

**Identifying the communication preferences of  
distance education students at the Unit for Open  
Distance Learning**

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Mini-dissertation submitted in partial fulfilment of the  
requirements for the degree *Master of Business  
Administration* at the North-West University

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Graduation: May 2018

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## **ABSTRACT**

Distance education is the future of educating individuals everywhere, and to better understand distance education students the communication preferences play an important part in growing this phenomenon. Distance education could be sustained or built on by a better understanding of the communication preference of distance education students.

This study is based on the evaluation of secondary data obtained from the Unit for Open Distance Learning (UODL) call centre at the North-West University.

The objective of the study is to analyse the secondary data from phone calls, emails, faxes, SMSs and web responses received at the UODL call centre and to determine the communication preferences of the distance education student at the UODL.

A literature review was conducted to clarify distance education, communication channels and the UODL, as well as the importance of call centres in distance education, barriers in communication over distance and the structures of the UODL. In total, 268 693 phone calls, emails, faxes, SMSs and web response enquiries were evaluated.

Conclusions and recommendations for possible solutions and forecasting were made based on the secondary data obtained.

**Keywords:** Distance education, communication preferences, distance education students

# ACKNOWLEDGEMENTS

I would like to take this opportunity to show my appreciation and to thank everyone who contributed towards this study; without them, this research would not have been possible:

- The executive director of the Unit for Open Distance Learning, Professor Manie Spamer, who gave permission to use the data of the call centre.
- The director of the Unit for Open Distance Learning, Dr Marinda van Zyl, who had the patience and confidence to let me study and gave permission to partake in my MBA studies.
- Thank you to my study leader, Mr Rooies Andrianatos, for the guidance, support, motivation and knowledge throughout this study.
- The UODL call centre, for all the hard work, effort and patience.
- The Wakker Akkers, who are part of my syndicate group; without the team work and support I would not have come this far.
- The Statistical Consultation Services for the quick feedback of my statistics.
- My language editor, Mrs Cecile van Zyl.
- The North-West University for the facilities used and academic knowledge.
- The School of Business and Governance for the excellent academic and administrative support.
- My girlfriend, Madelein, for the moral support, patience and all the coffee.
- My pets, Rambo and Lexi, for still loving me.
- My mother, Marietjie, two brothers, Derek and Jan, for the ongoing support and faith in me; sorry for all the missed social events.
- Everyone who contributed – friends, family and colleagues who I did not mention.
- Lastly, I would like to thank Jesus Christ my Lord and Saviour who gives me the strength, health, energy, wisdom and the courage to study.

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# CHAPTER 1

## NATURE AND SCOPE OF STUDY

### 1.1 Introduction

Distance education (hereafter DE) originated in the 1840s in England when Isaac Pitman offered courses through mail (Spector, Merrill, van Merriënboer & Driscoll, 2008:17). According to Demiray and Isman (2001:89), the first example of DE was an advertisement placed in a Swedish newspaper in 1833 advocating DE through post and that the majority of DE institutions were set up near post offices to deliver the instructions to the learners. More institutions were established later between the period 1880 to 1890, where DE evolved from studying through post correspondence to radio interaction as more students were trying to further their career by completing academic degrees (Simonson, Smaldino, Albright & Zvacek, 2006:38).

In the 1920s, a new technology was introduced to DE institutions. Learning through radio enabled lecturers to broadcast classes, video was also introduced to provide students with an audio-visual experience, while learning the programme content (Simonson *et al.*, 2009:38). Television followed and was introduced to students in 1965, as DE became more popular (Nasseh, 1997:2). The University of Wisconsin set up an education telephone network in 1965 to DE to physicians (Samans, 2003:4). Limited access to a telephone network had a major impact on this method of communication and to fill this gap, modern technologies were used by DE institutions to communicate (Makoe, 2012:64).

The Mind Extension University (MEU) delivered recorded video material to a few universities in the United States of America in 1991; it was clear that a growth in distance learning (hereafter DL) became evident (Nasseh, 1997:4). All of the communication methods, including mail, radio and television through distance learning were a one-way communication channel between the institution and the student. With live broadcasted television sessions, many problems arose and only through telephone communication could students communicate their problems. Call centres in DL institutions became a vital part in improving the support service to support students (Annand, Huber & Michakzuk, 2002:2).

The internet had a huge impact on the way people communicated and was invented earlier in the 1960s, but really took shape in the mid-1990s (Leiner, Cerf, Clark, Kahn, Kleinrock, Lynch, Postel, Roberts & Stephen Wolff, 2009). Students with a computer and internet had immediate access to communication with DE institutions, accessing learning material and retrieving information (Angheluță, 2014:1606). The internet opened a new communication channel between the administrative staff, lecturers and the students at higher education institutions. With easier access to networks, more information technology devices originated, such as smart boards and interactive white boards. This is where a lecturer can present classes over the internet, while students can interact with the lecturer (Pishva & Nishantha, 2008:58).

DE keeps on evolving with the utilisation of new information technology devices and new ideas. Technology narrows down the interface between the academic institution and the student. With the introduction of smart phones, 47% of the South African population had acquired smart phones by 2015, which meant direct access to the internet and 57% of all internet traffic in South Africa was from smart phones (Meeker, 2015:169). Students with smart phones have increased access to e-mail, social media, SMSs and live chats to communicate with the DE institution.

## **1.2 Problem statement**

According to Attri (2012:42), DE is becoming more relevant and more students are investigating DE as a method of improving their qualifications, skills and knowledge. One of the concerns with DE is the lack of student support and services, i.e. applications, finances, advice and library services, and these factors complicate the students' learning experience (Attri, 2012:50). In light of the mentioned challenges, student support becomes important, but only if it is provided in a timeous manner.

According to Aoki (2012:192), information and communication technologies (ICTs) are critical to students' support in DE and one of the key reasons for not using ICT in DE is the lack of support services, budgets and human resources. It is critical to apply ICT in supporting DE students, because students need effective assistance through all possible communication channels.

In my current position as the manager of the Unit for Open Distance Learning (UODL) Call Centre at the North-West University (NWU), Potchefstroom Campus,

managing certain trends in the communication preferences becomes important in order to allocate the necessary resources. Student support is seasonal, with high volume periods before examinations and lower volumes during the semester, ensuring quality assistance that helps the students to excel in their studies. The aim of this research is to better understand personnel, systems and resources, so that it can be better allocated during peak times.

The aim of this study is to identify the communication channel preferences of DE students at the UODL at the NWU. To identify these preferences, a literature review will be conducted and data will be collected and investigated from the UODL call centre. The study is empirical of nature and a quantitative method will be used to establish the communication preference of DE students in order to better manage the available resources.

### **1.3 Research objectives**

The UODL management can better allocate the resources in the call centre to address the needs of DE students. With the secondary data, the researcher aims to provide more clarity surrounding the needs of the DE student. Through this, the UODL will better understand the communication preferences of DE students, thereby improving its support service. The NWU will benefit from the research report regarding the data of DE students and the ways the students prefer to communicate, as it is important to know how students communicate with the UODL.

#### **1.3.1 Primary objective**

The primary objective of the study is to identify the communication preferences of DE students at the NWU.

#### **1.3.2 Secondary objectives**

The secondary objectives of the study are to:

1. identify where the NWU can improve in order to keep DE student support top notch.
2. identify new trends of DE students concerning communication preferences.
3. make suggestions and implement possible recommendations provided by the researcher after data has been interpreted.

## **1.4 Scope of study**

### **1.4.1 Field of study**

The field of research falls under Human Resource Management and Business Communication Systems Management.

### **1.4.2 Geographical demarcation**

The Unit for Open Distance Learning at the NWU on the Potchefstroom Campus in the North West Province. The data of this study will be collected from the number of phone calls, emails, faxes, SMSs, Facebook and web responses received from current, previous and prospective DE students. Currently, there are ±33 000 registered DE students in Education, Nursing, Theology and Policing.

## **1.5 Research questions**

- What communication channel do DE students prefer to communicate with the UODL?

Additional questions can be formulated from the primary research question:

- Are DE students satisfied with the feedback they receive from the communication channel used by the UODL/NWU?
- What is the timeframe of feedback that a student expects?
- What are the relevant topics of enquiry?
- What new innovative communication channels can be identified for future use?

## **1.6 Research methodology**

### **1.6.1 Literature study**

The aim of the study is to research what method of communication the DE students prefer in communicating with the UODL at the NWU and how it can be managed effectively. According to Dabaj (2011:3), all academic institutions that offer DE should acquire the most effective substitute for normal full-time contact education. Barriers in communication can each be unique in DE; from a poor background in technology, time management and restrictions, to bad infrastructure, to data and a lack of funds (Dabaj, 2011:1).

The current student support at the UODL consists of a call centre consisting of four operators and a manager (at the time of the study conducted) to answer administrative queries sent to the UODL. In 2010, a growth of approximately 75% in DE was recorded by all the higher education institutions (HEI) that were part of a study, compared to a growth of approximately 50% in full-time contact education (Hanover Research, 2011:7-8). Technology is constantly changing and this creates more ways through which students communicate with academic institutions. The researcher plans to use the following resources:

- Loway QueueMetrics – Call Centre Monitor System
- Novell GroupWise – Mailbox
- The UODL Facebook page
- The NWU UODL website
- Academic books, journals and articles

Loway QueueMetrics is the call centre information monitor system that provides statistics on all calls and actions of operators. Novell GroupWise is the NWU email operating system and the archive holds all emails sent and received from the UODL. The UODL Facebook page is the social media page that students also use to communicate with the UODL.

Prospective students are also contacting the UODL call centre daily to get more information on courses offered. To identify the problem and to obtain effective communication, the barriers need to be identified or the needs of the students need to be identified to overcome difficulties; and the technical aspects of DE should be user-friendly and the support services (Call Centre) should be controlled according to the needs of DE students (Dabaj, 2011:6-10). The researcher will attempt to identify where the needs of DE students lie and where resources can be allocated to better attend to student queries through the various communication channels. According to Ferreira and Venter (2011:82), many students do not complete their studies through DL because students cannot cope with DE. A possible solution could be to improve the throughput rate through more open communication channels.



It is necessary for the UODL to improve the pass rate of DE students; this will better the quality of the workforce in South Africa. Communication channels are extremely important to achieve this. Quality interactive communication is required in DE and modern technology is the key to help cross that bridge (Ferreira & Venter, 2011:81). According to Tatkovic, Ruzic and Tatkovic (2006:4), the best multi-media approach needs to be integrated in the institution to provide the best communication between the student and the institution. The UODL needs to determine the communication channel needs and preferences of the DE students, so that resources can be allocated at the correct times.

## **1.7 Empirical study**

### **1.7.1 Research design**

The researcher plans to take a quantitative approach; the data should be a fair to high number, numerical in terms, percentages and ratios can be given to measure variables (Creswell, 2013:12). Quantitative research is more logical and focuses on numbers that can be used to determine factors that influence the different communication channels of the UODL (British Library, 2014).

