knowledge students themselves feel they need, and to develop courses that take into account what they want to learn. Furthermore, students may also be regarded as potential sources and creators of knowledge, and courses may be designed to employ project and other self-directed learning activities. NUST-COLL offers certain courses through the eLearning mode. Students that register for courses on eLearning learn through the Internet, study from home, and decide when to study, enjoy interactive online tutorials and group activities and more importantly, get guidance from a personalised tutor support (PoN, 2014: 11). Furthermore, personalised tutors mark all the student activities such as tests, quizzes and assignments. In this sense, it is evident that "learner autonomy" presents DE students with the opportunity to self-direct and work without much guidance. One of the challenges faced by DE programmes offered in a dual mode system (where both conventional and DE are used in delivering courses) is the use of teachers who are accustomed to conventional face-to-face tutoring (Mbwesa, 2014: 185). As Mbwesa (2014: 185) argues, DE teachers need to be well trained to appreciate their roles in facilitating learning in DE courses. Institutions offering distance education should, therefore, make deliberate efforts to train and orientate tutors and equip them with necessary capacity to manage students and programmes. Effective learning in distance education requires well trained and experienced tutors to assign tasks that promote autonomous learning to students.

At a macro level, the theory of transactional distance examines how the three key variables: dialogue, structure and learner autonomy interact to either increase or diminish transactional distance, and the psychological separation between the instructor and the learner (Shearer, 2009: 17). As indicated earlier in this section, Moore (1993: 26 – 27) submitted that when dialogue is high and structure is low, we have low transactional distance, and if dialogue is low and structure is high we have high transactional distance. Furthermore, when autonomy is high and dialogue is low, we may still have low transactional distance, as high levels of dialogue may not be required by the autonomous learner (Shearer, 2009: 17). Figure 2.2 shows the relationships between the three variables (D – dialogue, S – structure and A – autonomy) of transactional distance (TD).
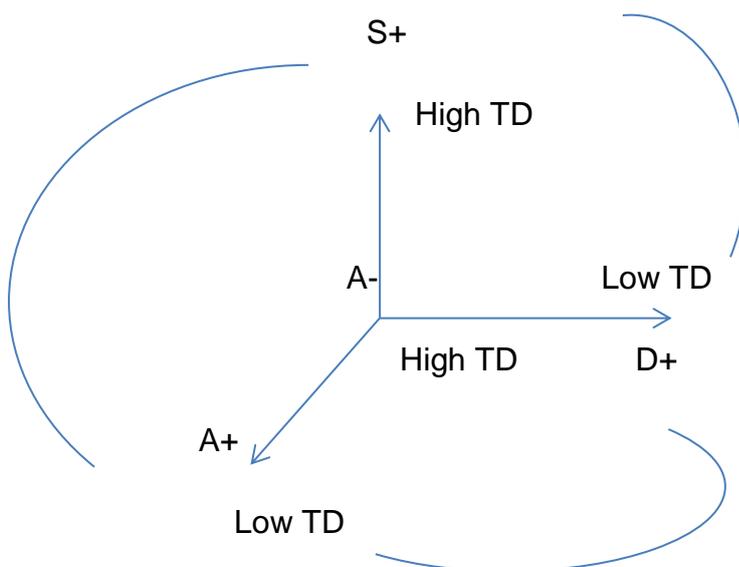


**Figure 2.2: Relationships between three variables of transitional distance theory**

**(Source: Shearer, 2009: 17)**

According to Garrison (2000: 3), a theory such as transactional distance is invaluable in guiding the complex practice of a rational process such as teaching and learning at a distance. As Jung (2001: 527) argues, the theory of transactional distance

provides a useful conceptual framework for defining and understanding distance education in general.

The separation (distance) between students and lecturers (institutions) affects both teaching and learning; hence the need for effective student support services to address the shortcomings. Tait (2014: 14) remarked that as institutions pull themselves out of constructivist pedagogy and towards connectivist pedagogy, the ways in which support to students can be given changes. Additionally, as responsibility is more and more shared with and between learners, diminishing the hierarchy of subject experts and students, so the new practices of learner analytics are being developed. Tait (2014: 14) refers to learner analytics as a back-system to diagnose and identify when and how learners might need support, deriving from learning within, not separated from, the module or programme. The transactional distance theory outlines the pedagogical aspect of distance education especially with respect to the provision of SSS which are aimed at promoting the success rate and reducing dropout rates. More dialogue on distance education reduces transactional distances but dialogue becomes non-existent when the programme is highly structured (Moore, 1993: 27). It is, therefore, important for DE institutions to consider the three variables when designing and implementing SSS to promote flexible learning, increase success rates and reduce student dropout.

In the 21st century, the landscape of distance education is changing in terms of challenges facing DE institutions to provide quality education through distance education mode. It is critical to integrate new and emerging technologies to deliver education at a distance as discussed in Section 2.2.3.

### 2.2.3 Virtual Learning Environment (VLE)

Generally, Virtual Learning Environment (VLE) can be defined as a learning environment mediated by computers and technology. Wilson (1996: 8) defined VLE as a computer-based environment that is a relatively open system, allowing interactions and encounters with other participants, and providing access to a wide range of resources. Analysing the given definition of VLE, one starts thinking about concepts such as eLearning, computer-aided instruction (CAI), web-based environment, multimedia, MOODLE and blended learning. As highlighted in Section

2.4.5, NUST has adopted a blended learning approach, which allows a combination of instruction media, different instructional methods and a combination of online (eLearning) and face-to-face instruction. Using the internet as medium for distributing teaching materials and a platform for learning activities, can reduce both geographical and transactional distance. This is currently the case because VLEs have now become part of the essential educational infrastructure in many higher education establishments for academics, administrators and students. In this regard, it is important that institutions of higher learning offering distance education should explore all communication mechanisms to ensure that effective learning takes place.

According to Piccoli, Ahmad and Ives (2001: 403), VLEs share many similarities with computer aided instruction (CAI), or computer micro-worlds as students can access the materials independently, individuals can follow different paths through it and can utilise different material displays. Piccoli et al. (2001: 403) aptly argue that the VLE concept is broader than CAI since it adds the communication dimension to previously individualised learning. With many communication media such as emails, mobile technology (WhatsApp, Facebook, Twitters and Messenger) and eLearning, I submit that institutions of higher learning especially those that are offering distance education should integrate these information and communication systems with the traditional learning environments. According to Piccoli et al. (2001: 403), traditional learning environments are defined in terms of time, place, and space. They further note that the definition of traditional learning environment is expanded by including dimensions like technology, interaction and control. In this context, VLEs allow students to access learning materials anywhere and promote dialogue which leads to effective learning. Table 2.1 below clarifies how Virtual Learning Environments differ from traditional classroom education.

**Table 2.1: Classification of dimensions of Learning Environments**

| Dimensions | Definition | Comparison |
|---|---|---|
| Time | The timing if instructions, VLEs free participants from time constraints. | When instruction is delivered asynchronously in a VLE, participants retain control as to when they engage in the learning experience. Learners determine the time and pace of instruction. |
| Place | The physical location of instruction. VLEs free participants from geographical constraints | Participants access the learning material and communicate with classmates and instructors through networked resources and a computer-based interface, rather than face-to-face in a classroom |
| Space | The collection of materials and resources available to the learners. VLEs provide access to a wide array of resources | While it is feasible to expand the traditional model of classroom-based instruction to include the variety resources available in VLEs (Leidner & Jarvenpaa 1993, 1995), generally these materials remain only a secondary resource in instructional-led classroom education. |
| Technology | The collection of tools used to deliver learning material and to facilitate communication among participants | In VLEs, technology is used to deliver learning materials and to facilitate many-to-many participants. Text, hypertext, graphics, streaming audio and video, computer animations and simulations, embedded tests, and dynamic content are some examples of delivery technology. Electronic mail, online threaded discussion boards, synchronous chat, and desktop videoconference are some examples of communication technology. |
| Interaction | The degree of contact and educational exchange among learners and between learners and instructors | VLEs rely on information and communication technology to create the venue of knowledge transfer and learning progress. Unlike computer microworlds, VLEs are open systems that allow for communication and interaction among the participants. Unlike traditional education, VLEs support student-to-student and student-to-instructor connectivity throughout the learning experience in a technology-mediated setting. |
| Control | The extent to which the learner can control the instructional presentation. Control is a continuum enabling the design of varying degrees of learner control (Newkirk 1973) | A certain degree of learner control can be built into traditional classroom instruction, but VLEs have the potential to provide far greater personalisation of instruction and a much higher degree of learner control than traditional classroom education. Traditional learning environments do allow students, when outside of the classroom, to control the pace and sequence of material, and the time and place of their study. VLEs, however, provide this flexibility during instruction as well. |

**Source: Adapted from Piccoli et al. (2001: 404)**

Table 2.1 outlines the difference between the traditional learning environments (TLEs) and virtual learning environments (VLEs). While the VLE looks flexible with added advantages over TLE, I contend that in order to fully implement VLEs, institutions of higher learning offering distance education should understand how their students can benefit from such technology. Another aspect for consideration is the training of staff on using the VLEs, creating excellent content and coming up with appropriate pedagogical uses of the environment.

Tait (2014: 6) submits that it is important to place the changes for learning driven by the digital revolution in a longer term perspective, and then more specifically, to link these to the student support dimensions of distance education. In this sense, the integration of eLearning and other ICT media would contribute effectively to the much-needed student support services. Ideally, students should be given freedom to choose their most preferred medium of communication for effective interaction with the other students and academic staff. E-learning is the use of technology to enable people to learn anywhere and anytime. Ahmed and Mahanta (2012: 46) defined eLearning as education via the internet, a network, or a standalone computer.

Additionally, eLearning applications and processes include web-based learning, computer-based learning, virtual education opportunities and digital collaboration. Similarly, Wang and Hwang (2004: 410) submit that eLearning denotes "information and communications technology enhanced learning by delivering learning contents and activities via internet, intranet/extranet, audio/video…i.e. via an environment consisting of hardware, software and personnel". From the two given definitions, it can be deduced that the concepts of eLearning, online learning and web-based learning are synonymously used to refer to learning by network technologies. It is my contention that to achieve effective administrative and academic support services through different technological media, institutions of higher learning must consider how and to what extent students are going to interact with the system and how students can best be equipped to make the best use of the tools available. In my view, these should be considered before the design, development, implementation and the use of VLEs.

## 2.3 NATURE OF DISTANCE EDUCATION IN NAMIBIA

To understand the Namibian education context better, it is necessary to explore its background during the apartheid administrations.

### 2.3.1 Background of education in Namibia

As a former German and South African colony, Namibia endured all forms of discriminations, namely: disparity between the colonisers and the colonised, provision of well-calculated limitation of skills to perpetuate the privileges of the ruling class and restrictive measures used for selecting blacks for further studies (Shilongo, 2004: 1, 8). Until 1990 when Namibia attained independence, the education system was shaped by the policies located within the framework of the apartheid ideology (Government of the Republic of Namibia [GRN], 2004: 29). This education system reflected a wider apartheid political ideology of societal separation defined according to race. I believe this was done by the South African government to further strengthen the apartheid state's machinery of transmitting skills and attitudes required for maintaining their status quo.

Under that system, access to education and training was limited to a privileged few mainly white people. The political system was designed in a way that ensured that black Namibians received inferior education which prepared them to be good servants of the colonial masters (Tjitendero, 1984: 7). Similarly, Namupala (2000: 17) claims that the skills education taught to black people were deliberately kept basic in order to enable them to become workers on farms and in white household settlements. As stated by GRN (2004: 29), the system produced learners who were semi-literate, and did not gain any meaningful or essential skills which would prepare them for life.

It is my argument that the majority of indigenous black learners were not given quality education that would prepare them to think and act independently. Shilongo (2004: 8) confirms that "lower educational standards in black schools coupled with stringent use of the dominant class language, examinations and the use of corporal punishment prevented learners from being selected to higher levels of education". She further concluded that these factors were used as restrictive measures for

selecting blacks for further studies or keeping them out of the system. The few students wishing to acquire tertiary education had to go to South Africa or other countries, since tertiary education only started in 1980 (PoN, 2014: IV). In this respect, the Academy for Tertiary Education was established by Act No. 13 of 1980 to provide teacher training and secretarial courses (PoN, 2014: IV). Later on, Act, No. 9 of 1985 of the South African administration was then promulgated for the Academy to consist of a University component (the present university of Namibia), a Technikon for technical programmes related to science and technology, and College of Out-of-School (COST) for vocational training programmes such as diploma and certificate courses in various disciplines.

Independence in 1990 heralded a new era in the provision and philosophy of education, informed by the historical inequalities of the apartheid period and driven by four goals, namely access, equity, quality and democracy, as highlighted in the country's Vision 2030 (GRN, 2004: 29). Namibians had to assume responsibility in different sectors of the country's economy, and education was one of the top priorities in order to develop strong human capital. If equitable participation in the economy is to become a reality, those who have been disadvantaged, especially those who experience discrimination on the basis of region, poverty and gender, should have fair access to education in Namibia (Ministry of Higher Education, Vocational Training, Science and Technology [MHEVTST], 1998: 24). Furthermore, expanding access to education increases productivity and economic growth (Ministry of Education and Culture, 1993: 3). Additionally, the new government of the Republic of Namibia declared in article 20 of the country's constitution that all people should have access to education and that the state must provide reasonable facilities to render effective education. This calls for the establishment of tertiary institutions in Namibia to address economic development and societal problems and inequalities. From my experience, I have observed that over the past 25 years, the government of the Republic of Namibia has invested a considerable portion of the national budget into education.

Even before Namibia attained independence in 1990, it was already recognised that ODL has the potential to address the country's educational and training needs in a cost-effective manner (Möwes, 2008: 1). In terms of the White Paper on Higher Education of 1998, ODL can offer most Namibian adults the most economical,

effective and accessible opportunities to seek tertiary level qualifications (MHEVTST, 1998: 68). Most adults that require education and training have families to manage or full-time jobs, may be involved in community services and live far from the capital city, Windhoek, which hosts most tertiary institutions. Additionally, the costs of living such as accommodation rental and transport fees are very high and unaffordable for many people. As such, because of its flexibility, ODL can accommodate the varying levels of enrolment and has the capacity to reach out to all fourteen regions of the country. Another observation is that, ODL can also play a very important role in the provision of opportunities for lifelong learning, which is central to the country's social and economic development. Therefore, I concur with Möwes (2005: 1) that distance education has come to be accepted as a well-recognised mode of education and training both relevant to, and necessary for meeting the emerging demands of Namibian society. Currently, many Namibians are studying through distance mode at various institutions in the country, which is a strong indicator that distance education will continue to accommodate people who cannot study full-time due to different commitments.

### 2.3.2 Tertiary institutions offering Distance education programmes in Namibia

As Mehotra, Hollister and McGahey (2001: ix) observed:

> distance learning, or distance education, is not a future possibility for which higher education must prepare, it is a current reality creating opportunities and challenges for educational institutions; a reality offering students expanded choices in where, when, how, and from whom they learn; a reality making education accessible to ever larger numbers of persons.

The Government of Namibia should be commended for creating an environment that allows for the establishment of institutions of higher learning. The establishment of the Namibian Open Learning Network Trust (NOLNET) in 2001, as a smart partnership between four publicly funded institutions and the Ministry of Education is testimony that Namibia values distance education. The four publicly funded institutions providing ODL programmes at both pre-tertiary and tertiary level in Namibia are the Centre for External Studies at the University of Namibia (UNAM-

CES), the Centre for Open and Lifelong Learning at the PoN (PoN-COLL), the Namibian College of Open Learning (NAMCOL) and the National Institute for Educational Development (NIED) (Möwes, 2008: 1). NOLNET was established to foster collaboration and networking in open and distance learning, (National Council for Higher Education [NCHE], 2010: 9). As such, a memorandum of understanding was signed between the Ministry of Education and the four public institutions to ensure the implementation and coordination of ODL activities in the country and put quality control mechanisms (Möwes: 2008: 3). Currently, there are other tertiary institutions in Namibia that cater for distance education, like the International University of Management (IUM) and the Institute of Open learning (IOL). Furthermore, many Namibians are studying via ODL through other universities outside the country. It is my considered view that DE provision has become a critical factor and viable choice for areas that are not reached by conventional education system or for professionals who need to upgrade their skills outside the confines of fulltime education.

2.3.2.1 The University of Namibia

As stated in Chapter 1 (Section 1.1), the University of Namibia (UNAM) was established by an Act of Parliament, No. 18 of 1992, to serve as a centre of higher learning and research and to train high-level specialists in critical areas necessary for national development (MHEVTST, 1998: 60). According to Section 4 of the Act, the University aims "to provide extension services" and also "to further training and continuing education." These clauses legitimated the basis for the development and management of ODL activities through the University's Centre for External Studies (CES). CES caters for educational needs of people who, for a variety of reasons, cannot come full-time to any of the 12 University campuses to further their studies, (UNAM-CES, 2014: 13). Furthermore, through its eight regional centres, CES offers all programmes by ODL mode, whereby the medium of instruction is through the printed materials supplemented by weekend tutorials. In other words, CES provides both academic and administrative SSS to students, to promote flexible learning and increase the success rate. It is important to note that the main medium of instruction at CES is through the printed materials, which are occasionally supplemented by

weekend tutorials, 1 – 2 week contact sessions by way of audio, audio-vision, video conferencing and telephone tutorials (UNAM-CES, 2014: 13). UNAM-CES offers eight (8) honours degree programmes, eleven (11) diplomas and four (4) certificates in different areas of specialisation such as education, accounting and entrepreneurship, nursing science, administration and educational management as well as HIV management and counselling (UNAM-CES, 2014: 15).

Even though UNAM-CES claims to be ensuring greater access to higher education and equity for students with various educational backgrounds, there have been different views on students' perceptions on the support services and the quality of distance education offered to them by CES. Matakala, Tshabangu and Zulu (2014: 6-8) reported that DE students are seldom invited to induction programmes at the beginning of every academic year, that they usually receive assignment feedback very late, and they are not involved in planning and organising UNAM activities such as the cultural festival, student quality day and graduation ceremonies. Furthermore, there is lack of effective collaboration between DE tutors and university lecturers who usually design modules and set examinations. It was also reported that lecturers in UNAM academic departments often make changes to the curriculum during the year without properly informing DE students and their tutors through CES (Matakala et al., 2014: 8). Brown, Lewin and Shikongo (2014: 106) proposed that there should be training of UNAM face-to-face academics, that is, those that mark DE assignments, tutor and develop or design study materials on ODL functions. This training could address issues such as the quality of materials and creative approaches to ODL experiences.

2.3.2.2 The Namibia University of Science and Technology

The PoN, which was renamed the Namibia University of Science and Technology (NUST) in 2015 grew out of former Academy for Tertiary Education founded in 1980 (NUST, 2017: iv). It was established by an Act of Parliament, No. 33 of 1994, to provide post-secondary education and continuing education (MHEVTST, 1998: 72). Before the existence of PoN-COLL, the administration of Polytechnic distance activities was the responsibility of UNAM-CES, but in 1996, the Polytechnic delinked its DE activities from CES and the University of Namibia to establish its own DE centre, (MHEVTST, 1998: 77). In 1997, a decision was taken to establish a separate

distance centre within the PoN, the COLL, in order to facilitate the delivery of ODL programmes (Möwes, 2008: 2). NUST has since taken over and the DE centre is known as NUST-COLL which has grown over the years and continues to grow yearly in terms of student enrolment and staff complement. As a result, NUST-COLL's building infrastructures in the regions might not accommodate the ever-increasing number of students. It is, therefore, urgent that NUST-COLL should start expanding its building infrastructure, teaching and learning facilities and increase support staff in the regions to provide sound administrative and academic support services.

Through distance education mode, to date, NUST-COLL offers certificates, diplomas, bachelor's degrees and honours degrees in accounting and finance, public and business management, transport management, logistics and supply chain management, economics, marketing, human resources, vocational education and training, English and communication as well as hospitality and tourism management (NUST-COLL, 2017: 4). Furthermore, academic and administrative support services are offered to the students through ten regional centres.

In 2012, NUST-COLL registered 2927 students in various programmes that were available on distance education mode of study, which represented 22.6% of the total enrolment of 12966, (PoN, 2012: 49). The number of students doing courses on distance mode continues to grow significantly since NUST allows full-time students to register for some courses on a distance mode. It is therefore important that NUST-COLL has the necessary staff and infrastructure so as to provide quality service to its students, stakeholders and staff.

As LaPadula (2003: 120) notes, support that is readily available to on-campus students is lacking for distance learners and that creates further isolation, which can be discouraging and lead to failure. The researcher observed that distance students at the NUST-COLL regional centres do not or cannot make use of student counsellors, dean of students, student representative council and different sport and cultural platforms as these are only available on the main campus in Windhoek. My view is that these services have the potential to eliminate "student isolation" and increase the success rate. It can also be argued that extra-curricular activities such as sport, cultural groups and debates can develop students' time management skills, and increase motivation and confidence among others benefits. Furthermore,

Namibia is a vast country covering a surface area of 825,418 square kilometres, and as such, the current number of regional centres may not be accessible to all registered students due to distance and financial reasons. Therefore, it would be prudent to establish study centres across the country, to supplement the regional centres so as to reduce travelling costs to NUST-COLL regional centres for library services, especially for the rural communities without electricity and internet connectivity.

2.3.2.3 Namibian College of Open Learning

The Namibian College of Open Learning (NAMCOL) was established by an Act of Parliament (Act No. 1 of 1997) and falls under the jurisdiction of the Ministry of Education (NAMCOL, 2014: 10). The primary goal of NAMCOL is to contribute towards social and economic development of the country by providing opportunities to out-of-school youth and adults to acquire general education and upgrade their professional and vocational skills (NAMCOL, 2014: 5).

NAMCOL provides the platform for out-of-school youth and adults to improve their performance in various junior and secondary school courses with the purpose of gaining entry into tertiary institutions for further studies. Like any ODL institution, NAMCOL has established its credibility both nationally and internationally through the provision of student support services.

Young people in Namibia are both a major human resource for development and key agents for social change, economic development and technological innovation (GRN, 2004: 35). This implies that developing the capacity of the youth to participate in their own development and national development will not only have a major positive impact on the short-term social and economic conditions, but also on the well-being and livelihood of future generations. In this regard, NAMCOL has developed and introduced a number of professional programmes to address training needs in the market, namely four (4) certificates and three (3) diplomas in education, local government studies, youth development and community-based work, (NAMCOL, 2014: 39). Equally important, in 2013, NAMCOL started offering Technical and Vocational Education and Training programmes (TVET) which include automotive mechanics, welding and metal fabrication, plumbing and pipefitting, and

office administration (NAMCOL, 2014: 11). Like UNAM and NUST, NAMCOL provides learner support through printed materials and face-to-face tutorials in all 14 regions of Namibia. NAMCOL contracts fulltime teachers from schools around the country to act as face-to-face tutors for its students. Since they have full-time jobs which keep them busy at school, these tutors may not provide sufficient support to the NAMCOL students. Therefore, NAMCOL should employ full-time tutors in order to provide efficient academic support to students. Furthermore, NAMCOL learners take the same examination as "formal" secondary school learners since the courses are equivalent to those offered in the Namibian Government Schools; hence it is necessary to prepare them for the examinations. It is common knowledge that the majority of learners at NAMCOL are repeaters (from Grade 10 or 12) and should be able to get better symbols than they scored at school, but that is not always the case. Therefore, NAMCOL should be mandated to do an evaluation of learner support services in order to improve the learners' performance.

2.3.2.4 National Institute for Educational Development

According to MEC (1993: 75), teacher education before independence in Namibia was inadequate in both quality and quantity. Additionally, Namibia had very few qualified teachers at independence; hence the Ministry of Education proposed a transformation of the entire education system in line with the major goals of access, equity, pedagogical effectiveness, and democratic participation. To address the problem of unqualified and underqualified teachers, it was necessary to introduce teacher in-service training programmes of some sort. As an intervention, in 1991, the government established the National Institute for Educational Development (NIED) to spearhead curriculum reform of the formal education system through curriculum and material development, pre-service and in-service training for teachers and general educational research (Möwes, 2008: 2). NIED offers the distance-taught Basic Education Teacher's Diploma (BETD) to unqualified teachers to complete their studies and upgrade their qualifications while continuing with their teaching duties. According to Coupe and Goveia (2003: 1), NIED offered two programmes, namely Basic Education Teacher Diploma for In-Service Teachers (BETD INSET) and Instructional Skills Certificate (ISC). Teachers had to pass ISC as a prerequisite for

BETD INSET, which was a four-year comprehensive in-service teacher-training programme. As mentioned earlier, education under the apartheid regime was characterised by hindering factors like the irrelevance of curriculum and an inadequate teacher education programme. Furthermore, the majority of teachers were not prepared for the tasks assigned to them (MEC, 1993: 75). Coupe and Goveia (2003: 1) concurred that the majority of teachers only had grade 12 level of education without any formal teaching credentials. The question could be asked: How can the NIED effectively train more teachers using limited financial resources, especially when the targeted teachers are scattered throughout the country teaching full-time? To answer this question, Coupe and Goveia (2003: 2) emphasised that in Namibia's current situation, the adoption and integration of technology in distance education would be the best mode to train and provide ongoing support to teachers.

Using technology in distance education clearly could reach the majority of teachers in Namibia. However the type of technology to be used should be accessible to all the students in both urban and rural areas.

The NIED project encountered several constraints impeding successful adoption of the new technologies in the DE programme of the Ministry of Education (Coupe & Goveia, 2003: 5). According to them, most of the constraints experienced were more on environmental characteristics such as the expansion and the use of ICT in Namibia. In spite of the constraints, many teachers that were trained through the BETD INSET programme are now qualified. The Ministry of Education, through the NIED project has learnt many lessons, namely access, timing, human resources, cost issues and issues of appropriate uses of technology to plan for the future teacher training programmes in Namibia. In my view, DE institutions should learn from the experience of the Ministry of Education to improve the provision of SSS. Moreover, all DE institutions should provide quality support services that are accessible to all students irrespective of their geographical location. NIED continues to give training to teachers, examination markers and school administrators on effective management of schools and implementation of course syllabi.

## 2.3.2.5 International University of Management

The International University of Management (IUM) is a private university in Namibia which was officially launched in 2002. The university has its roots in the Institute of Higher Education which was founded in 1993 (IUM, 2014: 18). With five campuses in Namibia, IUM offers programmes on management science and ICT from certificate to postgraduate level to more than 8000 students within the country. Distance education is a fast-growing mode of study within many institutions of higher learning. Besides the increased number of distance students, evidence suggests that there is poor resource allocation and little attention given to distance students' engagement compared to conventional fulltime students (Matakala et al., 2014: 1). IUM launched its Distance and Open Learning programme in 2009 to give an opportunity to persons who, for various reasons, could not access full-time or part-time university programmes to enrol through distance mode (IUM, 2014: 106). Currently, IUM has outsourced the administrative aspects of distance mode to the Institute of Open Learning (IOL), but the university produces study materials, sets and marks all assignments and examinations (IUM, 2014: 106). Furthermore, the university continues to pursue collaboration and partnerships with universities in the realm of ODL.

Matakala et al. (2014: 3) maintain that most distance education providers are mindful of the challenges under which most of their students study, and acknowledge the need to provide academic support to enable students to complete their study programmes. Overall, students tend to be more critical of the type of support services offered since they constitute much of their interaction with the institutions and thus form their perceptions on quality provision or lack thereof. As part of this study, I paid a visit to the IUM Walvis Bay branch to familiarise myself with the available facilities for the students, and learned that the branch does not have a designated printer or photocopy machine for students. Students are provided with a soft copy of study guides (Manuals) to go and do their own printing elsewhere. Practically, it would be more convenient for students to print their assignments and make copies from the available resources at the branch than printing elsewhere. The branch library is too small with very few books for the students to borrow. Just like at the NUST-COLL regional centres, IUM students are only allowed to borrow 3 books

for 5 days. I have also observed that IUM students complain a lot through local newspapers about the delay in their examination marks, processing requests and issuing of certificates after completing studies. It would seem that the delay in releasing the results is due to the manual system used at the IUM branches. To date, the IUM branches in the regions are still using a manual system to capture marks, request and process academic transcripts, and receive payments from students. This is an indication that the regional branches have not yet fully decentralised and acquired necessary infrastructure and systems and as a result they rely on the services from the university headquarters in Windhoek. It was encouraging, however, to notice that the Walvis Bay branch had more computers in addition to a wireless network for the students to do research. To all intents and purposes, quality support services mean that students have access to facilities that would enhance their learning and promote good performance. In this sense, it would be prudent for IUM to provide printers, photocopying machines and more books to the library to meet the needs of all the students in the regions.

## 2.3.2.6 Institute of Open Learning

The Institute of Open Learning (IOL) is an accredited distance education institution in Namibia, with the aim of contributing to the educational, economic and social advancement of all Namibians (IOL, 2014: 02). IOL operates in six regional offices in the country to provide SSS to all the registered students.

It is generally held that the provision of solid SSS is necessary to retain distance students and increase the success rate. As LaPadula (2003: 120) aptly put it: "It is unrealistic to expect students that do not come to campus for their education will travel to campus to access student services". IOL uses technology to provide student support services that assist students to become more effective and efficient (IOL, 2013: 7). In other words, IOL regional centres are equipped with free photocopy and fax services, typing facilities, a computer centre with free internet, library and e-resources, face-to-face tutorials and student counsellor. Additionally, IOL was reported to be in the process of producing a complete set of DVDs containing videos of face-to-face contact classes on all subjects (IOL, 2013: 7). Distance students may enrol in an institution with career, educational, or personal problems that will stand in the way of their learning if not addressed. Therefore, counselling becomes

imperative in this sense because it provides a safe and confidential space for students to deal with personal and academic issues that affect their studies. Currently, IOL offers qualifications at certificate, diploma, honours degree and master's degree level in education and police science.

There are also other private and commercial educational institutions in Namibia that offer a variety of programmes through open and distance learning at different educational levels. This is commendable as it would help the country meet its development and educational needs as laid down in Vision 2030, the Education and Training Sector Improvement Programme (ETSIP), and other policy documents. Both academic and administrative SSS are essential for all institutions offering distance education to increase the success rate and ensure the quality of education.

## 2.4 THE NEED FOR STUDENT SUPPORT SERVICES

According to Simpson (2002: 07), student support consists of both academic and non-academic support aimed at increasing retention and graduation rates. Undoubtedly, SSS play a critical role in imparting quality education to distance students, reducing dropouts and increasing graduation/success rate. In this world of technology and dynamic social and economic challenges, the support services should be upgraded to be more responsive to the contemporary issues. Tait and Mills (2002: 112) argued that SSS are as important for the financial health of an institution as the production of teaching materials. Student support services are regarded as critical for income generation in three ways, namely widening participation in the context of recruitment and retention, contribution to market research, and being the public face of the institution by providing high quality services which may be a unique selling point of an institution in the future. They concluded that those institutions which are successful in the future may find that it is the quality of their SSS which provide a competitive edge. There is no doubt that distance education offers opportunities for a large number of people to access further education and training. However, the challenge is whether this access leads to success or graduation for the majority of registered distance students. LaPadula (2003: 120) argues that student support can increase enrolment at tertiary level and provide a well-rounded programme for students from different backgrounds. Learner support should no longer be regarded as an add-on function for a specific

department, but all departments designing materials for distance education students should do so knowing that students will use them with minimum face-to-face interactions. This implies that educational institutions offering distance education should integrate learner support component into their course design activities.

The significance of student support services within distance education mode is of paramount importance, hence Mills (2003: 106) argues that a greater emphasis on more focussed learner support could have more lasting impact on retention rates if approached holistically and integrated fully in the learning process. From my experience as a regional coordinator, I have noted that a significant number of students admitted through mature age scheme needed constant support and guidance to be self-directing in certain learning situations especially during the first stages of their studies.

Nonyongo (2002: 128) identified major weaknesses in the University of South Africa (UNISA) system after apartheid ended, such as low success in terms of completion and throughput rates, the correspondence nature of programmes in comparison with well-functioning distance education and inadequate learner support exacerbated by a lack of a co-ordinated regional network of learning centres. While it is very difficult to isolate the variables in an educational system and identify a simple causal relationship between learner support and student success, the UNISA example before reform in 2004 provides the clearest case for the importance of learner support in a distance education institution (Tait, 2003: 02). Furthermore, the UNISA scenario provides the best documented case of the dangers of developing distance education without adequate learner support. The following serves as the rationale for introducing SSS in any DE institution, such as the NUST-COLL regional centres.

### 2.4.1 Student isolation

Studying through ODL is often a very lonely experience, and according to Simpson (2002: 10), distance students are isolated from other students, their tutors, institution and sometimes even their own families and friends. This applies to geographical isolation as well. Such isolation may prevent any possibility of dialogue about their studies. Based on Moore's theory of the transactional theory of distance education, dialogue through effective student support overcomes isolation as it promotes

communication between tutors and students. The provision of effective SSS can make a positive difference to completion rates. The majority of students at some NUST-COLL regional centres live in remote areas and may find themselves isolated from the institution and contact with peers, which often results in feelings of loneliness and anxiety. Lack of interactivity with peers and tutors can be attributed to lack of electricity for computers, mobile networks (internet) and long distances. Simpson (2002: 10) further suggests that isolation is probably the key factor responsible for dropout as students who fail to establish support networks are more likely to withdraw from their studies. It is also critical to implement an effective communication mechanism that will combat some of the effects on geographical isolation. This would ensure that all students irrespective of the distance from the regional centres or campus are not left out.

## 2.4.2 Retention of students

Simpson (2002: 09) states that one characteristic of ODL is its high dropout rates in comparison with conventional institutions. He based his argument on a survey of 3000 UK evening course students by Woodley (1987), who found a 21% dropout rate by the end of the term, followed by a massive 58% failing to enrol subsequently. Student support, especially student guidance and counselling, tutor support, and effective information and administrative systems all provide a range of activities that enhance teaching and learning which reinforces students' sense of confidence, self-esteem and progress (Tait, 2003: 04). Furthermore, interventions are crucial when students have not completed work on time which makes timely and effective contribution to the reduction of dropout. Effective SSS would attract and retain students to an institution as long as it responds to the students' needs. As Granger and Benke (1998: 128) note: "successful student support is a result of every aspect of the programme, from a prospective student's first awareness of the programme to graduation day, working in an integrated fashion to maintain the student's engagement and process". The point is that some students may find it difficult to handle the self-instructional materials they receive from NUST-COLL, or they may find it difficult to access e-resources using facilities at the centre; hence the required knowledge of study skills can be provided through student support services. This is a

process which starts with orientation, registration and academic support through to graduation.

Distance education requires intensive, well-organised support which should be provided to all registered distance students using different technologies in areas such as mentoring, providing accurate information, counselling or induction programmes, can increase the rate of retention (Brewster & Railsback, 2001: 22). This is important and can be facilitated through training workshops, which may be conducted before the actual registration in order to give students some background in various programmes so that they can be well acquainted and know what their preferred fields of study entail.

### 2.4.3 Student Identity

Unlike the full-time undergraduate students at universities for whom "university student" is possibly their exclusive designation for the duration of their stay on campus, most of the distance students differ in the sense that they are part-time adult students. Effective SSS are critical for increasing the pass and throughput rates of students studying through NUST-COLL regional centres. Because of other commitments, studying is often second, if not a third priority for most of DE students (Möwes, 2005: 39). Learning within the DE context may be a daunting prospect for many students as their performance may be directly related to the anxiety engendered (Jegede & Kirkwood, 1994: 279).

This implies that adult education students need support services that contribute to: maintaining or increasing student motivation, promoting effective study skills, providing answers to administrative queries, providing access to resources and providing guidance through the study materials.

As a former tutor for Mathematics at NUST-COLL regional centres for three years, I observed that, besides their work, family and social commitments, many students had other challenges like poor high school background and lack of basic skills in using technological media. Latchem (2010: 89) emphasises that both DE tutors and students need to be prepared and trained in the technical skills of using ICT. My view is that to derive optimal benefit from distance learning, DE students should be

trained and be skilled on the basic use of technological information services such as standard office software package (word processing), internet (accessing e-resources and library, email, and Skype) and mobile/telephone tutoring. It is my contention that problems such as distance and transport to attend face-to-face tutorial classes can be solved by using a variety of media and technologies.