### **1.7.2 Study population and sampling method**

The sample of this study will include all the emails, phone calls, faxes, web responses and SMS enquiries received at the UODL call centre from January 2014 up until June 2017. The researcher will make use of a cross-sectional design that is usually used with official statistics, such as the data extracted from the UODL systems (Bryman & Bell, 2015:105). The data will be compared monthly and yearly from January 2014 to June 2017 to better understand the growth or decline of the communication preferences. The larger the sample, the more accurate and increased the likelihood of precision. The main concern is to prevent sampling errors, which is more likely in a larger sample (Bryman & Bell, 2015:176-177). The cross-sectional design will also help to increase the reliability of the data.

### **1.7.3 Data collection**

The researcher will use an unobtrusive research method; this is to use statistics available in the archives, also known as secondary data, or can be extracted at any time (O'Brien, 2010:2). The data extracted for calls received by the UODL call centre will be from the Loway QueueMetrics Call Centre monitor – specific reports for any

timeframe can be withdrawn. The researcher will extract data from this system for January through to December for 2014, 2015 and 2016; in 2017, it will be data from January to June. The reports indicate the number of phone calls received, missed, average length of calls and many of the data that will not be used. The number of emails, SMSs, faxes and web responses received will be accessed through Novell GroupWise. The data will be filtered to separate the SMSs, faxes and web responses, which can then be added to a graph with the calls received. The researcher will quantify the Facebook data; this will include the messages received and the number of inquiries students send on the Facebook platform.

The data will be combined to create a pie graph for each sample that can be compared throughout the sampling duration time.

#### **1.7.4 Data analysis**

A univariate analysis of the data will be followed; this refers to the analysis of one variable at a time (Bryman & Bell, 2015:318). This analysis will compliment a frequency table that can be used to measure the percentage of each factor, for instance the percentage phone calls, emails, SMSs etc. of the sample (Bryman & Bell, 2015:318). The use of descriptive statistics will be used to describe the characteristics of the data from the UODL call centre. This is to describe, for example, the averages of a variable and how they differ (Salkind 2012:161).

Loway QueueMetrics instantly provides data pertaining to a time period selected; the data can be compared three times a year with the growth or decline of the specific data period. The data will also be compared annually. This data will include the entire sum of the total queries received.

The researcher will access the Novell GroupWise archives to retrieve the data. The data will then be filtered out to separate the faxes, SMSs and web responses. If there are spam emails, they will be deleted. The data will then be added to align with the data and dates of the calls. A pie chart will be presented with the data to indicate the different communication preferences.

These current, previous and prospective DE students will not be aware of the study, but the study will help to identify the communication preferences and trends

developing. The researcher will be able to identify, plan, allocate and implement different resources better and use the data available in forecasting models.

The use of inferential statistics will help to make decisions about how the data collected from the UODL call centre correspond with the primary objective of the study (Salkind, 2012:161).

## **1.8 Limitations of the study**

The limitations of this study are that not all DE students have immediate access to modern communication technologies. The results from the sample will only reflect the NWU DE data and no other universities in South Africa. Not all DE students contact the UODL call centre directly, but use other contact preferences to communicate with the NWU and UODL. Communication received is not always DE related and is diverted from other departments to the UODL. Spam emails are kept to a minimum, but some do get through the NWU firewall or are not deleted. This provides more scope for further research.

## **1.9 Division of chapters**

To reach the objectives of this study, the study will be divided into four chapters, which include:

**Chapter 1:** Introduction, problem statement and the nature and scope of the study.

**Chapter 2:** Literature study that is focused on identifying the communication preferences of DE students.

**Chapter 3:** Empirical study where data is collected on a quantitative basis using QueueMetrics, Novell GroupWise and Facebook statistical tools and analysed.

**Chapter 4:** Conclusions and recommendations based on all data gathered.

## **1.10 Chapter summary**

In this chapter, an introduction was provided on the brief history of various communication preferences of DE and the primary and secondary objectives were stipulated. The research methodology was explained with the sampling population, data collection, data analysis, division of chapters and limitations of the study. The

literature will be studied on identifying the communication preferences of DE students in the next chapter.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

According to Dabaj (2011:3), all academic institutions that offer distance education should get the most effective substitute for normal full-time contact education. The Department of Higher Education and Training (DHET) published the *White Paper for Post School Education and Training* (DHET, 2013:xiv) and the *Policy for the Provision of Distance Education in South African Universities in the Context of an Integrated Post-school system* (DHET, 2014:6). These white papers indicated that South Africa should have at least 1.6 million students enrolled in higher education by 2030. According to Spamer (2013), the government has realised that traditional universities cannot cope with the demands of contact students and are realising that distance learning is becoming the solution to the future of education in South Africa. The ideal mode of delivery to achieve the mentioned objectives of the government is to invest in DE to accommodate the growing number of students.

Investigating the communication preferences of DE students will enable HEIs' administrators to envisage the number of university students and possible aligning with the strategy of the DHET. Communication is a way of expressing oneself, simultaneously enabling us to understand the thoughts and emotions of others. By identifying the communication preference of the DE student, the HEI can allocate resources to support and engage with the DE student (Speak, 2014:1). In 2010, an increase of 75% in DE was recorded by all the HEIs that were part of a study, compared to a growth 50% in full-time contact education (Hanover Research, 2011:7-8). Interaction with DE students is pivotal, and can lead to positive feedback, more opinions and eventually more enrolments. Interaction, in this case, can be communication back and forth between the DE student and the DE institution (Vioreanu, 2016:1).

The Unit for Open Distance Learning (UODL) plays a significant part in the interaction with DE students and is of utmost importance to deliver stellar services to DE students to obtain targets and align with the strategy of the NWU. The UODL

services approximately 33 000 DE students, and to connect or engage with all these students, the UODL needs resources, such as technology, systems, processes and people to fully service these DE students. The communication channels, DE students and the UODL will be discussed as part of the literature review

## **2.2 Concept clarification**

### **2.2.1 Distance education (DE) and distance learning (DL)**

According to Kaplan and Haenlein (2016:441), DE is the ability to teach without the students being physically present. DE can also be defined as a difference in time, location or both (Wang, 2008:248). DE programme courses can be presented via the use of information and communication technologies (ICTs) or any other method to bridge the gap between students and the DE institution.

DL is a similar concept to DE, where studying is done without attending a school or university; lessons and lectures are broadcast or conducted via correspondence (Midgley, 2017:1).

### **2.2.2 Open and distance learning (ODL)**

ODL has a similar concept to DE, but is open to students to register anytime and have a maximum and minimum study duration, with multiple methods of delivery such as contact classes, recorded classes and peer-to-peer interaction (Commonwealth of Learning, 2015:3). ODL covers most bases of education through distance and the methods of how to reach and educate DE students.

### **2.2.3 Information and communication technologies (ICTs)**

Murray (2011:1) stated that ICTs can be defined as the combination of different communications through the utilisation of information technology (IT). According to the Commonwealth of Learning (2015:2), ICTs are a variety of technologies and tools used to “*create, collate and communicate information and knowledge*”. This means that computers, telephones, cell phones, the internet, wireless signals, audio-visual aids etc. are all fragments of ICTs. Riley (2017:1) stated that ICTs are used for digital technology to assist individuals, but especially education institutions to utilise and transfer information.

#### **2.2.4 Communication preferences**

Firstly, communication can be better understood by intended meanings or messages, verbal or non-verbal to another entity such as a DE student by using a mutual way of understanding each other (Harper, 2017:1). According to Vijayaraghavan and Thacker (2013:85), communication preferences allow an individual to access different communication channels and how to control the messages, whichever is the best for the individual. This can be the communication channel that the DE student prefers to communicate with HEIs, whichever is the easiest or most convenient.

#### **2.2.5 Student support**

According to Heydenrych (2010:7), student support can be defined as how an individual interacts or communicates with the learning process and the study environment. The student support system is the whole community in which the individual learns, from the lecturers, mentors, other students, colleagues to support staff. Student support needs to be built to fit the needs of the individual to create an optimal environment for both the DE student and DE institution (Heydenrych, 2010:7).

#### **2.2.6 E-learning**

The term e-learning is used to describe the utilisation of any digital tool for teaching and learning, particularly to access content (Commonwealth of Learning, 2015:2). E-learning is the electronic means of learning, by using multi-media such as videos, email, the internet and audio-visual content (Bhandari, 2017:1). Therefore, e-learning encompasses using electronics to communicate and learn at an HEI.

#### **2.2.7 Communication channel**

The communication channel sits between the sender and the receiver; the sender selects the most convenient channel, and the receiver makes the channel available (Anon, 2017:2). This is the method or preference how a DE student will contact his/her DE institution. To be more technical, a communication channel can be a transmission or signal; a digital medium or electronic bits to convey information (Janasz, Dowd & Schneider, 2016).

### **2.2.8 WiFi**

WiFi is a technology that connects wirelessly to a network through wireless signals (Tech Terms, 2014:1). According to PCmag (2017:1), every laptop, tablet or smart phone has WiFi connect ability as a standard feature, meaning that access to the internet is at most individuals' finger tips. WiFi allows users to connect their devices, such as laptops and cell phones to a network or router that provides services, such as the internet.

### **2.2.9 Smart phone**

A smart phone is cell phone, but has the capabilities of a computer, such as sending and receiving emails, connecting to WiFi, opening documents, taking photos, recording videos etc. (Cassavoy, 2017:1). Smart phones have an operating system similar to computers; this enables the phone to be used as a media centre, storage unit and communication tool (uSwitch, 2016:1). The use of smart phones enables individuals to access websites, forums and DE institutions. Smart phones also help to connect with fellow DE students.

### **2.2.10 Call centre**

A call centre is an office or department that operates telephone and voice calls from previous, existing or new customers and is handled by a team of agents and supervisors (Weald, 2017:1). A call centre processes outbound and inbound calls and assists clients with information of the specific business of interest; a call centre can also be defined as a virtual help desk (TechTarget, 2017:1). The call centre assists clients telephonically with information that the client might need; it is a swift response and first line of contact between the client and the business.

### **2.2.11 Social media**

According to Nations (2017:1), social media refers to individuals sharing, interacting and communicating information on a public instrument (media), such as the internet. Social media is a virtual community and networks for individuals or companies to share information, interests and ideas that are facilitated by a certain host. Examples of social media are Facebook, Twitter and LinkedIn (Obar & Wildman, 2015:745). Social media can then be defined as a public forum for discussions, opinions as well as for marketing of businesses and for one important reason, communication and keeping in touch with other individuals and companies.



### **2.2.12 Facebook**

Facebook has been a social media platform since 2004. Communities, individuals, companies and any type of groups around the globe can join Facebook to interact and communicate with each other. The Facebook Corporation is for-profit and based in the United States of America (Kirkpatrick, 2011). Facebook is also a popular forum to share information about ourselves. This also allows other individuals to share information about us; Facebook is a two-way communication channel so that interaction can be easily managed (Oeldorf-Hirsch, Birnholtz & Hancock, 2017:1). The use of Facebook is critical for a company to keep up-to-date with the public and market to share and receive new ideas regarding services and products.