## 2.4.4 Understanding an institution

While DE institutions strive to overcome barriers that previously prevented students from accessing formal education, in the process, they also create barriers of their own. In particular, students may find the modes of operation from initial registration, selection of courses and various delivery methods which are non-traditional, strange and confusing. Most DE adult students did not have senior secondary education or Grade 12 certificate because they were pushed out of the education system by circumstances, and as such, they might lack basic knowledge and skills which could serve as a foundation to understand the mode of operation. This might be a problem that NUST-COLL needs to address. Some courses such as Information Competence (ICT521S) and Computer User Skills (CUS411S) are only offered through the eLearning mode for all students at NUST. Some adult distance education students cope with difficulty as they struggle to understand the course objectives while at the same time they are struggling with computer literacy and the use of technology in general. Other courses such as Basic Science (physics, chemistry and biology) and Basic Statistics are also proving to be barriers for adult distance students since most of them did not do either mathematics or science at school.

To overcome this hurdle, they need more intensive support in the form of tutorial guidance and coaching besides the designed materials for self-study. It is argued that the way adult students approach any learning activity reflects their previous learning experience, their level and type of formal education, modern learning styles, their current circumstances such as jobs, and the needed skills that they need in order to increased competences (Möwes, 2005: 40). It is common knowledge that no university wants to have graduates that only have qualifications in the form of papers but without the ability to apply their knowledge. Therefore, it is important that some form of coaching by means of teaching or facilitation should be provided to students

so that they can internalise the course objectives for later application and problem solving.

Qakisa-Makoe (2005: 45) asserts that one must must know answers to the following questions when developing learner-centred study materials: Who are the beneficiaries of the course? Will the course serve the students any purpose? What are the objectives of the course? How do students get to understand the course content or how will the course content be delivered to students? It is important for the course designers and material developers to know who the targetted students are, course objectives to be achieved and the types of support they need. Arguably, students would be in a better position to understand and pass CUS411S course if they could be fully computer literate. If students are inducted or oriented properly into the open and distance learning system, they are destined to respond and understand the system better, and consequently perform better in their studies. Student orientation is of paramount importance as it prepares students for the academic life on campus, institutional culture, and how the institution operates. Furthermore, the introduction of academic and non-academic SSS into all DE programmes will play a critical role into ensuring students' success. Therefore, it should be highlighted that the quality of service rendered by the NUST-COLL regional centre, which is the first point of contact for distance learners, must play a critical role in the student's subsequent academic success.

### 2.4.5  Students' demands

While students' demands might be considered to be pedagogically weak in the theoretical sense, it is, however, the fact that those students will always demand better services such as library, internet, tutorial classes and marker-tutor assignments. Tait (2003: 03) argued that students in an ODL system are in a better position to choose with whom they study and what they want from the institution. In other words, students can choose to enrol for tertiary education at other institutions in the country such as University of Namibia, International University of Management, Institute for Open Learning or other distance institutions outside the country. Simpson (2002: 10) reiterated that as ODL provision grows, so competition mounts. He further states that where students have a choice, they judge institutions by the quality of the materials they produce, and probably even more by the standard

of student support they provide. Students at NUST write the same examination irrespective of the mode of study they study through, and pay the same tuition fees. The full-time students are taught by full-time lecturers, while the NUST-COLL regional students are taught by part-time lecturers/tutors that are employed from local industry. From my observation, some students start their studies at NUST in fulltime mode, and later change to the distance mode in their second or third year due to various commitments like employment. These students demand attention from the tutors (value for money). Students are admitted through different routes such as mature age, advanced standing and normal entry requirements of 25 points in 5 Grade 12 subjects or more; their academic preparedness might be different based on their educational backgrounds. To retain students within an ODL system, solid student support must be integrated in an ODL system.

The current practice at NUST is that certain courses require distance students to write assessment tests set up by fulltime lecturers. The main challenge I have observed is that the timetable for the tests does not take into consideration the unique circumstances and availability of distance students. Some distance students miss out on the tests because they are not free from work. In this sense, it would be more convenient for distance students to write tests on Fridays and Saturdays. DE providers must provide SSS that are responsive to students' needs in order to create a productive learning environment for students.

**2.4.6 Moral reasons for student support.**

Moral reasons for student support are normally odd when designing study materials or providing support services, but Simpson (2002: 10) argues that just like in any education activity or programme, the moral aspect in ODL is an obligation to ensure that all students are happy, supported and get motivated to continue with their studies. Furthermore, if the provision of student support is a justification for students to complete their studies, then there is a higher moral imperative that sometimes conflict with that, especially when the institution/tutors have to convince students to continue with their studies in difficult situations that they sometimes find themseves in.

Sometimes, a student support officer or tutor may have pressing and irreconcilable demands depnding on a situation. For instance, in some cases, some students experience difficulties, such as illness, divorce, bereavement or inability to cope with the academic demands of a course. One might not be decisive whether to encourage and support students experiencing problems to continue with their studies or allow them to withdraw, especially when students show signs of giving up. If students drop out of their studies, they become a dropout statistic, which is not good for the image and objectives of distance education. Simpson (2002: 11) contends that this line can only be drawn if sophisticated and clearly-thought-out student support policies and procedures are in place. It would be helpful for students to visit tutors or NUST-COLL regional staff when they have personal problems to seek counselling and guidance, but the question is whether NUST-COLL regional centres have the capacity to handle their daily activities and attend to individual students' personal problems. The point is that NUST-COLL regional centres serve many distance students with only two fulltime administrative employees with heavy workload of other activities. It is common knowledge that distance students will always have problems that require some form of counselling; thus, there must a be a platform at the regional centres to attend to counselling needs of the students.

## 2.5 STUDENT SUPPORT SERVICES OFFERED BY NUST-COLL REGIONAL CENTRES

Simpson (2002: 13) classifies SSS into two categories: academic support and administrative support. Academic support refers to a wide variety of support services aimed at assisting students to understand the course objectives. These include library resources, tutoring services and instructional methods. It also includes well-defined course objectives in tutorial letters sent to students, discussions during face-to-face tutorials, eLearning and other interactive media. Face-to-face tutors share the assessment procedures, provide feedback on their progress and develop students' critical thinking, numeracy and communication skills.

Administrative support involves various activities that facilitate safekeeping of student records, examinations arrangements, registrations and administration of financial resources. It involves giving information to students, exploring problems and suggesting directions to students. NUST-COLL is aware of the difficult circumstances in which many of its students have to study, and therefore, regional centres provide support services to students in the regions, (PoN-COLL, 2014: 08). Many students are scattered around the country, and to cater for them, SSS are provided through NUST-COLL regional centres. This study concentrated on the support services offered at the COLL regional centres; hence this section outlines different SSS on offer. Students apply through the NUST-COLL regional centres, register and get all the services locally from first year until graduation. Materials are designed and printed at the main campus in Windhoek, and sent to regional centres via courier services. Each NUST-COLL regional centre is managed by a Regional Coordinator and a Student Support Officer to ensure efficient and effective provision of SSS to all the distance students. Orientation, face-to-face tutorial classes, marker-tutors, library services, eLearning, vacation school and telephone tutoring are some of the SSS provided at the NUST-COLL regional centres.

### 2.5.1 Orientation

An orientation programme is offered for first year students in all the study programmes just before they begin their studies. It normally takes place after the close of the registration period. During the orientation sessions, available services are outlined as well as the procedures to be followed to access the services. The regional coordinators also use the platform to explain the roles of the students and how to use all the materials received during the registration process. Moore (2012: 167) stresses that all students should receive orientation upon entering study programmes. This is true as the orientation course can reduce the need for individual counselling at a later stage. It is my contention that senior students who migrate to distance mode should also be given orientation. This is because distance education operates differently from fulltime studies whereby students are expected to know the procedures to be followed and the degree of freedom that comes with it. In other words, DE students are expected to comply with rules and procedures with minimal supervision from NUST-COLL. DE students take full responsibility for their studies in

terms of completing their assignments, balancing studies and other responsibilities, and finding solutions to their problems through the support system.

Matakala et al. (2014: 6) reported that DE students at UNAM Centre for External Studies are seldom invited for induction programmes at the beginning of every academic year. Consequently, they are deprived of information such as where to seek for help on study materials and which office to approach about information technology. They further highlighted that fulltime students do not experience this problem. It is my contention that admitted prospective DE students should attend the compulsory orientation programme to help them understand the institution, services available to them, choices over course registrations and get information and resources that will allow them to make informed and appropriate academic plans. Based on the above, I strongly believe NUST-COLL regional centres can launch the new student orientation programme before their registration and not after as the current practice. From my own experience and observation as NUST-COLL regional coordinator, I can say that, orientation before registration will prevent unnecessary course or programme cancellation. While counselling is regarded as crucial for distance education students, COLL regional centres do not have a special counselling unit; hence only the regional coordinators and student support officers counsel students on course choices and exemptions, among other things.

### 2.5.2 Face-to-face tutorials on Saturdays

Face-to-face tutorials are organised locally, for two hours per course every week at the regional centres. These tutorials are facilitated by locally-contracted qualified, tutors who also bring along some industry experience. To qualify as a tutor, one should hold the minimum of an honour's degree with experience, but preferably a master's degree. Tutors are not professionally trained to deal with, facilitate and handle distance students; hence they use their professional judgement to respond to the students' needs. In an effort to highlight their roles and responsibilities, a meeting is convened by the regional coordinator for all the tutors at the beginning of each semester. Face-to-face tutors are advised to collaborate and consult with marker-tutors responsible for the courses that they teach to ensure parity of standards and

the delivery of quality education, (COLL, 2013: 05). Whether face-to-face tutors contact marker-tutors and fulltime lecturers for collaboration, there is no evidence of an organised platform that brings them together unless done on an individual basis. It is, therefore, the tutors' role to provide academic support, encouragement and motivation to the distance students, supported by the regional coordinators.

The theories of distance education recognise the importance of pedagogic and motivational value of student support. Garrison (1989: 25) observes that students need support to develop independent learning skills. He argues that learner control does not only concern independence in terms of choice (where to study, time to attend classes, pace and methods of learning), but also with the learner's competencies (ability and willingness to learn independently, and availability of human and non-human support to guide and facilitate learning). There is high flexibility and independence among the DE students as the decision to attend tutorial sessions is entirely up to them.

Currently, for every course with five or more students registered, face-to-face tutorials are offered for a minimum of eight hours per month, that is, two hours per week. The schedules for face-to-face tutorials with the names and contact details of the tutors are given to all students before the tutorial sessions start for the semester. Unfortunately, if there are fewer than five students registered in a specific course, face-to-face tutorials are not offered as they are assumed to be economically unviable. Similarly, if there is no qualified tutor to facilitate a certain course, students are left to study by themselves for the semester and they are expected to write the examination. All the distance education students write the same examinations as the full-time students at the end of the semester though there are differences in the teaching approaches used and how they prepare for the examinations.

Support for DE tutors is sometimes lacking, leading to further isolation and failure of distance students. Matakala et al. (2014: 8) state that there is a lack of effective collaboration between DE tutors and university lecturers who usually design modules and set examinations. It is my view that NUST-COLL regional DE tutors should be trained to be able to help the students articulate their learning needs, guide students to construct their knowledge actively rather than just absorbing knowledge from the tutor or study guides and initiates dialogue between course material and students.

Similarly, training of DE tutors should provide them with a broader understanding of the nature of students at the NUST-COLL regional centres and this, I believe, will motivate the DE tutors to have a better understanding and introduce creative supporting tools during the contact sessions.

**2.5.3 Marker-tutors**

Assignments from distance education students are used as a teaching tool, and marker-tutors do not just mark in a conventional manner, but they also offer the necessary advice and encouragement on how students may improve and make progress towards being successful at the end of the semester (PoN-COLL, 2014: 09). The regional staff forward all the received assignments to NUST-COLL head office for recording before the markers collect them for marking and thereafter, the marked assignment and the feedback letter is posted to the student.

Marker-tutors' feedback on assignments is an important issue in distance education: Kintsch (2009: 230) highlighted that feedback allows students to assess their current level of understanding, provides hints about what to do when their understanding is inadequate, and marker-tutors must carefully select new texts to be studied that afford the students opportunities to learn more advanced strategies. It is my observation as a NUST-COLL regional coordinator that the turnaround time of assignments is too long. Students normally receive the marked assignments after the submission of the second assignment which in my view does not allow students to improve their performance in the second assignment. Wilkinson (2003: 1) contendes that corrective feedback is needed to enable students to understand whether attempts to improve learning and experience lead to improvements. According to Cowan (2002: 6), most DE institutions, like in the UK, use end of module questionnaires to collect feedback on students' levels of satisfaction towards feedback from marker-tutors. I am not sure about the quality and effectiveness of feedback from the marker-tutors, but I concur with Chetwynd and Dobbyn (2011: 67) that effective feedback on student assignments plays a vital role in retention and in the development of self-regulating students, particularly in the first year. Similarly, Tshaka (2011: 9) contended that written feedback should always be constructive, clear, unambiguous and motivating. My question, however, is that if the feedback comments are elaborate, constructive and encouraging, why do students perform

poorly in the examination? It is my observation that the comments given to DE students through the assignment feedback letters are general and do not address individual student's academic problems.

### 2.5.4 Library Services

All NUST-COLL regional centres have mini libraries with limited number of copies of resources, prescribed books and recommended books. In terms of NUST-COLL's regional centre library policy, students can borrow up to four books for four days (COLL, 2014: 10). Some books remain in the library to be used as reference by all students that may require them. The number of students studying on distance mode via regional centres has grown over the years. It is my contention that the demand for library books surpasses the number of available copies. I have observed that most of the time, students do not return borrowed books to the library on the due dates due to the number of days given to them. The library also has a number of very useful resources, such as past question papers and supplementary materials from full-time lecturers that are accessible on the website: http://www.nust.na/library/library.php such as past examination papers and supplementary materials from full-time lecturers. Every centre is equipped with at least ten computers, connected to the Internet for students to browse. Students that own portable computers can also be connected through Wi-Fi to have access to all the available resources, especially when all the centre computers are occupied or the centre is closed. Furthermore, students use computers in the library to type their assignments and submit them electronically to the markers but manual submission is also allowed. I concur with Diaz-Maggioli (2004: 14) that technological support, such as the use of computers, can help students engage in the learning situations that can promote self-regulated learning and ensure successful completion of assignments.

My contention is that the reason why regional centres are equipped with computers is that it is providing a platform for students to access e-resources, submit online assignments, write eLearning tests and browse through internet. It is also my observation as a NUST-COLL regional coordinator that on average, NUST-COLL centres such as Ongwediva and Walvis Bay serve more than 300 students each. Therefore, I argue that the number of computers at the centres is insufficient to serve the needs of the students.

## 2.5.5. ELearning

NUST-COLL offers eLearning as another mode of study in addition to full-time, part-time and conventional distance education at NUST. Currently, NUST-COLL offers six (6) courses on eLearning and these can be accessed through http://elearning.nust.na by all interested students. Additionally, all students must do Computer user skills (CUS) and Information competence (ICT) which are only available in the eLearning mode. This is compulsory for all distance programmes. Students need to first register for eLearning during the normal registration period, attend face-to-face orientation sessions at the NUST-COLL regional centres before they can gain access to the VLE for eLearning courses. Studying via eLearning enables students to: interact regularly with the personalised tutor support and fellow students; have a much more interactive learning process than studying by conventional distance mode; get feedback, questions, tasks and assignments online; submit assignments via VLE; have a dedicated tutor who will provide online support during the duration of the course; and access the study guide and other additional materials directly from the course site (NUST, 2017: 9). Furthermore, students are expected to allocate about four (4) hours per week to access their eLearning accounts for updates and other activities.

E-Learning is the use of technology to enable students to learn anytime and anywhere via the internet, network, or standalone computer (Mahanta & Ahmed, 2012: 46). It can be argued that eLearning provides an effective and cohesive virtual learning environment where DE students are not required to use paper, and should experience no delays on feedback, and no travel expenses to the centre. However, Mahanta and Ahmed (2012: 50) contend that eLearning is not suitable for students that do not have self-discipline in terms of time management. Most of the DE students are working adults and may not find time to participate in discussions and view updates.  As discussed in Section 2.3.1, lack of electricity, internet connectivity and long distances from the COLL centres can possibly make it difficult for students to access their eLearning accounts. I contend that the rural DE students who do not have access to computers with internet may find it difficult to access their eLearning accounts. Furthermore, DE students who work at sea and in the mining industry would be disadvantaged since they are out of network coverage most of the time.

## 2.5.6. Vacation School

Vacation school for distance education students is offered twice a year once per semester during April and August in Windhoek. Students from all the 10 NUST-COLL regional centres come together to attend tutorial classes with head office (main campus) tutors. Just like face-to-face regional tutorial classes, all students are encouraged to attend. It is a valuable opportunity for students not only for academic purposes, but also to make use of library facilities and to meet their tutors and fellow students.

During the vacation school, DE students write compulsory assessment tests in certain courses. Unfortunately the students who for various reasons do not attend the vacation school miss out on the tests. I contend that NUST-COLL management should adopt a flexible mechanism which allows students to take their tests at the regional centres during vacation school period. With modern technologies such as videoconferencing and Webex, DE students can attend vacation classes at their respective regional centres but until technology becomes available, they must attend the sessions in Windhoek.

## 2.5.7 Telephone/email-tutoring

Marker-tutors are available for tutoring and academic advice through emails and telephone correspondence. The tutors' contact details are given to all students upon registration, and students are advised to make use of this service (PoN-COLL, 2014: 9). However, from my experience as the NUST-COLL regional coordinator, I have noted that distance education students do not make use the telephone-tutoring facility maximally. Another concern is that most tutors have fulltime jobs at different companies and only offer their services of tutoring and marking assignments outside their official working hours, which may have a negative effect on the quality of teaching. In this regard, telephone or email tutoring can work well when both students and tutors are committed to achieving improved performance. However, it should be well-coordinated, and where feasible students and tutors should agree on the time for tutoring.

## 2.5.8 Multi-media and eLearning

The instructional materials for some courses are supplemented with CD's and/or DVDs and given to students upon registration as part of their instructional materials. Tutoring and student support through mobile learning tutorials and "teleteaching" tutorials are also available for some courses (PoN-COLL, 2014: 10). Teleteaching refers to tutoring through the Internet in real time (live) whereby students connect with their tutor and participate in an online tutorial from wherever they are. This way, students and tutors are not constrained by place as in the normal face-to-face tutorial session. All that is needed is a reliable internet connection and a headset to connect at the agreed scheduled time (PoN-COLL, 2014: 10). These facilities are available at all the NUST-COLL-regional centres across the country.

Mobile learning (mLearning) is a way in which mobile phones can be used to support distance education students by providing them with access to electronic resources to supplement existing study materials; providing the means to facilitate collaborative learning; providing the means to have regular contact with the tutor/lecturer; and creating opportunities for regular formative assessment with feedback (PoN-COLL, 2014: 10). All the information for these additional media is stipulated in the tutorial letters given to students for the relevant courses.

According to Tarawneh, Alzboun and Tarawneh (2011: 107), multimedia can be defined as the seamless digital integration of text, graphics, animation, audio, still images and motion video in a way that provides individual users with high levels of control and interaction. DE students can access fulltime lecture presentations, motion video and still images via MOODLE which is available within their eLearning accounts. NUST-COLL regional centres are equipped with webcams and head phone sets for the students to use in the laboratory without disturbing fellow students. Students can search the source of information in a shorter time and construct their knowledge by getting the meaningful information from anywhere. However, Tarawneh et al. (2011: 110) established that multimedia requires high-end computer systems that are compatible with sound images, animation and video, which constitute large amounts of data. Large amount of data slow down or may not even be compatible with low-end computers. Multimedia would work well if all DE students had access to multimedia-capable computers. However, it is worrying that

many DE students do not have computers or electricity and internet connectivity especially in the rural areas. Besides having computers at NUST-COLL regional centres with the related software, students should possess a minimum level of computer literacy in order to exploit the capabilities of this medium of learning. From my experience as the NUST-COLL regional coordinator, I have noted that many DE students, especially the new ones in first year do not have computer literacy skills; yet it is critical that all DE students should be computer literate upon admission, or do computer literacy in the first year of their studies.

## 2.6 DROPOUT, RETENTION AND SUCCESS RATES AT NAMIBIA UNIVERSITY OF SCIENCE AND TECHNOLOGY

Dropout, in this study, refers to a decrease in the number of students participating in course activities or a degree programme before the completion of the programme. Retention represents the number of students who persist from one level to the next in their degree programme, while success rate refers to those students that manage to graduate with a degree or diploma. The issue of retention, success and dropout rates in distance education have been investigated and vigorously contested for many decades. According to Muse (2003: 257), a student may drop a course that places considerable and immediate demand on acquiring and mastering a set of tools, add-ons, and other learning aids, especially if they believe that they are falling behind in their studies or are being affected in some other negative way. It is also argued that institutions do not pay attention to anxiety, which is one of the factors that influence student success. According to Kurt and Gurcan (2010: 454), anxiety leads to failure and a decrease in coping mechanisms which occurs when individual students learn new things or when they show resistance to change.

The researcher has observed that a significant number of distance students drop out of their studies or cancel some of their courses. Furthermore, most students who persist spend more than the official allocated time to complete their studies. One can make these conclusions from semester enrolment statistics but the NUST annual reports on statistics only give the actual number of students registered at the end of the academic year; thus, there is paucity of information from NUST-COLL-regional

centres. Tyobeka (2012: 68) found out that the success rate at the NUST dropped by nine points from 68% in 2006 to 59% in 2010. However, dropout rates decreased from 23% to 19% during the same period. These rates were attributed to the rapid increase in the student enrolment over the years as well as the low lecturer to student ratios. It is, therefore, imperative to develop interventions intended to further decrease dropout rates and significantly boost success rates for the NUST-COLL regional centres in particular.

The number of students that exceed the prescribed study periods at the NUST continue to increase on a yearly basis and this affects many students especially when some programmes are phased out. Kandjii (2016: 32), in a media release to a local newspaper, indicated that 1792 students were informed in 2015 that they had either exceeded their study period or had failed to make adequate academic progress in two consecutive years. This is an indication that these students would be forced to drop out of their studies if their appeal was not successful. The distance students that exceeded their study periods had been studying for more than ten years, which is the maximum number of years to study via distance learning for a four-year degree programme.

At NUST-COLL regional centres, attempts have been made to provide SSS such as computer laboratories, and telephone/email tutoring to bridge the geographical distance between the tutor and the student. However, I have observed that the uptake in terms of the use of these services has not been satisfactory. This is partly because most DE students are employed fulltime and might not be happy with external factors such organisational support, financial problems and time constraints. Aguti, Nakibuuka and Kajumbula (2009: 16) highlight different reasons for student dropout such as personal, employment, financial issues, academic preparation and choice as common to DE students in general. However, they note that personal problems may sometimes be overcome with the help of guidance and counselling of students while effective pre-entry advice, information and admission procedures could reduce the incidence of dissatisfaction with chosen courses or careers. These problems are applicable to NUST-COLL regional centres as well. As stated earlier under section 2.4.1, I propose that COLL gives orientation to all DE admitted students before they register and provide a student counsellor for regional centres. Not all DE students can afford to pay for tuition fees, and therefore, it would be

helpful in the Namibia Student Financial Assistance Fund (NSFAF) could fund all students irrespective of the mode of study. NSFAF provides funding in the form of repayable loans to all Namibian citizens who have been admitted and registered as full-time students for different programmes at tertiary institutions (Uri-khob & Sheehama, 2012: 8). Accommodation and transport are very expensive in Windhoek, where students can go for full-time studies. Therefore, as highlighted earlier, it would be worthwhile for NSFAF to fund all students who cannot afford to pay for their studies irrespective of the mode of study.

## 2.7 SUMMARY

This chapter has outlined the nature of education in Namibia before and after independence in 1990. The institutions that offer distance education programmes in Namibia were described as well as their activities with regard to the provision of student support services. Furthermore, this chapter discusses factors that justify the integration of student support services in distance education system before highlighting the provision of support services at the NUST-COLL-regional centres across the country. The success and dropout rates at NUST were also outlined. The next chapter presents the global perspectives on SSS in ODL.

# CHAPTER 3: GLOBAL PERSPECTIVES ON STUDENT SUPPORT SERVICES IN OPEN AND DISTANCE LEARNING

## 3.1 INTRODUCTION

The Chapter discusses the factors to consider when designing the student support system for DE students, how to enhance SSS and outlined practices of student support system at two DE institutions, namely; University of South Africa (UNISA) and Open University of United Kingdom (OU).

Distance education (DE) has existed globally for a long time in different forms. Simpson (2002: 1) indicated that open and distance learning is more than 150 years old and dates back to the early days of one social revolution – the 'Penny Post' with Isaac Pitman's correspondence courses in shorthand. This was followed by many revolutions later, particularly the information technology (IT) revolution, which has contributed an explosive growth and changes in open and distance learning globally. As distance education evolved over time, technology has played a critical role in its movement which has pushed distance education into a new realm of new possibilities. In other words, people are now able to do and study courses with institutions that are thousands of miles away, communicate to the course instructors any time and even do payments online by using technology.

Kelly and Mills (2007: 149) emphasise that the goal of open and distance learning is to widen participation and to overcome geographical, social and economic barriers. This begs the question: what should DE institutions do to overcome these barriers? The researcher believes that barriers can be addressed through the provision of effective and relevant academic and non-academic support services to distance students. The support services must be designed in the context of the students concerned in order to be responsive to their needs and challenges. That means the entire support system of academic and student services must go hand in hand with teaching and learning in order to achieve excellence in education. Student support is a critical component in ODL as it has been identified by many distance education proponents as particularly important for student success.

DE providers need to work harder than traditional on-campus SSS in order to create an environment that is supportive of students. To support this contention, Wheeler (2006: 175) contends that distance students tend to require more support than their classroom-based counterparts, and therefore, support needs in DE can be linked directly to an individual student's motivation. Though there is a growing recognition of effective provision of SSS to distance education students, Simpson (2002: 1) further argues that support services have not yet received the attention they deserve. Furthermore, what is also increasingly clear is that, student support needs to be included in distance learning programmes at the initial planning phase and the support should be "fit for purpose" (Mills, 2003: 106). Moreover, Granger and Benke (1998: 128) make it clear that successful student support is a result of every aspect of the programme, from a prospective student's first awareness of the programme to graduation day, and should work in an integrated fashion to maintain the students' engagement and process. Similarly, Phillips (2003: 170) argued that support services need to be available at every stage of the student's career at entry, during study, between courses and at the end of the study programme.

The goal of student support programme as argued earlier (see Chapter 2, Section 2.2), is to increase retention and success rates of DE students and help them progress from one level of higher education to the next. Distance education is fast developing, particularly because of the fast development of information and communication technologies. This rate of development has a direct influence on the preferred methods and techniques available in distance education. Most distance education students remain employed full-time for various reasons such as family, socioeconomic circumstances and physical distance from the institution of their choice. Moneta (1997: 7-8) notes that students seek remote access from home and work, and therefore, the need for effective student support is critical. Students have become increasingly resistant to cumbersome and costly visits to campus for seemingly trivial interaction with support personnel and clerical service providers. They would rather have the inconvenient trips to campus for bill paying, course registration, and even library services be reduced. It is, therefore, essential that DE students should receive all the necessary support during their studies.

Distance education in Namibia is fast becoming a choice even to the young high school leavers who want to pursue studies at the NUST.

NUST only has one full-time campus located in Windhoek. Due to the high cost of accommodation, transport and other expenses in Windhoek, after completing Grade 12, some applicants register for distance education at NUST-COLL regional centres. Since these students are not employed, they need to be engaged in meaningful dialogue which can only be facilitated through the available support services. Dhunpath and Dhunpath (2013: 106) rightly argue that one of the key contributors to poor retention and graduation rates is that the systems and resources supporting ODL teaching and learning are premised on the assumption that the distance education universities serve the needs of mature adult working students who have the capacity to take responsibility for their learning, are capable of learning alone or in their own time, can learn from a variety of learning materials and are active rather than passive learners. However, in practice, this is not always the case, and hence, DE institutions should design substantive support services that will increase success and retention rates. Additionally, Simpson (2002: 10) notes that as ODL grows, so competition mounts in terms of the demand for quality services. With many DE providers on the market, students have a choice and they will judge institutions by the quality of material they produce, and probably more by the standards of the student support they offer. It is, therefore, important that ODL institutions make adequate provision of SSS a priority in their planning and development of course materials. The researcher believes that the periodic evaluation of support services with the inclusion of students themselves may provide a support service model that is valued by all students.

## 3.2 FACTORS TO CONSIDER IN THE DEVELOPMENT OF ADEQUATE STUDENT SUPPORT SERVICES

As indicated in Chapter 1, Section 1.3.2.1, every country has a unique experience in terms of culture, societal principles, technology and the quality of basic education. In other words, factors to be considered for the development of adequate SSS vary from institution to institution. Equally important, the student support system to be put in place should integrate student needs, the requirements for the course content, institutional context and the type of technology to be used in order to provide an effective and efficient service to the students.

Nonyongo (2003: 123) argues that the quality and applicability of any learner support structure is designed based on the nature and philosophy of the total distance education system of the country and the institution concerned.

The landscape of higher education, especially the DE landscape has seen significant changes over the years. The emerging technologies have revolutionised the provision of education and learning. In the 21$^{st}$ century, we have moved from the industrial age through the information age and now to the knowledge age (Mahanta & Ahmed, 2012: 46). Their argument is that knowledge and its efficient management constitute the key to success and survival for organisations in today's highly dynamic and competitive world of today. Similarly, Tait (2014: 13) maintains that the impact of ICT has profound implications for the integration of teaching and student support. It is imperative for DE institutions to invest more resources in the most relevant technology which will benefit their students rather than implementing the use of technology which will not be accessible to the students. It is important then that all students of the university of science and technology like NUST should be equipped with internet-enabled portable computers. Students would then be able to submit their assignments online, but the manual submission option should also be open to cater for students that cannot use the technology due to other factors like lack of network connectivity.

Möwes (2005: 51) spelled out two different approaches to student support: one relying exclusively on non-continuous communication, namely communication by media like the written, recorded or tele-transmitted word; the other continuous, including face-to-face contact as more or less self-evident elements of distance education. Distance education has evolved over the years, and the researcher believes that the combination of the above approaches with an integrated element of technology would present a more efficient approach. Additionally, the designed support system for any institution should be evaluated continuously to address emerging student needs. To address the myriad needs of DE students, DE institutions should adopt a holistic approach towards the design, development, implementation and assessment of ODL environments. Identifying the individual elements that constitute a holistic approach to distance education can be a challenging task, and it is the role of lecturers to identify these elements in order to effectively plan and design a quality student support system.

Discussed below are some of the factors to be considered in the development of SSS, namely; student characteristics, course or programme demands, technological infrastructure, and geographical environment.

### 3.2.1 Student characteristics

In some cases, DE students register for an odd programme just to supplement their general education and gain some formal skills necessary for the job market. If proper guidance and information were provided during the orientation programme before registration, students could register for the programmes that they need and not because they are influenced by other students who register for such programmes. It is generally believed that students that are motivated to do a certain programme hardly quit, which in turn, reduces dropout rates. Sangeeta (2014: 194) submits that lack of motivation leads to high non-completion rates of students in distance education. That is, DE students generally feel lonely due to lack of communication and competition in education (ibid). It can also be argued that some students register for studies through distance education without proper understanding of how it works and necessary tools to be successful in the programme. To succeed in their studies, it is important to provide students with training on necessary tools used throughout the programme. Simpson (2002: 150, 153, 155) highlights that the central concept in the development of an effective SSS is meeting the needs and expectations of the students. It is important to know the background of the students for whom distance education programmes are designed, such as employment status, educational background, geographical situations, communication technology connectedness and others in order to design an inclusive and integrated student support system. Most distance students are full-time working adults, family heads and community service providers who, in most cases, are isolated from institutions and overburdened with different responsibilities and lack of mobility.

Furthermore, students can be illiterate in many ways. Some students may lack techno-literacy or their access to mass media and technology may be low or non-existent. Additionally, some students might only have a chance to study through the distance mode for different economic reasons such as non-affordability of campus hostel fees, and they might not be prepared for DE challenges.

The support system should, therefore, accommodate students of different characteristics to curb preventable dropout incidence, and increase success and completion rates.

Distance education provides study opportunities to most students from disadvantaged or poor background through mature age entry scheme or recognition of prior learning. Collins and Milliard (2013: 74) posit that inadequate understanding and failure to address differences between students from mature age entry point and those that meet normal entry requirements leads to low completion rates. They call for a redressed educational awareness of students that need support from the entry level.

### 3.2.2 Course or programme demands

Simpson (2002: 190) argues that courses that are mostly academic and knowledge based may have different support structure from those that have skill elements such as teacher training courses. Such skill-based courses are more likely to require substantial face-to-face support contact. These are issues related to teaching and assessments. Another critical aspect of facilitating distance education learning is the experience of tutors. Mbwesa (2014: 186) recommends that DE teachers need to be well trained to appreciate their roles in facilitating learning in DE courses. Tutors should be given additional training to help them manage DE programmes taking into account special needs and demands of the DE student and DE approaches.

Most institutions of higher learning have semester and year courses. The question of whether the courses are assessed by means of continuous assessment or examination, depends on issues related to teaching and assessment policy. Some questions that could be posed are what activities will be covered, who is going to teach/facilitate the activities, for instance, tutors or lecturers, and the necessity of face-to-face tutorials. The researcher, however, notes that the admission criteria should ensure that admitted students can cope with the course demands within the provided support system. The core argument here is that distance institutions should plan student support as an integral part of teaching and learning, rather than introduce damage control mechanisms when students are not coping with the course demands.

It is important to be mindful of the fact that some adult students that register for distance education, especially those that are admitted through mature age scheme do not have Grade 12 level education. Therefore, the challenge for the distance education institutions is to ensure that all students are prepared to cope and perform well in certain courses such as Basic Science, Computer-user skills and mathematics.

### 3.2.3 Technological infrastructure

Gulati (2008: 01) notes that modern communication technologies, such as the internet, can potentially offer possibilities that eliminate geographical access and cost barriers to learning. These barriers include poverty, limited educational infrastructure and cultural practices in some developing countries where access to higher education is limited for married women. While Gulati's argument is true, it is necessary to consider issues of internet connectivity and access to different types of technologies, such as the internet connectivity, access to television and availability of electricity to operate electronic gadgets when planning for SSS. Wright, Dhanarajan and Reju (2009: 2) argue that some government and institutional personnel in developing countries often implement eLearning or online learning without first establishing if it will work for their students and their institutions. The argument is that online learning may not be realistic for students who read by candles and kerosene lamps or students who reside in areas without internet connectivity. However, Wright, et al. (2009: 3) acknowledge that there are many benefits for institutions offering DE to introduce technologies, such as greater access to information, enhanced communication emails/eLearning or Webex and face-to-face instructions through simulations. Planning for effective technological infrastructure will not always be perfect because of many unforeseen challenges and developments, but Bates (2000: 212) argues that the "imperfect nature of planning and management should not diminish the need for deliberate strategies to implement effective technology-based teaching." It is, therefore, important that distance institutions must put in place a clear, detailed plan for implementing technology by involving all the stakeholders.

Mahanta and Ahmed (2012: 46) are of the view that the introduction of eLearning in distance education has the potential to transform how and where adult and full-time employed students learn as long as the student has internet connection.

However, they also acknowledge that there are major technological limitations such as necessary hardware for eLearning – desktop or notebook computers and relevant resources (Mahanta & Ahmed, 2012: 49). Additionally, factors such as internet coverage, limited bandwidth, electricity and distances to the study centres can affect the successful implementation of eLearning platforms. Therefore, it is critical that ODL institutions should give students options to choose between doing a course via eLearning or using the traditional method of face-to-face classes and writing examinations.

### 3.2.4 Geographical environment

The framework for the development of a planning tool for SSS, developed by Tait (2000), articulates geographical environment as one of the key elements that play a crucial role in deciding the type and volume of SSS needed. Factors like population density in rural and urban areas, the availability and cost of transportation as well as some cultural constraints can help in determining the type of support service needed, such as where to establish the regional centre or the usage of radio and television programmes. While the above factors remain significantly important in the planning process, Tait (2014: 07) outlines the ways in which text, print, transport, electricity, radio and digital technologies have provided solutions to many people globally. Additionally, technology has been closely associated with changing the human experience of learning and education systems for centuries.