### **2.2.13 Live Chat**

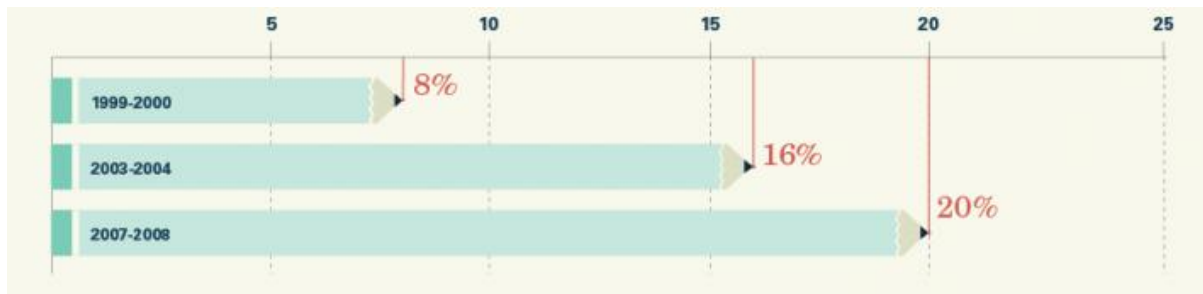
Live Chat is software that a company installs on their website as a communication tool between the company and the client (LiveChat Review, 2011:1). Live Chat serves as a first point of contact between the company and the client; if the client has any inquiries, he can then ask questions and information using Live Chat. The company has agents who respond immediately.

### **2.2.14 Full-time studies/contact students**

According to the University of Edinburgh (2017:1), full-time studies are for students who are on the premises of the university, who can focus on their studies, to complete it in the shortest period possible, where classes and lectures are on campus. This means that it is difficult to maintain a job and study, as most classes are during normal business hours.

## **2.3 Distance education**

Education can be divided into three main systems. The first is the traditional system. Here, the focus point is on basic knowledge. Secondly, the industrial age of education focuses on the industries and manufacturing and lastly the information age education era, where the education focuses on technology and problem-solving (Vu, 2010:1). This study focuses on the information age education era because it is relevant in today's market and DE has become renowned in this age. According to the statistics below, the number of students rose by 150% between 1998 and 2008, as seen in Figure 2.1 below:



**Figure 2. 1: Percentage of students enrolled for a DE course**

**Source: Akanegbu (2012:1)**

According to a Babson study (2016:2), there is nearly a growth of 4% per year in DE students, and one in four (28%) students are studying through DE or are enrolled for a DE course.

DE students use communication technologies that are readily available and easy to obtain. This technology also helps to reach and serve larger groups of students (Firat, 2016:191). These communication technologies include the internet, cell phones, computers, social media and virtual classrooms.

### **2.3.1 Distance education: International perspectives**

According to Simonson, Smaldino, Albright and Zvacek (2014:16), DE students around the world have different backgrounds and foundations and will be discussed briefly.

#### **2.3.1.1 Distance education in United States of America (USA)**

In the USA, from the 1920s, radio stations have been a popular method for DE institutions to reach their DE students, but soon phased out in the 1930s when television was introduced and took over the instructional method of teaching and learning and was the most popular method in the 1980s (Simonson *et al.*, 2014:38). From the 1990s, the internet with fibre-optic systems and networks became the backbone of DE in the USA, as DE students could be reached in a more convenient and economical way, and it made the distribution of material easier and more classes could be presented (Simonson *et al.*, 2014:39). According to the Distance Learning Portal (2017:1), the USA currently has 21 million enrolled DE students and just over 800 000 international DE students at 231 institutions. DE students can ask guidance from appointed advisers to help in finding a perfect DE institution that

focuses on the DE students' needs (DLP, 2017:1). American DE students make use of a combination of e-learning techniques for example online discussion and chat groups or recorded lectures (Moore, Dickson-Deane & Gaylen, 2011:132).

### **2.3.1.2 Distance education in Europe**

In Europe, traditional universities are more popular and deliver more courses. In the 1990s, distance programmes were also delivered through virtual classrooms and computers (Simonson *et al.*, 2014:14). The geographical outlay makes it easier for universities to present the traditional way of teaching and students can travel to universities much easier. Universities in Europe made use of voice recordings for the visually impaired students and for language subjects; this way, students could be reached over distance (Simonson *et al.*, 2014:38). European countries made use of the same techniques as mentioned with the USA. Currently, top universities in Europe are the leading providers of courses online, but the Americans are the leading providers of DE (Simonson *et al.*, 2014:39).

In the United Kingdom (UK), there are more than 400 000 international students and 2.6 million DE students at 156 institutions (DLP, 2017:1). Unlike the USA, with advisors, the UK offers student unions to advise DE students as to which courses to choose, and other personal assistance, such as accommodation, language, faith etc.

### **2.3.1.3 Distance education in Sub-Saharan Africa**

The University of South Africa (UNISA) was the front runner in DE, and brought distance learning to SA in 1962 (Simonson *et al.*, 2014:39). In the 1980s, DE was the primary method of delivery to train educators or teachers; the technique used by the University of Zimbabwe was the postal service, where students would receive printed media, and assignments would be posted back to the university (Simonson *et al.*, 2014:90). According to Betchoo (2015:187), only one in 250 people in sub-Saharan Africa have access to the internet, against the global average of 1 in 15 people, which poses a boundless challenge for DE. Universities in Africa still use this method today due to the lack of technology and infrastructure. According to DLP (2017:1), there are 800 000 DE students and 60 000 international students in South Africa. Africa may be a late entry into the market for DE, but is quickly becoming just as capable of presenting DE as First World universities because of the accessibility or availability of technology in e-learning. Politics and the bad economic atmosphere in

Africa lead to the slow growth in DE, and therefore the lack of technology-driven education (Simonson *et al.*, 2014:13; Visser & West, 2005).

## 2.4 Importance of call centres in distance education

According to Demir (2015:1), call centres serve as a solution centre that handles and resolves student affairs and matters. Students contact the call centre to get help with administrative or academic problems, and the operators can then assist with operations. It is critical for a DE institution to incorporate a call centre as students' support is important in DE and students cannot get information face-to-face. The UODL call centre is the mediator between the students and the different academic lecturers from faculties and UODL administrators (Demir, 2015:2). Richardson, Belt and Marshall (2000:358) stated that call centres are the globalisation figure or feature for ICT in DE as students overcome the geography of not being able to be face-to-face with the DE institution. According to Demir (2015:3), students who cannot get hold of the faculty or do not get help from the administrative department, such as the UODL, get information from doubtful sources and can be dissatisfied, and then the DE students turn to social media to surface their disappointment with the DE institution. In Figure 2, the different kinds of student support that are found in a DE institution are illustrated:

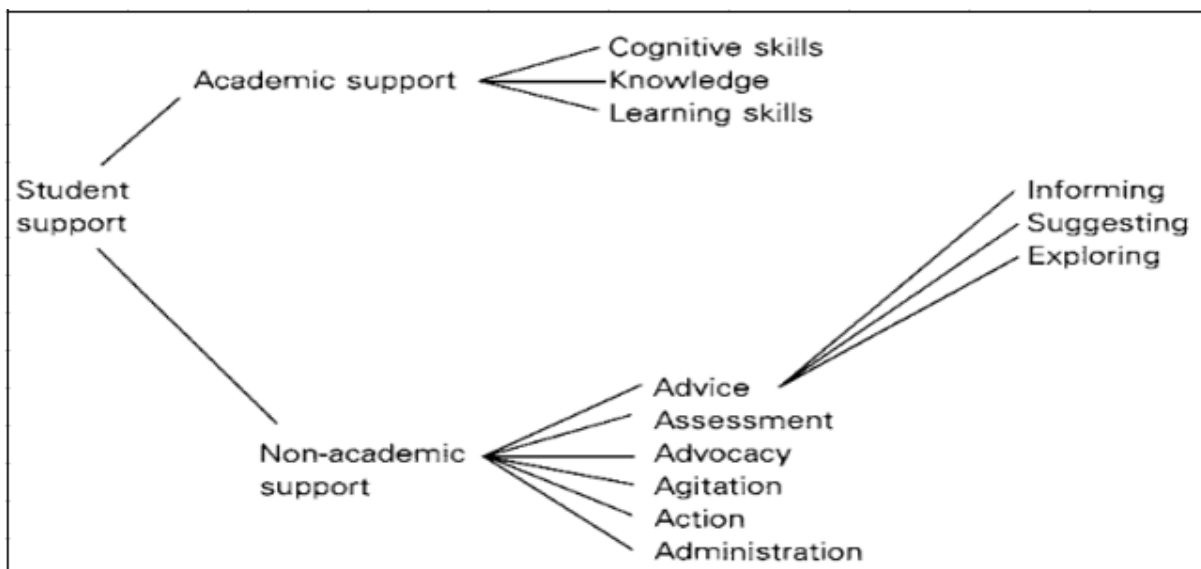


Figure 2. 2: Student support in DE

Source: Simpson (2013:7)

As mentioned in Figure 2.2, call centres are available to provide advice, help with administration, inform DE students, provide suggestions and provide more ideas to the DE student.

According to Demir (2015:7), most of the call centres in India's HEI consist of college graduates and, in France, call centre operators are qualified with two years of university education and, in the United Kingdom, between approximately 30 and 40% of call centres have staff who are qualified with a three-year degree. It is critical that call centre staff are well trained, educated and knowledgeable of all the education institution's programmes and systems. The call centre liaises with all operations departments to inform and help DE students as quickly and efficiently as possible, also supporting faculties and other administrative elements.

## **2.5 The Unit for Open Distance Learning**

The UODL services approximately 33 000 DE students throughout South Africa and Namibia, with singular Theology students in countries such as Spain, Argentina and Dubai. The current faculties that the UODL serves are the Faculties of Education, Nursing, Theology and Arts (NWU, 2017).

### **2.5.1 History of the Unit for Open Distance Learning**

During 1993, the Potchefstroom Teachers' College (PTC) began to offer its services to upgrade teaching qualifications. The first 27 students enrolled for this opportunity. As the news spread of this opportunity, the numbers quickly began rising, and students from outside the North West Province started to enrol. Classes were set up for students in Gauteng and the Free State. A collaborative partnership developed between the PTC and the Potchefstroom University for Christian Higher Education (PU for CHE) to service these enrolled DE students.

In 1997, the Faculty of Education, in collaboration with the College of Open Learning in South Africa (COLSA), entered into the DE realm with a variety of DE courses. In 2001, the PTC joined the PU for CHE and a new Faculty of Education formed, and was made up of a few schools within the Faculty, including the Educators Centre (EC) that was responsible for the DE. The task of the EC was to educate unqualified and under-qualified teachers in South Africa and Namibia. The number of DE

dramatically increased and the EC was fully responsible for the distance programmes offered to DE students.

In 2004, the PU for CHE became the North-West University (NWU), which had three campuses across the North West Province and Gauteng. Full-time lecturers were used to teach these students and, in 2004, the NWU gave permission to appoint 10 lecturers only for DE. The School for Continuing Teachers Education (SCTE) was established with these new lecturers. The recorded videos that the SCTE used to teach students were not satisfying the needs of DE students, and contact classes became a reality. An increase in DE student numbers played part in the structuring of another new building, B11a, which has been in use from 2011. More and bigger offices were needed as the assignments and examinations increased by 10 000s.

### **2.5.2 Structures of the Unit for Open Distance Learning**

The following figures are the two organograms that represent the layout of the UODL and the operational offices of the UODL.