As Mbwesa (2014: 177) argues, print media is still a key DE delivery mode especially in developing countries and marginalised communities in rural settings where ICT developments are still not fully implemented. In most cases, students are spread over wide geographical areas such that they experience a physical distance from the campus or regional centres.

### 3.3 HOW TO ENHANCE STUDENT SUPPORT SERVICES

Most student support activities require interaction between the individual student and the distance institution to yeald the desired goals. There are online universities globally that use information and communication technologies (ICT) succesfully to deliver SSS to distance education students. This serves as evidence that technology

can change the way DE institutions deliver support services to their students. Gulati (2008: 1) acknowledges that using technologies in education is now a global phenomenon. In other words, technology can be used in distance education to distribute materials for learning equitably across students that are far from the university campus. It can enable lecturers to reach their students to discuss course objectives and content. Furthermore, Ivala (1999: 9) explains the benefit of integrating technology, like the internet into distance education. He argued that integrating internet-related technologies with other media such as print, video conferencing, radio and television would promotes dialogue between students and lecturers and this has a potential to increase success rates. Furthermore, the implementation of media and multimedia may lead to accommodation and promotion of different learning styles, which might be needed by all students to internalise course objectives. Technology can be the best tool to expose many students to different ways of learning such as visual, auditory and kinesthetic.

Integrating technology in distance education to widen its scope and strengthening the capacity of distance education providers to meet the needs of the masses is of paramount importance. Moore (2013: 123) supports the usage of ICT, which has transformed many areas of distance education such as library services. Through ICT, students can spend less money on buying books and travelling to campus library by accessing e-resources, such as books, journals, theses and even requesting some materials from the personal librarians. NUST-COLL offers eLearning as another mode of study in addition to full-time, part-time and conventional distance education (PoN-COLL, 2014: 11). Studying via eLearning allows students to study from home, learn through the internet, have interactive online tutorials and group activities and even submit their assignments from anywhere as long as they are connected to the internet.

DE institutions have incorporated integrated asynchronous and synchronous technologies in study programmes to enhance the academic support. Besides the cost of these technologies, Pullen and Snow (2007: 145) note that "simultaneous teaching of classroom and synchronous online students is a highly effective approach with low costs and low barriers to adoption". They further argue, "it is most effective when integrated with asynchronous supporting materials" (ibid.). Both synchronous (simultaneous) and asynchronous (intermittent with time delay)

promote interaction, which creates an opportunity for tutors/lecturers and students to share ideas. Moore and Kearley (2012: 40) highlight that "synchronous technologies afford immediate (speed) real time contact and interaction where participants at different sites see and hear the presenters." This platform allows the presenter and students to have a conversation where they can ask questions and get immediate feedback. On the other hand, asynchronous technologies do not afford immediate feedback from either the lecturer or students. However, they have advantages that include allowing participants to provide their own content and choose who they want to interact with especially in social networking programmes (Moore & Kearsley, 2012: 111). Furthermore, participants (students) are afforded an opportunity to view contributions of others, and do some reflection before they provide a well-thought response.

Tait (2014: 5) used the case of Open University in the UK to clarify the impact of using digital technologies on student support by giving the historical perspective of learning using technologies over many centuries. From this analysis, he established that, "the dominant paradigm of geography – which has defined the structures for student support services in second generation distance education – has now been overtaken in digital distance and eLearning contexts by the more powerful affordances of learning design" (Tait, 2014: 5). On the issue of student dropout as the major challenge for distance education. Using technologies in this century such as eLearning provides the solution for the effective design of support service, therefore; his argument that educational mission, not the mode of delivery, provides a more powerful explanation for the dropoup (ibid.). Additionally, he proposed that effective student support should be integrated with teaching and assessment as opposed to the current practice of separately organising it structurally and professionally. This study sought to understand students' views and experiences on the provision of SSS at the NUST-COLL regional centres on teaching (face-to-face tutorials) and assessments (marker-tutor feedback, assignments and tests) as some of the academic support services.

While technologies seem to offer opportunities for to facilitate distance education, Dastjierdi (2016: 4) points out the importance of choosing a suitable technology for students. Tertiary institutions offering distance education should evaluate and asses

the usefulness each technology before it is adopted for distance learning and teaching (ibid.).

## 3.4 PRACTICES OF STUDENT SUPPORT SYSTEM AT TWO DISTANCE EDUCATION INSTITUTIONS

This study proposes that low success rates and high student dropout rates among distance students can only be improved if student support is understood and implemented from the perspective of the direct beneficiaries of education, that is, students. Tait (2014: 05) proposed that student support should now be understood as integrated with teaching and assessment, not separately organised structurally and professionally. The researcher concurs with Tait (1995: 232) that learner support involves the whole range of services both for individual students and for students in groups, which complement the course material perceived as the major offerings of institutions using distance education. Additionally, student support should empower distance students to learn, open doors for students to access information, and motivate students towards completing their studies. This section highlights the background and offering of distance education at Open University (OU) of the United Kingdom and the University of South Africa (UNISA) to understand how they run their DE programmes.

### 3.4.1 The Open University of the United Kingdom

This section outlines the profile of the Open University (OU) of the United Kingdom. It also gives a historical account on the provision of SSS and the use of technologies to support DE students.

3.4.1.1 Introduction and Background

The Open University in the United Kingdom was established in 1969, and according to Adenkambi (2008: 2), it was established to widen access to education in Britain. From 1971 it started to operate as an autonomous university, funded largely by the government, providing adult students with a second chance to obtain a university education. The main aim was to extend access to the UK population to higher education, especially people who could not get a chance to study at traditional

universities. This effort is a product of humanitarian commitment according to Open University (1994: 05). The University has served as a model to many other ODL institutions that deliver teaching and learning activities using the Open University practices. Tait (2003: 2) highlighted that since its establishment in 1969, Open University offered modern distance education through the development of a range of learning and teaching media along with an integrated student support system. OU, just like the University of South Africa (UNISA), is a single-mode university. Möwes (2005: 79) highlighted that OU differs from UNISA in several important respects such as:

> teaching and learning is, first of all, multidimensionality, which involves printed teaching material, teaching programmes on radio and television, digital learning, teaching in study centres and residential schools, and individual counselling all interact with and influence one another. This practice then establishes multimedia distance education.

The above observation can also be found in other distance education universities but Möwes (2005: 79) argues that, multidimensionality is a hallmark of originally combined and professionally constructed multimedia distance education at OU.

3.4.1.2 Student support at the Open University

Tait (2014: 8) highlights that the OU, invested substantially in student support. OU like many other open universities values the learner support system, and as such, a range of study centres have been created to deliver support services at a local level. During the pre-digital period of distance education, the regional centres brought much-needed student support geographically nearer to the students.

To provide tutorial opportunities to many students that are scattered around the UK, a network of about 260 study centres were established in different towns. These study centres are supported by 13 regional centres in order to ensure that students get the necessary support. In this way, the main campus university headquarters located in central England is brought nearer to where the students live (Tait, 2014: 9). Furthermore, Tait (2014: 09) argues that the overall curriculum design, teaching and learning system are fully combined with the student support through the decentralisation of the services to the regional centres. The centres are staffed with

tutor-counsellors, subject expert tutors, and individual student support. Currently, there are many changes in the provision of support services with the aspect of geographical distance being removed by technology (Tait, 2014: 10). This implies that, the univesity carefully selected appropriate methods and techniques that are compatible with available technologies that are easily accessible to the students. Tait (2014: 10) further argues that the DE institutions that have student support subsytem should not separate it from curriculum design and material development, but should merge the two into one. Student support services are regarded as a critical component in the overall learning design and objectives of the courses.

As Mahanta and Ahmed (2012: 50) rightly argue, eLearning presents synchronous and asynchronous opportunities for students to learn and interact with educators or databases to effectively acquire up-to-date information. However, they admit that eLearning may not be suitable for some students who do not get a few hours to use it per day, especially because many DE students are working adults who might not get time to use computers daily. Similarly, Tait (2014: 13) submits that the integration of ICTs in teaching and provision of support services has the potential to transform distance education and increase success rate if students embrace the presented opportunities. According to him, "geography as an organising principle represents one dimension while the ability for students to source and create content rather than having content delivered represents another". Furthermore, Tait (2014: 11-12) admits that the student dropout rate is still high besides the decentralisation through the regional and study centres. The student dropout at OU is mainly caused by open entry and students transferring to other institutions (Simpson, 2013: 107). In other words many students might not be ready for the standards and level of education at OU. According to Simpson, students entering the OU UK with much lower entry requirements than conventional university entry requirements had higher dropout rates than better entry-qualified students, which brought the graduation rate down. A proportion of OU students have always transferred out to continue their studies and graduate with other institutions (Simpson, 2013: 107). The graduation rates in distance higher education are less than 20% compared with full-time UK rates of around 80% (Inkelaar & Simpson, 2015: 1). It would seem that OU, has better technological infrastructure than other open universities. However, the question is why the students drop out and fail to graduate as expected. In this respect, Mahanta

and Ahmed (2012: 50) maintain that, besides other problems that distance students' experience, they need preparatory training especially in ICT skills in order to get used to eLearning environment.

## 3.4.2 The University of South Africa

This section highlights the history, orientation and mode of course delivery followed by the University of South Africa (UNISA).

3.5.2.1 Introduction and background

The University of South Africa (UNISA) has a long history and possibly the oldest university dating back to 1873, as the University of the Cape of Good Hope (Segoe, 2012: 118). The name of the university was changed to the University of South Africa in 1916 and was moved to Pretoria in the same year (Segoe, 2012: 118). In 1946, in terms of South African legislation, UNISA redefined its focus, developed programmes, and according to Nonyongo (2003: 128), it became the first public university in the world to teach exclusively by means of distance education. The 2013 statistics for student enrolment indicate that there were 355240 students registered in different programmes of whom 91.4% were from South Africa (UNISA, 2014: n.p). Furthermore, UNISA has seven regional centres and several regional offices across South Africa that complement the efforts of the head office which is based in Pretoria (Dube & Holomisa, 2014: 291- 292). UNISA has various facilities and resources at the regional centres to accommodate students who cannot access face-to-face services like discussion classes (Molepo & Mothudi, 2014: 497). One of the objectives of the UNISA strategic plan is to establish service-oriented, technology-enhanced learner support to increase retention and throughput rates (Pillay, 2009: 29).  According to Molepo and Mothudi (2014: 497), many face-to-face services such as discussion classes are being phased out due to the introduction of technological resources such as videoconferencing and teleconferencing. Given its massive size and the resultant economies of scale, UNISA can assist students to acquire the necessary hardware such as desktop, notebook and other ICTs resources for the effective implementation of eLearning. Mabuza (2014: 514) submitted that UNISA's vision is captured succinctly as "towards the African

University in the service of humanity" – befitting the role it plays in education in Africa and beyond.

## 3.4.2.2 Student Support at UNISA

UNISA as an ODL institution is making increasing use of technology in order to provide support to the majority of its students as it was found that it would not be possible to reach and effectively support all UNISA students through face-to-face means (Molepo & Mothudi, 2014: 497). Furthermore, UNISA relies heavily on the tutor system to service the massive numbers of students. According to Kintsch (2009: 230), tutors must provide a platform for students to assess their current level of understanding, provide tips on what to do to improve their understanding and carefully select new activities to be studied that afford students opportunities to advance their understanding. To enhance the face-to-face lecturer-tutor interaction and the tutor's understanding of the subject content, UNISA's fulltime lecturers give training to part-time tutors once a year (Segoe, 2012: 130).

Kuboni (2009: 363) advocates an effective learner support system as a key to the success of a DE institution; hence support must be given before, during and after registration. Furthermore, orientation sessions for new students should be conducted to familiarise, motivate and orientate them about their intended field of study. UNISA still sends students a package of study materials such as course outlines, assignments, prescribed books and programme for contact sessions, but unfortunately, as Segoe (2012: 127) notes, in some cases, these materials do not reach students on time. This study highlights five critical aspects of student support available at UNISA such as myUnisa, tutorials and asynchronous and synchronous distance education technologies.

A web-based system, myUnisa is intended to provide collaboration and learning/teaching management platforms that support students at UNISA. It is interactive and it was developed to supplement and enhance academic interaction and improve communication between the institution and its students and among students anywhere in the world (Unisa, 2010: 24). It should be noted that UNISA uses the open and distance learning model which provides education access to individuals who would otherwise be isolated from the benefits of tertiary qualifications

such as those residing in rural areas and those who are employed on a full-time basis (Pillay, 2009: 10). Dube and Holomisa (2014: 292) reported that UNISA planned to roll out eLearning in 2013 as part of the ODL implementation plan of transforming to a fully-digitised transactional environment. It was assumed that once eLearning is implemented in myUnisa platform, it would promote student-student, student-lecturer and student-tutor interaction and vice versa. With integrated eLearning platforms, myUnisa requires lecturers and students to have basic technology skills, and Latchem (2010: 89) therefore emphasises that both DE tutors/lecturers and students need to be prepared and trained in the technical skills of using ICTs. This means that tutors, lecturers, administrative staff and UNISA students must have basic skills in using technological media to ensure that teaching and learning is effective.

The tutorial system is an important learner support system that caters for the rural and the disadvantaged students. However, this is hampered by the fact that not all students have access to technology, electricity and network connectivity. Lentell (2003: 66) states that tutors are not merely markers of their students' work during contact sessions, but their roles include facilitating and guiding learning of their students so that they could gain knowledge and deeper understanding. Lewis (1995: 244) summarises the role of the DE tutor thus:

> ….your role as tutor is to complement the learning materials and extend the learners' understanding of them through marking and grading assignments and help with general problems. You are the first port of call if the learner cannot make sense of the material and you act as the link between the course material and learner, initiating and taking part in a dialogue with them.

Some institutions have introduced satellite broadcasts to give presentations to remote students. Segoe (2012: 132) highlights that satellite broadcasts are a fairly new delivery system at UNISA. This medium can be live or in the form of pre-recorded presentation of lectures, tutorials, scientific experiments and training programmes for students in remote areas to watch live television broadcast.

Asynchronous and Synchronous distance education technologies are also used at UNISA as discussed under Section 3.4. UNISA uses technological support such as emails and faxes, satellite broadcasts, audio and video conferencing and eLearning

to reach out to its students. Jaffer, Ng'ambi and Czerniewicz (2007: 131) argue that information and communication technologies (ICT) can and do play a number of roles in distance education. These roles promote critical thinking, develop innovative graduates that form part of responsible citizens for the information society, and enhance educational outcomes and the quality of pedagogy and learning. As Gulati (2008: 01) argues, the integration of technology in teaching and learning is now a global phenomenon as it gives value and meaning to learning. It is interesting to note that UNISA is aware of the need to evolve with the world and is continually positioning itself to be a 21$^{st}$ century world university (Mabuza, 2014: 514). To do that, UNISA has embarked on improving its Information and Communication Technologies (ICT); engages in multi- and trans-disciplinary research; forges collaborations across the globe; contributes towards Open Educational Resources (OERs); and implements virtual learning by using technologies (Mabuza, 2014: 514).

While UNISA is commonly known as the Africa's leading ODL university, Mabuza (2014: 514) reported that the university faces a plethora of issues when it comes to the management of quality. UNISA's admission policy was amended in 2011, allowing many students who meet the basic statutory requirements to be admitted to undergraduate diplomas and bachelor's degrees, leading to massive growth student numbers. Mabuza (2014: 514) submitted that the high student numbers have ripple effects on planning and capacity of the university to improve, and put pressure on the ICT systems or myUnisa, which causes unnecesary delays. For example, UNISA relies on myUnisa as a virtual learning environment for resources and assignment submissions, however, sometimes it expereinces failure during peak times. As the largest university on the continent, UNISA should be commented for managing to facilitate the administrative access and for its recognition of prior learning policy (Dhunpath & Dhunpath, 2013: 112). However, they report that UNISA continues to face challenges of articulation, the challenges of learner support and the challenge of throughput rate. Alternative pathways or opportunities are provided to those not meeting the basic entry requirements, which although noble, may have contributed to the high numbers of students who eventually battle to exit the system with a qualification – in other words they drop out (Mabuza, 2014: 514). One can only ask what strategies UNISA has implemented to assist these students for their performance to improve and increase the success rate.

**3.5 SUMMARY**

This section highlighted the history of distance education and student support services in general. It then articulated the factors to be considered for the development of adequate SSS. Foundations of distance education such as theory of industrialisation of teaching, Holmberg's theory of didactic interaction and the theory of independence and autonomy were explored. A theoretical framework underpinning this study and how to enhance support services were discussed. The last part covered practices on support services at two DE institutions, namely, the Open University in the United Kingdom and the University of South Africa. Besides the modes of course delivery at UNISA and the Open University in the United Kingdom (OU UK), challenges facing the two institutions were explored. The next chapter discussed research design and methodology

# CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

## 4.1 INTRODUCTION

The literature review in Chapters 2 and 3 has provided strong grounds for the importance and necessity of student support services in distance education. Chapter 2 presented the nature of distance education in Namibia and how local distance education institutions such as the University of Namibia (UNAM), Namibia University of Science and Technology Centre for Open and Lifelong Learning (NUST-COLL), Namibia College of Open Learning (NAMCOL), Institute of Open Learning (IOL), International University of Management (IUM) and National Institute for Education Development (NIED) support students to make the learning process easier and realise the instructional objectives of their courses. Chapter 3 presented the global perspectives on student support services in open and distance learning. The theoretical framework for distance education and practices of student support system at the University of South Africa (UNISA) and the Open University of the United Kingdom (OU) were also discussed in depth.

The chapter deals with the research design and methodology used in the study to collect data on the implementation and effectiveness of student support services at the Namibia University of Science and Technology, Centre for Open and Lifelong Learning, particularly at the regional centres. The research paradigm within which this study is located is explained followed by a discussion on methodological approach adopted in this study. The chapter also discusses data collection methods, data analysis procedures, measures of trustworthiness, ethical considerations, delimitations and limitations to be considered throughout the study.

## 4.2 PHILOSOPHICAL ASSUMPTIONS AND RESEARCH PARADIGMS

In any kind of study, researchers bring a set of beliefs and philosophical assumptions that shape the direction of their research. All types of research, namely qualitative, quantitative and mixed methods research have underlying philosophical assumptions; that is, the ontological and epistemological assumptions that relate to the methodology chosen for the study.

Table 4.1 shows different knowledge claims (paradigms) on which researchers base their assumptions on how and what they will do during the research project. These paradigms such as interpretivism, positivism and constructivism highlight the nature of enquiry employed by researchers, namely ontology, epistemology and methodology.

**Table 4. 1 Positivist, interpretive and constructionist paradigms**

|  | Ontology | Epistemology | Methodology |
|---|---|---|---|
| **Positivist** | • Stable external reality<br>• Law – like | • Objective<br>• Detached observer | • Experimental<br>• Quantitative<br>• Hypothesis testing |
| **Interpretive** | • Internal reality of subjective experience | • Empathetic<br>• Observer subjectivity | • Interactional<br>• Interpretation<br>• Qualitative |
| **Constructionist** | • Socially constructed reality<br>• Discourse<br>• Power | • Suspicious<br>• Political<br>• Observer constructing versions | • Deconstruction<br>• Textual analysis<br>• Discourse analysis |

**Source: Adapted from Terre Blanche, Durrheim and Painter (2006: 6)**

Terre Blanche, Durrheim and Painter (2006: 6) describe the three dimensions as follows:

> Ontology specifies the nature of reality that is to be studied, and what can be known about it. Epistemology specifies the nature of the relationship between the researcher (knower) and what can be known. Methodology specifies how the researchers may go about practically studying whatever they believe can be known.

In this study, the researcher aimed to establish whether the current SSS are effective and helpful in the performance of distance students. The more specific ontological question the researcher sought to answer was: what is the students' overall opinion regarding the provision of student support services at NUST-COLL regional centres?

Epistemology deals with the nature of knowledge between the researcher and what can be known. The researcher is involved with the implementation of SSS at NUST-COLL regional centres and regards SSS as highly important towards improving the performance of DE students. I have, therefore, chosen SSS at NUST-COLL regional centres to find out from the students and regional coordinators' perspectives which SSS are important, and why. The researcher believed that the findings would have practical value and contribute to the body of knowledge in the field of distance education and indeed, with special reference to NUST-COLL regional centres.

This study adopted both interpretivist and positivist paradigms in order to evaluate the implementation of SSS at NUST-COLL regional centres. The study was embedded which collected both quantitative and qualitative data at the same time to support and enhance the findings of each approach. Evaluating the implementation of SSS at these regional centres will not only guide the improvements of both process and outcomes, but also help in understanding problems on the ground from the perspectives of students and regional coordinators. Different paradigms have unique ontological and epistemological assumptions; thus, the assumptions related to the methodology chosen for this study are described. It is normal to conclude that DE students face similar problems in any environment but it is apparent that students at different NUST-COLL regional centres experience unique problems based on their environmental, technological and geographical location.

Scotland (2012: 9) asserts that the description of knowledge and how it is discovered is subjective. In this study, the researcher was concerned with the realities at NUST-COLL regional centres such as the problems experienced by the students and regional coordinators. This reality consisted of students' and regional coordinators' subjective experiences, hence, open-ended questions and interviews were employed to collect data. This was an ontological assumption (interpretive paradigm) and according to Scotland (2012: 9), "researchers need to take a position regarding their perceptions of how things really are and how things work." The researcher had to report on the realities as evidence from the students' and regional coordinators' perspectives and experiences.

According to Antwi and Hamza (2015: 219), epistemology poses questions such as "what is the relationship between the knower and what is known? How do we know

what we know? What counts as knowledge?" The researcher was one of the NUST-COLL regional coordinators who knew that the implementation of SSS was meant to be uniform across all the regional centres. Therefore, the researcher adopted an objective and detached epistemological stance towards the reality on the ground. The study aimed at explaining quantitatively how variables such as face-to-face tutorials, library services, marker-tutoring and eLearning interacted and contributed to outcomes such as increased success rates and throughput rates. Scotland (2012: 9) contends that "epistemological assumptions are concerned with how knowledge can be created, acquired and communicated, in other words *what it means to know*."

This study employed both qualitative and quantitative methodologies; hence, this section highlighted their differences between the ontological and epistemological perspectives. Furthermore, this study "conceptualizes quantitative and qualitative meta-theoretical assumptions concerning the nature of the knowable or reality (ontology), view on truth and legitimate knowledge (epistemology), and how the inquirer finds out knowledge (methodology)" (Antwi & Hamza, 2015: 217). In other words, the researcher knew the various SSS available at NUST-COLL regional centres, but whether these services were effective would be evaluated through data collection and interpretation using an objective approach. The researcher strongly believes that SSS must be designed in the context of the needs of the students which can be different from region to region. It was therefore important to analyse and compare students' views from different NUST-COLL regional centres as well as the problems experienced by the regional coordinators when implementing the available SSS in their various regions.

## 4.3 RESEARCH DESIGN

According to Kumar (2011: 94), "a research design is a procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately and economically". In other words, it is a strategy for action through which the research questions will be addressed effectively. A research design gives a simplified view of research components such as data collection methods, study type and the analysis plan. Similarly, Selltiz, Deutsch and Cook (1962: 50) define research design as "the arrangement of conditions for collecting and analysis of data in a manner that aims

to combine relevance to the research purpose with economy in procedure". Consistent with the above definition, Thomas (2009: 71) submits that research designs should address questions such as what the study is trying to address and whether the results can be used practically. As a summary of the above definitions, research design could then be broadly defined as the research plan which takes into account the researcher's expectations and context.

It was the conviction of the researcher that for the main research question to be validly, objectively, accurately and economically answered, a combination of quantitative and qualitative methodologies was to be used. The focus of this study, namely the effectiveness of student support services implementation at the NUST-COLL regional centres, could be well understood by using both qualitative and quantitative approaches. One can submit that this study was more predominantly a qualitative approach with elements of a quantitative approach. When both qualitative and quantitative are used in a single study, it can be regarded as mixed-method. I concur with Chaumba (2013: 326) that "mixed methods research allows for comprehensive analyses of phenomena" and it "enhances the validity of the finding". That means, the two designs were complementary to each other, that is, the strengths of one phase in data collection would ameliorate the weaknesses of the other in order to get a complete understanding of the phenomenon from both perspectives. Similarly, Descombe (2002: 23) submits that, mixed methods approach has gained recognition and has been used in social research for the last decade, in order to enhance accuracy and reconfirm the findings from multiple methods. Quantitative data in this case provided basic research evidence, while qualitative data, by means of thick descriptions presented a vivid picture of the phenomenon being studied and provided examples and reasons behind the quantitative findings. In the following section, both qualitative and quantitative methodologies are discussed to show how each will play a role in this study.

## 4.3.1 Quantitative methodology

Terre Blanche, Durrheim and Painter (2006: 272) state that "quantitative research follows a predetermined set of procedures where we know in advance what the important variables are, and are able to devise reasonable ways of controlling or

measuring them". The SSS available at NUST-COLL regional centres were known, but the effectiveness of SSS implementation was not known. Kumar (2011: 103) highlights that "quantitative studies designs are specific, well structured, have been tested for their validity and reliability, and can be explicitly defined and recognised". According to Leedy and Ormrod (2001: 102), "quantitative researchers seek explanations and predictions that can be generalised to other persons and places. The intent is to establish, confirm, or validate relationships and to develop generalisation that contribute to theory".

Creswell (2003: 153) contends that "validity and reliability of scores on instruments, additional standards for making knowledge claims, lead to meaningful interpretations of data". The quantitative method collects data that can be quantified and interpreted for new knowledge. This study sought to gauge particular views and problems on the implementation of student support services at NUST-COLL regional centres from the perspective of the students and regional coordinators. In order to quantify which SSS were the most effective, and which ones should be improved, the findings were analysed to ascertain the nature of the problem. Emphasis was also placed on exploring whether the implementation of SSS responds to the students' expectations and needs during their studies as well as problems experienced by the regional coordinators when providing services to the students.

Möwes (2005: 100) asserts that "different researchers make different epistemological assusmptions about the nature of causality, and these assumptions affect their their approach to the study of cause-and-effect relationships among educational phenomena". In this study, the emphasis was placed on how the implementation of SSS at COLL regional centres affected the students' expectations and needs during their studies. The researcher expressed a strong conviction that SSS can improve the success rate and reduce the dropout rate among DE students but they should be designed from the students' perspective. Williams (2007: 66) submits that "in the causal comparative research, the researcher examines how the independent variables are affected by the dependent variables and involves cause and effect relationships between variables". The researcher had an opportunity to examine the impact of support service provision on student's needs and expectations during their studies. Furthermore, the views and proposals from the reginal coordinators were used to validate and justfy some claims from the students. In other words, the nature

of emprical data collected in this study prompted the researcher to understand the effects of different support services on success rates. The researcher intended to collect and interpret data through an objective approach whereby the world is considered to be external and objective.

Quantitative approach is referred to as the positivist approach by researchers. According to Welman, Kruger and Mitchell (2005: 6), "the positivist approach underlies the natural-scientific method in human behavioural research and holds that research must be limited to what we can observe and measure objectively, that is, that which exists independently of the feelings and opinions of individuals". Similarly, Shulman (1986: 8) clarified that in terms of a positivistic worldview, the researcher is an outsider who observes and provide conclusions based on the relationship between the variables. In this study, the researcher studied the objective reality that was out there, analysed and understood it from the perspectives of distance students and regional coordinators. In particular, the researcher wanted to establish what counts as knowledge in the implementation and provision of student support services at the NUST-COLL regional centres. As Welman, Kruger and Mitchell (2005: 8) argue, quantitative researchers must be detached and objective with the facts provided, to ensure that the research process is not biased.  This basic assumption is supported by Hutchinson (1998: 124) who stated that "positivists view the world as being 'out there' and available for study in a more or less static form".

According to Möwes (2005: 100):

> another assumption applicable to positivist epistemology is that researchers believe that features of the social environment retain a high degree of constancy across time and space. Furthermore, positivist researchers study samples and population and statistical techniques are available to determine the likelihood that sample findings apply to the population.

The above assumption was applicable to this study since the population of distance students at the NUST-COLL regional centres and the sample were selected and the numerical data to be collected was analysed, using statistical procedures.  In other words, statistical inference procedures were used to generalise findings from a sample to a defined population namely, distance students at NUST-COLL regional centres. The study was therefore guided by the philosophy of a positivist research

design. Additionally, the researcher relied on the causal-comparative method, which is also referred to as ex post facto (Latin for "after the fact") research since both the effect and the alleged cause have already occurred and must be studied in retrospect. The researcher viewed this method as appropriate for the study, since the implementation of student support services at different COLL regional centres could not be manipulated by the investigator during the data collection. The reality on the implementation and provision of student support services at COLL regional centres had already happened. The study sought to establish the existence of certain relationships and effects between the implementation and provision of student support services and expectations and needs of distance students. Furthermore, regional coordinators were expected to provide the much needed information on the actual implementation of SSS. The use of ex post facto design is supported by Ary, Jacobs and Razavier (1972: 269) who state that "though not a perfect substitute for experimentation, it does provide recognition of the circumstances under which much educational research must be conducted….It remains a useful method that can supply much information of value in educational decision-making". Since this study was similar to the study conducted in Namibia by Möwes (2005), I concur with Möwes (2005: 101) that "ex post facto design is applicable to this study because its use in research has been supported in most literature on research methods".

Leedy and Ormrod (2005: 232) submit that "Ex post facto designs provide an alternative means by which a researcher can investigate the extent to which specific independent variables affect the dependent variables of interest." The provision and implementation of SSS had already occurred or were present at the NUST-COLL regional centres. The researcher then collected data from the students' and regional coordinators' perspectives to investigate the possible effects on the presumed effective implementation of SSS. The researcher posited that effective implementation of support services as per the needs and expectations of the distance students would have a positive impact on the performance and success rate at the COLL regional centres.

### 4.3.2 Qualitative methodology

Fouche and Delport (2002: 79) outlined the definition of qualitative research paradigm in its broadest sense as "the research that elicits participants' meaning of experience or perceptions". Additionally, Creswell (2009: 175) argues that "qualitative researchers prefer to study the world as it naturally occurs, without manipulating it." In other words, the researcher was expected to suspend his prior knowledge about the implementation of student support services at the NUST-COLL regional centres and focus on the views provided by the participants. This was done through the interviews with the regional coordinators and the open-ended section of the student questionnaire. McMillan and Schumacher (2010: 23) support the naturalistic view of the qualitative methodology thus, the qualitative research approach is deeply rooted in the philosophy of empricism which uses unstructured approach to obtain information. It focuses on the naration of expereinces and present the findings in a descriptive manner. The findings are normally in the form of words which must be explored with different methods to achieve a deep understanding. In other words, qualitative research uses verbal descriptions to explain complex phenomena from the participants' view such as needs and expectations of the distance students.

McMillan and Schumacher (2010: 320) further assert that qualitative research aims to understand social phenomena from the participants' point of view by describing problems as presented and the collection of data is done in a setting that is sensitive to the participants. In the context of this study, the reality to be studied, namely which existing SSS at NUST-COLL regional centres had been responsive and how they could be improved, included students' subjective experiences. This is a characteristic of an interpretive paradigm, which aims to explain the students' subjective reasons and meanings that lie behind their interaction with various SSS. As Matee (2009: 171) puts it: "The main interest here is therefore in the meanings that people have constructed and how they make sense of their world and the experience they have in the world". Furthermore, the regional coordinators described the problems experienced during the implementation of the student support services at the NUST-COLL regional centres. It was, therefore, of paramount importance that the

researcher attempted to understand the "complex world of lived experience from the point of view of those who live it" (Mertens, 1998: 11).

This study sought the understanding of the students with regard to the provision, effectiveness, and perceptions of the student support services at NUST-COLL regional centres. It should be noted that the researcher was guided by the characteristics of qualitative research as highlighted in Table 4.2 below.

**Table 4.2: Characteristics of qualitative research**

| CHARACTERISTIC | DESCRIPTION |
|---|---|
| Natural settings | Study of behaviour as it occurs naturally |
| Context sensitivity | Consideration of situation factors |
| Direct data collection | Researcher collects data personally and directly from the sources |
| Rich narrative description | Detailed narratives that provide in-depth understanding of behaviour |
| Process orientation | Focus on why and how behaviour occurs |
| Inductive data analysis | Generalisations are induced from synthesising gathered information |
| Participant perspectives | Focus on participants' understanding, descriptions, labels and meanings |
| Emergent design | The design evolves and changes as the study takes place |
| Complexity of understanding and explanation | Understandings and explanations are complex, with multiple perspectives |
| Research paradigm | Constructivist and interpretivist |

**Source: Adapted from McMillan and Schumacher (2010: 321)**

Based on the characteristics given in Table 4.2, the researcher acted as an observer in the setting that was to be studied, either as the interviewer, the observer or the person who studied, described, decoded, translated and analysed documents to find meanings of naturally-occurring phenomena in the social world. The researcher is

working for the NUST-COLL regional centres and believes relevant and effective implementation of support services at the regional centres is of crucial importance. Additionally, engaging with the regional coordinators, the researcher submits that it would develop a qualitative understanding of how SSS are implemented in the context of different regional centres.

According to Creswell (2009: 175) and Stake (2010: 15), qualitative research enables the researcher to become the primary instrument for data collection in order to acquire the desired depth of understanding. In other words, the researcher moves closer to the people whose experiences he seeks to understand in a face-to-face situation, and becomes immersed in the situation and the phenomenon being studied through interviewing the participants and making the interpretations and recording of what transpired (Creswell, 2009: 175). Furthermore, Bazeley (2007: 2) clarifies that qualitative methods are chosen in situations where a detailed understanding of a process or experience is wanted and the needed information is in non-numeric form. Information provided by the students helped the researcher determine the nature of student support services' implementation at various COLL regional centres. Additionally, the researcher is a curious learner who comes to learn from and with research participants (Hoberg, 1999: 83). The researcher chose qualitative inquiry as it placed emphasis on understanding through looking closely at participants' words, actions and records. The recommendations were made based on the responses and proposals that were provided by the regional coordinators during the interview sessions as well as from the open-ended questions of the student questionnaires.

### 4.3.3 Mixed Methods

According to Leech and Onwuwgbuzie (2008: 266), mixed methods research represents research that involves collecting, analysing, and interpreting both quantitative and qualitative data in a single study that investigates the same underlying phenomenon. In this study, both qualitative and quantitative methods were used to solicit responses from the participants but the qualitative paradigm was more predominant. The researcher supported the integration of both methods with a view of getting an expanded understanding of the research problem. The researcher

concurs with Teddlie and Tashakkori (2009: 33) that mixed methods research provides better or stronger inferences than using either one or the other approach on its own. That means this study was expected to provide a depth understanding of distance students' needs and expectations as well as the problems experienced by the regional coordinators on implementing the SSS at various NUST-COLL regional centres. The results did not only provide an understating of the practices and problems associated with the provision of SSS at COLL regional centres, it helped in developing a model aimed at improving and addressing problems that are currently experienced by both regional coordinators and DE students. The researcher also believed that using both qualitative and quantitative methods would provide an opportunity to accommodate divergent views.

This study was both exploratory and explanatory in nature as it employed an open and inductive approach during the interview sessions with the regional coordinators who manage the SSS at COLL regional centres to identify problems with the implementation of SSS. One can also use the results from the student questionnaire to provide an explanation as to what challenges are contributing to low success rate and thereby developing a model for improvement.

Adopting both qualitative and quantitative methods enhances insight into the research problem and questions, offer richer insights and result in a more questions of interest for future studies than using one of them independently (Caruth, 2013: 113). The rationale for mixing the two methods was based in the fact that qualitative or quantitative alone was not sufficient to capture the details and facts of the situation on the ground. The researcher as a regional coordinator and knowing the structures of SSS viewed the application of qualitative approach as appropriate to understand problems experienced at various COLL centres across the country. Regional coordinators and senior students were best suited to describe their lived experiences. The quantitative approach was applicable through the open ended questions to examine the extent to which students were using SSS and the throughput rate at the institution.

## 4.4 RESEARCH METHODS

According to Matee (2009: 166), knowledge can only be created through well crafted research methods that promote progress and enable people to understand difficult situations and come up solutions to the problems. In educational research, research methods may refer to the ranges and approaches used to gather and analyse data. In this section, the detailed description of the proposed population and sampling procedures, data collection strategies and research instruments used were presented.