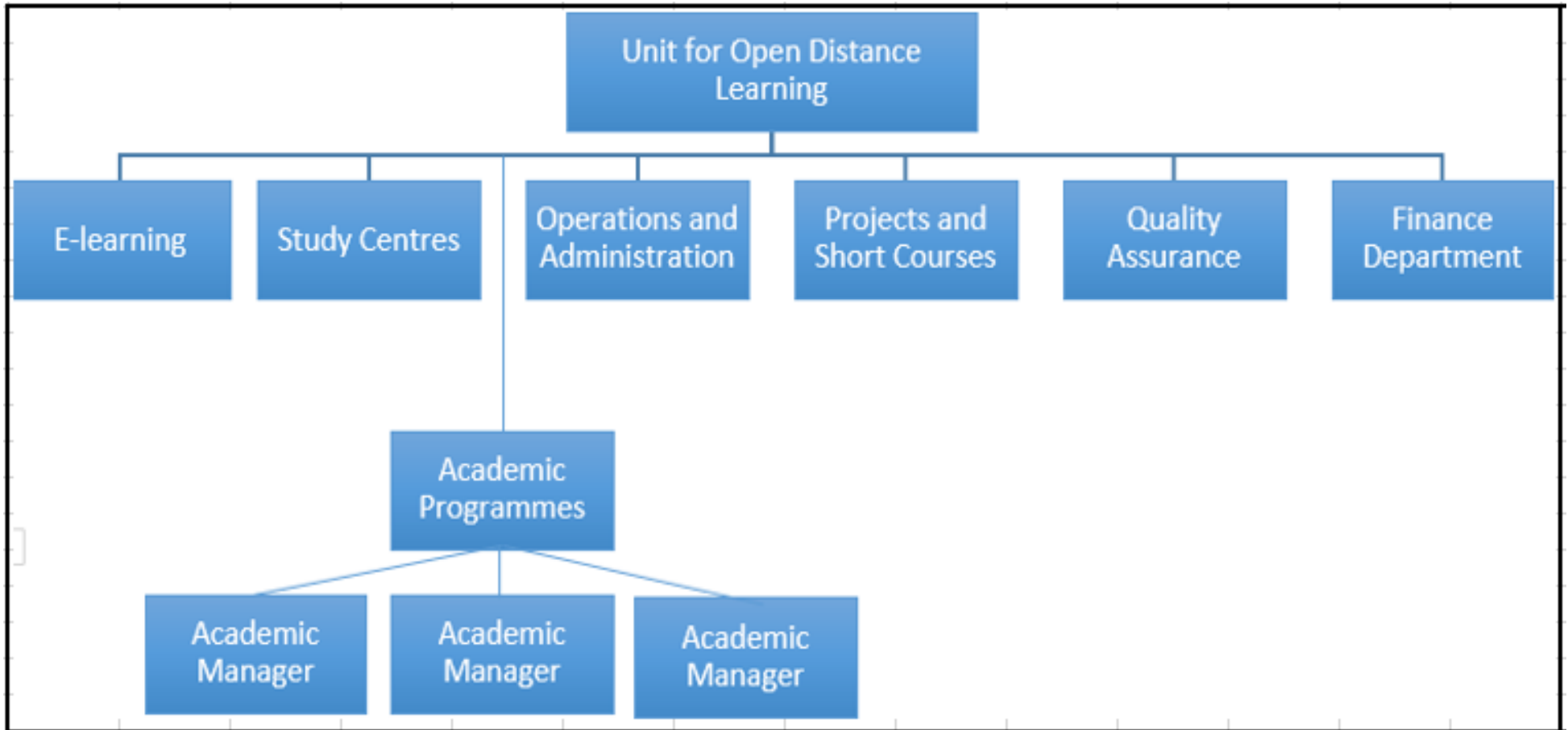


Figure 2. 3: Organogram of the UODL

Source: Adapted from: UODL Process Manual (2016)

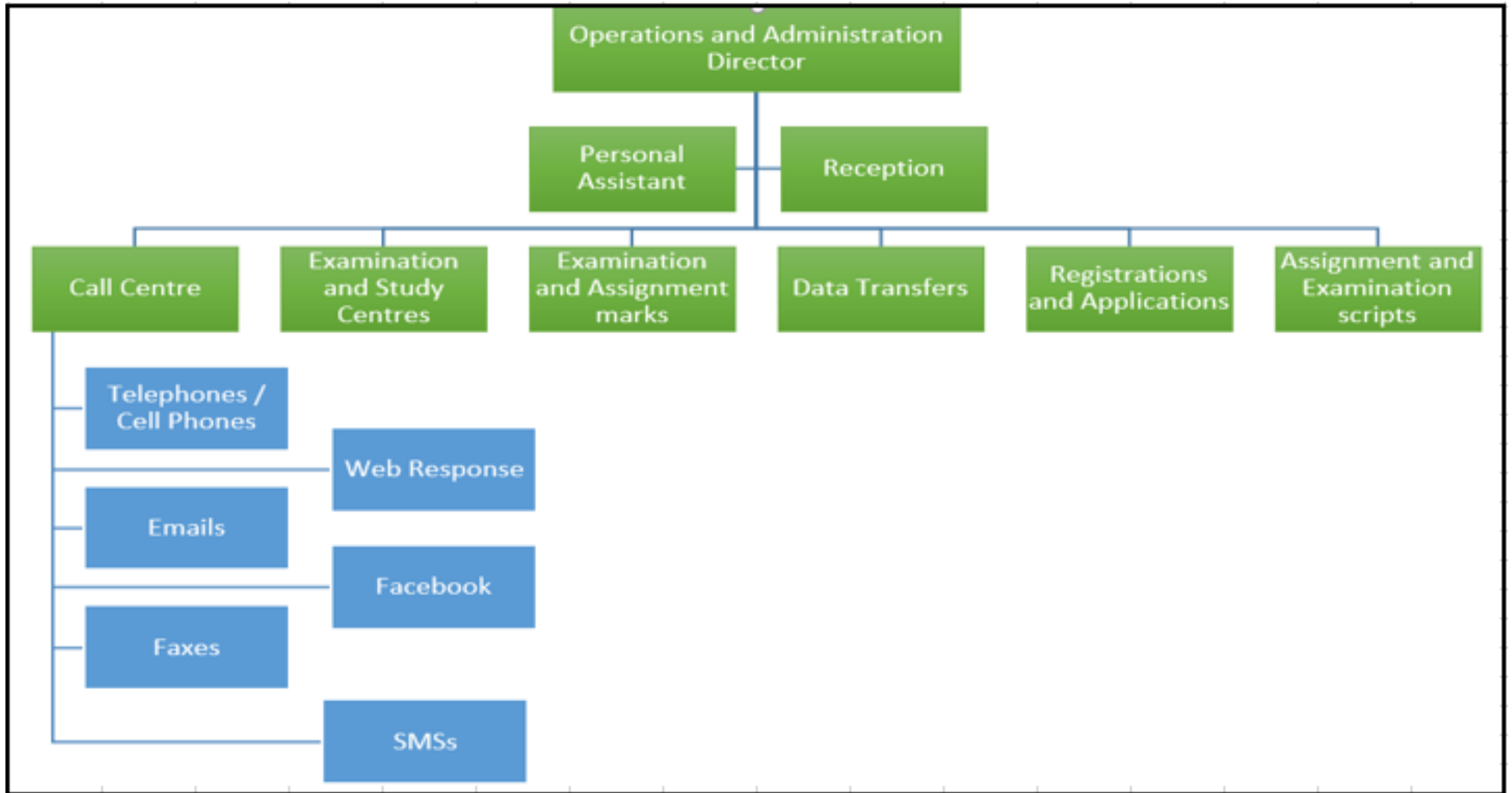


Figure 2. 4: Organogram of the operations and administration

Source: Adapted from: UODL Process Manual (2016)



## **2.6 Roles and responsibilities within the UODLs structures**

### **2.6.1 Managerial offices**

These offices and managers see to it that the functions of the UODL are performed correctly and are more likely to be behind the scenes of the actual operations.

#### **2.6.2.2 Projects and short courses**

The Project and Short Courses (PSC) office is responsible for the contracts with the Department of Education, namely the bursary students. The PSC ensures that a healthy relationship exists with the different departments to tender and win contracts to enrol DE students at the UODL.

#### **2.6.2.3 Quality assurance office**

The Quality Assurance Office (QAO) oversees the quality service of the UODL, from the state of each contact and examination centre, the record keeping, service delivery, programmes, student support, and updated website. This office needs to be active in every office to ensure that the DE students receive quality service. The QAO supervises the audits organised by the UODL. According to Russell (2012:299-301), quality assurance creates confidence in a product or service for external users and for the internal individuals in a company to fulfil the necessary requirements needed by the client, in this case the DE students and the staff of the UODL.

#### **2.6.2.4 Public relations**

The Public Relations (PR) office liaises with public entities and builds relationships with different colleges to promote the UODL and DE across South Africa. According to Rivero and Theodore (2014:2), PR's main function is to maintain and establish relations with the companies' external as well as the internal stakeholders; these can be the media, public, government, employees, employers etc.; in this case, the UODL, government, the NWU, DE students and staff.

#### **2.6.2.5 Academic managers**

The academic managers (AM) play a pivotal role in the operations of the UODL. These AMs liaise with each faculty they are responsible for. Any changes in the faculty courses or programmes are communicated to the AM and they should implement and manage these changes into the UODL. The AMs are also directly involved with decisions and changes of operations in the UODL, and need to communicate and implement it with

the certain faculty. According to the University of Sheffield (2017:1), an AM should be a strong academic leader, manager and developer of the specified department to deliver and align strategies within the faculty, while delegating personnel between levels; in this case, between the faculties and the UODL.

#### **2.6.2.6 Finance department**

The Finance Department (FD) is responsible for budgeting and forecasting the funds of the UODL. The FD liaises with the CEO of the UODL as well as with the NWU financial offices to allocate funds for the UODL for the necessary resources to deliver services to DE students. According to Smith (2014:1), the finance department covers a vast range of duties, such as day-to-day transactions, to making strategic decisions with managers, giving through reports, setting up statements and tracking and allocation of funds; in this case, the UODL allocates funds to managers to operate their offices and resources to service DE students.

#### **2.6.2.7 Learner centre coordinator**

The study centre coordinator (SCC) is responsible for 69 learner support centres across South Africa. The SCC needs to obtain the venues, check whether it fulfils the QAO criteria such as, does the centre have internet access, are the facilities safe and secure, is the venue large enough to facilitate a few classes at a time and can a white board (WB) be installed? The SCC also liaises with each centre coordinator who is responsible for the facilitators at each centre. These study centres are where most DE students go to class to attend sessions broadcast from the UODL. According to the Indiana College Network (2017:1), accessibility and convenience are key to the operations of coordinating study centres. The coordinator is also a liaison between students and the university, and the SCC is also familiar with most operations and should be able to answer most questions.

#### **2.6.2.8 Graduations office**

The Graduations Office or assistant to the operations manager liaises with the NWU graduation office and OLG, the administrative partner to organise graduation sessions around South Africa and Namibia. The organising of venues, accommodation, flights gowns, and stage setup are only a few things that the graduation office is responsible for. According to the University of Iowa (2017:1), the role of a graduation office is to

contact and assist students with information regarding graduations, organising ceremonies, and reporting to the registrar.

### **2.6.2.9 Operations director**

The operations director (OD) has the responsibility of all the administration and operations of the UODL. These include the 1) applications and registrations office, 2) assignments and examinations office, 3) data transfers, 4) data capturing, 5) examination centre office, 6) and the call centre. These operation offices work directly or indirectly to attend to the needs and provide quality service to the ±34 000 DE students of the UODL.

## **2.7.2 Operation offices**

### **2.7.2.1 Applications and Registrations office**

The application and registration office is responsible for capturing DE students' applications, and when approved, the registration office captures the DE students' registration. The DE students' files are stored in a safe at this office.

### **2.7.2.2 Assignments and Examinations office**

The assignment and examination office handled close to 350 000 assignments and examination scripts in the last year. There are two assignment submission opportunities, and after these opportunities, the examinations are written. An electronic marking component was recently added for multiple-choice scripts.

### **2.7.2.3 Data transfers**

The UODL and the administrative partner, OLG, have different systems to capture data; and these data consist of biographical data, marks, historical data etc. The data need to be transferred from OLGs system, which is eVision, to the NWU system, which is Varsite. The data transfer office is also responsible for sending termination and warning letters to DE students.

### **2.7.2.4 Data capturing office**

The data capturing office is responsible for capturing the approximately 500 000 marks into the system. Mark amendment sheets are handled at this office as well as the subject credit applications, *ad hoc* marking and the re-registrations of DE students.

### **2.7.2.5 Examination centre office**

The examination centre office is responsible for organising examination centres with OLG, and to change students' examination centres on the system. This office is also responsible for the examination timetable dates so that no sessions clash with another.

### **2.7.2.6 Call centre**

The call centre is responsible for all DE student queries received from all the above-mentioned offices. The call centre is the first in line to receive complaints, problems, ideas, compliments and overall communication from the DE students and other parts of the NWU. The call centre liaises with all of the managerial offices and operation offices to assist DE students in the best possible manner.

## **2.8 The future of call centres**

With technology constantly changing and evolving, some services will make less use of human interactions and communication and brings us to the question: Will call centres be sustainable in the future of DE? According to Pickard (2015:1-3), ten predictions can be made about call centres up until the year 2025, namely:

- Call centres will become a relationship hub – relationships built between customers and call centres (i.e. DE students and the call centre agents).
- Call routing systems – the calls will directly go to the person or expert in a certain field.
- Live chat/messaging will become more popular – the UODL needs to implement this feature to communicate live with DE students via the internet.
- Customer (student) support is the key differentiator – customers (students) would rather do business with a company (DE institution) that offers good customer service.
- Continuous changes in communication channel preferences – how well the DE institution can adapt to these changes will determine success.
- The future is mobile services – creating apps where the caller can multi-task while on the phone.
- The internet of things – more devices able to connect to each other, with proactive features (increasing interconnectivity).
- Flexible location – the call centre can attend to queries from a remote area or tend to email queries from home.

- Voice biometrics – security questions might be replaced on how the DE student answers a question and not what the answer is; the software reads the voice and detects tension and other details.

It is not only the call centres that will evolve in the future, but the DE students will also change; the DE students will be more skilled, computer literate, needs will change as well as other factors that the future holds. DE students will have more access to technologies and this may increase the demand in interactive communication between the DE student and the HEI. ICT will definitely play a significant role in changing the future of call centres and communication methods. Managers should keep on researching innovative ways to make call centres sustainable with the use of technology.

## **2.9 Barriers in communication in distance education**

Barriers in communication can each be unique in distance education and can overlap, from a poor background in technology, time management and restrictions, to bad infrastructure, data and a lack of funds (Dabaj, 2011:1; Berge, 2013:374). The goal and objective of DE student support services are to reduce the barriers and to facilitate the students, as it is of utmost importance to make studying worth the students' while (Potter, 2013:62-63). Potter (2013:64) found that DE students rated efficient communication with the lecturer as very important; this can also implicate communication with the administration or support staff. Students in DE can then be better understood and better service can be applied.

According to Ozelkan and Galambosi (2012:1), most barriers in communication lie with ineffective methodology of teaching and learning in DE. Berge (2013:375) stated that the more communication capabilities there are, the more complex the communication barriers are. As an example, the UODL had no SMS system in place, and therefore students cannot communicate with the UODL. It is pivotal to have as much communication channels available for DE students who might not have access to the latest technologies.

Berge (2013:374) stated that mobile devices such as laptops and cell phones are the preferred way to communicate in the daily lives of individuals who partake in business or education. Educational content and administrative support are becoming more

electronic so it should be more accessible due to these mobile device; therefore, a DE institution needs to be able to ensure these communication channels are optimised for DE students.

## **2.10 The call centre at the UODL**

The current student support at the UODL consists of a call centre consisting of four call centre agents and a manager to answer administrative inquiries sent to the UODL. The UODL call centre handles the phone calls, emails, faxes, web responses, emails and social media received from DE students. Technology is constantly changing and this creates more ways through which students communicate with academic institutions. The researcher plans to utilise the following electronic resources to determine the communication channel preferences of DE students:

- Loway QueueMetrics – Call centre monitor system
- Novell GroupWise – Mailbox
- The UODL Facebook page
- The NWU UODL website
- Academic books, journals and articles

Loway QueueMetrics is the call centre information monitor system that provides statistics on all phone calls and actions to operators. Novell GroupWise is the NWU email operating system and the archive holds all emails sent and received from the UODL. The UODL Facebook page is the social media page that some students also use to communicate with the UODL. It is necessary to understand the communication preferences as it will provide insight into how DE programmes can be marketed and show how these preferences evolve over time (Rodriguez-Rentas, 2014:1). According to Vioreanu (2016:2), students will typically communicate with the DE institution via email as smart technologies are easily accessible; however, because the UODL students are more likely to be from a rural area, this may not be the case. Students expect prompt feedback from the DE institution and therefore students prefer to call or email.

Prospective students are also contacting the UODL call centre daily to get more information on courses offered. To identify the problem and to obtain effective communication, the barriers need to be identified or the needs of the students need to

be identified to overcome difficulties. The technical aspects of distance education should also be user-friendly and the support services (call centre) can be controlled according to the needs of students (Dabaj, 2011:6-10). The researcher will attempt to identify where the needs of students are and where resources can be allocated to better attend to student queries through the various communication channels. According to Ferreira and Venter (2011:82), many DE students do not complete their studies through ODL because they cannot cope with the methodology of DE.

According to Dahlstrom, Walker and Dziuban (2013:13), 110 000 students preferred using email or calling (70%), SMSs (50%), web-based forum (54%), instant messaging (40%) and video chat (40%) to contact the help desk. At the moment, the UODL does not offer instant messaging or video chat, but the DE preferred communicating via email or calls. The UODL or NWU should investigate a live chat with an operator ready to answer questions instantly on the website to improve and expand its communication channels so students have more options to choose from.

Innovative ideas in communication are the way forward and the future of DE to make DE sustainable for many generations, as well as the DE institutions to overcome communication barriers associated with secondary issues such as language, culture etc. (Berge, 2013:374). The UODL realised that initiative and new ideas need to be established or researched to be competitive in the DE environment. It is necessary for the UODL to get as many students to pass to better the quality of the workforce of South Africa. These communication channels are extremely important to achieve this. Quality interactive communication is required in DE and modern technology is the key to help cross that bridge (Ferreira & Venter, 2011:81). According to Tatkovic, Ruzic and Tatkovic (2006:4), the best multi-media options need to be integrated in the institution to provide the best communication between the student and the DE institution. The UODL needs to determine the communication channel needs and preferences of the DE students, so that resources can be allocated correctly. If the environment is communication rich, the more potential there is to overcome communication barriers to DE; in this case, the UODL needs to establish more ways of communicating to students (Berge, 2013: 375).

## **2.11 Methods of communication in DE**

A short summary of the communication methods is provided to offer a better background to the different preferences in communication available at the UODL:

### **2.11.1 Phone calls from cell phones/land lines**

According to van Zyl (2012: 279), 91% of DE students at the UODL have cell phones, which indicates that it is possible to contact the UODL by phone. The UODL does have a dedicated call centre to accept these calls. The UODL communicates back to these students via SMSs or phone calls. This method is the most preferred way by the DE students to communicate to the UODL.

A disadvantage in this method of communication is that students may not have airtime, money or available data on their phones to contact any DE institution. The main advantage is that the DE student receives feedback almost immediately regarding their inquiry.

### **2.11.2 Emails**

Emails are digital messages that can be sent via the internet by using a computer or a smart phone from one email address to another. There are over 145 billion emails sent per day (Outlook, 2012). Students do need access to the internet to send emails and it can be costly; however, the UODL study centres provide free WiFi for students to access the internet. According to van Zyl (2012:279), only 10% of the UODL DE students have access to the internet from home, whereas 30% have access from their schools. However, 80% of DE students indicated that they do not use emails as a way of preferred communication. The UODL call centre has a dedicated email address that handles administrative inquiries. These statistics were taken in 2012 and the percentage of DE students with access could have increased as data and internet deals with providers have become more affordable. According to Tschabitscher (2017:1), there are 2.5 billion email users around the globe; approximately one third of the human population have an email address.

According to Mzekandaba (2016:1), just more than 50% of households in South Africa have access to internet, which indicates an increase in numbers of DE students. Disadvantages in using email as a method of communication is that the DE students are dependent on internet access, should be computer literate and have an email address.



Responses are not always immediate. An advantage of sending emails is that there is a paper trail, DE students can go back to the email, it is convenient and can be sent from any place on earth.

### **2.11.3 Faxes/e-Faxes**

This method is seldom thought of as it is usually seen as a one-way communication channel, but with e-faxing or fax to mail a DE student or call centre operator can quickly send and receive faxes or e-faxes on their email addresses. Students have the opportunity to send faxes, which arrive at the UODL call centre as an e-fax on the dedicated email address for student inquiries. There are 46 million faxes sent each year and it is necessary for the UODL to keep this communication channel open for students who do not utilise an email address and want to send documents to the UODL (Garret, 2013:1; Vinikas, 2015:1). The call centre operators each have an e-fax line and the dedicated email address receives the faxes and e-faxes from students.

Disadvantages of using faxes and e-faxes are that large documents with many pages are not economical and not reliable. An advantage is that DE students can send their documents from anywhere; the faxes are also received immediately. Electronic data is preferred over paper-based documents as it can be retrieved quicker and easier.

### **2.11.4 Short message service (SMS)**

Van Zyl (2012:279) states that more than 90% of students have cell phones and can send or receive SMSs. Approximately 19 billion SMSs are sent worldwide; this is a cost-efficient way of communicating and DE students at the UODL have the opportunity to SMS inquiries to the call centre (Burke, 2016:1). The UODL has a dedicated number that DE students can send SMSs to, which are then sent to the call centre email address. The DE students can then be called or SMSed depending on the query. If it is academic of nature, the SMS is forwarded to the specific subject lecturer.