### 4.4.1 Sampling and Population

McMillan and Schumacher (2010: 129) define the concept population "as a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria and to which the results of the research are to be generalised". Similarly, Ary, Jacobs and Razavier (2002: 163) referred to population as "all members of any well-defined class of people, events or objects in a study". In this study, the target population comprised of 860 senior (second to final year) students who were studying at nine (9) NUST-COLL regional centres across Namibia and all nine (9) regional coordinators. The application and implementation of SSS was uniform in all NUST-COLL regional centres which the researcher viewed as not pro-students.

It was not practical to involve all members of the population due to various factors such as time, accessibility, and cost among others; therefore, a smaller representative group or subset of the population was involved. Kumar (2011: 193) defined a sample as a subgroup of the population one is interested in. Additionally, McMillan and Schumacher (2010: 129) defined a sample as a group of subjects or participants from whom the data are collected or a portion of the population that is actually observed in the study. For this study, a sample of 300 senior students (out of 860 students) and nine (9) regional coordinators were targeted to participate in this study. This represents 35% of the senior students and 100% of the regional coordinators. However, 109 (13%) DE students completed the questionnaires while eight (89%) regional coordinators were interviewed for the results of this study. According to Terre Blanche et al. (2006: 134), about 30% is required for a small

population of approximately 1000 while 10% should be sufficient for a moderately-sized population of 10000. The size of the sample links to issues of certainty, validity and reliability in quantitative research or trustworthiness and credibility in qualitative research. It was therefore the conviction of the researcher that 35% of the senior students would yield trustworthy and credible results.

The NUST-COLL regional centres are geographically located in rural, semi-urban and urban areas and representation was taken into consideration in the selection of seven (7) regional centres. Stratified random sampling was used to determine the number of students per centre based on the total enrolment of the centre as well as gender. Stratified random sampling technique was suitable since the population was divided into homogenous subgroups by gender, race, rural and urban centres and age. Additionally, convenience sampling was used within different subgroups to ensure representativeness of the samples. Ideally, random sampling with a table of numbers should have been used for the sampling frame but it was not guaranteed that the selected students would come to the regional centres during the period of data collection. The study was therefore applicable to the senior DE students who came to the centres and volunteered to participate in the in the study. The regional coordinators were tasked to ensure that questionnaires were handed to the senior students who came to the centre while taking "gender status" into consideration. In this way, the number of female and male students that took part in the study was equal. The regional coordinators were purposively selected as they were considered relevant to this study due to their vast experiences on SSS implementation at the NUST-COLL regional centres.

The seven regional centres that were involved in this study as shown on the map (APPENDIX 8) were Walvis Bay, Ongwediva, Outapi, Rundu, Keetmanshop, Gobabis and Otiwarongo. The researcher believed that the selected centres would bring out the true picture of student support services at the regional centres. The selected centres are serving students from towns and villages in remote areas that are accommodative of different geographical settings and development levels in the country.

### 4.4.2 Design of research instruments

It was discussed above that the research design for this study would incorporate both a quantitative (positivist paradigm) and a qualitative (interpretative paradigm) dimension. Consequently, a questionnaire composed of closed and open-ended questions was used for data collection from senior DE students studying at NUST-COLL regional centres. Furthermore, regional coordinators, as staff members who are experienced and well-informed about SSS provided to distance students at NUST-COLL regional centres were interviewed. According to Esterberg (2002: 176), the use of multiple data collection instruments as opposed to relying on a single instrument promotes good data analysis which produces significant conclusions. In this regard, O'Leary (2005: 100) added that the collection of data needs to be rigorous. In fact, it is the systematic and rigorous approach used by the researcher that helps define data which gives credibility to the eventual findings. For this study to establish how the current student support services at the regional centres can be improved and whether it responds to the barriers and needs of distance students, both regional coordinators and students themselves had to be part of the study. The findings from both sources were complementary which provided strong evidence of the current status of SSS and how they can be improved to promote success and throughput rates.

The production and distribution of questionnaires as well as interviewing the regional coordinators was complex, with a possibility of increasing the cost of the whole process. However, in this study the advantage was that the researcher is employed as a regional coordinator by the NUST-COLL Department, and the study was financially supported by the NUST. The regional coordinators met at the main campus for their annual meeting in the second quarter of 2016 and this provided an opportunity for the researcher to involve them in this study. Besides the interviews that were conducted, the researcher used the opportunity to inform them about the whole process of distribution, collection and returning of completed questionnaires to the researcher.

## 4.4.2.1 Questionnaire

Kumar (2011: 145) defined a questionnaire as "a written list of questions, the answers to which are recorded by the respondents". Terre Blanche, et al. (2006: 484) concur with the above definition, and further highlight that "a questionnaire usually consists of a number of measurement scales, open-ended items for qualitative responses, and other questions that elicit demographic information from respondents". Relevant data were collected through a structured questionnaire (see Appendix C) made up of scaled, checklist and dichotomous questions.

Qualitative data was collected through 10 open-ended questions (see Appendix C, Section D). Open-ended questions allowed respondents to communicate and narrate their experiences or opinions about a specific issue in their own words, without any restriction (Terre Blanche, et al., 2006: 486). Open-ended questions yielded data supplementary to that generated by closed questions from the questionnaire and more importantly were intended to establish whether students' expectations and needs have been met. Furthermore, open-ended questions provided more information on whether students were satisfied with the provision of SSS at NUST-COLL regional centres and what they wanted to see implemented for their benefit.

Based on the available literature and review of existing research instruments, the researcher could not find appropriate instruments to be adapted for this study namely, interview questions for the regional coordinators on the implementation of SSS at the regional level. However, since this study was similar to the study that was done by Möwes in 2005, the researcher found the questionnaire used appropriate for this study. Student support services used by Möwes have not changed but many new services have been introduced over the years and the settings have changed. The instrument was modified and more questions were added to source views of students from different study programmes, geographic settings, and technical challenges. Additionally, the open ended-questions in the questionnaire were strengthened by the interview questions with the regional coordinators to get clarity of certain problems experienced during the implementation of SSS. The SSS offered by the UNAM centre for external studies in 2005 are similar to the SSS currently offered by NUST-COLL. It should be noted that the implementation model of SSS at

NUST COLL is the same across the country irrespective of the development, technology and geographical barriers, but the system does not always work as intended. For example, students from Outapi, Kavango and Ongwediva COLL centres are often affected by floods making their travelling difficult. Other centres such as Walvis Bay and Keetmanshop are not affected by floods and the majority of students have access to electricity and a road network. The researcher modified Möwes (2005) questionnaire to suit the present study and challenges of the 21$^{st}$ century. To avoid duplication of the results, literature and completed research studies were consulted to identify the existing gaps in the body of knowledge such as what problems there are with the implementation of SSS. This informed the researcher to adopt a similar questionnaire with modifications and an interview schedule that suited the purpose of the present study and would bring out the relevant findings. The questionnaire used in this study was divided into four sections namely: demographic information, access to and attendance rates of student support services (SSS), evaluation of items for each type of student support service being provided and open-ended questions. It should be noted that open-ended questions were in all the sections. Students were expected to evaluate the various SSS available at NUST-COLL regional centres in terms of their expectations and needs for such services.

*4.4.2.1.1 Advantages of questionnaires*

Questionnaires, as methods of data collection, have both strengths and weaknesses that the researcher must be aware of. Kumar (2011: 148-153), and Leedy and Ormrod (2001: 197) highlight several advantages and disadvantages of using questionnaires. The following are some of the advantages of questionnaires:

- They are less expensive as compared to other methods and produce quick results.
- The method offers greater assurance of anonymity because respondents do not use their names or become controlled when completing the questionnaire.
- They can be completed at the respondent's convenience.
- They provide a stable, consistent and uniform measure, without variation.

- Respondents have sufficient time to check records or facts in order to complete the questionnares correctly.
- In a questionnaire, open-ended questions can provide a wealth of information; as respondents can express themselves freely, resulting in a greater variety of information.

*4.4.2.1.2 Disadvantages of questionnaires are:*

- Questionnaires do not allow probing, prompting and clarification of questions.
- They do not always provide an opportunity to collect additional information while they are being completed.
- Due to lack of supervision, partial response or low response rate is possible. In this study, 301 senior DE students were given questionnaires but only 109 students completed the questionnaire in full.
- Opportunity to clarify issues is lacking when respondents do not understand some questions.
- Researchers are not always sure whether the right person has answered the questions because the identity of the respondents and the conditions under which the questionnaire was answered are not known.
- Open-ended questions are difficult to analyse as the researcher will need to go through another process-content analysis – in order to classify the data.

4.4.2.2 Interview

Burns (1997: 329) defined an interview as "a verbal interchange, often face to face, though the telephone may be used, in which an interviewer tries to elicit information, beliefs or opinion from another person". This study employed a structured interview for the eight (8) regional coordinators. An interview schedule for this study was a written list of open-ended questions, used to elicit the views of the regional coordinators in a person-to-person interaction such as face-to-face, by telephone or by other electronic media (Kumar, 2011: 145). The regional coordinators are experienced education managers that oversee the overall implementation of SSS at

the NUST-COLL regional centres and execute the academic and administrative functions for the centres.

Interviews helped the interviewer to learn what the interviewees knew about the topic, to discover and record their experiences, thoughts, and feelings about the topic, and its significance or any meaning that the topic might have (Mears, 2012: 170). The researcher intended to use a predetermined set of questions, using the same wording and order of questions as specified in the interview schedule for uniform information. This helped the researcher to allocate responses under different themes that were developed for analysis purposes.

### 4.4.2.2.1 Advantages and limitations of interviews

According to Kumar (2011: 145), "one of the main advantages of the structured interview is that it provides uniform information, which assures the comparability of data." Another advantage is that the researcher records information from the interviewee which can be supplemented with information from the observation of non-verbal reactions (Kumar, 2011: 150). In the context of this study, the researcher is an experienced regional coordinator and was able to explain the questions to the interviewees in order to get facts and answers to specific questions. It should be noted here that the researcher was very much aware and informed of bias in posing questions; hence, there were no deviations from the set questions in the interview schedule. According to Nieuwenhuis (2011: 87), the central goal of qualitative interviewing is to gain rich, descriptive data that elicit comprehensive understanding of the phenomenon of interest from the participants' point of view.

Interviews can be time-consuming and expensive to administer (Kumar, 2011: 150). Each regional coordinator was interviewed alone so that each could respond to the questions based on their experiences at their respective regional centres. Additionally, the researcher used a good quality voice recorder in order to transcribe the responses later for analysis. Another disadvantage of interview is that the quality of data depends upon the quality of the interaction (Kumar, 2011: 150). The interviewer took care of issues such as anonymity, confidentiality and explained the purpose of the interview in order to put the interviewees at ease. The names of the

regional coordinators were not used and the researcher was the only one who had access to the voice recorder.

### 4.4.3 Data collection procedure

Written permission to collect data from the students was obtained from the Director of NUST-COLL through the office of the vice-rector for academic affairs. This was done after obtaining the ethical clearance from the University of South Africa (UNISA). Furthermore, students were notified through the regional coordinators' office about the purpose of the study. According to Cohen, Manion and Morrison (2011: 81), the researcher must first gain official permission to undertake one's research in the target community before collecting data. Students were also informed that their participation in the study would be purely on a voluntary basis. The main aim of the informed consent to the students and regional coordinators was to introduce the respondents to the research topic, provide instructions, give clarity on doubts that respondents might have about the study, motivate them to be part of the study and assure them of anonymity and confidentiality (Creswell, 1994: 121). Furthermore, a meeting with the regional coordinators was held to explain the purpose of the study and how the questionnaires would be distributed to the students as well as the interview schedules. The random distribution of questionnaires to students that visit the centre was explained in detail and the regional coordinators were encouraged to ensure that both female and male students participated in the study. Additionally, the questionnaire had clear instructions for the respondents to follow.

As mentioned earlier, the purpose of the study was explained to all the regional coordinators and appointments for the interview sessions were arranged at the main campus in Windhoek over three days in the afternoons when the workshop sessions were over for the day. The researcher used a voice recorder to capture the interview data and this was done with the consent of the regional coordinators. According to McMillan and Schumacher (2010: 360), voice recording guarantees completeness of verbal interactions of the interviews, and thus provides materials for reliability checks. The researcher was able to go back to the recorded voice for the correct interpretation of the data.

**4.5 DATA ANALYSIS**

According to Gray (2009: 493), data analysis is a rigorous and logical process through which the mass of collected data in a study is given order, structure and meaning. The researcher cleaned and described data with the aim of discovering useful information whereby conclusions could be formulated. Furthermore, Dey (1993: 30) defines data analysis as a "process of resolving data into its constituent components so as to reveal its characteristic elements and structure." Analysis involves the process of reducing and organising the data, synthesising, searching for significant patterns and discovering what is important and relevant to the research questions (Ary et al. 2002: 465). Terre Blanche et al. (2006: 52) added that the aim of analysis is to transform collected data into possible answers to the research question. In other words, the collected data were analysed and interpreted to respond to the research question.

**4.5.1 Analysis of Qualitative data**

Collected data were analysed for computer entry, coded, cleaned and processed using Statistical Package for Social Sciences version 23 (SPSS 23), Microsoft word and Excel. According to MacMillan and Schumacher (2010: 367), qualitative data analysis is "an inductive process of examining, selecting, categorising, comparing, synthesising and interpreting data for plausible explanations to address the principal aim of the study." In order to convert the collected data into themes, the researcher coded the responses from the respondents for effective analysis. Hennink, Hutter and Bailey (2011:227) contend that the process of coding involves carefully reading data thoroughly, taking into consideration which codes are discussed in that section of data and then labelling this section with relevant codes. For the analysis of the interview data and responses from open-ended questions, the voice recordings of the interview and open-ended responses were transcribed. The typed transcript data were coded to identify and describe the patterns and themes in order to understand the meanings of these categories from the perspectives of the respondents. The researcher considered coding to be appropriate for the analysis of responses to the open-ended questions.

The regional coordinators' experiences on how they managed, provided and implemented student support services at the regional centres would guide the interpretation of students' perceptions; hence they were deemed to be useful in making recommendations. Similarly, data analysis for the 10 open-ended questions employed the process of constant comparison, whereby each response was compared to the previous one. This enabled the researcher to develop a set of broad categories that could accommodate all responses (Möwes, 2005: 108). Further, categories were reviewed, merged and reduced to more representative categories of all respondents' experiences as highlighted in Section 5.4.2 and 5.4.3.

### 4.5.2 Analysis of Quantitative data

In this study, the researcher aimed to determine whether the implementation of one or more of the chosen variables such as face-to-face tutorials, library services and marker-tutoring affect other variables to be studied. The participants' demographic profile was analysed through statistical computations of frequency distributions. It is common knowledge that the effective implementation of SSS generally has a positive influence on success and throughput rates. The researcher identified the independent and dependent variables for this study in order to determine the effects of one on the other. Welman, Kruger and Mitchell (2005: 16-17) define an independent variable (X) as "that factor which the researcher selects and manipulates in order to determine its effect on the observed phenomenon (the problem that is being investigated)". They further define the dependent variable (Y) as "that factor which the researcher observes and measures to determine how it was affected by the independent variable". In other words, a dependent variable changes depending on the variation in the independent variable. The researcher argues that the performance of the distance students at various NUST-COLL regional centres depends on the implementation of the SSS. Students and regional coordinators are the people that live and experience the problems associated with the student support services. The independent variable for this study was the implementation of SSS, both academic and non-academic. These support services included administrative support, face-to-face tutoring/Saturday classes, vacation schools, orientation seminars, tutor-marking, library services, eLearning and telephone tutoring. The

dependent variables as the factors to be measured were the students' expectations and needs as well as the problems experienced by the regional coordinators with the implementation of the student support services.

For the researcher to determine if the independent variable had an effect on the dependent variable, a chi-square ($x^2$) was used. This is in line with an explanation provided by Welman, Kruger and Mitchell (2005: 229) that $x^2$ is used "to determine if the difference between statistically expected and actual scores is caused by chance/accident or if they are statistically significant – not caused by chance". It should be noted that SSS are designed to enhance performance and increase success rate among DE students. However, the researcher believes that effective SSS should be designed in the context of the recipients such as the students concerned. According to Chiromo (2009: 78), $x^2$ is a non-parametric statistical test used to test directly for goodness of fit or indirectly as a test for independence and determines the impacts of independent variable on dependent variable. Furthermore, the researcher used descriptive analyses, graphs, pie-charts, frequencies and percentages to compare the proportions of participants who responded in different ways. Microsoft Excel was used for graphs and Microsoft Word to produce tables.

## 4.6 VALIDITY AND RELIABILITY

The researcher contends that without reliability and validity, he would not know if he was measuring what was supposed to be measured and how precisely it should be measured. Nieuwenhuis (2011: 80) notes that when qualitative researchers speak of "validity and reliability" they are normally referring to the credibility and trustworthiness of the research. Various authors and scholars have provided clarity on the two concepts of reliability and validity. McMillan and Schumacher (2010: 102) state that the study's findings are trustworthy when they are found to 'approximate' reality. Similarly, credibility concerns the truthfulness of the research findings (Ary et al., 2006: 504).

### 4.6.1 Reliability

Ridenour and Newman (2008: 39) highlight that "the basic purpose of reliability is to help the researchers estimate validity of the findings". This underscores that validity

links closely to reliability; thus it was important for the researcher to produce valid and reliable knowledge/findings when doing the research. According to Leedy and Ormrod, 2005: 29), reliability refers to the degree of consistency the chosen instrument demonstrates when employed to gather the data for a given study. Matee (2009: 175) expands the definition of reliability as the consistency of the instrument and test administration in the study, the consistency of the researcher's interactive style, data recording, data analysis and interpretation of participants' meaning of data. Similarly, Cooper and Schindler (2004: 710) defined reliability as "a characteristic of measurement concerned with … accuracy, precision and consistency". Furthermore, reliability refers to the dependability of a measurement instrument, that is, the extent to which the instrument yields the same results on repeated trials (Terre Blanche et al., 2006: 152). To enhance reliability, the researcher gave the same instructions, amount of time to complete the questionnaire and followed similar procedures at all the NUST-COLL regional centres. The same approach was followed during the interview sessions with the regional coordinators. There was consistency with the results obtained from both the regional coordinators and senior students in terms of challenges experienced and problems with the current SSS at COLL regional centres.

**4.6.2 Validity**

The student questionnaire used in this study was adapted from Möwes 2005 study where the general design was kept but with additions of current support services and removal of items that were not relevant to the study. Constructs such as students' attitudes, motivation and usage of SSS were tested through statements where students could agree or disagree with in a Likert Scale.

There are different types of validity such as concurrent validity, predictive validity, content validity and criterion-related validity but this study defined validity in the context of measurement validity. Terre Blanche et al. (2006: 146) define validity as the degree to which a measure does what it is intended to do. In other words, the instruments should be used for the particular purposes for which they were designed. Similarly, Ridenour and Newman (2008: 39) define validity as the extent to which the test or set of data or design actually measures or reflects or produces what it is supposed to measure, reflect or produce. The researcher concurs with Mears

(2012: 174) that trustworthiness can be measured by how accurately the study reflects the participants' meaning of the topic under study. Validity was then addressed through the honesty (of the researcher and participants), depth and richness of data and academic level of senior students that were approached.

## 4.6.3 Triangulation

Triangulation is broadly defined by Denzin (1978: 291) as "the combination of methodologies in the study of the same phenomenon." Boeije (2010: 176) states that triangulation refers to the examination of a social phenomenon from different angles. According to Easterby-Smith, Thorpe and Lowe (2002: 146), triangulation "is a term borrowed from navigation and surveying, where a minimum of three reference points are taken to check an object's location." This study used both qualitative and quantitative methodologies, with qualitative approach being predominant. In other words, the study used a questionnaire (closed and open-ended questions) and interviews as sources of data. Furthermore, in order to eliminate common threats to trustworthiness, this study engaged triangulation as the process of obtaining information from multiple sources, cross-checking, and verifying the gathered data. Using different methods in the context of this study was useful in the validation process as it sought to ensure that there was convergence or agreement in the collected data. Bouchard (1976: 268) submits that when there is convergence or agreement between two methods, this enhances the belief of the researcher that the results are valid and not a methodological artifice. In this study triangulation was used as a vehicle for cross-validation especially when two methods were found to be congruent and yielded comparable results.

Teddlie and Tashakkori (2009: 266) submit that "Although the two sets of analyses are independent, each provides an understanding of the phenomenon under investigation. These understandings are linked, combined, or integrated into meta-inferences". For example, if many students indicated that there are face-to-face tutorial classes at their regional centres or they do not attend face-to-face tutorial classes on the closed-ended part of the questionnaire. Such responses or indications are explained on the open-ended part of the questionnaire or during the interview by the regional coordinators. The categories and themes developed from

the interviews and open-ended questions of the questionnaires were used to corroborate findings from the quantitative findings. Social reality is complex; thus, if students provide conflicting responses to the same question, each finding is interpreted in its context or representing different viewpoints on the same issue. It is noted that NUST-COLL regional centres are located in different settings in terms of geographical factors, social dynamics, and access to technology.

## 4.7 CONSIDERATIONS REGARDING THE STUDY

This section discusses ethical considerations, delimitations and limitations for the study. These issues were considered before data collection took place, as required by the University of South Africa (UNISA) in research involving humans to ensure that it meets ethical requirements.

### 4.7.1 Ethical considerations

The general purpose of research ethics is to protect the welfare of research participants, and to support that, Mouton (2001: 243) argues that researchers have the right to the search for the truth, but not at the expense of the right of other individuals in society. Since the researcher acquired material and information provided on the basis of mutual trust, it was of paramount importance that the rights, information and interests of the participants were protected. This is consistent with Burton and Bartlett (2009: 29) who maintain that "ethics should be a central consideration for all education researchers." This means that the researcher had to assure the participants of their right to privacy and the confidentiality.

The participants of this research were well informed about the purpose of the study, procedures, risks, benefits, alternative procedures and limit of confidentiality: this is called "informed consent" (Johnson & Christenson, 2008: 109). Voluntary and informed consent in written form were obtained prior to the commencement of data collection as indicated in appendices 1, 2 and 5. The researcher was, therefore, satisfied that informing participants in advance would allow them to choose whether or not to participate without any force, fraud, deceit or any other form of coercion. In the context of this study, permission was granted by the Director for NUST-COLL through the office of the registrar to collect data at the regional centres. It was also

required that the researcher had to provide a supporting letter and the ethical clearance from the university research supervisor before permission could be granted from the NUST registrar's office. After permission was granted, the researcher convened a meeting with all the regional coordinators to explain the significance of completing the questionnaires (by students) and to clarify any arising issue, during their first semester meeting in Windhoek. This was possible because all the regional coordinators normally meet in Windhoek at the main campus for their workshop meetings. The process of data collection was also explained to all the COLL regional coordinators during the face-to-face interviews and later over the phone especially during the distribution and administration of the student questionnaire.

## 4.7.2 Confidentiality and Anonymity

The researcher ensured that privacy, anonymity and confidentiality of the participants were respected during the conduct of this study. It is a norm that researchers should make sure that information provided by the participants and their identity is kept anonymous (Kumar, 2011: 246). Similarly, no one should have access to individual data or the names of the participants except the researcher, and the participants should know who will see the data before they participate (McMillan & Schumacher, 2010: 122). In the context of this research, only the researcher had access to the collected data and kept all the used instruments locked up in a safe. Furthermore, students were not required to reveal their names on the questionnaires. The regional coordinators were code-named R1 – R8 to ensure their anonymity during the interview. The researcher also informed the regional coordinators about the usage of the voice recorders during and after the interview. The voice-recorded data was needed for transcription seeing that the notes taken by the researcher during the interview were not comprehensive.

## 4.7.3 Delimitations and limitations

This study was confined to all senior students from seven (7)  COLL regional centres and eight (8) regional coordinators. The names of the regional centres were given in

Section 4.3.1 of Chapter 4. The researcher was in agreement with the literature that researchers should narrow their studies to avoid ending up with data that are too unwieldy or often unrelated to the core of the research problem (Heck, 2011: 206). Furthermore, it was important to consider factors such as geographical location, the availability of participants, evidence to be collected and the priorities in doing analysis when deciding the boundary of the study.

The selected regional centres are located within different and unique geographical setups such as urban, rural and semi-urban areas. The researcher anticipated the challenges of accessibility for some students due to distances, work and other responsibilities. To have access to all students, the collection of data was done during the second semester registration in July 2016, where questionnaires were handed over to students for completion and students could bring them back to the regional coordinator upon their next visit to the centre. It should be noted that distance students have a choice to use or not to use SSS available at the regional centres and this affected the number of students visiting the centres per day especially the centres that were serving many students from the remote areas. The decrease in the number of students visiting the centre after registration affected the return of completed questionnaires to the regional coordinators and only 109 of 301 were eventually returned.

## 4.8 CHAPTER SUMMARY

This chapter discussed the research design and methodology used in this study. The chapter also described and provided justification for designing a mixed methods study. The data collection instruments that were used in the study, namely a questionnaire and an interview schedule were explained. The data management process, which involves the reduction, cleaning, capturing and organisation of data into patterns were explained followed by a discussion on how data analysis was carried out. In addition, issues of validity and reliability with regard to the research instruments and results were highlighted. Furthermore, the chapter discussed ethical considerations that were observed in order to protect the privacy and confidentiality of the participants. The next chapter provides the analysis and interpretation of the data.

# CHAPTER 5: DATA PRESENTATION, ANALYSIS AND DISCUSSIONS

## 5.1 INTRODUCTION

The aim of this study was to evaluate the implementation of student support services (SSS) at the Namibia University of Science and Technology - Centre for Open and Lifelong Learning (NUST-COLL) regional centres from the perspectives of students and regional coordinators. The objectives of the study were to identify problems with the existing implementation of SSS, determine the needs and challenges of DE students, probe the current practices and propose recommendations for the improvement of SSS implementation at the regional centres. Data were collected by means of interviews from the purposively selected regional coordinators and the questionnaire administered to DE students from the seven randomly selected COLL regional centres.

This chapter presents the analysis of the quantitative data from the student questionnaire and the qualitative data from both the regional coordinators' interviews and the open-ended questions from the student questionnaire. The first part of this chapter outlines the response rate of both students and the regional coordinators and points out the limitations experienced during the process of data collection.

## 5.2 RESPONSE RATES

Before the presentation of the collected data, it is important to highlight the response rate for both the regional coordinators and the students who participated in the study. The study purposively targeted all nine regional coordinators and 301 DE students from seven randomly selected COLL regional centres. According to Johnson and Wislar (2012: 1805) a higher response rate produces findings that are more representative and can be generalised to the population of interest. It should be noted that there is no scientifically proven minimally acceptable response rate; hence the researcher followed the advice of Terre Blanche et al. (2006: 49) that "the researcher must ensure that the sample is large enough to allow him or her to make inferences about the population." In the context of this study, the researcher was confident of the data collected because a big sample was targeted to accommodate possible shortages and practical constraints during the data collection period.

**Table 5.1: Response rates**

| Sample | Sample size | Responses | % response rate |
|---|---|---|---|
| Regional coordinators | 9 | 8 | 89.0 |
| NUST-COLL regional Students | 301 | 109 | 36.0 |

Table 5.1 shows the response rate after collecting data over a period of two months. The time for collecting data was considered sufficient to get a maximum response. A significant number of questionnaire copies were not returned to the regional coordinators who participated in the study. The outstanding questionnaires could be attributed to many activities and responsibilities that require the attention of distance students such as full-time employment, family and community services besides their studies. However, the researcher was satisfied with the returned questionnaires from all regional centres as they provided comprehensive and information-rich data useful for the study.

Johnson and Wislar (2012: 1805) maintain that response rate can be used as a standard to produce findings that are more representative and can be generalised to the population of interest, especially when there is a higher response rate. It is my contention that representativeness of the sample cannot only be defined in terms of the sample size but more importantly also by the accuracy of the findings. As Abbot and McKinney (2013: 118) noted, the sample can be small and still be valid. The main point here is that the findings from the collected questionnaires provided rich information and there was consistency on responses from different regional centres. Based on the collected data, one can argue that collecting more questionnaires would not add any value to the research as similar results would still be obtained.

## 5.3 ANALYSIS OF QUANTITATIVE DATA

The collected data from part A, B and C of the student questionnaire was summarised, cleaned and prepared by using Microsoft Excel to get them ready for compiling the descriptive statistics through the Statistical Package for the Social Sciences (SPSS) version 23. The SPSS version 23 was used to analyse and calculate chi-square, degree of freedom and the level of significance, which were

used to draw conclusions on different questions from the questionnaire. In other words, the level of significance was important in determining the relationship between independent and dependent variables, such as the number of years the student had been studying and the effectiveness or implementation of SSS. It is always necessary to interpret summarised data; hence the collected data was presented on bar graphs, pie-charts, tables and figures. The returned questionnaires with two or more questions unanswered were excluded from the study. In total, 113 questionnaires were received from the respondents and four were excluded because only one question was answered. That means 109 questionnaires were used for this study because of their completeness.

## 5.3.1 Demographic details of students

All the respondents were senior students who had been studying at the Namibia University of Science and Technology (NUST) for more than one full academic year. The senior students had used and been exposed to different student support services provided at the NUST-COLL regional centres; hence they were regarded as knowledgeable when it came to responding to questions in the questionnaire. The intention was to get an equal gender representation but this was not possible due to the voluntary nature of returning the completed questionnaires. Out of 109 respondents, 59 (54%) were women while 50 (46%) were men as indicated below on Section 5.3.1.3. Most of the respondents (82.6%) were employed, which was an added responsibility to their studies. DE students that responded to the questionnaire were from all the regional centres that were purposively selected based on their geographic location across the country with an enrolment of 80 or more students per centre.

5.3.1.1 Age categories

The ages of the respondents were grouped into seven categories as shown in Table 5.2 which shows that 51.4% of the respondents were 30 years old and younger, with 30.3% of the respondents aged between 30 and 40 years old. Only 18.3% of the respondents were older than 40 years. One would expect the ages of DE students to

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be older than conventional students, but this was a fair representation which shows that distance education is a viable choice even for school-leaving students.

**Table 5.2: Age categories of the questionnaire respondents**

| Age categories | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 19-21 | 3 | 2.8 | 2.8 | 2.8 |
| | 22-25 | 22 | 20.2 | 20.2 | 22.9 |
| | 26-30 | 31 | 28.4 | 28.4 | 51.4 |
| | 31-35 | 17 | 15.6 | 15.6 | 67.0 |
| | 36-40 | 16 | 14.7 | 14.7 | 81.7 |
| | 41-45 | 10 | 9.2 | 9.2 | 90.8 |
| | older than 45 | 10 | 9.2 | 9.2 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.2 Marital status

Table 5.3 shows the marital status of the questionnaire respondents. As indicated in the table, the majority (61.5%) of the respondents were single while 38.5% of the respondents were married. This reality is in line with the age representation; many young people now opt for distance education for different reasons other than family. In today's world where job experience is a requirement for graduates to secure employment, it can be argued that youth tend to work and study in order to gain some experience and get money to finance their education.

**Table 5.3: Marital status of the questionnaire respondents**

| Marital status | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Single | 67 | 61.5 | 61.5 | 61.5 |
| | Married | 42 | 38.5 | 38.5 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.3 Gender composition of the respondents

The student gender composed of 50 (46%) men and 59 (54%) women; this was not far from the 50-50 gender composition which was targeted by the researcher. The study targeted an equal number of both male and female respondents but due to the voluntary nature of participation and the time frame of collecting data, the gender balance could not be predetermined.

5.3.1.4 Employment status

As stated in Section 1.3.3, most distance students are employed full-time; hence the need for convenient support services to help them cope with their studies. Table 5.4 shows the employment status of the respondents. It can be said that the varied nature of employment made it difficult for the students to travel to the centre whenever they wanted to. For example, some students are working at sea and in the mining industry which prevents them from visiting the regional centre when they are experiencing challenges with their studies.

**Table 5.4: Employment status**

| Employment | | Frequency | Percent (%) | Valid Percent (%) | Cumulative Percent (%) |
|---|---|---|---|---|---|
| Valid | Yes | 90 | 82.6 | 82.6 | 82.6 |
| | No | 19 | 17.4 | 17.4 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.5 Number of years studying at NUST

This study targeted students who had been studying at NUST for more than one full academic year, that is those in second year, third year, fourth year students and more years of study. As discussed in Section 2.5, 1792 students were informed at the end of 2015 that their studies would be discontinued in 2016 pending the approval of their applications to continue with their studies. It is evident from Table 5.5 that 39.4% of the respondents had been at NUST for more than four years, while 19.3% and 18.3% of the respondents had been studying at NUST for four and three

years respectively. This revelation can be interpreted that many students spend more than the official study period at the institution which in most cases is attributed to failure.

**Table 5.5: Number of years studying at NUST**

| Years of studying | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | One | 8 | 7.3 | 7.3 | 7.3 |
| | Two | 17 | 15.6 | 15.6 | 22.9 |
| | Three | 20 | 18.3 | 18.3 | 41.3 |
| | Four years | 21 | 19.3 | 19.3 | 60.6 |
| | More | 43 | 39.4 | 39.4 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.6 Reasons for studying through COLL regional centre

As mentioned earlier in Section 2.2.2, distance education offers studying choices as to where, how and when to study, implying that distance mode makes education accessible to many people. The respondents were asked why they opted to study through the NUST-COLL regional centre. From Table 5.6, the majority (59.6%) of respondents indicated that they opted for distance education as it provides the possibility of studying while working, while 16.5% cited economic reasons for studying through the distance mode. By implication studying through the regional centres makes it possible for the students to study from home and avoid the financial burden of paying for accommodation in Windhoek.

While distance education affords an opportunity to many employed people to study, it remains unknown if they are prepared for tertiary education. In other words, if students who register have low academic preparedness, then the university should introduce preparatory courses to bridge the gap between high school and tertiary education. It is assumed that students who do bridging courses before first year at the university are more ready for academic demands. Table 5.6 presents students' responses as to why they are studying through the regional centre.

**Table 5.6: Reasons for studying at COLL regional centre**

| Reasons | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | It provides possibility of studying while working. | 65 | 59.6 | 59.6 | 59.6 |
| | It is the best choice from the economical point of view. | 18 | 16.5 | 16.5 | 76.1 |
| | In order to promote my salary through the degree that I will earn. | 5 | 4.6 | 4.6 | 80.7 |
| | In order to improve my overall skills | 17 | 15.6 | 15.6 | 96.3 |
| | Other | 4 | 3.7 | 3.7 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.7 Highest qualification attained at NUST

Study programmes at the NUST have many exit levels. The bachelor of technology degree programmes are meant to be completed in four years. A first-year certificate is awarded after passing all first-year courses, and the same goes for second year, while a diploma is  awarded for passing third year when doing a four-year degree programme. By implication, a degree is awarded upon completing the whole programme, after passing the fourth year of the programme. Table 5.7 summarises the highest qualification awarded to the respondents during their studies at NUST. A situation where students take more years than the official period to complete studies could be an indication that they have been failing. This is evident from Table 5.5, which shows that many respondents had been studying for more than four years, and yet, they only had first year certificates or no qualification at all.

**Table 5.7: Highest qualification for the respondents**

| Qualification | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1st year certificate | 28 | 25.7 | 25.7 | 25.7 |
| | 2nd year certificate | 14 | 12.8 | 12.8 | 38.5 |
| | Diploma | 22 | 20.2 | 20.2 | 58.7 |
| | Degree | 7 | 6.4 | 6.4 | 65.1 |
| | Nothing | 38 | 34.9 | 34.9 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.8 Ownership of ICT tools

In the 21st century, technology is considered to be a tool that enhances productivity at work, including educational institutions. The importance of technology was highlighted in Section 1.3.4, that by using technology, students can cut the costs of travelling to the libraries, submitting assignments and seeking academic support. It is important to know the kind of technology tools that are commonly used in order to design compatible supporting mechanisms. It is also a fact that one can have technological tools but not be competent in using them for their educational benefit. Furthermore, there are other challenges associated with the effective use of technological tools such as availability of electricity (to charge laptop computers or tablets) and network connectivity for internet browsing. Many respondents (45.0%) indicated that they owned laptops, tablets or mobile phones with internet access (43.1%). As reflected in Table 5.8, 12 respondents reported that they owned desktop computers with internet connectivity. Thus, it can be deduced that most of the respondents could make use of technology for their educational advantage. It is, therefore, up to NUST-COLL regional centre management to ensure that students are connected to the internet. Regional centres can be equipped with wireless network facilities, or alternatively, students can be provided with internet devices such as "NETMAN" to connect to the internet away from the centre. NETMAN stands for network manager. It is a device that allows internet access anytime, anywhere. Students can buy data bundles in order to have internet access and be able to email their assignments.