Disadvantages of sending SMSs is that there is a limited number of characters that can be used and messages should be short and to the point. Depending on the service provider, it can be costly for DE students to send SMSs. Advantages of using SMSs as a communication method can be cost effective for the UODL, as bulk SMSs are sent. It is also a good tool to reach most DE students and to notify the DE students of important information.

### **2.11.5 Web responses**

The web response system or web page is on the UODL website and is accessible to anyone that has an inquiry regarding DE. When a DE student logs an inquiry or request, the request is sent to the dedicated email address at the UODL call centre. The request will include the student's contact details and inquiry. This link is available 24/7 and students can submit these inquiries throughout the year. Feedback is given as soon as the agents are available.

Disadvantages are that DE students need to be computer literate and have internet access to submit a web request query. Advantages are that the query is sent immediately to the email inbox of the UODL call centre to respond, and it is also cost effective for the DE student.

### **2.11.6 Facebook (social media)**

With social media, for instance Facebook, DE students have the opportunity to network and connect to the DE institution on a more informal level. There was a significant growth in using social media between 2007 and 2010 by undergraduate students, and this growth will continue steadily as social media are becoming more popular as a means to communicate (Smith & Caruso, 2010; Dabbagh & Kitsantas, 2011:1). Students with smart phones or computers that have internet have increased access to social media; it is a convenient way of communication. According to van Zyl (2012:61), students rely on and trust social media more and are utilising this commercial communication tool more often. The UODL Facebook page is managed by the UODL call centre and responds to students' queries as soon as they are received.

Disadvantages of using social media are that the DE students need internet access and a Facebook account. An individual creates an account by going onto the Facebook website and submitting their details. Students also open themselves up to other students' critique if they publish a question. The advantages are that DE students can ask a question from anywhere and receive feedback. A company can use social media to market or gain a competitive advantage by running campaigns and advertisements on Facebook, because social media has such a huge impact on the daily lives of each individual.

### **2.11.7 Live or instant messaging/chat**

This feature is a live chat or instant messaging that is on a website or from one computer or cell phone to another and is an interactive tool to send and receive messages immediately between a DE student and a call centre operator (Lauricella & Kay: 2012:1). According to Jones, Edwards and Reid (2009:204), instant messaging as a method of communication may not be as pervasive and it may take extra time to attend to these messages immediately. Lauricella and Kay (2012:8) stated that two-thirds (66%) did not prefer to use instant messaging with a lecturer. As most queries were academic of nature, this percentage may change if it is urgent administrative queries. The feature is more instant than email, and builds a direct relationship with the company, operator or lecturer (Lauricella & Kay: 2012:2).

The disadvantages of instant messaging are that the DE student expects feedback immediately, which can also be an advantage because the student can be assisted in real time. An operator needs to be logged in to assist a student. Students also need to have internet access and be computer literate. The advantages are that students can send instant messages with their phones where ever they are, as it is important for DE students to be connected instantly to their HEI.

### **2.11.8 Post mail**

Students have the opportunity to post physical notices, documentation, inquiries etc. to the call centre. This feature is one of the oldest ways of communication in DE and is still used by DE students at the UODL to send applications, examination centre changes etc. Postage is difficult to attend to as it might not reach the call centre due to postal problems. DE students in rural areas who do not have access to the internet will use this method of communication to contact the call centre.

A disadvantage of using this method is that post offices are not always reliable and documentation gets lost or takes a few weeks to reach its destination. It may also be costly to post a large document. An advantage is that no electricity is needed and it is the only way some rural area DE students can reach the call centre.

Table 2.1 summarises the methods in short and the contact details of the UODL communication channels:

**Table 2. 1: Methods of communication at the UODL**

<b>Method of communication</b>	<b>Available at the UODL (Yes / No)</b>	<b>Contact details</b>
Calls	Yes	018 285 5900
Emails	Yes	<a href="mailto:DistancePotch@nwu.ac.za">DistancePotch@nwu.ac.za</a>
Faxes/e-Faxes	Yes	087 234 4957
SMSs	Yes	43366
Web response	Yes	<a href="http://distance.nwu.ac.za/contact-us-general-information">http://distance.nwu.ac.za/contact-us-general-information</a>
Facebook	Yes	<a href="https://web.facebook.com/NWU.UODL/?fref=ts&amp;ref=br_t_f">https://web.facebook.com/NWU.UODL/?fref=ts&amp;ref=br_t_f</a>
Live chat/instant message	From September 2017	n/a
Mail	Yes	Building B11a – UODL North-West University Potchefstroom Campus Private Bag X6001 Potchefstroom 2520

The different methods were introduced at various times at the UODL as the technologies became available; in the same way, the older technologies such as post, are decreasing and will eventually disappear.

## **2.12 Summary**

In Chapter 2, the literature review, the definitions or concept clarifications were discussed to provide more in-depth information or background on certain terms. The three variables of the study were discussed, namely communication channels, call centres and DE students. Firstly, the different methods of communication in DE were explained. Secondly, the importance, barriers and future of call centres were discussed, as well as an overview and history of the UODL and UODL call centre. Thirdly, an overview of DE in the USA, Europe and sub-Saharan Africa was considered. In the next chapter, the research methodology of the empirical study will be discussed and analysed.

# CHAPTER 3

## RESULTS AND DISCUSSION

### 3.1 Introduction

The primary objective of this study is to determine the communication preferences of DE students at the UODL. The interpretation and quantitative analysis of the study conducted are discussed in this chapter. Secondary data was collected and extracted from the UODL Loway QueueMetrics software system and GroupWise email manager. GroupWise is the official North-West University email software system and all official emails are sent and received through GroupWise. Numerical data, objectivity and generalisability are three critical elements in defining quantitative research (Maree, 2013:145). According to Johnston (2014:623) and Boslaugh (2007), where technology is present or related in secondary data, it is of utmost importance that the timeframe of the data be as recent as possible. Utilising different scales to analyse, compare and measure different variables is also a reliability factor in quantitative research (Roos, 2014:49). Loway QueueMetrics is a computer software system used to determine the number of phone calls that were received at the UODL call centre. To determine the number of emails, web responses, short message service (SMS) and faxes received, GroupWise was used. The decision was made to not record Facebook data, due to uncertain amounts of communication that was received from students. The total number of enquiries evaluated was 268 693, which include phone calls, emails, faxes, web responses and SMSs. This chapter provides the necessary understanding of the procedures and methods followed to determine the sampling method, study population, data gathering, limitations and validity.

### 3.2 Data gathering procedure

The secondary data was collected from data provided from student inquiries in the UODL call centre from approximately 33 000 DE students. Because the data is not incriminating or personal, no consent was needed from the study population and ethical clearance has been obtained and approved, as the Executive Director of the UODL gave permission to use the call centre data (Appendix A). The steps to determine each communication preference data are illustrated and available and will be discussed below.

### 3.3 Sample and study population

All the data was available to the researcher, because the researcher is the manager of the UODL call centre. All phone calls and missed phone calls received at the UODL call centre, each email received, excluding spam, in the UODL call centre email inbox, all faxes received as well as failed faxes and all web responses received form part of the extracted secondary data. The larger the sample from each communication preference or channel, the more reliable, valid and representative the conclusions of the data will be (Johnston, 2014:624).

The population of this study consisted of the phone calls, emails, web responses, SMSs and faxes of DE students who are currently enrolled as students at the UODL at the NWU. The mentioned study population is from across South Africa and Namibia. The majority of communication received formed part of DE students interested in courses in Education, Nursing, Theology or Policing. Secondary data was used without obtaining permission from DE students, because the data was not incriminating or damaging in any way. In Table 3.1, the total amount of each communication channel enquiry received at the UODL call centre was captured.

**Table 3. 1: Total number of enquiries received at the UODL call centre from January 2014 to June 2017**

Phone calls	210 727
Emails	51 959
SMSs	429
Web responses	4 225
Faxes	1 353
<b>Total</b>	<b>268 693</b>

In Table 3.1, an overview of the number of enquiries received at the UODL call centre, the trends and graphs will show in detail the timeline of these variables. The total number of enquiries evaluated was 268 693.

### 3.4 Communication methods extracted

The researcher extracted the calls, emails, web responses, SMSs and faxes received at the UODL call centre. The methods and results will be discussed below.

### 3.4.1 Phone calls

The researcher used the Loway QueueMetrics System to determine the number of phone calls per month received at the UODL call centre. In the programme, the researcher extracted data from 2014 up until June 2017 at the UODL call centre. The researcher retrieved a custom report for each month from January 2014 to June 2017. The data was captured onto an MS Excel spreadsheet, as depicted in Table 3.1.

The following steps were taken to retrieve a monthly call centre call report:

1. The researcher logged into Loway QueueMetrics.
2. Go to the home page, select “Run custom report”.
3. Enter the start and end date of report, in this case each month.
4. Save the report.
5. Captured the data in a MS Excel spreadsheet like below.

**Table 3. 2: Phone calls received at the UODL call centre from January 2014 to June 2017**

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2014	7446	3342	5348	3697	4227	3071	2825	2325	5185	4658	4667	3691	50482
2015	7893	4555	3360	4481	6632	4810	4376	6682	4436	6579	3533	1798	59135
2016	9389	6604	3148	3715	7570	3715	2834	5627	4710	7684	3938	1477	60411
2017	12072	6517	3733	3969	7228	7180							40699

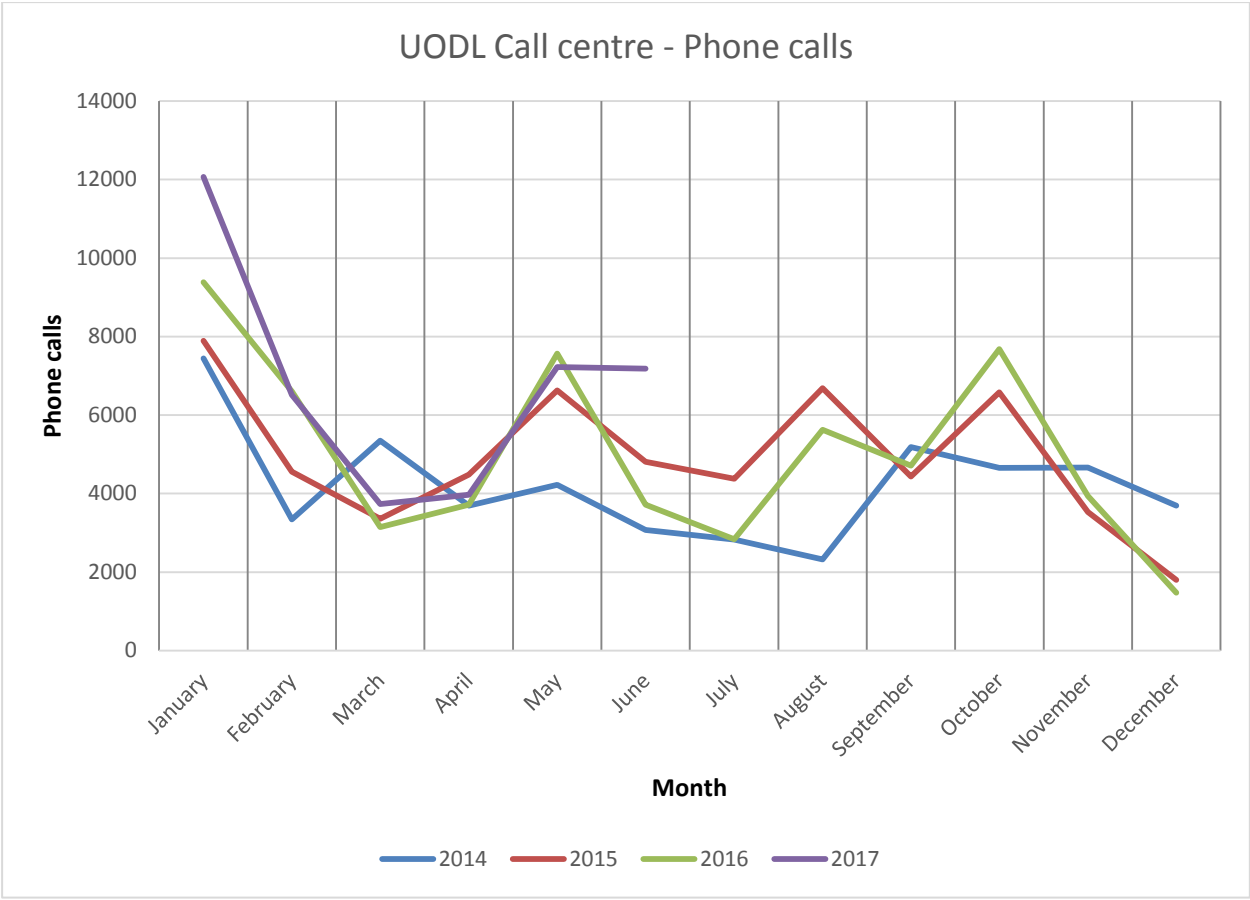
Source: Adapted from Loway QueueMetrics (2017)

In Table 3.2, the total number of phone calls for each month was captured from January 2014 to June 2017. Each month also includes the missed phone calls received. In 2014, the total phone calls received was 50 482; in 2015, the calls increased by 8 653 (17%) to a total of 59 135. In 2016, the total calls only increased by 1 276 (2%) phone calls to a total of 60 411 phone calls. From January 2017 to June 2017, a total of 40 699 phone calls were recorded; an increase of 6 558 for the same period in 2016; an increase of 8 968 from 2015; and an increase of 13 568 in the same time frame in 2014.

The average phone calls per month for 2014 was 4 207 phone calls, for 2015 the average phone calls was 4 927, an increase of 17%, in 2016 the average phone calls per month slightly increased with 2% to 5 034 phone calls and in 2017 for the first six months, the average phone calls per month increased by 35% to 6 783 phone calls. The



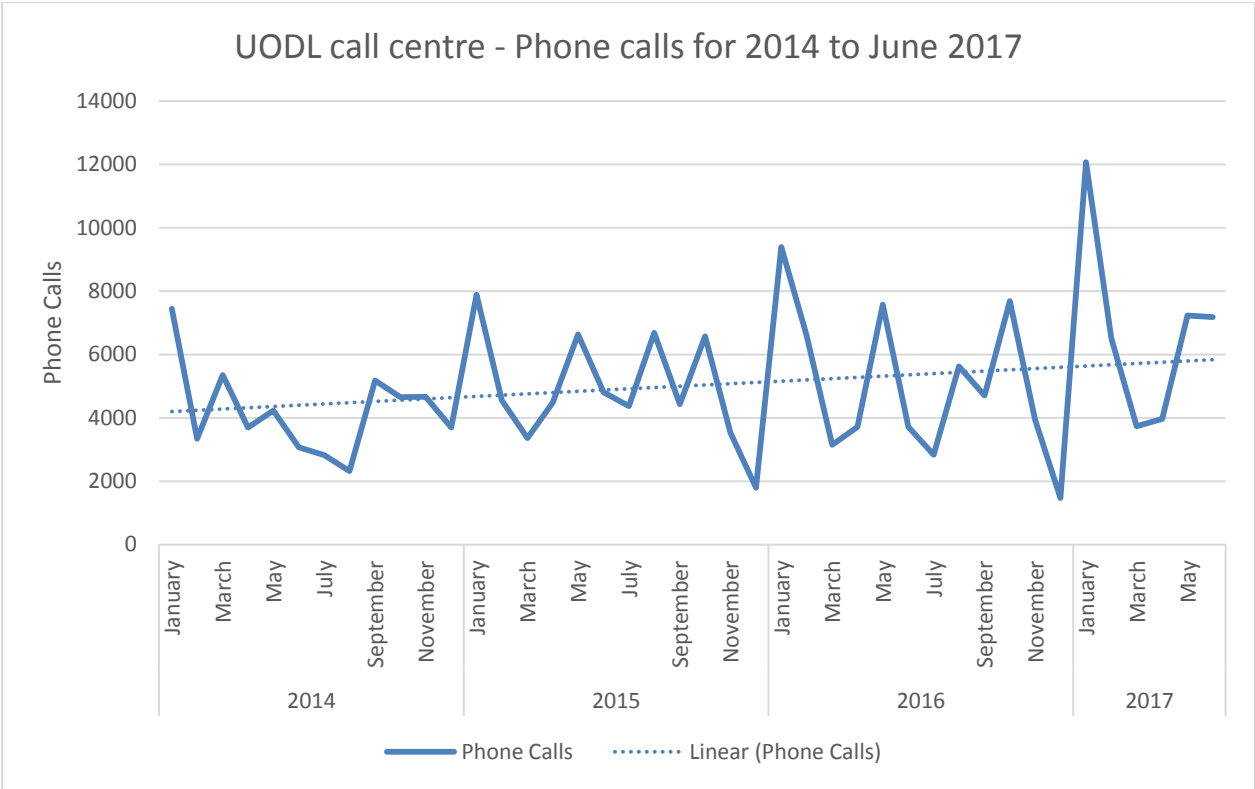
reason for the increases can be new programmes offered through DE at the UODL as well as the increase in DE students and the target for more DE students set by the NWU management. The marketing of DE programmes can also be a role player in more students from around SA phoning the UODL call centre for more information regarding DE programmes. External reasons can be that airtime is cheaper from service providers, which means DE students can phone the UODL call centre to receive feedback immediately instead of waiting for a response via email, fax, SMS or web response.



**Graph 3. 1: Phone calls received at the UODL call centre from 2014 to June 2017**

It is evident from Graph 3.1 that the most phone calls were received in January each year and the quietest month was December for each year. The reason for the high volume of phone calls can be beginning of the year applications and registration finalisation. In May of each year, there is an increase or spike of phone calls, and the reason can be contributed to the June examinations and DE students' enquiries, for example, personal examination time tables or participation marks for the examination. From July to August and September to October, there was an increase in phone calls

for 2015 and 2016, and it can be predicted that the phone calls will increase in August and October. Management can allocate more call centre agents for these months as well as for January. The reason for the high phone call rate in January can be for new applications, registrations and November examination results. In December of each year, the phone calls decrease and more agents can take annual leave, the reasons can be that the results will not be available yet as the examinations had just finished and that the DE students are on leave or vacation, the NWU officially closes around the end of the third week in December, missing out on a week's phone calls.



**Graph 3. 2: Forecast trend line for phone calls at the UODL call centre**

As illustrated in Graph 3.2, the linear trend line shows an increase in the average phone calls per month; in 2014, the average phone calls per month was 4 206 and in 2017 the average phone calls were 6 783 phone calls. Phone calls seem to trend downwards from July to December. It is expected that the average phone calls at the end of 2017 will be slightly less than the current average of 6 783 phone calls. According to the linear trend line, the average phone calls should be approximately 6 000 and a projection of 72 000 phone calls is predicted for 2017 according to the trend line in Graph 3.2.

### 3.4.2 Emails

Cooper (2014:31) states the importance of emails in organisations that form the pillar of corporate communication. The GroupWise email manager (computer software) was utilised to determine the number of emails received at the UODL call centre. Spam emails that were automatically deleted and all other emails were separated from the web responses, SMSs and faxes, to be archived and stored in their respective year and month folders for later reference.

The following steps are taken to determine the number of emails received:

1. Logged into GroupWise.
2. Go to File, Open Archive.
3. The monthly emails are sorted into folders.
4. Delete spam emails
5. Separate SMSs, web responses and faxes in other folders
6. The communication left in the folder is emails that are captured in an MS Excel spreadsheet like below.

**Table 3. 3: Emails received at the UODL call centre from January 2014 to June 2017**

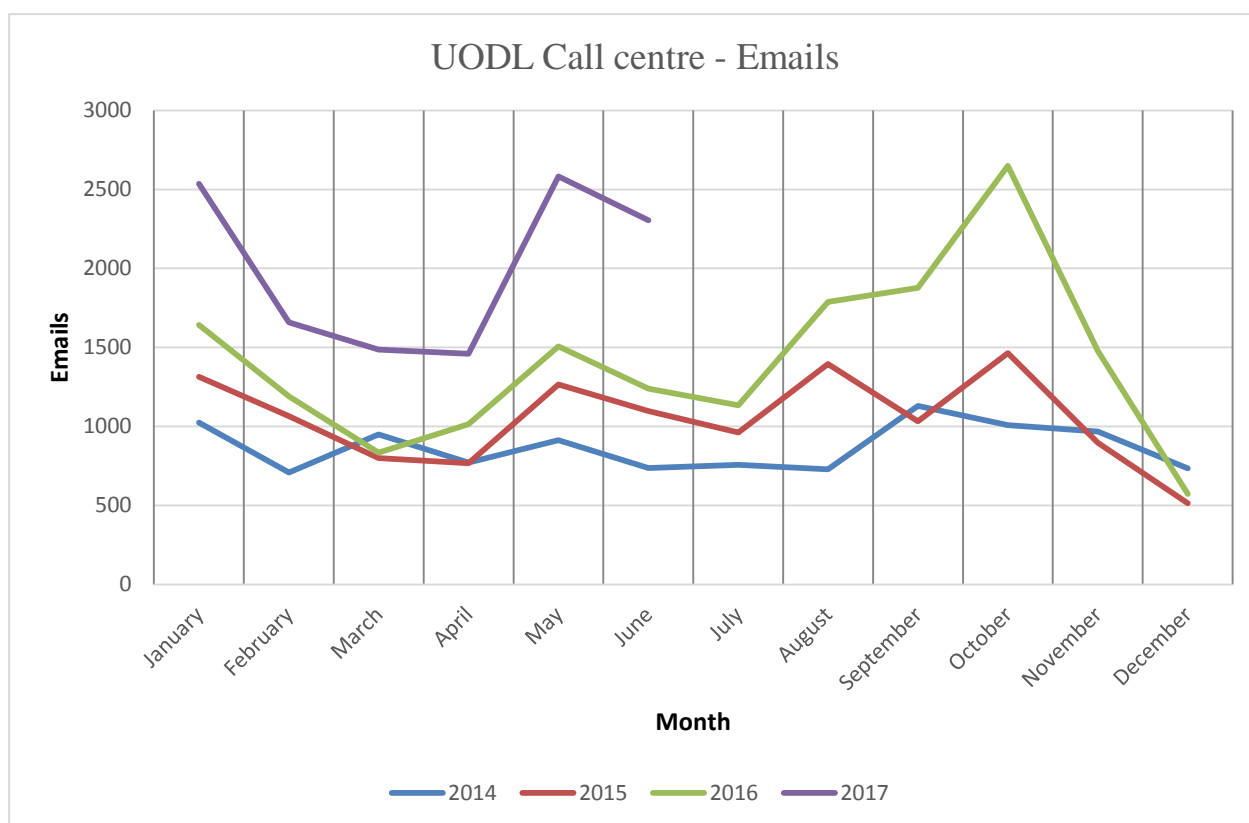
Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2014	1024	708	950	771	914	737	758	729	1129	1009	968	735	10432
2015	1315	1066	800	767	1266	1097	961	1395	1032	1464	896	513	12572
2016	1643	1190	835	1014	1506	1240	1134	1788	1877	2650	1479	572	16928
2017	2535	1659	1486	1460	2582	2305							12027

Source: Adapted from GroupWise (2017)

In Table 3.3, the total number of emails for each month was captured from January 2014 to June 2017, and the data was extracted from GroupWise software and captured for each month. The total emails received for 2014 was 10 432, which increased by 2 140 emails received in 2015. From 2014 to 2016, the number of emails increased by 62%. The number of emails received from January 2017 to June 2017 is 14% more than received in the whole of 2014.