**Table 5.8: ICT tools owned by the respondents**

| Technology | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Portable computer(Laptop) | 49 | 45.0 | 45.0 | 45.0 |
| | Mobile phone with Internet | 47 | 43.1 | 43.1 | 88.1 |
| | Computer with Internet | 12 | 11.0 | 11.0 | 99.1 |
| | Computer without internet | 1 | .9 | .9 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.9 Distance to COLL regional centre

The establishment of COLL regional centres was supposed to address the long distances students had to travel to the main campus in Windhoek, however, Namibia is a big country with people scattered all over the country. Thus knowing the distance travelled by students to the centres would assist in formulating mechanisms that could enhance communication and delivery of services closer to them. As indicated in Table 5.9, the majority of respondents (73.4%) indicated that they lived within a distance of 20km from their local regional centre. The other 26.6% said they lived more than 20km away. A long distance can have a negative effect on accessibility of SSS offered at the regional centres, especially in the rural areas.

**Table 5.9: Distance to the COLL regional centre**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 0-20 km | 80 | 73.4 | 73.4 | 73.4 |
| | 21-40 km | 13 | 11.9 | 11.9 | 85.3 |
| | 41-60 km | 3 | 2.8 | 2.8 | 88.1 |
| | 61-80 km | 4 | 3.7 | 3.7 | 91.7 |
| | 81-100 km | 6 | 5.5 | 5.5 | 97.2 |
| | More than 120 km | 3 | 2.8 | 2.8 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

5.3.1.10 Representation of COLL regional centres

This section presents the composition of the respondents in terms of regional centres. The study aimed at getting 43 respondents although this was an ideal; the actual number of respondents per centre is indicated in Table 5.10 below. Most of the centres, besides Walvis Bay and Otjiwarongo provide services to many students that live far from the centres. This affected the return of completed questionnaires. Walvis Bay centre and Otjiwarongo had a response rate of 39.4% and 20.2% respectively. Some centres such as Ongwediva, Tsumeb and Keetmanshoop provide services to many students that live more than 100km away: they had lower response rates.

**Table 5.10: Respondents per COLL centre**

|       |            | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | Walvis     | 43        | 39.4    | 39.4          | 39.4               |
|       | Otjiwarongo| 22        | 20.2    | 20.2          | 59.6               |
|       | Tsumeb     | 5         | 4.6     | 4.6           | 64.2               |
|       | Ongwediva  | 6         | 5.5     | 5.5           | 69.7               |
|       | Rundu      | 10        | 9.2     | 9.2           | 78.9               |
|       | Outapi     | 12        | 11.0    | 11.0          | 89.9               |
|       | Keetmans   | 11        | 10.1    | 10.1          | 100.0              |
|       | Total      | 109       | 100.0   | 100.0         |                    |

5.3.1.11 Transport to the COLL regional centre

Table 5.11 shows the type of transport used by respondents when accessing support services from their various regional centres. As reflected in this table, the majority of respondents (58.7%) did not use their own cars to visit the centre but relied on the friends' cars or hitchhiking. From the economic perspective, 77.1% of the respondents reported that they used cars to visit the regional centre for support services, which meant they ought to have petrol money to do that. By implication, the frequency of respondents' visits to the regional centres could be influenced by the

economy or their income. While 22.9% indicated that they walked to the centre, this could be attributed to inability to afford transport fares.

**Table 5.11: Type of transport to COLL regional centre**

| Transport | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Taxi/Hike | 38 | 34.9 | 34.9 | 34.9 |
| | Own car | 45 | 41.3 | 41.3 | 76.1 |
| | Friends car | 1 | .9 | .9 | 77.1 |
| | Other | 25 | 22.9 | 22.9 | 100.0 |
| | Total | 109 | 100.0 | 100.0 | |

## 5.3.2 Awareness and Usage of student support services

This section shows the respondents' rating of different types of services offered at the regional centres. The respondents' ratings show how they viewed the provision of services and whether they were aware that services were available at the regional centres. The services were rated by using the Likert scale of two or four-points to show their level of agreement or disagreement and awareness.

5.3.2.1 Availability of Services at COLL regional centres

Concerning the awareness of different support services available at the regional centre, more than 90% of the respondents indicated that they were aware of the services. It is, however, noted that awareness does not translate into usage. It was established that the availability of services such as counselling and telephone tutoring were not known by many respondents. The descriptive statistics representing counselling and telephone tutoring show that 49.5% and 62.4% of the respondents respectively were not aware of the two types of services available. Telephone tutoring and counselling services are provided to distance students from the main campus via telephone. However, the respondents proposed that counselling services should be decentralised to the regional centres (see Table 5.45). The detailed responses on the questions of whether the respondents were aware of the availability of all the services are presented in Table 5.12 below.

**Table 5.12: Awareness of SSS availability**

| Type of services | AWARENESS | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | aware | | unaware | | Total | |
| | N | % | N | % | N | % |
| Administration support (admission, registration, advise on course amendments/exemptions, change of Centre, financial services, issuing study materials | 109 | 100.0 | 0 | 0.0 | 109 | 100 |
| Study facilities | 102 | 93.6 | 7 | 6.4 | 109 | 100 |
| Library services | 104 | 95.4 | 5 | 4.6 | 109 | 100 |
| Printing services | 95 | 87.4 | 14 | 12.8 | 109 | 100 |
| Access to emails | 103 | 94.5 | 6 | 5.5 | 109 | 100 |
| Counselling services to promote students' motivation, overcome students' concern about their studies, decisions on cancellations/withdrawal | 55 | 50.5 | 54 | 49.5 | 109 | 100 |
| Orientation (1$^{st}$ years) | 106 | 97.2 | 3 | 2.8 | 109 | 100 |
| Face-to face tutorials (Saturday classes) | 94 | 86.2 | 15 | 13.8 | 109 | 100 |
| Telephone tutoring | 41 | 37.6 | 68 | 62.4 | 109 | 100 |
| Computer lab for student use | 106 | 92.7 | 3 | 2.8 | 109 | 100 |
| e-learning portal | 101 | 92.7 | 8 | 7.3 | 109 | 100 |
| Communication with other distance learners | 93 | 85.3 | 16 | 14.7 | 109 | 100 |
| Vacation school in Windhoek | 108 | 99.1 | 1 | 0.9 | 109 | 100 |

5.3.2.2 Usage of the support services at COLL regional centres

Respondents were asked to evaluate their usage of different services offered at the COLL regional centre by using the rating scales given in Table 5.13 below.

**Table 5.13 Rates of usage for SSS**

| TYPE OF SERVICES | RATES OF USAGE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Never | | Seldom | | Other | | Very often | | Total | |
| | N | % | N | % | N | % | N | % | N | % |
| Administration support (admission registration, advise on course amendments/exemptions, change of Centre, financial services, issuing study materials | 1 | 0.9 | 17 | 15.6 | 6 | 5.5 | 85 | 78.0 | 109 | 100 |
| Study facilities | 9 | 8.3 | 30 | 27.5 | 10 | 9.2 | 59 | 54.1 | 108 | 100 |
| Library services | 5 | 4.6 | 27 | 24.8 | 14 | 12.8 | 63 | 57.8 | 109 | 100 |
| Printing services | 23 | 21.1 | 31 | 28.4 | 17 | 15.6 | 38 | 34.9 | 109 | 100 |
| Access to emails | 16 | 14.7 | 27 | 24.8 | 16 | 14.7 | 50 | 45.9 | 109 | 100 |
| Counselling services to promote students' motivation, overcome students' concern about their studies, decisions on cancellations/withdrawal | 72 | 66.1 | 17 | 15.6 | 7 | 6.4 | 13 | 11.9 | 109 | 100 |
| Orientation (1st years) | 18 | 16.5 | 30 | 27.5 | 14 | 12.8 | 47 | 43.1 | 109 | 100 |
| Face-to-face tutorials (Saturday classes) | 31 | 28.4 | 33 | 30.3 | 11 | 10.1 | 34 | 31.2 | 109 | 100 |
| Telephone tutoring | 80 | 73.4 | 15 | 13.8 | 6 | 5.5 | 8 | 7.3 | 109 | 100 |
| Computer lab for student use | 11 | 10.1 | 16 | 14.7 | 12 | 11.0 | 70 | 64.2 | 109 | 100 |
| e-learning portal | 16 | 14.7 | 30 | 27.5 | 17 | 15.6 | 46 | 42.2 | 109 | 100 |
| Communication with distance learners | 27 | 24.8 | 22 | 20.2 | 17 | 15.6 | 43 | 39.4 | 109 | 100 |
| Vacation school in Windhoek | 10 | 9.2 | 16 | 14.7 | 11 | 10.1 | 72 | 66.1 | 109 | 100 |

Table 5.13 shows that only four types of services out of 13 had more than 50% of "very often" usage. In other words, besides the awareness of the availability of support services at the regional centres, respondents did not use the services for various reasons. The reasons are shown later in Tables 5.40 – 5.43, such as too few library copies, courses not considered for face-to-face tutorials and services that were not available over the weekends. Generally, one can argue that respondents value the usage of the support services and were making use of them whenever possible. In this sense, it would be helpful for NUST-COLL to be accommodative of students' social and economic problems by providing the needed services. Therefore, it is important that NUST-COLL should consider taking services to the students by using different mechanisms such as empowering students to use

technology and establishing more study centres in towns where there is high a population of students.

## 5.3.3 Evaluation of student support services implementation at COLL regional centres

In this section, respondents were asked to rate the implementation of different support services at their regional centres. Their responses are provided below and show a clear picture of how they rated the services. This should be understood as a way of informing the support service providers where to change in order to improve service delivery for the students.

5.3.3.1 Administrative student support services

The implementation of different support services was evaluated positively by 80% of the respondents who agreed that the implementation of the available support services was done well. However, 33% respondents felt that NUST-COLL regional staff did not facilitate and assist them to form study groups. Similarly, it should not be ignored that 21.1% of the respondents submitted that the facilitation of contact between students and staff members at the main campus needed attention.

**Table 5.14: Provision of administrative support services**

| STATEMENTS | EXTENT OF AGREEMENT OR DISAGREEMENT WITH STATEMENT | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | TOTAL | |
| | N | % | N | % | N | % | N | % | N | % |
| There is adequate and timely support available at COLL regional Centre | 74 | 67.9 | 31 | 28.4 | 3 | 2.8 | 1 | .9 | 109 | 100 |
| General enquiries and problems are handled efficiently | 82 | 75.2 | 22 | 20.2 | 4 | 3.7 | 1 | 0.9 | 109 | 100 |
| Printing of academic records, proof of registration | 79 | 72.5 | 29 | 26.6 | 0 | 0.0 | 1 | 0.9 | 109 | 100 |
| Advice on course amendments, exemptions and change of mode | 59 | 54.1 | 36 | 33.0 | 14 | 12.8 | 0 | 0.0 | 109 | 100 |
| Respond to written enquiries and address all issues | 53 | 48.6 | 43 | 39.4 | 12 | 11.0 | 1 | 0.9 | 109 | 100 |
| Receive and dispatch assignments to the markers | 78 | 71.6 | 30 | 27.5 | 0 | 0.0 | 1 | 0.9 | 109 | 100 |
| Issue and order study materials for students | 66 | 60.6 | 35 | 32.1 | 6 | 5.5 | 2 | 1.8 | 109 | 100 |
| Assistance with library facilities | 73 | 67.0 | 30 | 27.5 | 5 | 4.6 | 1 | 0.9 | 109 | 100 |

| Statement | N | % | N | % | N | % | N | % | N | % |
|---|---|---|---|---|---|---|---|---|---|---|
| Information about face-to-face tutorials | 59 | 54.1 | 37 | 33.9 | 10 | 9.2 | 3 | 2.8 | 109 | 100 |
| Information about scheduling of vacation school | 72 | 66.1 | 31 | 28.4 | 6 | 5.5 | 0 | 0.0 | 109 | 100 |
| Administration of examination and tests | 77 | 70.6 | 30 | 27.5 | 1 | 0.9 | 1 | 0.9 | 109 | 100 |
| Receive all fees from students | 71 | 65.1 | 30 | 27.5 | 7 | 6.4 | 1 | 0.9 | 109 | 100 |
| Facilitation and assistance to form study groups | 28 | 25.7 | 45 | 41.3 | 29 | 26.6 | 7 | 6.4 | 109 | 100 |
| Assistance regarding computer lab, internet and printing | 64 | 58.7 | 37 | 33.9 | 8 | 7.3 | 0 | 0.0 | 109 | 100 |
| Facilitation of contact between students and marker-tutors | 35 | 32.1 | 51 | 46.8 | 15 | 13.8 | 8 | 7.3 | 109 | 100 |

## 5.3.3.2 Benefits of attending orientation

**Table 5.15: Benefits of attending orientation at COLL regional centre**

| STATEMENT | EXTENT OF AGREEMENT OR DISAGREEMENT WITH STATEMENT | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Strongly agree | | Agree | | Disagree | | Strongly Disagree | | Not Oriented | | Total | |
| | N | % | N | % | N | % | N | % | N | % | N | % |
| Orientation seminar prepared you to be ready to start with your studies | 48 | 44.0 | 22 | 20.2 | 0 | 0 | 0 | 0 | 39 | 35.8 | 109 | 100 |
| Orientation seminar made you to be aware of all the support services available at the centre | 43 | 39.4 | 23 | 21.1 | 2 | 1.8 | 2 | 1.8 | 39 | 35.8 | 109 | 100 |
| Orientation seminar provided all information that help me cope with studies | 42 | 38.4 | 25 | 22.9 | 3 | 2.8 | 0 | 0.0 | 39 | 35.8 | 109 | 100 |
| Orientation seminar motivated and encouraged you to make a success of your studies | 40 | 36.7 | 26 | 23.9 | 4 | 3.7 | 0 | 0.0 | 39 | 35.8 | 109 | 100 |
| Orientation seminar made you aware of what is expected from you as a distance student | 46 | 42.2 | 22 | 20.2 | 2 | 1.8 | 0 | 0.0 | 39 | 35.8 | 109 | 100 |
| Orientation seminar clarified all doubts and problems pertaining to my studies | 32 | 29.4 | 27 | 24.8 | 8 | 7.3 | 3 | 2.7 | 39 | 35.8 | 109 | 100 |

As indicated in Section 2.4.1, orientation prepares students for their academic socialisation into the distance learning culture. It is believed that students that have attended orientation would not need much individual attention on regulations and policies of the university. Overall, Table 5.15 indicates that students evaluated the orientation programme positively. In other words, the majority of students who attended the orientation programme benefited in terms of knowing what was expected of them, awareness of available support services and guidance on how to cope with their studies. The researcher contends that if orientation is given to students before registration, they could register for the number of courses that they could handle and this would greatly reduce cancellation of courses at a later stage.

Orientation courses connect the students to the university as they give information on the programmes and services offered through the regional centres. Table 5.15 reveals that 35.8% of the student respondents did not attend the orientation courses, implying that these students missed out on important information. Orientation courses develop independence, skills and knowledge needed to be successful.

## 5.3.3.3 Face-to-face tutorials

**Table 5.16: Benefits of attending face-to-face tutorials at COLL regional centre**

| STATEMENT | EXTENT OF AGREEMENT OR DISAGREEMENT WITH STATEMENT | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Strongly agree | | Agree | | Disagree | | Strongly disagree | |
| | N | % | N | % | N | % | N | % |
| Face-to-face tutorial sessions suit my personal schedule | 16 | 22.9 | 41 | 58.6 | 13 | 18.6 | 0 | 0 |
| Tutors show sound knowledge of their subject matter | 21 | 30.0 | 38 | 54.3 | 11 | 15.7 | 0 | 0 |
| A variety of teaching methods are used to make the course interesting and rewarding | 13 | 18.6 | 32 | 45.7 | 22 | 31.4 | 3 | 4.3 |
| Tutors are always punctual | 11 | 15.7 | 36 | 51.4 | 19 | 27.1 | 4 | 5.7 |
| The presentation of the subject matter is systematic and clear | 13 | 18.6 | 41 | 58.6 | 11 | 15.7 | 5 | 7.1 |
| Tutors encourage questions and dialogue with students | 24 | 38.6 | 33 | 47.1 | 12 | 17.1 | 1 | 1.4 |
| Tutors support and allow students to express fears and anxiety about the course | 18 | 25.7 | 28 | 40.0 | 17 | 24.3 | 7 | 10.0 |
| Tutorial classes lessen feelings of isolation | 23 | 32.9 | 26 | 37.1 | 15 | 21.4 | 6 | 8.6 |
| Tutors encourage students to share experiences | 30 | 42.9 | 31 | 44.3 | 9 | 12.9 | 0 | 0 |
| Face-to-face tutorials are useful to clarify doubts and problems pertaining to the course | 33 | 47.1 | 31 | 44.3 | 6 | 8.6 | 0 | 0 |
| Face-to-face tutorials allows you to be better prepared for examinations | 29 | 41.4 | 33 | 47.1 | 8 | 11.4 | 0 | 0 |

The evaluation of face-to-face tutorials yielded mixed results. It is a concern that 35.8% of the respondents did not attend face-to-face tutorial classes as their courses

were not offered, or due to other problems including work-related ones. If some students do not attend tutorial classes because they are not offered, what strategy should NUST-COLL implement to assist these students? It is known that most students who are admitted through the mature age entry scheme need academic support to cope with the course demands. NUST-COLL regional tutors have the role to provide academic support, motivate and promote dialogue among the students in order to lessen the feeling of isolation. It is commendable that 87.1% of the respondents indicated that tutors encouraged students to share their experience.

As argued by Matakala, et al. (2014: 8) in Section 2.4.2, there is a lack of effective collaboration between DE tutors and the university lecturers who design the modules and set examinations. It is argued that collaboration would enhance the tutors' facilitation skills.  Apart from the 35.8% of respondents who did not attend face-to-face tutorials, 15.6% of student respondents (see Table 5.40) expressed concern that their tutors needed training on how to handle DE students. Some 35.7% students also indicated that tutors did not use a variety of methods to make the courses interesting and rewarding.


5.3.3.4 Quality of assignments


Assignments are issued to students during registration with due dates and submitted back for marking through the regional centres. The regional centres keep records of received assignments before they are couriered to the main campus for marking. Once the marking is done, markers are supposed to provide guidance to the students on where to improve, what to do and how to get assistance. It was deemed prudent to get the respondents' opinions on the quality of assignments, marking and comments provided for guidance in order to improve on these in the future.

As discussed in Section 2.4.3, assignment feedback allows students to assess their level of understanding and give hints on what to do in order to improve.
The respondents' views were mixed on their evaluation of the quality of assignments given. The majority of students (99.1%) rated the assignments, to be highly useful and an important teaching and learning tool. Furthermore, 67% of students agreed that the comments given on the assignments were motivating and encouraging. One

interesting scenario is when respondents were asked if assignments were vague and difficult to attempt. It was found that 48.6% of respondents expressed that assignments were vague and difficult as compared to 51.4% of the respondents who disagreed with the same statement. Similarly, respondents had mixed views on the availability of marker-tutors for consultation to provide academic support after marking the assignments. As discussed in Section 2.3.1, interaction between DE students and marker-tutors could combat geographical isolation which forces students to drop out of their studies. This means that if marker-tutors do not interact with students for academic support, expected academic performance is most likely compromised.

As Table 5.16 reflects, 67.9% of the respondents indicated that the turnaround time for the marked assignments feedback was not adequate. In other words, the time spent between submitting an assignment and receiving the marked assignment from the tutor-marker is too long. It is the researcher's strong contention that effective feedback on the assignments is a very important part of formative instruction that students need to improve their course performance. Students need marked assignments to plan and work through their mistakes in order to improve on the next assignment.

**Table 5.17: Quality of assignments**

| STATEMENT | EXTENT OF AGREEMENT OR DISAGREEMENT WITH STATEMENT | | | | | | | | | |
| | Strongly Agree | | Agree | | Disagree | | Strong disagree | | Total | |
| | N | % | N | % | N | % | N | % | N | % |
| Assignments are useful and an important teaching and learning tool | 81 | 74.3 | 27 | 24.8 | 1 | 0.9 | 0 | 0.0 | 109 | 100 |
| Assignments are vague and difficult to attempt | 23 | 21.1 | 30 | 27.5 | 44 | 40.4 | 12 | 11.0 | 109 | 100 |
| Comments and feedback on assignments are comprehensive, detailed and helpful | 30 | 27.5 | 45 | 41.3 | 21 | 19.3 | 13 | 11.9 | 109 | 100 |
| Comments on the assignments are motivating and encouraging | 24 | 22.0 | 49 | 45.0 | 30 | 27.5 | 6 | 5.5 | 109 | 100 |
| No comments and feedback are given | 11 | 10.1 | 20 | 18.3 | 47 | 43.1 | 31 | 28.4 | 109 | 100 |
| Maker-tutors are available for consultation to provide academic support after marking the assignments | 16 | 14.7 | 39 | 35.8 | 27 | 24.8 | 27 | 24.8 | 109 | 100 |
| The turnaround time of assignments is adequate (time spend between submitting and receiving marked assignments from tutor-marker) | 11 | 10.1 | 24 | 22.0 | 30 | 27.5 | 44 | 40.4 | 109 | 100 |
| Comments and feedback on assignments are constructive and relevant | 24 | 22.0 | 48 | 44.0 | 27 | 24.8 | 10 | 9.2 | 109 | 100 |

### 5.3.4 The students' awareness and usage of student support services based on selected demographic variables.

The independent variables for this study were both the academic and administrative SSS. Selected demographic variables (dependent), such as qualifications obtained, years of study, reasons to study and type of technology were used to investigate how they were affected by the SSS using the chi-square ($x^2$). The chi-square test enabled the researcher to judge the importance of individual variables. In this study, the selected demographic variables were related to the students' needs and expectations; the test is therefore appropriate.

The p-values associated with $x^2$ are probabilities; therefore they are not always accurate especially when the expected frequencies are small. The p-values less than five percent (5%) were taken to be significant whereas if the p-value was greater than 5%, it was interpreted as not significant. According to Chiromo (2009: 70), "the smaller the level of significance, the greater the degree of confidence the researcher can have in the research findings." In this study, the $x^2$ in most cases exceeded the critical values as per the $x^2$ distribution table; hence, the findings were taken to be valid.

In the following section, an analysis according to years of study at NUST, reasons to study through the regional centre, qualifications obtained and access to technology was done on administrative support services, orientation services, face-to-face tutorial classes and assignments marking and administration.

5.3.4.1 Analysis according to years of study at NUST

Orientation services provided to the students at the COLL regional centres were analysed according to the number of years that students had been studying at NUST, and significant differences were found for most of the statements. The tables in this section show an analysis of different orientation statements according to the number of years at NUST.

When students were asked whether they attended orientation session when they registered at NUST through the regional centre, it was found that 35.8% (n = 39) of the 109 respondents did not attend the orientation. The results in Table 5.18 show that 55.8% (n = 24) of those 39 students have been studying at NUST for more than four years. The information in Table 5.18, 5.19 and 5.20 shows how the students that attended the orientation programme responded to the statements according to the number of years that they had been studying at NUST.

Table 5.18 reveals that significantly most of the students that attended orientation were made aware of the available support services at the COLL regional centres. Similarly, as Table 5.19 shows students agreed significantly that orientation provided information that helped them cope with their studies and it clarified doubts and problems pertaining to their studies (see Table 5.20).

**Table 5.18 Orientation made you aware of support services available at the regional centre**

| Years | | | Orientation Seminar made you aware of all services | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Not orientated | |
| One | Count | | 4 | 2 | 0 | 0 | 2 | 8 |
| | % within Years | | 50.0% | 25.0% | 0.0% | 0.0% | 25.0% | 100.0% |
| Two | Count | | 8 | 6 | 1 | 0 | 2 | 17 |
| | % within Years | | 47.1% | 35.3% | 5.9% | 0.0% | 11.8% | 100.0% |
| Three | Count | | 13 | 5 | 0 | 1 | 1 | 20 |
| | % within Years | | 65.0% | 25.0% | 0.0% | 5.0% | 5.0% | 100.0% |
| Four years | Count | | 7 | 3 | 0 | 1 | 10 | 21 |
| | % within Years | | 33.3% | 14.3% | 0.0% | 4.8% | 47.6% | 100.0% |
| More | Count | | 11 | 7 | 1 | 0 | 24 | 43 |
| | % within Years | | 25.6% | 16.3% | 2.3% | 0.0% | 55.8% | 100.0% |
| Total | Count | | 43 | 23 | 2 | 2 | 39 | 109 |
| | % within Years | | 39.4% | 21.1% | 1.8% | 1.8% | 35.8% | 100.0% |

Note: $x^2 = 28.58$; df = 16; p<0.05

**Table 5.19: Orientation seminar provided all information that helps me cope with studies**

| Years | | | Orientation Seminar provided all information that helps you cope with studies | | | | Total |
|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | Agree | Disagree | Not orientated | |
| One | Count | | 3 | 3 | 0 | 2 | 8 |
| | % within Years | | 37.5% | 37.5% | 0.0% | 25.0% | 100.0% |
| Two | Count | | 10 | 5 | 0 | 2 | 17 |
| | % within Years | | 58.8% | 29.4% | 0.0% | 11.8% | 100.0% |
| Three | Count | | 11 | 7 | 1 | 1 | 20 |
| | % within Years | | 55.0% | 35.0% | 5.0% | 5.0% | 100.0% |
| Four years | Count | | 6 | 4 | 1 | 10 | 21 |
| | % within Years | | 28.6% | 19.0% | 4.8% | 47.6% | 100.0% |
| More | Count | | 12 | 6 | 1 | 24 | 43 |
| | % within Years | | 27.9% | 14.0% | 2.3% | 55.8% | 100.0% |
| Total | Count | | 42 | 25 | 3 | 39 | 109 |
| | % within Years | | 38.5% | 22.9% | 2.8% | 35.8% | 100.0% |

Note: $x^2 = 24.33$; df = 12; p<0.05

**Table 5.20: Orientation seminar clarified all the doubts and problems pertaining to my studies**

| Years | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Not orientated | Total |
|---|---|---|---|---|---|---|---|---|
| | | | Orientation seminar clarified all doubts and problems pertaining to my studies |
| One | Count | | 4 | 2 | 0 | 0 | 2 | 8 |
| | % within Years | | 50.0% | 25.0% | 0.0% | 0.0% | 25.0% | 100.0% |
| Two | Count | | 6 | 6 | 2 | 0 | 3 | 17 |
| | % within Years | | 35.3% | 35.3% | 11.8% | 0.0% | 17.6% | 100.0% |
| Three | Count | | 11 | 7 | 1 | 0 | 1 | 20 |
| | % within Years | | 55.0% | 35.0% | 5.0% | 0.0% | 5.0% | 100.0% |
| Four years | Count | | 4 | 4 | 1 | 2 | 10 | 21 |
| | % within Years | | 19.0% | 19.0% | 4.8% | 9.5% | 47.6% | 100.0% |
| More | Count | | 7 | 8 | 4 | 0 | 24 | 43 |
| | % within Years | | 16.3% | 18.6% | 9.3% | 0.0% | 55.8% | 100.0% |
| Total | Count | | 32 | 27 | 8 | 2 | 40 | 109 |
| | % within Years | | 29.4% | 24.8% | 7.3% | 1.8% | 36.7% | 100.0% |

Note:    $x^2 = 40.99$; df = 20; p<0.05

Face-to-face tutorials were also analysed according to the number of years that students had been studying at NUST and significant differences were found as shown in Tables 5.21, 5.22 and 5.23. It should also be noted that 46.8% (51 of 109) indicated that they did not attend face-to-face tutorial sessions and many of them were in their fourth year (n = 11) while the students who had been at NUST for longer than four years numbered 29. For all the respondents in different years of study, it was found that significantly more students agreed that face-to-face tutorial sessions suited their personal schedule (Table 5.21), and tutors used the platform to encourage students to share their experiences (Table 5.23) and dialogue with fellow students (Table 5.22). It is, however, a concern that most senior students do not attend tutorial sessions for the reasons given in Table 5.40. From the given analysis, students that did not attend tutorial classes have been at NUST for more years than the other students.

**Table 5.21: Face-to-face tutorial sessions suit my personal schedule**

| Years | | | Face-to-Face tutorial sessions suit my personal schedule | | | | Total |
|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | Agree | Disagree | Non attendance | |
| One | Count | | 2 | 4 | 0 | 2 | 8 |
| | % within Years | | 25.0% | 50.0% | 0.0% | 25.0% | 100% |
| Two | Count | | 3 | 6 | 1 | 7 | 17 |
| | % within Years | | 17.6% | 35.3% | 5.9% | 41.2% | 100% |
| Three | Count | | 9 | 6 | 3 | 2 | 20 |
| | % within Years | | 45.0% | 30.0% | 15.0% | 10.0% | 100% |
| Four years | Count | | 4 | 4 | 2 | 11 | 21 |
| | % within Years | | 19.0% | 19.0% | 9.5% | 52.4% | 100% |
| More | Count | | 7 | 5 | 2 | 29 | 43 |
| | % within Years | | 16.3% | 11.6% | 4.7% | 67.4% | 100% |
| Total | Count | | 25 | 25 | 8 | 51 | 109 |
| | % within Years | | 22.9% | 22.9% | 7.3% | 46.8% | 100% |

Note:  $x^2 = 25.66$; df = 12; p<0.05

**Table 5.22: Tutors encourage questions and dialogue with students**

| Years | | | Tutors encourage questions and dialogue with students | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Non attendance | |
| One | Count | | 4 | 2 | 0 | 0 | 2 | 8 |
| | % within Years | | 50.0% | 25.0% | 0.0% | 0.0% | 25.0% | 100% |
| Two | Count | | 3 | 5 | 2 | 0 | 7 | 17 |
| | % within Years | | 17.6% | 29.4% | 11.8% | 0.0% | 41.2% | 100% |
| Three | Count | | 9 | 8 | 1 | 0 | 2 | 20 |
| | % within Years | | 45.0% | 40.0% | 5.0% | 0.0% | 10.0% | 100% |
| Four years | Count | | 3 | 5 | 2 | 0 | 11 | 21 |
| | % within Years | | 14.3% | 23.8% | 9.5% | 0.0% | 52.4% | 100% |
| More | Count | | 8 | 4 | 1 | 1 | 29 | 43 |
| | % within Years | | 18.6% | 9.3% | 2.3% | 2.3% | 67.4% | 100% |
| Total | Count | | 27 | 24 | 6 | 1 | 51 | 109 |
| | % within Years | | 24.8% | 22.0% | 5.5% | 0.9% | 46.8% | 100% |

Note:  $x^2 = 29.25$; df = 16; p<0.05

**Table 5.23: Tutors encourage students to share their experiences**

| Years | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Non attendance | Total |
|-------|--|--|----------------|-------|----------|-------------------|----------------|-------|
| | | | Tutors encourage students to share their experiences | | | | |
| | One | Count | 2 | 3 | 1 | 0 | 2 | 8 |
| | | % within Years | 25.0% | 37.5% | 12.5% | 0.0% | 25.0% | 100% |
| | Two | Count | 4 | 5 | 1 | 0 | 7 | 17 |
| | | % within Years | 23.5% | 29.4% | 5.9% | 0.0% | 41.2% | 100% |
| | Three | Count | 11 | 6 | 1 | 0 | 2 | 20 |
| | | % within Years | 55.0% | 30.0% | 5.0% | 0.0% | 10.0% | 100% |
| | Four years | Count | 5 | 2 | 3 | 0 | 11 | 21 |
| | | % within Years | 23.8% | 9.5% | 14.3% | 0.0% | 52.4% | 100% |
| | More | Count | 7 | 5 | 1 | 1 | 29 | 43 |
| | | % within Years | 16.3% | 11.6% | 2.3% | 2.3% | 67.4% | 100% |
| Total | | Count | 29 | 21 | 7 | 1 | 51 | 109 |
| | | % within Years | 26.6% | 19.3% | 6.4% | 0.9% | 46.8% | 100% |

Note:   $X^2 = 29.72$; df = 16; p<0.05

The quality of marking and feedback for the assignments was analysed according to the number of years that students had been studying at NUST. Table 5.24 shows significant differences when students were asked if marker-tutors were available for academic consultations after marking the assignments. Students who had been at NUST for one and three years significantly agreed that markers-tutors were available for consultation. However students who had been studying at NUST for two, four and more years significantly disagreed with the statement that marker-tutors were available for consultation after marking the assignments. This is evidence that students need academic support; hence NUST-COLL should work out a strategy to support all the students.

**Table 5.24: Marker-tutors are available for consultation to provide academic support after marking assignments**

| Years | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Total |
|---|---|---|---|---|---|---|---|
| | One | Count | 3 | 3 | 0 | 2 | 8 |
| | | % within Years | 37.5% | 37.5% | 0.0% | 25.0% | 100% |
| | Two | Count | 1 | 6 | 9 | 1 | 17 |
| | | % within Years | 5.9% | 35.3% | 52.9% | 5.9% | 100% |
| | Three | Count | 5 | 9 | 3 | 3 | 20 |
| | | % within Years | 25.0% | 45.0% | 15.0% | 15.0% | 100% |
| | Four years | Count | 2 | 7 | 5 | 7 | 21 |
| | | % within Years | 9.5% | 33.3% | 23.8% | 33.3% | 100% |
| | More | Count | 5 | 14 | 10 | 14 | 43 |
| | | % within Years | 11.6% | 32.6% | 23.3% | 32.6% | 100% |
| Total | | Count | 16 | 39 | 27 | 27 | 109 |
| | | % within Years | 14.7% | 35.8% | 24.8% | 24.8% | 100% |

Note:  $x^2$ = 19.62; df = 12; p<0.05

Administrative support services were analysed according to the number of years that students had been studying at NUST as shown in Table 5.25. Table 5.25 revealed that all students who had been studying at NUST significantly agreed that advice on course amendments and exemptions were available at the regional centres. However, 23.5% and 16.3% of students who had been studying at NUST for two and more years respectively disagreed with the statement.

**Table 5.25: Advice on course amendments and exemptions available at the regional centre**

| Years | | | Advice on course amendments and exemptions | | | Total |
|---|---|---|---|---|---|---|
| | | | Strongly Agree | Agree | Disagree | |
| One | Count | | 3 | 5 | 0 | 8 |
| | % within Years | | 37.5% | 62.5% | 0.0% | 100% |
| Two | Count | | 9 | 4 | 4 | 17 |
| | % within Years | | 52.9% | 23.5% | 23.5% | 100% |
| Three | Count | | 14 | 5 | 1 | 20 |
| | % within Years | | 70.0% | 25.0% | 5.0% | 100% |
| Four years | Count | | 7 | 12 | 2 | 21 |
| | % within Years | | 33.3% | 57.1% | 9.5% | 100% |
| More | Count | | 26 | 10 | 7 | 43 |
| | % within Years | | 60.5% | 23.3% | 16.3% | 100% |
| Total | Count | | 59 | 36 | 14 | 109 |
| | % within Years | | 54.1% | 33.0% | 12.8% | 100% |

Note: $x^2 = 15.31$; df = 8; p<0.05

5.3.4.2 Analysis of the reasons for studying through a NUST-COLL regional centre.

Students' responses on the choice to study through a regional centre were used to analyse orientation, face-to-face tutorial letters, the quality of marking assignments and the availability of administrative support services. Tables 5.26, 5.27 and 5.28 show the statements that were analysed. Table 5.26 reveals that all students irrespective of the reason to study via a regional centre agreed significantly that there was adequate and timely support available at the regional centre. Students were asked if the presentation of the subject matter through face-to-face tutorials was systematic, clear and effective as reflected in Table 5.27. Students who were studying towards the degree in order to improve their salary scales at work disagreed with the statement (60%, n = 3 out of 5). One can conclude that these students registered for wrong reasons that are "not academic transformation". All the other students who were studying through regional centres for any other reason agreed significantly with the statement.

**Table 5.26: There is adequate and timely support available at the regional centre**

| | | | There is adequate and timely support available at the regional centre | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Total |
| Reasons | It provides possibility of studying while working | Count | 43 | 20 | 1 | 1 | 65 |
| | | % within Reasons | 66.2% | 30.8% | 1.5% | 1.5% | 100% |
| | It is the best choice from the economic point of view | Count | 18 | 0 | 0 | 0 | 18 |
| | | % within Reasons | 100.0% | 0.0% | 0.0% | 0.0% | 100% |
| | In order to promote my salary through the degree that I will earn | Count | 1 | 4 | 0 | 0 | 5 |
| | | % within Reasons | 20.0% | 80.0% | 0.0% | 0.0% | 100% |
| | In order to improve my overall skills | Count | 9 | 6 | 2 | 0 | 17 |
| | | % within Reasons | 52.9% | 35.3% | 11.8% | 0.0% | 100% |
| | Other | Count | 3 | 1 | 0 | 0 | 4 |
| | | % within Reasons | 75.0% | 25.0% | 0.0% | 0.0% | 100% |
| Total | | Count | 74 | 31 | 3 | 1 | 109 |
| | | % within Reasons | 67.9% | 28.4% | 2.8% | 0.9% | 100% |

Note: $x^2 = 22.04$; df = 12; p<0.05

**Table 5.27: Presentation of the subject matter is systematic, clear and effective**

| | | | The presentation of the subject matter is systematic, clear and effective | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Non attendance | Total |
| Reasons | It provides possibility of studying while working | Count | 7 | 21 | 0 | 2 | 35 | 65 |
| | | % within Reasons | 10.8% | 32.3% | 0.0% | 3.1% | 53.8% | 100% |
| | It is the best choice from the economical point of view | Count | 2 | 7 | 1 | 0 | 8 | 18 |
| | | % within Reasons | 11.1% | 38.9% | 5.6% | 0.0% | 44.4% | 100% |
| | In order to promote my salary through the degree that I will earn | Count | 0 | 2 | 3 | 0 | 0 | 5 |
| | | % within Reasons | 0.0% | 40.0% | 60.0% | 0.0% | 0.0% | 100.0% |
| | In order to improve my overall skills | Count | 2 | 8 | 1 | 0 | 6 | 17 |
| | | % within Reasons | 11.8% | 47.1% | 5.9% | 0.0% | 35.3% | 100% |
| | Other | Count | 0 | 2 | 0 | 0 | 2 | 4 |
| | | % within Reasons | 0.0% | 50.0% | 0.0% | 0.0% | 50.0% | 100% |
| Total | | Count | 11 | 40 | 5 | 2 | 51 | 109 |
| | | % within Reasons | 10.1% | 36.7% | 4.6% | 1.8% | 46.8% | 100% |

Note: $x^2 = 43.70$; df = 16; p<0.05

**Table 5.28: Benefit from the telephone academic support service**

| | | | Telephone benefit from academic support | | | |
|---|---|---|---|---|---|---|
| | | | Yes | No | Don't use telephone | Total |
| Reasons | It provides possibility of studying while working | Count | 34 | 9 | 22 | 65 |
| | | % within Reasons | 52.3% | 13.8% | 33.8% | 100% |
| | It is the best choice from the economical point of view | Count | 6 | 2 | 10 | 18 |
| | | % within Reasons | 33.3% | 11.1% | 55.6% | 100% |
| | In order to promote my salary through the degree that I will earn | Count | 3 | 1 | 1 | 5 |
| | | % within Reasons | 60.0% | 20.0% | 20.0% | 100% |
| | In order to improve my overall skills | Count | 11 | 3 | 3 | 17 |
| | | % within Reasons | 64.7% | 17.6% | 17.6% | 100% |
| | Other | Count | 1 | 3 | 0 | 4 |
| | | % within Reasons | 25.0% | 75.0% | 0.0% | 100% |
| Total | | Count | 55 | 18 | 36 | 109 |
| | | % within Reasons | 50.5% | 16.5% | 33.0% | 100.0% |

Note: $x^2 = 16.88$; df = 9; p<0.05

The reasons for studying via a regional centre were also used to analyse the benefits of the academic support through the usage of the telephone as indicated in Table 5.28 above. Students who were studying for reasons not given in the Table 5.28 (others) disagreed significantly with the statement. However, students that are studying for any other reason given in Table 5.28 agreed significantly with the statement that they benefited from the telephonic academic support. It should be noted that 36 (33.0%) student respondents did not use the telephone for academic support service.

5.3.4.3 Analysis according to the type of technology used by students at regional centres

The type of technology such as cellular phones (mobile phone), laptops, tablets or desktop computers with internet access were used to analyse whether the turnaround time for the assignments was adequate.

Table 5.29 reveals that students that make use of the mobile phone and laptops or tablets with internet access disagreed significantly that the turnaround for the assignments was adequate. Based on the findings, the turnaround time of assignments should a point of concern to NUST-COLL. Similarly, the types of technologies used by students were used to analyse the attendance of an orientation programme and the outcome is presented in Table 5.30. Students using laptop or mobile phones with internet access significantly agreed with the statement that they attended an orientation programme.

**Table 5.29: The turnaround time of the assignments**

| | | | The turnaround time of assignments is adequate | | | | |
| | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Total |
|---|---|---|---|---|---|---|---|
| Technology | Portable computer(Laptop) | Count | 3 | 15 | 10 | 21 | 49 |
| | | % within Technology | 6.1% | 30.6% | 20.4% | 42.9% | 100% |
| | Mobile phone with Internet | Count | 5 | 4 | 18 | 20 | 47 |
| | | % within Technology | 10.6% | 8.5% | 38.3% | 42.6% | 100% |
| | Computer (desktop) with Internet | Count | 3 | 5 | 1 | 3 | 12 |
| | | % within Technology | 25.0% | 41.7% | 8.3% | 25.0% | 100% |
| | Computer without internet | Count | 0 | 0 | 1 | 0 | 1 |
| | | % within Technology | 0.0% | 0.0% | 100.0% | 0.0% | 100% |
| Total | | Count | 11 | 24 | 30 | 44 | 109 |
| | | % within Technology | 10.1% | 22.0% | 27.5% | 40.4% | 100% |

Note: $x^2$ = 19.02; df = 9; p<0.05

**Table 5.30 Attendance of orientation**

| | | | Did you attend orientation as a first year student | | |
| --- | --- | --- | --- | --- | --- |
| | | | Yes | No | Total |
| Technology | Portable computer(Laptop) | Count | 37 | 12 | 49 |
| | | % within Technology | 75.5% | 24.5% | 100% |
| | Mobile phone with Internet | Count | 28 | 19 | 47 |
| | | % within Technology | 59.6% | 40.4% | 100% |
| | Computer (desktop) with Internet | Count | 5 | 7 | 12 |
| | | % within Technology | 41.7% | 58.3% | 100% |
| | Computer (desktop) without internet | Count | 0 | 1 | 1 |
| | | % within Technology | 0.0% | 100.0% | 100% |
| Total | | Count | 70 | 39 | 109 |
| | | % within Technology | 64.2% | 35.8% | 100% |

Note:   $x^2 = 7.61$; df = 3; p<0.05

## 5.4 QUALITATIVE DATA ANLYSIS

It was explained in Chapter 4, a mixed-methods research design that incorporates both quantitative and qualitative approaches was adopted for this study. A qualitative approach through an interview schedule was employed to get the views and experiences of the NUSTCOLL regional coordinators on the implementation of the SSS at their respective regional centres. Similarly, the questionnaire given to students had a section with open-ended questions used to understand the needs, expectations and challenges experienced by students when accessing the current SSS at the regional centres. As mentioned in Chapter 4, Section 4.4.2.2, the regional coordinators are the SSS implementing agents; hence they could provide a comprehensive picture of how the SSS are implemented in the regions across the country and what challenges they experience during the implementation process. The researcher met with the regional coordinators for the interview session in the evening between 18:00 – 20:00 because they were busy with other activities in the afternoons. In the end, the interviews with the regional coordinators were conducted

face-to-face after hours between 18:00 – 20:00. The researcher took notes during the interview sessions to supplement the voice-recording taken during the interview.

A qualitative approach, especially with interview-based study and open-ended questions from the student questionnaire, was valuable for exploring the implementation of student support services at the regional centres. Regional coordinators and distance students responded to the research questions using the real-life experiences of where the SSS were implemented. In other words, students and regional coordinators provided answers in the context of their regions.

This section provides a detailed discussion of the empirical findings from the interviews with the regional coordinators and the open-ended questions from the student questionnaire. In order to present the results of this section in a logical fashion, the researcher deems it necessary, to present and discuss the findings from the interview with the regional coordinators first before analysing, the students' overall opinions regarding the quality of SSS provided by the NUST- COLL.

### 5.4.1 Overview of the data analysis process

In order to provide a comprehensive picture of the implementation of SSS at the COLL regional centres, the actual words used by the regional coordinators and text from the students have been used in facilitating the data analysis. The direct quotations from the regional coordinators' own words were helpful in grouping the comments into relevant categories. As discussed in Chapter 4, section 4.5.1, the researcher used the inductive process of organizing and grouping data into categories and identifying patterns (relationships) among them, then interpreted data to provide answers to the research question (MacMillan & Schumacher, 2010: 367). The voice recorder used came with software that transcribed all the voice recorded data into a written version. It was then easy for the researcher to group and summarize responses per interview question for cleaning and processing purposes.

### 5.4.2 Presentation of research findings: regional coordinators

MacMillan and Schumacher (2010: 367) submit that it is ideal for the researcher to interpret the collected data that is organized into categories. An analysis of the

collected data has been done against the background of literature review in Chapter 2 (section 2.2 and 2.3) and Chapter 3 (Section 3.2). The findings in this section are presented according to the categories drawn from the collected data, and based on the interview questions. The interview questions were formulated according to the main research question, research aim and research questions of this study as indicated in Chapter 1, section 1.4. Below is a list of categories that guided the analysis of the data from the interviews. The researcher explained to all the regional coordinators that their responses to the interview questions should be in the context of their respective regional centres and should not be generalised.

- General views on students' use of SSS at the regional centre;
- The effectiveness of regional coordinators implementation strategy in enhancing SSS;
- Challenges to the effective implementation of SSS; and
- Possible solutions for the effective implementation of SSS at the regional centre.

The regional coordinators were code-named RC1, RC2, RC3, RC4, RC5, RC6, RC7 and RC8 in order to maintain their anonymity. The following section discusses the findings on the above categories of collected data from the interview with the regional coordinators.

5.4.2.1 General views on students' use of SSS at the regional centre

The main aim of this study was to evaluate the implementation of both academic and administrative SSS at the NUST-COLL regional centres, as indicated in Chapter 1, section 1.5. It is the researcher's view that if more students could use the available SSS constantly, they would benefit from such services. Unfortunately, this is not the case as indicated by the low success rate and high dropout rate at NUST (Section 1.4). However, the researcher thought that it would be appropriate to get the views of the regional coordinators on the dynamics of SSS implementation. All the regional coordinators have studied for one or more qualifications through ODL, which provides a strong foundation for them to understand the importance of effective implementation of SSS.

This section presents and discusses the views of the regional coordinators on students' usage of the available SSS at the COLL regional centre by answering the following interview question (IQ1): "Do you think students are making use of the available SSS at the centre? Explain more". It was found that many regional coordinators felt that students were not really making use of all the SSS as expected. In answering the first question, RC1 stated:

> *Student support services are not utilised to their fullest capacity at our centre. For instance when we offer face-to-face tutorial classes which is a critical component of academic structure, students only attend when they have pending assignments but not in a consistent manner to the benefit of their studies. Secondly, library and internet services are underutilized because students tend to borrow books or use internet when they are experiencing difficulties answering assignment questions at the due dates, just to get the answers to the assignment questions.*

RC4 agreed with the sentiments expressed above and went on to say, *"not all students make use of the available student support services but I believe factors such as distance to the centre, transport to the centre and work commitments can determine the frequency of using the student support services. I can say the majority of students at our centre are not using SSS on a regular basis."*

Generally, the non-attendance and non-usage of SSS is attributed to the geographical settings (distances to the regional centres), family and work commitments; hence, the researcher argues that these factors promote student isolation. The implementation of an effective communication mechanism could combat the geographical isolation by ensuring that all students irrespective of the distance from the regional centre are not left out (Chapter, Section 2.3.1). In other words, SSS should be designed within the context that responds to all the students especially when their problems are known. It is also critical to ensure that the SSS to be put in place integrates students' needs, the requirements of the course content, institutional context and the type of technology to be used in order to provide an efficient service to the students (Chapter 1, Section 1.3.2.2).

RC4 and RC7 agreed that most students were using the student support services such as using internet, borrowing library books and reading at the centre, attending

face-to-face tutorial classes and also forming study groups. This is probably because students lived closer to the centres and worked shifts; hence the high flexibility and access to the services. In general, most regional coordinators were not concerned about some administrative support services such as payment of tuition fees and submitting assignments as students only made use of them occasionally.

5.4.2.2 The effectiveness of regional coordinators' implementation strategy in enhancing SSS.

The previous subsection discussed the regional coordinators' views on the usage of SSS at their various regional centres. On how effective the regional coordinators' implementation strategy was in enhancing SSS, RC5 had this to say:

> *The success of the implementation strategy for the SSS depends on the available resources, such as the number of prescribed books in the library. The small number of prescribed books in the library defeats our strategy of providing such a service to the majority of the student population especially when students don't return books on time.*

In agreement with the above, RC8 acknowledged that for the implementation strategy to be effective, collective efforts from both the regional coordinator and students should be harnessed. RC8 gave an example that "if students return library books on time and make an effort to understand how eLearning such as 'Moodle' platforms work, more students will have access to information and share with the others through study group."

Most of the regional coordinators responded to this question by stating that their strategies were working for the students as they were flexible. RC7 and RC4 gave some examples such as the assignment boxes that were outside the buildings for the students to submit their assignments at any time. Regional coordinators explained that they were always flexible as long as the strategy provided a solution for the distance students without compromising the rules and regulations. RC4 had this to say:

> *We are very flexible in providing service to our students such as working on Sunday, just to accommodate special issues such as face-to-face*

*tutorial classes when tutors are available. I don't claim for overtime because the availability of the tutor on a Sunday for our students is commendable.*

From the responses given by the regional coordinators to this question, one can deduce that service delivery is among the regional coordinators' top priorities. It is also evident that SSS such as eLearning and borrowing library books for four days are not working for students especially those that are from remote areas without electricity and network connectivity or far from the regional centres.

5.4.2.3 Challenges to the effective implementation of SSS

Given the importance of providing effective SSS, (Chapter 2, Section 2.3), the provision of these services needs to be reviewed periodically to ensure effective implementation at the regional centres. This section explores challenges that affect the successful implementation of SSS at various regional centres. All the regional coordinators interviewed declared the need for a third staff member at the regional centres who would be responsible for the library and the computer laboratory in the evenings from 18:30 to 22:00. The availability of the library services and computer centre would enable distance students to study at the centre after work and be able to borrow books from the library especially students that work and live far from the centres. Furthermore, the regional coordinators argued that the implementation of SSS would always be a challenge in the absence of needed resources, such as teleconferencing, sufficient computers at the centres and wireless connectivity for the students using their own computers.

 RC1 concurred with RC5 and RC5 who clarified that:

*Face-to-face tutorial classes are poorly attended by both students and tutors. In many instances, we have tutors forgetting that they have classes. The two hours face-to-face sessions are insufficient seeing that most of our students were admitted via mature age entry test, with poor grade 12 results. Secondly, the four days loan period for the library books is not enough for student that are at sea, working at the mines (shifts) or staying very far from the COLL centre. The much-needed support from the*

*main campus is not always available and it disappoints our students which affects our administrative work (RC1).*

RC5 elaborated on the students' poor attendance of face-to-face classes when he stated that:

*One of the challenges is that most of our tutors are not well qualified in terms of qualifications to teach at tertiary level. Some students end up quitting attending classes due to shallow presentation of the course content. Another challenge is that students want to use the library in the evening till 22:00 during examinations but due to staffing, we cannot provide such a service to students. The library usage is very high during examination period but the few library books available cannot serve all the students.*

Given the importance of providing an effective academic service to distance students, one can propose that NUST-COLL should provide training to tutors and support them with teleconferencing, uploading video clips from full-time lectures, providing more prescribed books to the centre libraries and recruiting an additional staff member to provide library and computer services after hours. RC7 was quick to point out that upon resignation of a tutor, the process of appointing a replacement took too long, and yet the recommendations were done timeously. Additionally, this regional coordinator was worried that most students at his centre were not comfortable with courses offered via eLearning besides the computer-user skills and information competence courses that were compulsory. While the researcher understands the benefits of courses offered on eLearning modes, one would also argue that it only works with students who have access to the internet on a daily basis, which, in some regions, is not the case.

The regional coordinators are also responsible for visiting students that are doing Work Integrated Learning (WIL) at different companies in their respective regions. WIL is a job attachment programme for final year students to integrate their learnt theory into practice. At times, the regional coordinators attend stakeholders' meetings and provide career guidance to prospective students in other towns for recruitment. RC2 cited a challenge of lack of transport as follows:

*Transport to different stakeholders' meetings or WIL visits are a bit hard for me as I don't have a car of my own or company car. This affects efficiency and productivity in terms of attendance and timely response.*

RC8 noted that IT resources such as the number of computers available at the centre were quite a challenge. He therefore outlined a series of some challenges:

*Our centre is one of the biggest in the country but it only has 15 computers of which most of them need constant maintenance due to their aging nature. We normally register more than 100 students in both Computer user skills CUS) and Information Competence ICT) courses that are offered online. This poses a challenge when it comes to tests and submission of assignments. When CUS and ICT students have tests at the centre, other students cannot use the computer laboratory for the whole day. The other challenge is the unavailability of videoconferencing facilities to support distance students and bring them closer to the sessions presented at the Main campus for full-time students. These can be recorded and played for our students at their convenient time (RC8)*

Three challenges were cited by RC8 thus.

- *Lack of adequate computers at the COLL regional centre;*
- *Malfunction computers at the centres due to age;*
- *Unavailability of a video conferencing facility.*

These challenges were raised by three other regional coordinators, underscoring that they were common to other regional centres across the country. The challenge of a videoconferencing facility was also raised by two other regional coordinators. The researcher views the acquisition of videoconferencing as a solution towards the academic support services especially on courses that do not have qualified tutors at the regional centres.

5.4.2.4 Possible solutions for the effective implementation of student support services at COLL regional centre.

The researcher advised the interviewees to only propose solutions that were compatible with their respective environment or regional centre. Most of the regional coordinators acknowledged that many of their students lived far from the regional centres or worked in certain industries such as mines, government agencies in remote areas or at sea, and these tended to prevent them from visiting the centre on a regular basis or having access to the available support services. Regional coordinators seemed to be concerned with how the regional students could get the same support services in the region as those at the main campus without them travelling to Windhoek. In this section, the regional coordinators were considerate of their students' environmental difficulties and challenges. RC4 had this to say:

> *Regional coordinators should be involved in decision making considering some unique problems that we experience in the region. Regional coordinator should take some decision in the absence of the necessary resources to provide good customer service. For instance, if a student has lost his/her student card on the day of the examination should not be turned away especially when we cannot print the student card at the centre. I would therefore propose that COLL regional centres should be equipped to print student cards to avoid disappointing students that qualify for exams but may not be allowed because they lost their student card (RC4).*

The regional centres are like mini-campuses across the country and with growing student enrolments, the time has come to empower regional coordinators in decision-making in order to minimise the referrals especially during the registration period. RC2 submits that regional coordinators should be trained in all areas of administration such as the functions of the faculty officers and be equipped with current information on curriculum changes for effective advice especially during the registration period.

Most of the regional coordinators were concerned about the facilities, resources and infrastructure development in the regions. RC7 proposed the following to enhance academic support services and improve service delivery:

> *Introduce videoconferencing facilities for students in the region to have the same classroom experience as the main campus based students. Videos can be recorded and played later for the students. ICT equipment such as computers at the centre should be fixed regularly to ensure maximum use. The other concern is about the building infrastructures where we are operating from; it is high time that the university construct its own facilities in the regions that are more conducive to learning and examination.*

RC7 explained further that regional centres should be equipped with more teaching aids such as projectors and the training of the tutors on the concept of distance education seeing that many of them were not professionally-trained educators. As alluded to in Chapter 3 Section 2.3, modern technologies appear to offer exciting possibilities for overcoming geographical access; hence, videoconferencing can possibly bring regional students closer to the full-time lecturers at the main campus.

All the interviewed regional coordinators emphasised the importance of the libraries at the regional centres such as making sources of information and resources accessible to the distance students. However, they appeared to be mostly concerned with the accessibility and availability of resources in the library. RC5 had this to say:

> *I think we should increase the number of copies (books) in the library especially for core courses. Extend library hours to 22H00 by employing an additional staff member for the library and computer laboratory for internet services.*

It is the researcher's view that the library should be open in the evenings and weekends, just like at the main campus in Windhoek for the students to make use of the resources. Distance students are faced with many other responsibilities such as work and family that prevent them from visiting the library during working hours; hence the need to provide a convenient service to them. Undoubtedly, libraries provide quiet environments for studying and are also conducive for study group

discussions and collaboration. RC3 brought in another dimension of using technology in providing library services and a trained librarian as follows:

*Library should introduce online journals and sources and promote library awareness programmes such as a reading culture to create an atmosphere that is conducive for learning. COLL must appoint librarians for the centres; train them in organizing and interpreting information for the students using the information communication technology. Currently, the four days given to students with the library books are not enough seeing that our students have many other responsibilities besides the academic life.*

RC3 reasoned that NUST as a university of science and technology should take the lead in modernising the libraries by extending the services beyond the physical walls of the library buildings. This can be achieved by ensuring that students have access to library resources through electronic means such as internet. It is argued that electronic resources would not only be convenient to students that are far from the libraries, but as an alternative, it would also cut costs in terms of buying enough library copies for the increasing number of students per year. As discussed already (Chapter 3 Section 3.2.3), technology has the potential to transform how and where DE students learn especially those in full-time employment.

### 5.4.3 Presentation of students' overall opinions on SSS

This section presents qualitative data from the eight open-ended questions asked in the student questionnaire. The researcher sought emerging patterns from the questionnaire and developed meaningful statements drawn from each question. Tallies were used on developed statements each time the student responded to the question which fell into the same statement. This was a continuous process for all the questionnaire copies because the researcher had to categorise data in line with the developed statements in order to interpret data and make logical conclusions. Once a valid point was observed which did not match any developed statements, a new statement was then formulated. Computer programs such as Microsoft (MS) Word review function was used minimally since the researcher could code responses from the open-ended questions manually. That meant the researcher had

to consider the meanings and content of the responses and match them to the developed statements in order to quantify the responses for interpretation. The responses to all the questions are summarised as follows on different tables.

The questions written below in this section probed students' opinions on SSS at the regional centres. The summarised responses to all the questions in this section were presented through different tables in the form of numerical values.

**Table 5.31: Students' opinions on the student support services at COLL regional centres**

| What is your overall opinion regarding the provision and implementation of the student support services (SSS) at the regional centre? |
| --- |
| Respondents commented that some aspects needed improvement for the effective implementation of SSS. Most of the respondents shared positive opinions on the provision and implementation of support services. <ul><li>The majority of respondents, 78 (71.6%) expressed their satisfaction that regional staff members were helpful in providing solutions to their problems and gave necessary advice.</li><li>Some respondents, 14 (12.8%) felt that regional centres were understaffed to handle all their problems, hence; a proposal to employ more staff members for problem solving.</li><li>Thirteen (11.9%) respondents proposed that tutorial classes should be offered on difficult courses with less than five registered students.</li><li>Four (3.7%) respondents felt that four days given to students to return library books was not enough to students with other responsibilities.</li></ul> |

**Table 5.32: Most effective student support services according to students**

| State with a reason one of the available SSS that you regard as the most effective and useful towards your studies. |
| :--- |
| This question was answered fully by stating the support service and reasons as to why or how it helped with the studies. <br><br> • The majority of respondents, 68 (62.4%) stated both library and computer centre supply services for resources and research. <br> • Twenty-four (22.0%) respondents opted for face-to-face tutorial classes for teaching and learning because they offered the opportunity to clarify concepts for better understanding of assignments and examinations. <br> • Eight (7.3%) respondents identified eLearning as a platform that gave them access to the much-needed notes in their courses. <br> • Nine (8.3%) respondents said they preferred orientation as it provided them with guidance, advice and direction towards their studies. |

**Table 5.33: Students' views on the importance of student support services to distance students**

| Describe the importance of student support services to a distance education student. |
| :--- |
| The responses were categorised and integrated in one, especially with similar reason. <br><br> • Many respondents, 69 (63.3%) described SSS as helpful in paving the way for students to attain set goals and objectives. <br> • According to 38 (34.9%) respondents, the support services bring services that are available at the Namibia University of Science and technology campus to distance students at the COLL regional centres. <br> • Two respondents did not answer this question |

**Table 5.34: The least effective SSS at the COLL regional centres**

| Which one of the available SSS do you regard as least effective and why? |
|---|
| • Fifty-three (48.6%) respondents felt that telephone tutoring is least effective because marker tutors and lecturers don't attend to calls.<br><br>• Twelve (11.0%) students felt that face-to-face classes are poorly attended and tutors are not well prepared.<br><br>• Eight (7.3%) respondents responded that vacation school is inconvenient for the full-employed students; hence proposed to have it at the regional centres<br><br>• Twenty-eight (25.7%) respondents reported that communication with other DE students is not well facilitated.<br><br>• Eight respondents did not respond to this question |

**Table 5.35: Students' views on studying without the SSS at the regional centres**

| Explain if you can be successful in your studies without making use of the current available SSS? |
|---|
| • The majority of the respondents, 106 (97.2%) responded positively to this question by submitting that it is not possible because problems and information dissemination requiring student support services are many and continuous.<br><br>• Three (2.8%) respondents did not respond to this question. |

**Table 5.36: Other needed support services at the regional centres according to students**

| What other student support services do you need which are presently not available at the COLL regional centre? |
| --- |
| • Thirty-eight (34.9%) respondents indicated that face-to-face tutorial classes should be offered for all the courses<br><br>• Thirty-eight (34.9%) respondents indicated that they need facilities such as video-conferencing and recorded full-time lectures for more academic support.<br><br>• Eighteen (16.5%) respondents proposed that strong internet and internet wireless devices for the students at the regional centres should be provided.<br><br>• Eight (7.3%) respondents requested that full-time written test question papers should be provided to the DE students for examination preparation<br><br>• Seven (6.4%) respondents did not respond to this question |

**Table 5.37 Views of DE students on the sense of belonging to NUST**

| As a distance education student, do you feel a sense of belonging to the Namibia University of Science and Technology (NUST)? |
| --- |
| • Eight-nine (81.7%) respondents responded positively to this question. They all felt a sense of belonging to NUST because quality of education was provided to all students irrespective of the mode of study.<br><br>• Eighteen (1.8%) respondents submitted that distance students were not considered for some activities such as clubs, tracksuits, wireless devices and discounts at certain shops.<br><br>• Two respondents did not respond to this question. |

Question 8 (n=109)

The responses to this question are presented in the tables below covering different forms of SSS. In this section, students pointed out the problems with the provision of different support services from their perspectives.

Question 8 asked students to outline the problems, if any, that they experienced with the implementation and provision of the following SSS at their regional centres. Most

of the responses were presented numerically; hence tables were used to summarise the given problems. The higher percentage implies that these are areas of concern that NUST should look into and implement strategies to provide solutions.

**Table 5.38: Problems with SSS: Administrative support**

| Administrative support at COLL regional centre |
|---|
| • Forty-four (40.4%) respondents noted that support services were not available on Saturdays, Sundays and late in the evenings.<br>• Forty (36.7%) respondents responded positively that they did not have any problem with administrative services<br>• Seventeen (15.6%) respondents claimed that study materials during registration were always late or delayed.<br>• Eight (7.3%) respondents did not respond to this question. |

**Table 5.39: Problems with SSS: Orientation**

| Orientation at the regional centre |
|---|
| • Thirty-two (29.4%) respondents complained that sessions were not recorded for replay to those that missed them.<br>• Thirty-eight (34.9%) respondents submitted that the orientation sessions should only be on Saturdays when most of them are not at work.<br>• Thirteen (11.9%) respondents felt that the student orientation was not well marketed to all DE students.<br>• Nineteen (17.4%) respondents indicated that they did not have any problem with the orientation sessions.<br>• Seven (6.4%) respondents did not respond to this question |

**Table 5.40: Problems with SSS: Telephone tutorial**

| Telephone tutorial |
| --- |
| • Fifty-four (49.5%) respondents claimed that they were not aware or informed of the support services. |
| • Forty-nine (45.0%) respondents (45.0%) complained that marker-tutors did not respond to students' calls. |
| • Three (2.8%) respondents responded positively that they did not have any problem with this service. |
| • Three (2.8%) respondents did not respond to this question. |

**Table 5.41: Problems with SSS: Face-to-face tutorials**

| Face-to-face tutorials |
| --- |
| • Forty-eight (44.0%) respondents complained that their courses were not considered for the tutorial classes as they had less than 5 registered students. |
| • Forty-one (37.6%) respondents claimed that tutors were frequently absent without making any prior arrangements. |
| • Seventeen (15.6%) respondents submitted that most tutors were not trained to teach and handle DE students. |
| • Three (2.8%) respondents complained that their courses clashed on the timetable. |

**Table 5.42: Problems with SSS: Vacation school**

| Vacation school |
| --- |
| • Most respondents, 46 (42.2%) complained that tutors were not prepared for the DE students from different regional centres.<br>• Twenty-three (21.1%) respondents felt that vacation school was not used as a platform to solve students' problems.<br>• Nineteen (17.4%) respondents did not attend the vacation school because it was not convenient for their working arrangements.<br>• Thirteen (11.9%) respondents indicated that they did not have any problem with the vacation school. |

**Table 5.43: Problems with SSS: Tutor marked assignments**

| Tutor-marked assignments |
| --- |
| • Sixty-seven (61.5%) respondents complained that the marked assignments took too long to be sent back, which did not serve the intended purposes anymore.<br>• Twenty-nine (26.6%) respondents felt that their assignments were unfairly marked without proper guidance for distance students.<br>• Thirteen (11.9%) respondents submitted that there were no individual guiding comments on the marked assignments. |

**Table 5.44: Problems with SSS: Library services**

| Use of the library services |
| --- |
| • Seventy-two (66.1%) respondents indicated that there were very few books in the library to cater for the high demand.<br>• Twenty-eight (25.7%) respondents were concerned about the four-day loan period, which they said was too short.<br>• Nine (8.3%) respondents showed concern over the non-accessibility of the library service on Saturdays and Sundays. |

**Table 5.45: Problems with Internet services at COLL regional centre**

| Use of internet and email services |
| --- |
| • Forty-five (41.3%) respondents complained of few and malfunctioning computers at the centres. <br><br> • Thirty-nine (35.8%) respondents were concerned about the unavailability of wireless connection for the students. <br><br> • Nineteen (17.4%) respondents complained about weak and freezing internet connections. <br><br> • Six (5.5%) respondents indicated that they experienced problems with the student webmail. |

**Table 5.46: Students' opinions on how to improve SSS at the regional centres**

| In your opinion, how can the existing SSS at the COLL regional centre be improved to respond to your needs? |
| --- |
| In response to the above question, the respondents gave some suggestions summarised below as to how student support services could be improved. Most respondents gave more than one proposal, and this was taken into consideration when capturing data to avoid a double count. <br><br> • Seven (6.4%) respondents proposed that NUST should allocate some library books to public libraries for easy access. <br><br> • Eighteen (16.5%) respondents proposed that NUST should expand and upgrade its centres to campus status in order to provide better services. <br><br> • Twenty-seven (24.8%) respondents felt that counselling services should be provided to DE students. <br><br> • Nineteen (8.3%) respondents advocated training of face-to-face tutors. <br><br> • Thirty-five (32.1%) respondents suggested that marked assignments should be returned to students in time with guiding comments for effective study and preparation towards examination. <br><br> • Thirty-two (29.4%) respondents implored NUST to offer face-to-face tutorials for courses with less than five registered students. |

- Thirty-eight (34.9%) respondents proposed that the regional centre libraries should be open on Saturdays and Sundays, and further that books in the library should be increased to meet the current high demand.

- Nineteen (17.4%) respondents advocated the use of technology, and social networks, such as WhatsApp, Twitter and Skype to promote dialogue.

- Seven (6.4%) respondents proposed that NUST should buy bigger printers and copiers for the regional centres to meet their printing needs.

## 5.5 THE INTEGRATION OF QUANTITATIVE AND QUALITATIVE APPROACHES

Both quantitative and qualitative approaches were employed in this study in order to answer the following research question: How effective are student support services at the Namibia University of Science and Technology COLL regional centres? Data collection for both approaches was done at the same time which also allowed for triangulation. The discussion on how the two approaches could be integrated for data analysis was discussed in Chapter 4, Section 4.5.1. This section discusses how the findings from the qualitative and quantitative were connected to SSS implementation at the regional centres. However, the study presents a typical example of explanatory mixed method since the qualitative findings were used to to justify and account for quantitative findings.

Qualitative data from the regional coordinators' interviews and the open-ended questions of the student questionnaire were cleaned for analysis as discussed in Chapter 4, Section 4.5.1. Qualitative data from the regional coordinators were analysed through various categories that were developed to summarise similar ideas from different participants. Similarly, data from the open-ended questions on the questionnaire were reduced to patterns which were used to formulate statements. Responses under different statements were quantified for analysis and discussion purposes. On the other hand, quantitative data were summarised on Microsoft Excel and analysed by using the SPSS Statistics Version 23 for descriptive analysis. The statements formulated under qualitative were complementary to the quantitative data. Most of the statements were used to justify the descriptions from the quantitative analysis.

Qualitative data obtained from the open-ended questions of the questionnaire and the interview session with the regional coordinators provided most of the answers to the research question such as the extent to which SSS responded to barriers, expectations and needs of the distance students. Both students and regional coordinators gave suggestions on improving the existing support services at the regional centres. The regional coordinators and students provided views on students' use of the SSS at the regional centres which provided concrete understanding of the results from the quantitative approach.

It can be argued that the integration of quantitative and qualitative approaches in this study identified the current usage of SSS and the problems that are currently experienced by both the regional coordinators and distance students. The empirical findings from the interviews with regional coordinators revealed that some of the student support services should be implemented from the students' perspective in order to reduce dropout and increase success rates. Many students live far from the regional centres; hence some support services such as library books could be allocated to different libraries in different towns to accommodate them.

## 5.6 CHAPTER SUMMARY

Both qualitative and quantitative data were analysed for interpretation. Data collected from the regional coordinators' interviews was grouped into categories generated from the questions while data collected from the open-ended questionnaires were organised into themes and coded. On the other hand, quantitative data was analysed and quantitised using the SPSS version 23, in order to get the descriptive values for interpretation.

For the quantitative approach, selected demographic variables such as qualifications obtained from NUST, a number of years students had been studying at NUST, reasons why they were studying through COLL regional centres and the type of technology they used were employed to test their significance and effects on the implementation of administrative support services, face-to-face tutorial classes, orientation and marker-tutor assignments. The levels of significance were calculated by using the SPSS software. It was found that many students did not attend orientation and face-to-face tutorial classes due to other commitments; hence

suggestions were made on how to ensure that students at regional centres had access to the same services provided at the main campus in Windhoek.

The combination of both qualitative and quantitative methods allowed students and regional coordinators to express their balanced views on the impact of SSS at NUST-COLL regional centres and propose alternative solutions to challenges they experienced. The results from the quantitative data revealed that many students had been studying at NUST for some years without getting any qualification such as a first-year certificate.

The next chapter presents conclusions, proposes recommendations for improving the implementation and provision of SSS at NUST-COLL regional centres and suggests areas for further research. The limitations of this study, validity, reliability and generalisability are also discussed in the next chapter.

# CHAPTER 6: SUMMARY, DISCUSSIONS, CONCLUSSIONS AND RECOMMENDATIONS

## 6.1 INTRODUCTION

Chapter 5 presented the findings of both qualitative and quantitative data. In this final chapter, a summary of the key findings is made and on the basis of these, and the respondents' suggestions, the recommendations are proposed. This study set out to evaluate the implementation and responsiveness of the student support services (SSS) at Namibia University of Science and Technology's Centre for Open and Lifelong Learning (NUST-COLL) regional centres by providing answers to the main research question: "What is the impact of SSS implementation at the COLL regional centres?" The study focussed on determining the needs and challenges of DE students at NUST-COLL regional centres in the context of the current provision of SSS. In exploring these, the objectives and findings of the study, the conclusions are drawn. The final part of this chapter suggests some areas for further research.

## 6.2 OVERVIEW OF LITERATURE REVIEWED

The literature reviewed for this study broadly covered the history of distance education, the need for student support, practices of distance education at various institutions in Namibia, the global perspectives on planning for distance education, practices on student support services at Open University of United Kingdom (OU UK) and University of South Africa (UNISA), various theoretical contributions and Moore's theory of transactional distances which stood out as a solid underpinning for this study.

Distance education has a long history which, if it is viewed through the lens of current practices such as flexibility, accessibility and quality, it is evident that it is becoming a viable option for both developing and developed countries. Literature provided the definition of distance education as a concept that is characterised by learning that takes place whereby the student and lecturer/tutor are separated by 'place' and 'time' (Moore, 1993: 20). In other words, distance is not only geographical, but also a variety of transactions between the student and the

institution. Moore (1993) used his theory of transactional distance to describe the universe of lecturer/tutor-student relationships that exist when learners and tutors/lecturers are separated by space and time by emphasising three elementary constructs of the field, namely dialogue or interaction between lecturers and learners, the structure of instructional programmes, and learner autonomy. Shearer (2009: 1) explained how the three variables interact to increase or decrease transactional distance. This study acknowledged that transactional distance was the major challenge resulting in the development of the model for effective implementation of SSS at the regional centres to bridge the transactional distance.

To promote dialogue and constant interaction between lecturers and students, literature (Section 2.2.3) discussed the concept of virtual learning environments (VLEs) as mediating tools such as Information and Communication Technology (ICT) to support teaching and learning. It was acknowledged that VLEs and ICTs have the potential to bridge the transactional distance. While the use of technology may prove to bridge the space between the lecturer and learner, the findings revealed that there are still challenges when it comes to compatibility and access to ICTs; hence, the need to develop the support system which accommodates divergent students' access to ICT and their circumstances. Literature discussed the advantages of ICT models in the developed contexts however, realities on the ground point to the shortcomings of their application within the developing context, like rural areas. The model developed by this study proposes how NUST-COLL can empower students in the rural areas.

Development of adequate SSS was discussed in Chapter 3, Section 3.2 as an initiative to provide support services aimed at improving student success and throughput rates. Literature revealed that there is no "one-size-fits-all" model of support service (Priyadarshini, 1994: 462). That is to say, each country has a unique experience in terms of culture, technology, geographical environment and quality of basic education. In order to design an effective student support system, NUST-COLL should consider profiles and backgrounds of its students, and the complexities of distance education at the regional centres impacting on student success and throughput rates.

Due to the complexity of distance education, this study acknowledges that various theories of distance education should be considered to inform different strategies that can bridge the transactional gap. Besides Moore's theory of transactional distance, Chapter 2, Section 2.2.1 outlined other distance education theories such as 'independent learning' by Wedemeyer (1971), 'industrial production model' by Peters (1967) and the theory of 'didactic interaction' by Holmberg (1985). The researcher considers that these distance education theories serve as a solid foundation for developing strategies to offer distance education.

The next section provides highlights of the research findings on the status and evaluation of student support services at NUST-COLL. This includes the provision of SSS at the regional centres, the need for SSS and justification for transactional theory as a theoretical framework chosen for this study on distance education.

### 6.2.1 Students' awareness of support services at COLL regional centres

As explained in Section 2.4, SSS are classified into administrative and academic support. Empirical evidence in Table 5.12 indicates that 90% of students on average were aware of the support services available at the regional centres. However, knowing the available support services does not translate into full utilisation of these services due to various factors, such as insufficient resources and work commitments. It was reported in Table 5.6 that 59.6% of students opted to study through the regional centres because of the flexibility of the course offerings, which provide an opportunity to work and study at the same time. By implication, the provision of support services should be convenient and flexible to all students who are working. Table 5.16 revealed that 46.8% of student respondents did not attend face-to-face tutorial sessions because their courses were not catered for in the timetable. This implies that many students who did not attend face-to-face tutorials were also not assisted through other means such as videoconferencing, telephone tutoring and Skype.

As reflected in Table 5.15, 35.8% of students indicated that they did not attend an orientation programme. Orientation could be used as a platform for students to get their problems heard and also get to understand the institution better. It was unfortunate that orientation sessions were not repeated or recorded for students that

did not attend for a variety of reasons such as work commitment, long distance to the centre and social or personal circumstances like family commitments.

### 6.2.2 Technological infrastructure at COLL regional centres

Print media is still regarded as a key delivery mode in distance education (Mbwesa, 2014: 177), but technology is changing human experience of learning, and it could be used as a solution to non-attendance and non-usage of support services at NUST-COLL regional centres. Technology like the Internet could be an effective communication mechanism to eliminate geographical isolation and promote dialogue, which is key in the learning process.

Regional coordinators reported that centres had a limited number of computers and library books (Section 5.4.2.3), which forced students to buy their own portable computers in order to have access to information; however since these did not come with modems, they still needed to have reliable internet connectivity. As a university of science and technology, NUST should play a leading role in ensuring that all distance students and face-to-face tutors have internet devices and portable computers that they can use to communicate effectively. To achieve this, NUST could make arrangements with service providers, such as Telecom Namibia and Mobile Telecommunications Limited Namibia (MTC) for students to get discounted computers and internet devices. Table 5.8 reflected that 45% of the students owned portable computers, while 43.1% had mobile phones with the Internet. The provision of internet devices to distance students and tutors would enable students to communicate with the tutor-markers, submit assignments and collaborate with fulltime lecturers anytime and anywhere through the virtual learning environment.

### 6.2.3 The need for student support services for distance education

Simpson (2002: 7) argues that student support services play a critical role in quality distance education, reduce dropouts and increase the success rate. Table 5.5 showed empirical evidence from the study that 39.4% and 19.3% of students had been studying at NUST for longer than the required official years for their programmes. Furthermore, 34.9% of students as indicated in Table 5.7 did not obtain any qualification such as a first year certificate, second year

certificate/diploma or degree in spite of studying for many years. By implication, many students could not pass courses that would qualify them for a certificate and, this contributes to high failure rate and high throughput rate.

Garrison (1989: 25) argues that students need various forms of support to succeed and attain true control of the learning process. Table 5.35 presented the views of 106 (97.2%) of students who indicated that that they needed SSS at the regional centres in order to pass their courses. Students reported that they needed face-to-face tutorial classes, video-conferencing and internet devices to access information remotely. Seeing that most students studying by distance learning were admitted through mature age entry with poor high school background and preparedness, support services would serve to promote dialogue and clarify concepts to them.

## 6.2.4 Theoretical framework for the study

The quality of SSS should be measured by the ability to promote student success and reduce dropout rates. In addition, the researcher believes that the best support services should respond to the students' needs and promote independent study and learning. Section 2.2.1 acknowledged the role played by early pioneers of correspondence education and discussed the theoretical contributions of Charles Wedemeyer, Otto Peters, Börje Holmberg and Michael Graham Moore. Moore's (1993) theory of transactional distance stood out for this study as an appropriate theoretical lens for viewing distance education as it provides the broad framework for the pedagogy of distance education. The researcher viewed Moore's theory of transactional distance as more practical towards guiding a complex practice of teaching and learning at a distance through NUST-COLL regional centres.

Section 2.2.2 discussed key elements of Moore's theory of transactional distance such as dialogue, structure and autonomy. Dialogue refers to the positive interactions meant for the improved understanding of the students which can be in-class discussions, out-of-class face-to-face interaction and out-of-class electronic communication (Gorsky & Caspi, 2005: 5). Table 5.8 indicated that 99% of the students had access to smart phones or computers, and these could be used to promote dialogue between lecturers, tutor-markers and students if students were provided with appropriate devices to connect to the internet. The use of technology

to promote dialogue at a distance requires training; however, both regional coordinators (Section 5.4.2.3) and students (Table 5.40) suggested that face-to-face tutors needed training on how to facilitate and teach distance students. The findings revealed that tutors need training on tutoring students with diverse academic needs and styles of learning by promoting the use of different opportunities to engage and interact further.

Structure is another element of transactional theory of distance education, which is a measure of the educational programme's responsiveness to the learner's individual needs (Moore, 1993: 26). The regional centres have different support services, which, if implemented correctly can reduce the structure and promote dialogue thereby increasing success rate. Support services such as eLearning, telephone tutoring, face-to-face tutorials and the introduction of videoconferencing can reduce the structural problems. The empirical findings from Table 5.13 indicated that 73.4% of the students did not use telephone tutoring, while only 31.2% and 42.2% attended tutorial classes and used the eLearning platform respectively. The researcher submits that the eLearning platform, face-to-face tutorials and telephone tutorials can be reorganised to promote dialogue, respond to students' problems and take account of inputs from students without any delay. Face-to-face tutorials could be offered through virtual environments for students that were not catered for in the timetable for tutorial classes.

The content of study guides given to distance students and some video clips uploaded onto the eLearning platform is predetermined which does not afford students an opportunity to ask questions and receive responses timeously, and this increases the transactional distance for students and tutors. As argued by Farquhar (2013: 31), it is important that distance course designers should consider in advance, whether the subject can accommodate a more flexible structure in exchange for greater opportunities for dialogue.

The third variable of the transactional distance theory as discussed in section 3.32 is learner autonomy. Learner autonomy allows students to exert control over learning procedures and what knowledge they want to learn. This study advocates that the support services should be designed from the student perspective, thereby giving some level of autonomy to students in aspects like deciding which strategy works,

and how they can contribute to decreasing or diminishing transactional distance. Currently, final year students are required to do work-integrated learning (WIL) for a minimum period of three months whereby students get to choose the areas to be covered for the job attachment from the list provided. During the WIL period, students apply the acquired theory in practice, get mentored by the industry supervisor and get clarity on many issues pertaining to the job activities in the industry. WIL allows students to navigate their way in the learning process through practising their skills and applying their knowledge. This attests to Moore's theory on self-directedness as it allows students to manage their own studies.

## 6.3 SUMMARY OF QUALITATIVE FINDINGS

This section draws a summary of qualitative findings from both the regional coordinators and DE students studying through the NUST-COLL regional centres.

### 6.3.1 Regional Coordinators' management of SSS at COLL regional centres

The regional coordinators are responsible for the effective and efficient implementation of both administrative and academic support services at the regional centres (Chapter 2, Section 2.4). Their duties are fully discussed in Chapter 2; Sections 2.4.1 to 2.4.8 and the findings to different categories are presented in Chapter 5, Section 5.4.2. These are summarised below.

6.3.1.1 General views on students' usage of SSS at the regional centres

While it is commendable that the Namibia University of Science and Technology through the Centre for Open and Lifelong Learning set up regional centres across the country, most of the regional coordinators (75%) stated that the majority of students were not fully utilising the SSS available at the regional centres for various reasons. According to the regional coordinators, the non-attendance or non-usage of SSS could be attributed to geographical locations (distance to the centre), employment commitments, network connectivity and unavailability of certain academic services such as tutorial classes and library books. The above can increase student isolation as discussed in Chapter 2, Section 2.3.1. However,

students closer to the regional centres made use of the available services, such as library books, computer facilities and internet services. All the regional coordinators indicated that students make use of administrative support services like payment of tuition fees and writing tests and examinations as these are always available when they come to the centre, once or twice monthly.

6.3.1.2 Effectiveness of the regional coordinators' implementation strategy for the SSS

The findings in section 5.4.2.2 show that regional coordinators' strategies are flexible as they provide solutions for the distance students. Regional coordinators have indicated that they accommodate their students on Sundays and public holidays; assignments are collected from the box which is accessible to all students the following day (in the morning) and they keep one copy per book in the library to be used as a reference. They also indicated that their strategies would be more effective if there was collective effort from students such as returning of overdue library books for the other students to use.

Regional coordinators indicated that while they strove to provide effective services to all students, top management at NUST should ensure that services such as more prescribed library books were available at the centres and should provide alternative solutions for students in remote areas over the use of eLearning and "Moodle platforms". Section 2.3.4 discussed understanding the institution and how some distance students drop out of their studies due to technical difficulties and not understanding basic fundamentals of courses. Regional coordinators emphasised the importance of addressing some of these problems to retain students' studies. In other words, if the above problems were not addressed, their strategies would fail. Moore's theory of transactional distance describes the importance of tutor-student interaction which bridges the distance that exists between them thereby heightening student satisfaction which motivates them to learn and develop critical thinking skills.

## 6.3.2 Identified challenges and possible solutions to the effective implementation for SSS

The importance of providing effective SSS was discussed in Section 2.3. This section summarises the challenges that affected the successful implementation of SSS and possible solutions that would ensure flexibility and effective implementation of support services at regional centres.

6.3.2.1 Challenges of effective implementation of SSS

Although NUST through the COLL values the provision of SSS, the regional coordinators who are responsible for the management of SSS at the COLL identified some challenges that could hinder the effective implementation of SSS at the regional centres. According to the findings in section 5.4.2.3, they emphasised the importance of employing a third staff member at all the regional centres to be responsible for computer centres and library facility on weekends and during evening hours especially from 18:30 to 22:00 on week days. Most students studying at regional centres were employed full-time (see Chapter 5, Table 5.4) and could only get time to use the facilities after hours. When one of the regional staff members was booked off, many activities such as industry visits, banking and library services were crippled, and during lunch hours, the centre would be closed, and this did not go down well with the affected students.

Most of the challenges identified had to do with insufficient facilities, teaching/learning aids and pedagogical approaches when it comes to face-to-face tutorial classes. According to regional coordinators, these included a shortage of computers and unavailable wireless connectivity service, teleconferencing facilities, few library prescribed books and face-to-face tutors who were not trained to facilitate and handle distance students. Most of the regional coordinators emphasised the importance of face-to-face tutorial sessions, but also highlighted that the two-hour sessions per week were not enough, especially for students who needed more attention to understand their course content. There were many students who had been admitted through mature age entry scheme, and were now finding it difficult to cope with difficult courses like mathematics, accounting and basic science. Regional

coordinators also expressed concern that most students were not computer literate, and therefore could not access certain information from the intranet.

6.3.2.2 Regional coordinators' proposed solutions for effective implementation of SSS

The main concern for most of the regional coordinators was how the distance students at the regional centres could get the same academic support as the other distance students studying through the main campus in Windhoek. They acknowledged that most of their students lived far from the regional centres, and they indicated that geographical distance would not hinder the effectiveness of the SSS if their proposals were to be considered. The empowerment of the regional coordinators in decision-making would minimise referrals during registration period. In other words, the regional coordinators should be trained and be equipped with current information on curriculum changes in order to provide effective curriculum guidance during the registration and minimise unnecessary referrals to the faculty officers.

The computer laboratories and libraries are central to conducting research and learning for students. The majority of the regional coordinators proposed that libraries should be equipped with more resources, especially the prescribed books and have more computers that were connected to internet for the students to have access to information like electronic journals. They further noted that these services could be more accessible if NUST could employ a permanent administrative officer to serve students on weekends and evenings till 22H00. It was also suggested that the regional centres should be equipped with video-conferencing facilities and more data projectors to be used for teaching. These facilities could be used to train and promote dialogue between full-time lecturers and the face-to-face tutors. According to the regional coordinators, most of the tutors need training on the concept of distance education and how to facilitate learning for adults, especially for students who do not have basic understanding of concepts.

## 6.3.3 Students' overall opinion on the implementation and provision of SSS at the NUST-COLL regional centres

This section summarises the responses from the open-ended section of the student questionnaire. The responses were grouped under three subheadings as shown below to summarise identified problems with the implementation of SSS, students' evaluation of different SSS and the students' needs and expectations.

6.3.3.1 Identified problems with the provision of different SSS at NUST-COLL regional centres

All the problems that students experienced with the implementation of SSS at the regional centres were presented in Chapter 5, Tables 5.38 – 5.45. Forty-four (40.4%) respondents complained that administrative support services were not available on Saturdays, Sundays and late evenings. Similarly, the majority of students (61.5%) stated that the marked assignments took too long to reach them. As discussed in Chapter 2, Section 2.4.3, assignments serve as teaching tools which allow students to assess their current levels of understanding. In addition to the turn-around time for the assignments, twenty-nine students (26.6%) highlighted that their assignments were inappropriately marked without proper guidance for them as distance students.

There were some reported problems with the library and internet services at the regional centres. Seventy-two students (66.1%) complained that the libraries at the regional centres had few library books to cater for the high demand, and that the loan period of four days was too short. According to the results in Table 5.45, 45 students indicated that regional centres had broken computers and only a few were working. In addition, wireless connection was not available to students. Since many students had smart phones and portable computers (see Table 5.8), wireless connection could be used by the students to have access to information.

The findings presented in Tables 5.40, 5.41 and 5.42 indicated problems experienced with academic support services, such as face-to-face tutorial classes, vacation school and telephone tutoring. Forty-eight students (44.0%) complained that their courses were not offered for tutorial classes due to a small number of students registered for the course. Other students reported that vacation school did

not serve the purpose of addressing students' concerns and problems because many tutors were not prepared for DE students from different regional centres. Similar to the comments on the unpreparedness of tutors during the vacation school, 17 (15.6%) students stated that most of the tutors were not trained to handle DE students which led to them not attending tutorial classes. When it came to telephone tutoring, 49.5% of the students claimed that they were not aware of telephone tutoring while 49 (45.0%) students complained that marker-tutors did not respond to their calls when they needed academic guidance.

6.3.3.2 Students' evaluation of student support services at the regional centres.


Students were asked to give their overall opinions on the provision and implementation of SSS at COLL regional centre. The majority of them (71.6%) expressed their satisfaction with the efforts demonstrated by the regional staff members in responding to their needs; however, they felt that the regional centres were understaffed could not handle all their problems at once. Sixty-eight (62.4%) student respondents stated that more computers and well-resourced libraries were needed at the regional centres for study and research purposes. In addition, 24 (22.0%) student respondents argued that tutorial classes in all the courses were crucial in clarifying concepts, especially when it comes to the assignments and examinations.

Student respondents were asked to describe why SSS were important to them as distance learners. Many student (63.3%) respondents described SSS as helpful in paving the way for students to attain their set goals and objectives. Thirty-eight (34.9%) students stated that the support system brought to students at regional centres, the services that were normally available to students at the NUST main campus. However, 53 (48.6%) students singled out telephone tutoring as the least effective because marker-tutors and lecturers did not attend to their calls.

### 6.3.3.3 Students' needs and expectations

As discussed in Chapter 2, Section 2.3.4, DE institutions try to overcome barriers that prevent students from accessing formal education. However, in the process some barriers are also created especially when students have not understood the operations and processes of the institution. Some student respondents (29.4%) proposed that orientation sessions for first year students be recorded for replay at a later stage especially for distance students who had many other responsibilities. Students also demanded that an orientation course for DE students should be offered on Saturdays to accommodate those who were working and those who lived far from the regional centres.

As reflected in Table 5.46, students suggested some strategies for improving the existing support services at the regional centres. Thirty-eight (34.9%) students submitted that more library books should be allocated to the regional centre libraries to cater for high demand. They also proposed that libraries should be open in the evening and on weekends. Furthermore, students suggested that NUST books should be placed in some public libraries in different towns for ease of access for students that live far from the regional centres.

While most student respondents appreciated the face-to-face tutorial classes, 29.4% of them requested that classes be offered in courses with less than five registered students. It was proposed that services, such as video conferencing be introduced for difficult subjects, such as mathematics, statistics and basic science, especially when there were no face-to-face tutorial classes offered at the regional centre. Additionally, nineteen students (17.4%) advocated for the use of technology such as WhatsApp to promote dialogue among distance students. In other words, WhatsApp groups can be created on specific courses for academic purposes of promoting dialogue among the lecturers and students. Marked assignments form part of tutorial classes; and for this reason, 35 students (32.1%) stressed the need for timely return of marked assignments to students with comprehensive comments in order to ensure effective studying and examination preparation.

Twenty-seven (24.8%) student respondents indicated that DE students need counselling services, and therefore, NUST should ensure that counselling services

were extended to the distance students at the regional centres. Students proposed that one or two professionally qualified and experienced counsellors should be employed to offer counselling services to students at the regional centres.

## 6.4 SUMMARY OF QUANTITATIVE FINDINGS

This section provides a summary of the quantitative findings from the student questionnaires. These findings were discussed in Chapter 5, Section 5.3.4 as the relationship between independent variables such as academic and administrative student support services and some selected dependent variables. The four selected demographic variables were qualifications obtained at NUST, the number of years the student had been studying at NUST, the reason to study through NUST-COLL regional centre, and the type of technology the student used. The chi-square test and the associated p-value were used to determine the level of significance of the relationship between variables whereby p = >5 was taken to be significant while p = <5 was regarded as insignificant.

### 6.4.1 Analysis according to the number of years studying at NUST

Table 5.18 – 5.25 presented the findings of the number of years that students had been studying at NUST with respect to an orientation course, face-to-face tutorial classes, tutor-marked assignments and administrative support services. Below is the presentation for the summary of the analysis.

6.4.1.1 Orientation course attendance by first year students

According to the findings in Tables 5.18 – 5.20, 40 students (36.7%) did not attend an orientation course in their first year of study of which 24 students (22.0%) had been studying at the Namibia University of Science and Technology for more than four years. Tables 5.18, 5.19 and 5.20 revealed that a significant number of those students who attended an orientation course in their first year were made aware of the available SSS, got information that helped them cope with their studies, and their doubts and problems pertaining to their studies were clarified.

6.4.1.2 Face-to-face tutorial classes

It was found that 50 (46.8%) students did not attend tutorial classes, of which 11 (3.7%) and 29 (26.6%) had been studying for four and more years respectively. The reasons given for non-attendance are presented in Table 5.40. Significantly more student respondents agreed that face-to-face tutorial sessions suited their personal schedules (Table 5.21). They also reported that tutors used the tutorial sessions to encourage students to share their experiences and dialogue with fellow students in Tables 5.22 and 5.23 respectively.

6.4.1.3 Tutor-marked assignments

As reflected in Table 5.24, on the question of whether the marker-tutors were available for consultation to provide academic support after marking their assignments, 54 (48.5%) student respondents disagreed with the statement. In terms of the number of years of study, students who had been at NUST for one or three years significantly agreed with the statement. However, it was found that students that have been at NUST for two, four or more years disagreed with the statement that marker-tutors were available for consultations.

6.4.1.4  Administrative support services

When administrative support services were analysed according to the number of years that students had been studying at NUST, Table 5.25 revealed that most students agreed significantly that advice on course amendments and exemptions were available at NUST-COLL regional centres.

**6.4.2 Analysis of the reasons to study through a NUST-COLL regional centre**

As presented in Table 5.6 students' reasons to study through a NUST-COLL regional centre were used to analyse administrative support services, face-to-face tutorial classes and benefits of using telephone support service for academic support and they were found to be significant.

6.4.2.1 Administrative support services

According to the findings presented in Table 5.26, all students studying through regional centres for different reasons agreed significantly that there was adequate and timely support available at the regional centre. This analysis agreed with the students' evaluation of administrative support services presented in section 6.3.4.2, which indicates that they were happy with the efforts put up by the regional staff to provide effective services.

6.4.2.2 Face-to-face tutorial classes

Most of the student respondents who attended face-to-face tutorial classes agreed significantly when were asked if the presentation of the subject matter was systematic, clear and effective as indicated in Table 5.27. However, sixty-five (60%) of students chose to study was to increase their salary levels at work though disagreed with the statement. As part of the telephone tutoring, fifty-five (50.5%) students agreed that they benefited when they called their tutors for academic support; however, eighteen (16.5%) students indicated that they did not benefit from calls made for academic support. Thirty-three (30.3%) students did not use the telephone for academic support.

**6.4.3 The types of technology used by students at COLL regional centres**

The types of technology used by students were related to tutor-marked assignments, administrative support services, face-to-face tutorials, and the attendance of an orientation course. As indicated in Table 5.8, only tutor-marked assignments and attendance of an orientation course were found to be significantly related to the type of technology.

6.4.3.1 Tutor-marked assignments

As per the type of technology they used, students were asked if the turnaround time for assignments was adequate and the findings were presented in Table 5.29. It was found that 74 (67.9%) students disagreed with the statement. However, 8 (7.3%)

students who used desktop computers with internet accessibility agreed with the statement.

6.4.3.2 Attendance of an orientation course

According to the findings in table 5.30, thirty-nine (35.8%) students did not attend an orientation course when they registered at the NUST-COLL regional centre. It was, however, found that more students who used portable computers and mobile phones with internet connection attended orientation courses. This finding points to the fact that students who are connected to the Internet tend to get information and announcements of events faster than those who are not.

## 6.5 CONCLUSIONS FROM EMPIRICAL FINDINGS

Chapter 1, Section 1.5 outlined four objectives for this research that could address the main aim of the research, namely to evaluate the implementation of SSS at the NUST-COLL regional centres. The four objectives are addressed in drawing the conclusions below. In order to draw conclusions that meet the objectives for the study, study findings from both qualitative and quantitative approaches were used to support the arguments.

### 6.5.1 Problems with current provision of SSS at the regional centres

The problems with the provision and implementation of the SSS at the regional centres were identified by the regional coordinators and the distance students themselves who were studying through regional centres. In the context of this study, regional coordinators have the responsibility to oversee the implementation of both administrative and academic SSS while the students are the recipients or beneficiaries of student support services. Chapter 5, Section 5.4.2.3 presented challenges that affect effective implementation of SSS from the regional coordinators' perspective. Additionally, students pointed out the problems that they experienced when accessing the SSS as presented in Tables 5.38 – 5.45.

Effective SSS play a decisive role in distance education that would ensure accreditation and recognition of qualifications obtained through distance mode. They

ensure that students get guidance, academic support, reduce student drop-out and place emphasis on academic success. These would be possible if the SSS were responsive to the needs of students and were designed from their perspectives.

Regional coordinators identified a shortage of facilities such as computers with internet connectivity, teleconferencing (video-conferencing), wireless network, more library resources, training workshops for the face-to-face tutors and the need for a permanent third administrative officer to work in the evenings and weekends for the library and computer laboratory. Some of the problems identified by the students were similar to those raised by the regional coordinators.

Students outlined many problems such as unavailability of SSS in the evenings and on weekends, unrecorded orientation sessions for replay, non-existent tutor support in certain courses, long turnaround times for assignments, scant comments on marked assignments, which did not guide them, few books in the libraries and malfunctioning computers. In addition, some students felt that face-to-face tutors should collaborate with full-time lecturers to ensure uniformity with regards to syllabus and curriculum objectives, especially because it was the lecturers who set the examination papers. In light of the problems identified, NUST-COLL has an obligation to revisit the support system. The researcher developed an implementation model for student support services which is presented later in Section 6.7, which could enhance effectiveness in response to the specified challenges. It should be noted that the designed model for implementation is not a blueprint but a guide; hence, deviations could be expected during the implementation phase when solutions are achievable by using other strategies.

### 6.5.2 The challenges of DE students at COLL regional centres

Literature in Chapter 1, Section 1.3.3 discussed some challenges to DE students. The needs of DE students are ever-changing owing to the geographical distance to the centres, economic and technological dynamics. It is common knowledge that the increase in the number of students who are studying through NUST-COLL regional centres can pose challenges to under resourced facilities such as libraries and computer laboratory. As indicated in Chapter 5, Table 5.4, ninety (82.6%) students (82.6%) were employed and they had been studying at NUST for many years without

getting any qualification such as a first-year certificate (see Table 5.5 and 5.7). The study also established that many students live far from the centres and eight-four (77.1%) of them indicated that they used transport to travel to the regional centres. Access to the internet and electricity is still a challenge for many of the students; hence, an effort to communicate to students using the most convenient technology is essential. The researcher defines technology in this context as "anything that enhances performance" and this is applicable if it solves the student isolation and promote dialogue.

Most of the problems identified in section 6.3.1 above are closely linked to the needs and challenges of DE students. According to the findings in Table 5.46, students want NUST-COLL to promote dialogue through WhatsApp and Facebook platforms to provide counselling services to students at the regional centres. Counselling is essential for solving and guiding students in their academic problems and it would assist students to cope with challenges that confront DE students. Most of the distance students were admitted to study at NUST through the mature age entry scheme and by implication, they did not have foundation in certain courses such as mathematics, statistics, basic science and accounting. Therefore, students requested that NUST should provide them with academic support even if there were fewer than five students registered. This can be supported and implemented through the use of technology to respond to the needs of students.

While it is recognised that support services such as tutorial classes, counselling, marker-tutor feedback and active student engagement through dialogue are integral parts of distance education, the researcher is concerned about the preparedness of students that were admitted through mature age entry scheme. This study proposes the introduction of foundation and preparatory courses for students who find some courses difficult for their comprehension. Preparatory courses can play a critical role in improving and developing academic skills needed to succeed in tertiary education. This study argues that support services such as tutorial sessions, timely feedback, technological support and library services are critical in distance education.

### 6.5.3 Current practices on SSS at NUST-COLL regional centres

Chapter 2, Section 2.4 discussed different types of SSS; both academic and administrative, that are provided at the regional centres. The practices at other universities such as the Open University of the United Kingdom (OU UK) and University of South Africa (UNISA) as prominent distance education institutions were presented in Chapter 3, Section 3.5. NUST provides most of the support services at the regional centres but one can learn and borrow some strategies from UNISA and OU UK to maximise the accessibility of the support services and expand the model that is currently used.

The views of regional coordinators were captured in Chapter 5 that students were not making use of SSS maximally, and this could be attributed to distance, shortage of library books, tutors not promoting dialogue, insufficient technology and non-existence of tutorial services in some courses. As discussed in Chapter 3, Section 3.5, SSS serve to empower distance students to learn open doors for students to access information and motivate them to complete their studies.

NUST-COLL can learn and emulate some good practices at other distance education institutions such as OU UK and UNISA. OU UK provides SSS through 13 regional centres and 260 study centres throughout the UK to ensure that students feel nearer to the university which is located in central England (Tait, 2014: 9-10). Besides the use of technology, the study centres in England are staffed with tutor-counsellors and subject expert tutors to provide guidance and academic assistance. UNISA on the other hand, provides support services through technology, but just like any distance education institution, regional centres have been resourced to accommodate students who cannot access face-to-face discussion classes at the main campus in Pretoria (Molepo & Mothudi, 2014: 497). To ensure that face-to-face tutors provide current academic assistance to students, UNISA lecturers provide training to the tutors once a year (Segoe, 2012: 130). Furthermore, the support services for students at the regional centres are strengthened through satellite broadcasts and the use of audio and video facilities.

To empower DE students to learn and complete their studies, and gain access to information, the regional coordinators and student respondents felt that tutors should

be trained to facilitate learning. They further suggested that study centres should be established by placing prescribed books in public libraries, the use videoconference and satellite broadcasts to reach out to regional students and having counselling services for guidance. It is imperative that NUST-COLL should establish study centres in other towns to bring the regional centres closer to the students in remote areas. The needs of distance students should be integrated in the planning of SSS. This is because support serves should assist students to complete their studies by improving and transforming their understanding.

## 6.6 RECOMMENDATIONS

The previous sections summarised and made conclusions to different objectives of this study. Literature review in Chapter 2 and 3 as well as the findings presented in Chapter 5 provided answers to the sub-questions, which were aimed at answering the main research question. This section addresses the sub-question: what suggestions do students make to improve the existing support services at the COLL regional centres? In general, student support services cover a range of services and activities provided to individual students or groups that complement course materials. Normally, distance education institutions are known for their provision of support services which make it possible for off-campus students to study and achieve same competencies to the on-campus students doing the same programme.

The recommendations presented in this section are related to the literature of this study and the empirical research findings as presented and discussed earlier in Chapter 5 and 6 respectively. Chapter 5, Section 5.4.2.4 and Table 5.46 discussed many proposals from the regional coordinators and DE students themselves. Most of the recommendations as discussed in the previous chapters and sections of this chapter, aim to strengthen the current available SSS at COLL regional centres. The recommendations given by students and regional coordinators are summarised here and are discussed below:

- Counselling services for the DE students at COLL regional centres.
- Provide training to face-to-face tutors, marker-tutors to facilitate adult students and capacitate RCs to minimise referrals to the faculty officers.

- Introduce videoconferencing, audio/video recorded tutorials, use WhatsApp platforms and satellite broadcast to promote dialogue.

- Expand COLL regional libraries and allocate some books to public libraries for easy access for students in remote areas.

- Employ additional staff at the COLL regional centres for the library and computer centre to work after normal working hours and on weekends.

## 6.6.1 Provision of counselling services to distance students at NUST-COLL regional centres

NUST should consider appointing counsellors for the NUST-COLL regional centres. This study argues that at least two counsellors should be appointed and be located centrally at the main campus. To reduce the distance between the counsellor and the student at the regional centre, ICT can be used to deliver the much needed service through videoconferencing, WebEx and telephone facilities. The researcher is convinced that technology can save travelling cost to the centre for counselling sessions; thus students have the choice over which type of technology to use for counselling service.

## 6.6.2 Training of face-to-face tutors, marker-tutors and regional coordinators

Training of DE tutors would provide them with a deeper understanding of the nature and type of students enrolled at the regional centres so that they could improve the student support they provide and devise more interactive approaches to teaching that foster independence. Not only that tutors should be trained to facilitate adult students, but the use of ICTs like the internet, mobile phones (text messaging) and WhatsApp to bridge the transactional distance.

Written feedback should provide students with an account of what they are doing well, where they need improvement and offer suggestions on what to do to improve their understanding. In this sense, it is critical that tutor-markers should be trained on the concept of distance education and guidance.

Regional coordinators advocated training on curriculum changes in order to provide correct guidance and avoid referrals to the faculty officers who take long to provide

solutions during registration period. They also proposed that student card issues be solved at the regional centres during the examination period to avoid sending students away who have lost their student cards.

### 6.6.3 Use technology to promote dialogue

It is important that NUST-COLL should use media that students have access to like Facebook, text messaging and WhatsApp. Student respondents and regional coordinators proposed that regional centres should introduce videoconferencing, satellite broadcast and WhatsApp platforms to promote dialogue. Many students nowadays have access to smart phones with WhatsApp and Facebook applications that can be used with different courses for academic dialogue. However, the use of telephone tutoring should be emphasised because the researcher proposes that it can be a viable option for the students that live in remote areas with no access to internet connection.

The researcher suggests that NUST should engage other stakeholders such as Telecom, energy companies and mobile communication companies to provide portable computers, internet devices and solar chargers at a cheaper price (student price) for the students to have access to information from the lecturers without travelling to NUST-COLL centres on a regular basis, especially those that live far from the centres.

### 6.6.4 Expansion of NUST-COLL regional centre facilities

Regional coordinators recommended that NUST should introduce online journals and e-books to ensure that students have access to library resources through electronic means. Both regional coordinators and students recommended that COLL should increase the number of computers at the centres and the number of books in the library as well as provide a wireless network to DE students at the regional centres. Another recommendation was to distribute some prescribed books to public libraries so that students can access easily without making long trips to the centres. Alternatively, NUST-COLL can introduce an electronic book request using email to send books to students by using fast mail or courier service.

**6.6.5 Employment of additional staff for the regional centres.**

In order to provide library and computer service to the DE students in the evenings and weekends, this study recommends that NUST-COLL employ an additional staff member to be in charge of the library and the computer laboratory.

**6.7 MODEL FOR IMPLEMENTATION OF SSS AT NUST-COLL REGIONAL CENTRES**

From the empirical findings of the study, the researcher developed an implementation model, which is a diagrammatic representation of how the implementation of SSS at the regional centres could increase the success and throughput rates of the DE students.
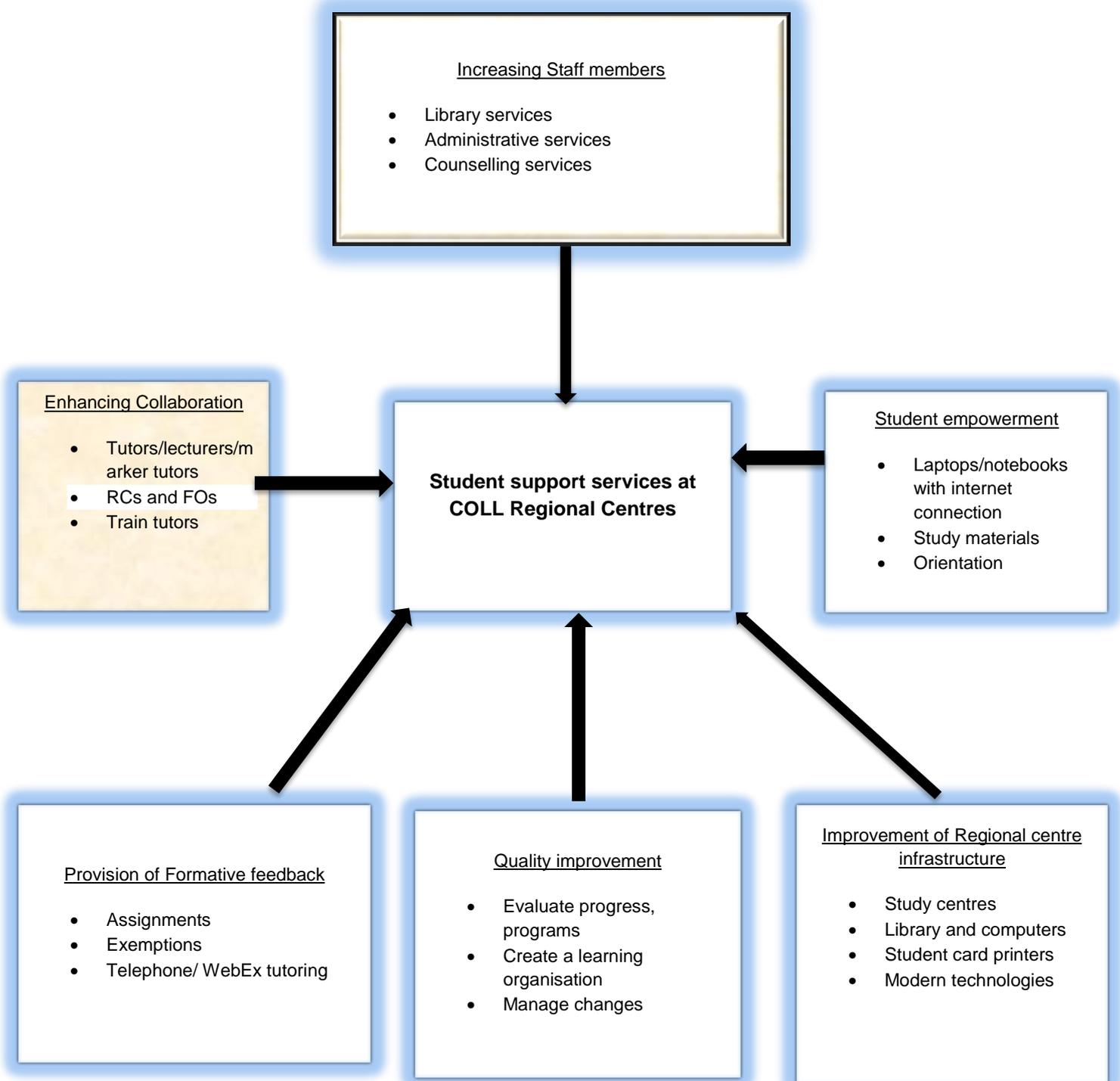
**Figure 6.1 Model for SSS implementation**

The model summarises the anticipated solutions to challenges by the researcher. It is believed that the model provides a guide and fundamentals of planning for effective SSS at the regional centres. The model comprises six elements, namely

enhancing collaboration, increasing staff members, provision of formative feedback, quality improvement, improvement of regional centre infrastructure and student empowerment. The model can be popularised to the COLL department through discussion forums, departmental retreat and workshops. These elements are fundament to the effective implementation of support services at the regional centres, which are explained below.

**6.7.1 Improvement of regional centre infrastructure**

Empirical findings in Section 5.4.2.4 presented the views of the regional coordinators on how regional centres can be equipped to provide the much-needed support services to all distance students. Regional centres should be equipped with modern technologies such as videoconferencing facilities, student card printing machines, more computers with internet and data projectors, and more library books should be purchased and should be made available for students to borrow physically or electronically. NUST should build its own facilities in the region in order to expand academic activities at the regional level. Distance students should be able to attend some tutorial classes offered at the main campus through videoconference and WebEx mode, and be able to ask questions or have interaction with other students. Having many computers with internet connectivity would not only allow students to use them for emails and an online library, but also for courses that are offered in an eLearning mode.

Once all the regional centres are equipped with modern technology, students would not need to go to the main campus for the one-week vacation classes. Vacation classes can be offered at the regional centres using appropriate technologies, and this would then allow students to be with their families, saving money on travelling and accommodation arrangements.

The regions in which the regional centres are located are geographically big. In view of this, most students have to travel long distances from different towns and villages to the towns where the regional centre are situated. Distance education strives to reach as many people as possible, but with long distances for students to travel, accessibility to library facilities is an arduous task. There was a call from both regional coordinators and student respondents to establish study centres in different

towns so that students can borrow library books easily. For this arrangement to be possible, NUST would have to enter into a memorandum of understanding with other libraries for charges or professional fees for services provided. The regional coordinators can be given another responsibility to facilitate and assist with the coordination and management of the study centres in their respective regions.

## 6.7.2 Enhancing collaboration

Most of the tutors at the regional centres are not professionally qualified as teachers; hence they need assistance on teaching methods and how to handle DE students. The examination question papers are normally set by full-time lecturers, while the marker-tutors mark assignments for DE students. The lecturers and marker-tutors are based in Windhoek while face-to-face tutors are based in the regions. Face-to-face tutors at the regional centres have more direct contact with the students than the lecturers or marker-tutors as they offer tutorial classes for two hours per week. Given the technologies at our disposal, workshops and meetings can be arranged for face-to-face tutors, lecturers and marker-tutors to discuss the course objectives, challenges facing the students and course content materials. Tutors should be trained and attend workshops with the lecturers and tutor-markers to boost their content knowledge and instructional strategies needed for handling distance students. It is important that face-to-face tutors should be on par with the lecturers and marker-tutors in terms of assessment skills, assessment criteria and course objectives so that they can facilitate and assist the students diligently.

Regional coordinators provide learner support during the information phase, guidance phase, registration and integration phase to students who studied through the regional centres. In the process, the regional coordinators do part of the faculty officers' job by ensuring that students are correctly registered. Some curriculum issues were normally referred to faculty officers during the registration period, who in most cases did not respond in time. Many students reported that faculty officers were not reachable for curriculum guidance. It is important that regional coordinators should be trained and empowered to handle some curriculum issues in order to minimise unnecessary referrals. It would be effective if there could be one faculty officer at the main campus who only attends to issues and queries from the regional

centres, especially during the registration period as this would promote effective customer service.

### 6.7.3 Increasing staff members

NUST-COLL regional centres have grown over the years with total enrolments of more than 100 registered students each while the bigger centres such as Ongwediva and Walvis Bay centre had recorded more than 300 students each. Currently, there are two staff members, namely the regional coordinator and the student support officer who provides different support services to students. In most cases, DE students would want to access the library or use the internet services late in the evenings, on weekends or public holidays for their studies. However, the current staff complement does not allow the provision of services both during the day and in the evenings especially because the regional coordinators are sometimes invited by the industry for career issues and job attachment visits for students among other activities.

Apart from the third administrative staff member at the regional centre, NUST-COLL should appoint a student counsellor to be stationed at the main campus who would attend to queries of regional distance students using modern technologies such as WebEx, Skype or videoconference. Besides giving necessary information about course assessments and study problems, student counsellors could create space for students to talk about academic and personal problems such as anxiety, stress, academic isolation, problems with family, bereavement and loss. These problems can force students to drop out of their studies if they are not handled sensitively.

### 6.7.4 Provision of formative feedback

Many DE students live far from COLL regional centres and the much-needed academic or administrative support in most cases. However, they can still make enquiries or seek assistance from the relevant staff members by telephone or emails. In most cases, students seek information for the purpose of getting clarity on some issues or taking appropriate action for improving their learning. For instance, the student may need information on how to complete an assignment, which has a deadline, and as such, if the feedback in not given promptly, the student may fail.

Formative feedback is part of the learning process; hence, it should be clear, specific and credible so that it can give students clear guidance on how to improve their learning.

The purpose of feedback on the assignments is to increase the student knowledge and understanding of the content areas, direct and assist students on what need to revise in order to improve their marks. It would be ideal to give students feedback on the first assignment before the submission of the second assignment. This way, the students would be aware of their performance and mistakes, and avoid repeating them in the second assignment.

To increase organisational efficiency and student satisfaction, it is recommended that NUST-COLL should implement a 24-hour turnaround time for staff to acknowledge or respond to student queries via emails, and a prompt and effective way of answering telephone enquiries. Marker-tutors can use WebEx or videoconferencing to discuss feedback on tests or assignments with the students in order to give them an opportunity to ask questions during these sessions. In distance learning, it is important that lecturers should give timely, comprehensive and constructive feedback as this motivates students to perform better.

While this study acknowledges that feedback is critical and fundamental to both effective teaching and learning, it advocates feedback that leads to positive change. It is recommended that all tutor-markers be trained on how to provide feedback that leads to positive change.

### 6.7.5 Quality improvement

The focus on improvement is important to enhance efficiency, effectiveness of all NUST-COLL structures and improved delivery of the much-needed support services to all the students. The process of quality improvement involves the evaluation of changes, integration of newer practical approaches into the existing systems and fostering a culture of quality that continuously seeks to provide effective and pro-student support services.

To develop student-centred support services, it is important to engage students in the design, planning and delivery of support services. This would not only

demonstrate commitment to student-centred support services, but it would also ensure that the designed support services are relevant to students' needs and the challenges that they face in their respective regions. It is also crucial to involve the regional coordinators and student support officers because they know the students better than the lecturers or course designers when it comes to what works for them in terms of support services.

The process of improving the quality of support services involves managing changes in an effective manner. During the months of February – March, students from Katima Mulilo, Rundu, Outapi and Ongwediva are often affected by floods which prevent them from visiting the centres for services. This requires proper planning with regard to how students can submit their assignments and get the necessary support from the tutor-markers. In a situation of floods, submitting assignments online would be appropriate; hence, it is important to provide students with internet devices or to modify the rules to accommodate such emergencies.

The quality of services does not leave out the quality of study guides that are used by students to cover the prescribed course content. When planning instructional material, it is important to consider the quality of instruction, activities and curriculum. This can be done when all staff involved use methods of training that are appropriate for the type of students enrolled at the regional centres. The instructional designers must know the challenges facing the regional students in order to develop quality study guides that promote dialogue during the learning process.

### 6.7.6 Student empowerment

Most of the DE students were admitted to different study programmes through the mature age entry scheme because they did not meet the normal entry requirements to study at NUST. It is proposed that students admitted through mature age entry be compelled to do remedial courses in order for them to be prepared for tertiary education. It is further believed that remedial courses can have a positive impact on the university outcome of unprepared students.

In order to fully integrate first year students into their study programmes with a clear purpose and understanding of academic and administrative requirements, an

orientation course must be attended by all students. It is recommended that first-year students should attend two orientation courses, one before registration and the other after registration. Ideally orientation course before registration should make students understand the institution and its culture better, the challenges of distance education, and what students are expected to do in their studies. Once the students have registered, it is also important to discuss the academic and administrative issues such as subject choice, collection of study materials, submission of assignments and writing of tests, curriculum issues and calendar of activities. The researcher recommends that orientation course proceedings should be recorded for students that want to replay at a later stage.

The empowerment of distance students is a critical aspect in distance education, especially for the working students who do not always visit the regional centre for support services. The researcher is convinced that the effective use of technology can eliminate isolation and bring the university closer to the students, which is important for increasing access in the 21$^{st}$ century. The use of technology can only be fruitful if all distance students are provided with laptop/notebook computers and internet devices so that they can connect wherever they are to access support services. NUST should negotiate with Telecom Namibia and Mobile Telecommunication Limited (MTC) network service provider for a discount of a computer package for students that include portable computers and mobile modem, like 3G or 4G for all the students registering for the distance education mode. Ensuring that all DE students are connected does not only promote dialogue between students and the university, but it can address some geographical barriers, and facilitate online tutorials and access to additional material to support student learning.

## 6.8. CONTRIBUTION OF THE STUDY

The primary aim of this study was to evaluate the implementation of the student support services provision at NUST-COLL regional centres across Namibia with the purpose of making proposals for strengthening the current support services. Themes like the transactional theory of distance education, planning of student support services, state of distance education in Namibia, and the use of technology in education were discussed.

The findings of this study suggest that NUST-COLL should prioritise the provision of student support services by equipping regional centres with needed resources, and promote collaboration between lecturers, face-to-face tutors and marker-tutors through training. Additionally, the findings revealed that the implementation of SSS at the regional centres was satisfactory. In order to improve more on this and enhance the effectiveness of SSS, a model was developed to be considered for implementation. This study will possibly contribute towards the effective implementation and provision of SSS, and in turn, this could improve the success rate and reduce the dropout rate of DE students at the Namibia University of Science and Technology Centre for Open and Lifelong Learning.

## 6.9 SUGGESTIONS FOR FURTHER RESEARCH

The objectives of the current study as stated in Chapter 1 were achieved through the empirical findings presented in Chapter 5. However, it is the researcher's view that, to strengthen the provision and implementation of student support services, further research could be conducted to improve on some of the areas that were not adequately covered in this study. The areas listed below could be considered for additional investigation.

- Extending the present study over a larger population of people involved in the provision of support services such as DE students, face-to-face tutors, student support officers, marker-tutors and lecturers that mark examinations.

- A comparative study involving various distance education universities in African countries especially those with success stories on effective student support. This could be used in the formulation of an SSS model to be used by the universities in Namibia.

- Research could be done with the Ministry of Information and Communication Technology, National Broadcasting Corporations (NBC and TV Africa), mobile network companies to establish how they could contribute to the effective implementation of support services for DE students at the regional centres.

- Further research could be undertaken into the differences between the performance of distance students at the main campus and those at the regional centres with a focus on what contributes to success or failure.

- It is recommended that a study be conducted on the roles of instructional designers and their contribution to the performance of DE students.

- Finally, future research on student support services could look at the effects of leadership on support systems at different institutions in Namibia.

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# APPENDIX 1: LETTER OF PERMISSION TO CONDUCT STUDY

To:     Dr. E. Niikondo

        DVC: Academic  Affairs

        Namibia University of Science and Technology

From:  Mr. Lukas Shikulo

        Regional Coordinator

        Namibia University of Science and Technology (NUST)

Date: 15 January 2016

**Re: Permission to collect research data from NUST COLL regional centres**

I hereby would like to ask for your permission to do my research project for my Doctoral studies at the Namibia University of Science and Technology regional Centres. It is required that I get permission from the organization to do my research. My topic is: **Evaluation of the implementation of student support services at Namibia University of Science and Technology Centre for Open and Lifelong Learning.**

I want to administer a questionnaire to senior students of selected centres and have an interview schedule with the Regional Coordinators of all COLL centres. This research will be purely academic. I will administer the questionnaires myself and share the findings with the department management to clarify issues that may arise.

Thank you for considering my request and I hope to have a positive response.

Yours sincerely

Mr. Lukas Shikulo
(Student number: 46325662)
University of South Africa

# APPENDIX 2: GRANTED PERMISSION TO CONDUCT STUDY

**NAMIBIA UNIVERSITY**
OF SCIENCE AND TECHNOLOGY

13 Storch Street
Private Bag 13388
Windhoek
NAMIBIA

T: +264 61 207 2118
F: +264 61 207 9118
E: registrar@nust.na
W: www.nust.na

**Office of the Registrar**

20 April 2016

Mr Lukas Shikulo
Box 4842
Walvis Bay
NAMIBIA

Dear Mr Shikulo

**RE: CONSENT TO CONDUCT RESEARCH WITH THE NAMIBIA UNIVERSITY OF SCIENCE AND TECHNOLOGY STAFF AND STUDENTS**

The letter with approval date 13 April 2016 from Prof Mapheleba Lekhetho, UNISA, and your email correspondence received on 13 April 2016 has reference.

Approval is hereby granted for you to conduct the research on *"Evaluation of student support services implementation at Namibia University of Science and Technology Centre for Open and Lifelong Learning"* in the Namibia University of Science and Technology. Any information gathered during the research is to be used for the purpose of the study only and must be treated as confidential. The results of the study should be shared with the University. Individual information of staff and students will not be made available, nor will biographical information of students be made available in such a way that individual students can be identified.

You are advised to contact the Director: COLL, Dr Delvaline Möwes, to compile a list of possible respondents to your data collection instrument.

I wish you all the best with your research.

Yours sincerely,

Corneels H Jafta
REGISTRAR

NAMIBIA
UNIVERSITY
OF SCIENCE AND
TECHNOLOGY

P/Bag 13388
Windhoek
NAMIBIA

2016 -04- 2 0

REGISTRAR
OFFICE OF THE REGISTRAR
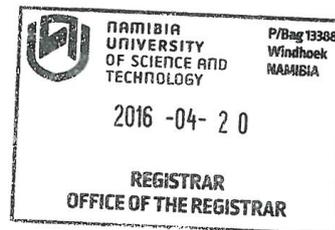
CC:    Director: COLL
        Deputy Vice-Chancellor: Academic Affairs
        Assistant Registrar: Academic Administration
        Director: DICT

## APPENDIX 3: SUPERVISOR'S SUPPORTING LETTER

College of Education
University of South Africa
P. O. Box 392
Pretoria 0001

13 April 2016

Dear Sir/Madam

RE: REQUEST FOR SUPPORT TO MR LUKAS SHIKULO TO CONDUCT RESEARCH

This is to certify that Mr. Lukas Shikulo, student number 46325662 is registered for the degree of Doctor of Education in Education Management at this University. The title of his study is: *Evaluation of student support services implementation at Namibia University of Science and Technology Centre for Open and Lifelong Learning.* As part of the requirements for his studies, Mr. Shikulo is expected to conduct empirical research by way of collecting data from different stakeholders within the Namibia University of Science and Technology that are relevant to his study. So that he can carry out this crucial exercise successfully, your professional support and cooperation are requested.

As a student, Mr Shikulo is bound by the ethics that govern research at this University, and as such, I am confident that he will use the data generated from this study purely for academic purposes and not in any manner that would damage the image of your organization or harm the research participants.

I believe that the findings of this study will contribute to knowledge in the field of education in Namibia, particularly to the evaluation of support services provided to students at the Centre for Open and Lifelong Learning.

To this end, I wish to thank you in advance for your support in this important endeavour.

Yours faithfully

Prof. VP Mahlangu
**Supervisor**
Tel.: 012 429 3781
Fax: 0865410602
mahlavp@unisa.ac.za

## APPENDIX 4: ETHICAL CLEARANCE CERTIFICATE

UNISA | university of south africa

**COLLEGE OF EDUCATION RESEARCH ETHICS REVIEW COMMITTEE**

16 March 2016

Ref : **2016/03/16/46325662/26/MC**
Student : Mr L Shikulo
Student Number : 46325662

Dear Mr L Shikulo

**Decision: Ethics Approval**

**Researcher:** Mr L Shikulo
Tel: +264811473262
Email: 46325662@mylife.unisa.ac.za

**Supervisor:** Prof M Lekhetho
College of Education
Department of Educational Leadership and Management
Tel: 012 439 3781
Email: lekhem@unisa.ac.za

**Proposal:** Evaluation of student support services implementation at Namibia University of Science and Technology Centre for open and lifelong learning.

**Qualification:** D Ed in Educational Leadership and Management

Thank you for the application for research ethics clearance by the College of Education Research Ethics Review Committee for the above mentioned research. Final approval is granted for the duration of the research.

The application was reviewed in compliance with the UNISA Policy on Research Ethics by the College of Education Research Ethics Review Committee on 16 March 2016.
The proposed research may now commence with the proviso that:
1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the College of Education Ethics Review Committee. An amended application could be requested if there are substantial changes from the

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
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## APPENDIX 5: CONSENT LETTER TO RESPONDENTS

P.O. Box 4842
Walvis Bay
Namibia
Telephone: (+26464) 204351
Mobile: +264811473262

**INFORMED CONSENT FOR STUDENTS**

Dear COLL student

My name is Lukas Shikulo (student number: 46325662) and I am a doctoral student at the University of South Africa. Currently, I am conducting a research study for my dissertation and Prof. Mapheleba Lekhetho is my supervisor. This study aims to evaluate the implementation of student support services (SSS) offered at the Namibia University of Science and Technology COLL regional Centres. As a student studying through COLL regional centre, you are invited to participate in this research study that could impact the provision and implementation of SSS at COLL regional centre.

Your participation involves the completion of the questionnaire to gain information about your needs and expectations as a distance student studying through the regional centre. The questionnaire covers broad array of questions to collect data about demographic information, access to and attendance rate of SSS and evaluation for the implementation of SSS. Additionally, open-ended questions aim to get your opinion regarding the quality of SSS provided at the regional centre.

Please note that your participation in this research is voluntary and refusal to participate does not involve any penalty. It will take about 40 minutes to complete the questionnaire. Kindly complete the questionnaire at the centre and hand it to the regional coordinator for safe keeping. To keep high level of confidentiality and anonymity, your responses will not be paired with your name or student number hence this letter and the questionnaire should be collected separate. This questionnaire will be completed by 301 distance students form different COLL regional centres. Kindly sign below as an acknowledgement that this research has been explained to you and you have read and understood the content outlined in this document.

.............................................        .............................        ..................
Print Student number                              Signature                        Date

.............................................
Mr. Lukas Shikulo (46325662)
lshikulo@gmail.com

**APPENDIX 6: INTERVIEW SCHEDULE FOR RCs**

**Interview Guide for Regional Coordinator**

Interview Questions

**BACKGROUND INFORMATION**

a) How long have you been a regional coordinator?

b) What is your highest qualification?

c) Have you studied through ODL?

**MAIN QUESTIONS**

a) In your opinion, do you think students are making use of the available student support services (SSS) at the centre? Elaborate more by giving examples.

b) What challenges, if any, do you experience when implementing student support services for your centre? (Face-to-face tutorials, library, assignments administration, etc…)

c) How do you perceive the effectiveness of your implementation strategies for SSS in responding to barriers, expectations and needs for distance students?

d) What, in your view, should be done to improve the role of regional coordinator when it comes to the effective implementation of student support services?

It was an informative and learning experience interviewing you. Thank you so much for your time and the much needed contributions.

# APPENDIX 7: QUESTIONNAIRE FOR STUDENT RESPONDENTS

UNISA | college of education

**EVALUATION OF STUDENT SUPPORT SERVICES IMPLEMENTATION AT NUST – COLL REGIONAL CENTRES 2016**

**STUDENT QESTIONNAIRE**

**INSTRUCTIONS TO THE STUDENT**

**Thank you for taking time to complete this questionnaire. The questionnaire consist of four parts i.e. A, B, C and D which you are required to complete fully. All the senior students (non-first years) who have been studying at NUST (or former Polytechnic of Namibia) qualify to complete this questionnaire.**

1. You should first sign the consent letter from your regional coordinator before completing this questionnaire.
2. When completing this questionnaire, please do not write your name or student number anywhere on the questionnaire because your participation is anonymous.
3. You must not complete more than one questionnaire.
4. **COMPLETED QUESTIONNAIRE SHOULD BE RETURNED TO THE REGIONAL COORDINATOR WITHOUT DELAY**
5. Answer all the parts (**A, B, C and D**)

**Dear Student**

Please answer all the following questions (by crossing X) fairly and objectively, using your own judgment and experience. Your name and student number appears nowhere on this form. Whatever you write on this form cannot be linked to you personally.

**PART A: DEMOGRAPHIC INFORMATION**

1. How old are you?

   ☐ 18 or younger   ☐ 18 – 21   ☐ 22 – 25   ☐ 26 – 30

   ☐ 31  – 35   ☐ 36 – 40   ☐ 41 – 45   ☐ older than 45

2. What is your marital status?

   ☐ Single   ☐ Married   ☐ Divorced/Separated

3. Gender   ☐ Female   ☐ Male

4. Are you employed? (if no, go to question 6)   Yes ☐   No ☐

5. If currently working, please indicate the type of employment

   ☐ Full-time   ☐ Part-time   ☐ Self-employed

6. For how many years have you been studying at Namibia University of Science and Technology (NUST)?

   One ☐   Two ☐   Three ☐   Four ☐   More ☐

7. What are your reasons for studying through distance at COLL regional centre?

   ☐ It provides possibility of studying while working

   ☐ It is the best choice from the economical point of view

   ☐ In order to promote my Salary through the degree that I will earn

   ☐ In order to improve my overall skills

   ☐ Other (please specify) _____

8. Indicate your highest level of qualification achieved at NUST (select only one qualification)

   ☐ 1$^{st}$ year certificate   ☐ 2$^{nd}$ year certificate   ☐ Diploma   ☐ Degree ☐

   ☐ Nothing

9. Do you own or have access to:
   ☐ Portable computer (Laptop)   ☐ Mobile phone with Internet

   ☐ Computer with Internet   ☐ Computer without Internet

10. How far is the COLL Centre from where you live?

| | | |
|---|---|---|
| ☐ 0 – 20km | ☐ 21 – 40km | ☐ 41 – 60km |
| ☐ 61 – 80km | ☐ 81 – 100km | ☐ More than 120km |

11. Indicate the type of transport you make use of to visit the COLL centre.

☐ Taxi/Hike    ☐ Own car    ☐ Friends car    ☐ Other (Specify)

_____

12. Which COLL regional Centre are you from?

_____

**Indicate whether you are aware of the availability of the following Student Support Services and how often you make use of them at the COLL regional Centre.**

### PART B: ACCESS TO AND ATTENDANCE RATES OF STUDENT SUPPORT SERVICES

1. Please use the column **"Rates of usage"** and **"Aware of availability"** for your rating. (Circle the numbers of your option)

| Type of services | Aware of the availability | | Rates of usage | | | |
|---|---|---|---|---|---|---|
| | Aware | Unaware | Never | Seldom | Other | Very often |
| Administrative support (admission, registration, advice on course amendments/exemptions, change or Centre, financial services, issuing study materials | 1 | 2 | 1 | 2 | 3 | 4 |
| Study facilities | 1 | 2 | 1 | 2 | 3 | 4 |
| Library services | 1 | 2 | 1 | 2 | 3 | 4 |
| Printing services | 1 | 2 | 1 | 2 | 3 | 4 |
| Access to emails | 1 | 2 | 1 | 2 | 3 | 4 |
| Counselling services to promote students motivation, overcome students concern about their studies, decisions on cancellations/withdrawal | 1 | 2 | 1 | 2 | 3 | 4 |
| Orientation (1st years) | 1 | 2 | 1 | 2 | 3 | 4 |
| Face-to-Face tutorials (Saturday classes) | 1 | 2 | 1 | 2 | 3 | 4 |
| Telephone tutoring | 1 | 2 | 1 | 2 | 3 | 4 |
| Computer lab for student use | 1 | 2 | 1 | 2 | 3 | 4 |
| ELearning portal | 1 | 2 | 1 | 2 | 3 | 4 |

| Communication with other distance learners | 1 | 2 | 1 | 2 | 3 | 4 |
| Vacation school in Windhoek | 1 | 2 | 1 | 2 | 3 | 4 |
| Other (please specify) ----------------------------------------- | 1 | 2 | 1 | 2 | 3 | 4 |
| Other (please specify) ----------------------------------------- | 1 | 2 | 1 | 2 | 3 | 4 |
| Other (please specify) ----------------------------------------- | 1 | 2 | 1 | 2 | 3 | 4 |

2.  If your answer to any of the above (rates of usage) is NEVER, please state your reason for not making use of such a service

| SERVICE | REASON |
|---|---|
| Administrative support (admission, registration, advice on course amendments/exemptions, change of Centre, financial services, issuing study materials | |
| Study facilities | |
| Library services | |
| Printing services | |
| Access to emails | |
| Counselling services to promote students' motivation, overcome students' concern about their studies, decisions on cancellations/withdrawal | |
| Orientation (1st years) | |
| Face-to-Face tutorials (Saturday classes) | |
| Telephone tutoring | |
| Computer lab for student use | |
| ELearning portal | |
| Communication with other distance learners | |
| Vacation school in Windhoek | |
| Other (please specify) ------------------------------- | |
| Other (please specify) ------------------------------- | |
| Other (please specify) ------------------------------- | |

**PART C: EVALUATION OF STUDENT SUPPORT SERVICES IMPLEMENTATION**

1. **Administrative support**

Please indicate your choice with for EACH of the statements below by crossing (X) the box that best represents your opinion on the availability of SSS at your regional centre.

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| There is adequate and timely support available at COLL regional centre | | | | |
| General enquiries and problems regarding admission and registrations are handled efficiently | | | | |
| Printing of academic records, proof of registrations and financial statements | | | | |
| Advice on course amendments, exemptions and change of mode | | | | |
| Respond to written enquiries, addressing all issues raised by students | | | | |
| Receive and dispatch assignments to the markers | | | | |
| Issue and order study materials for students | | | | |
| Assistance with library facilities | | | | |
| Information about face-to-face tutorials | | | | |
| Information about scheduling of vacation schools | | | | |
| Administration of examinations and test | | | | |
| Receive all fees from students | | | | |
| Facilitation and assistance to form study groups | | | | |
| Assistance regarding computer lab, Internet, Printing and Studying facilities | | | | |
| Facilitation of contact between students and marker-tutor and staff members at COLL Windhoek campus | | | | |

### 2. Orientation

Did you attend the orientation session when you registered as a student at the Polytechnic of Namibia, COLL regional Centre in your region?

| | |
|---|---|
| Yes | 1 |
| No | 2 |

If your answer to question 2 is **no**, please state your reasons for non-attendance

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If your answer to question 2 is **yes**, please respond to the following statements by crossing (x) the box that represents your choice

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| Orientation seminar prepared you to be ready to start with your studies | | | | |
| Orientation Seminar made you to be aware of all the support services available at the Centre | | | | |
| Orientation Seminar provided all information that help me cope with Studies | | | | |
| Orientation Seminar motivated and encouraged you to make a success of your studies | | | | |
| Orientation Seminar made you aware of what is expected from you as a distance Student | | | | |
| Orientation seminar clarified all doubts and problems pertaining to my studies | | | | |

### 3. Face-to-Face Tutoring/Saturday classes

Do you attend face-to-face tutorials at your nearest COLL regional Centre?

| | |
|---|---|
| Yes | 1 |
| No | 2 |

If your answer to question 3 is **no**, please give your reasons for non-attendance

-------------------------------------------------------------------------------------------------------------------------------------

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If your answer to question 3 is **yes**, please indicate your extent of agreement with the following:

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| Face-to-Face tutorial sessions suit my personal schedule | | | | |
| Tutors show sound knowledge of their subject matter | | | | |
| A variety of teaching methods/styles are used to make the course interesting and rewarding | | | | |
| Tutors are always punctual for classes | | | | |
| The presentation of the subject matter is systematic, clear and effective | | | | |
| Tutors encourage questions and dialogue with students | | | | |
| Tutors support and allow students to express fears and anxiety about the course | | | | |
| Tutorial classes lessen feelings of isolation | | | | |
| Tutors encourage students to share their experiences | | | | |
| Face-to-Face tutorials are useful to clarify doubts and problems pertaining to the course | | | | |
| Face-to-Face tutorials allows you to be better prepared for examinations | | | | |

### 4. Telephone Tutoring

Were you advised and encouraged by the COLL regional staff member to make use of telephone tutoring for academic support?

| | |
|---|---|
| Yes | 1 |
| No | 2 |

Did you phone your marker-tutor or face-to-face tutor for academic support?

| Yes | 1 |
|-----|---|
| No  | 2 |

If your answer is **no**, please state why you did not make use of this service?

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If the answer is **yes**, state how you benefited from this service?

5. **The following statements are set to get your opinion regarding the quality of marking done by your marker-tutor (s) [tutor/lecturer who marks your assignments] please mark by crossing (x) the box that represents your choice.**

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|-----------|---------------|-------|----------|-------------------|
|           | 1             | 2     | 3        | 4                 |
| Assignments are useful and an important teaching and learning tool | | | | |
| Assignments are vague and difficult to attempt | | | | |
| Comments and feedback on assignments are comprehensive, detailed and helpful | | | | |
| Comments on the assignments are motivating and encouraging | | | | |
| No comments and feedback are given | | | | |
| Marker-tutors are available for consultation to provide academic support after marking the assignments | | | | |
| The turnaround time of assignments is adequate (time spend between submitting and receiving marked assignments from tutor-marker) | | | | |
| Comments and feedback on assignments are constructive and relevant | | | | |

**PART D**

The following questions are set to get your overall opinion regarding the quality of student support services provided by the NUST COLL regional Centre.

1. What is your overall opinion regarding the provision of student support services (SSS) at COLL regional Centre?

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2. Which one of the available SSS do you regard as the most effective and useful? Give reasons why. (Which of these SSS do you think helped you most with your studies?)

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3. Describe the importance of student support services to a distance education student?

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4. Which one of the available SSS do you regard as least effective and why? (Refer to Part B. question 2)

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5. Explain if you can be successful in your studies without making use of the current available SSS?

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6. What other SSS (s) do you need which are not presently available at COLL regional Centre?

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7. Do you feel a sense of belonging to the NUST even though you are a distance student? Explain.

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8. Which one of the available SSS (S) do you often make use of and why? (Refer to Part B. Question 2.)

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9. What problems, if any, did you experience when you wanted to make use of the following student support services?

**Administrative Support**

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**Orientation**

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**Telephone tutorials**

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**Face-to-Face tutorials/Saturday classes**

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**Vacation schools**

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**Tutor-marked assignments**

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**Use of library facilities**

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**Use of internet and email services**

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**Other (please specify)**

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10. In your opinion, how can the existing SSS (s) at COLL regional Centre be improved to respond to your needs?

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**Thank you for your time**

# APPENDIX 8: MAP OF COLL REGIONAL CENTRES

**APPENDIX 8**

**Map of NUST COLL Regional Centres**
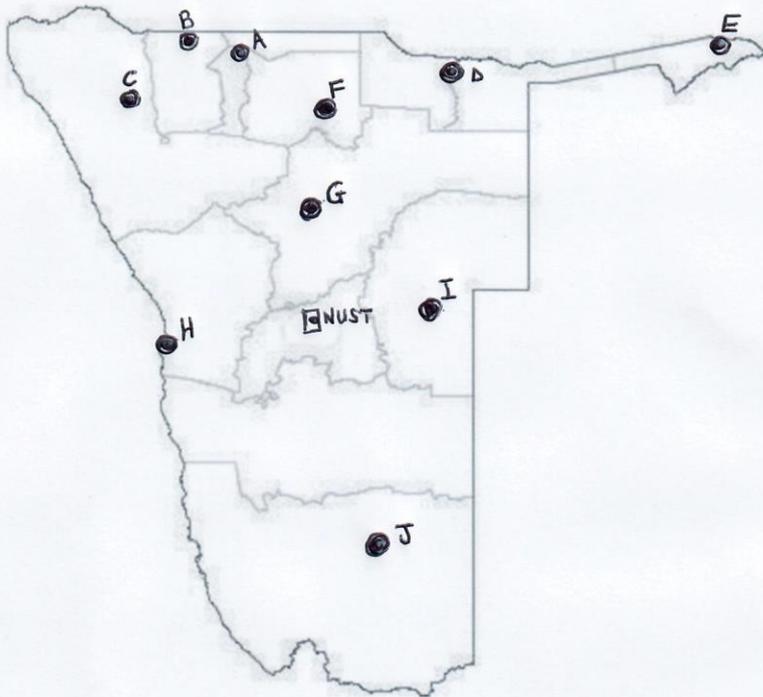


<u>COLL regional centres</u>

A – Ongwediva
B – Outapi
C – Opuwo
D – Rundu
E – Katima Mulilo
F – Tsumeb
G – Otjiwarongo
H – Walvis Bay
I – Gobabis
J - Keetmanshoop