The average emails received per month for 2014 was 869 emails, for 2015 the average emails received was 1 047, an increase of 20%, in 2016 the average emails per month

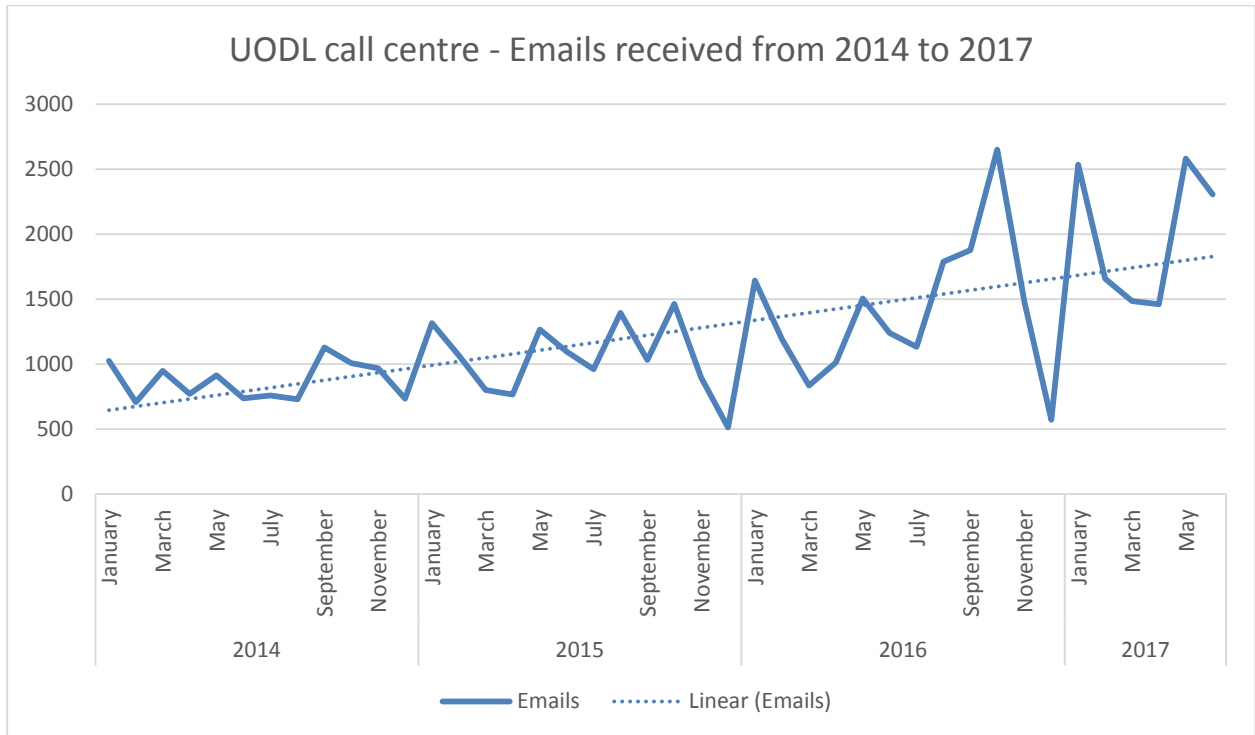
increased with 35% to 1 410 emails and in 2017 for the first six months the average emails per month increased by 42% to 2 004 emails. The extraordinary increase in emails per month, from 869 emails per month in 2014 to 2 004 in 2017, shows that DE student are becoming more computer literate, more DE students might have access to smart phones with email capabilities and an overall increase in accessibility to email services exists. More reasons could be that students prefer to email the UODL call centre the application forms, student request forms and registration forms. DE students can also send emails after business hours and receive feedback the following day.



**Graph 3. 3: Emails received at the UODL call centre from 2014 to June 2017**

In 2014, the average number of emails received was 850, which shows an increase of 230% between 2014 and 2017. In Graph 3.3, it can clearly be seen that there is a massive increase of emails received at the UODL call centre. The same trend can be observed in Graph 3.1. January is a busy month with a spike or increase in emails received in May of each year, and then again in October, this indicates the application and registration deadlines of students sending their documentation via email to the UODL. Each year, December is the month with the lowest number of emails received; this may indicate that DE students are on leave/holiday and the end of the academic year.

With the data illustrated in Graph 3.3, the researcher can predict that in October 2017, the UODL call centre will observe an increase in emails and again a decrease from there until December 2017.



**Graph 3. 4: Forecast trend line for phone calls at the UODL call centre**

In Graph 3.4, the linear trend line shows an increase of emails from 2014 to 2017, to an average of approximately 2 000 emails in 2017. The current average of emails received was 2 004 indicating that the average will be maintained until the end of the year. It can be forecasted that the UODL call centre will receive approximately 24 000 emails for 2017. There was a statistically meaningful increase in the number of emails received at the UODL call centre. According to the Statistical Consultation Services, there was an average increase of 28.9 emails per month.

### 3.4.3 Web responses

To determine the number of web responses received at the UODL call centre, the researcher needed to separate the web responses from the emails, SMSs and faxes received on GroupWise. The web responses were archived and stored, the same way as the emails, in their respective month and year folder. The web responses only became available in August 2014.

The following steps were taken to determine the number of web responses received:

1. Logged into GroupWise.
2. Go to File, Open Archive.
3. The monthly web responses were sorted into folders.
4. Separated SMSs, emails and faxes in other folders.
5. The web responses were separated from the rest of the data, and captured in an MS Excel spreadsheet like below.

**Table 3. 4: Web responses received at the UODL call centre from January 2014 to June 2017**

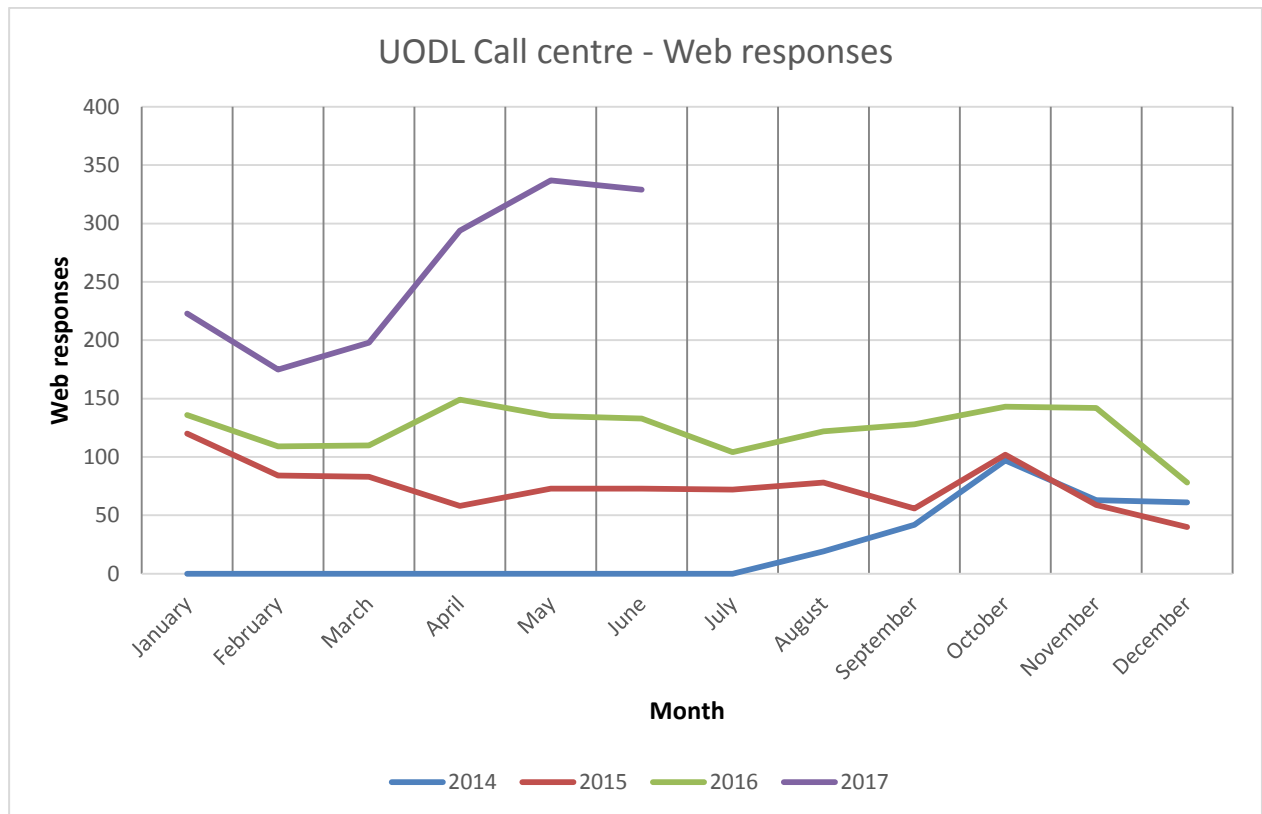
Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2014	n/a	n/a	n/a	n/a	n/a	n/a	n/a	19	42	97	63	61	282
2015	120	84	83	58	73	73	72	78	56	102	59	40	898
2016	136	109	110	149	135	133	104	122	128	143	142	78	1489
2017	223	175	198	294	337	329							1556

Source: Adapted from GroupWise (2017)

In Table 3.4, the total web responses for each month was captured from August 2014 to June 2017, the data was extracted from GroupWise and captured in an MS Excel spreadsheet. The web responses only became available from August 2014 to DE students. For the five months captured in 2014, a total 282 web responses were received on the UODL website, with an average of 56 web responses a month. In 2015, an average of 75 web responses were received per month, and an average of 124 web responses were received per month in 2016. More than double the amount of web responses were received per month in 2017 as in 2016, with an average of 259. From 2014 to 2017, the web responses increased 5.5 times.

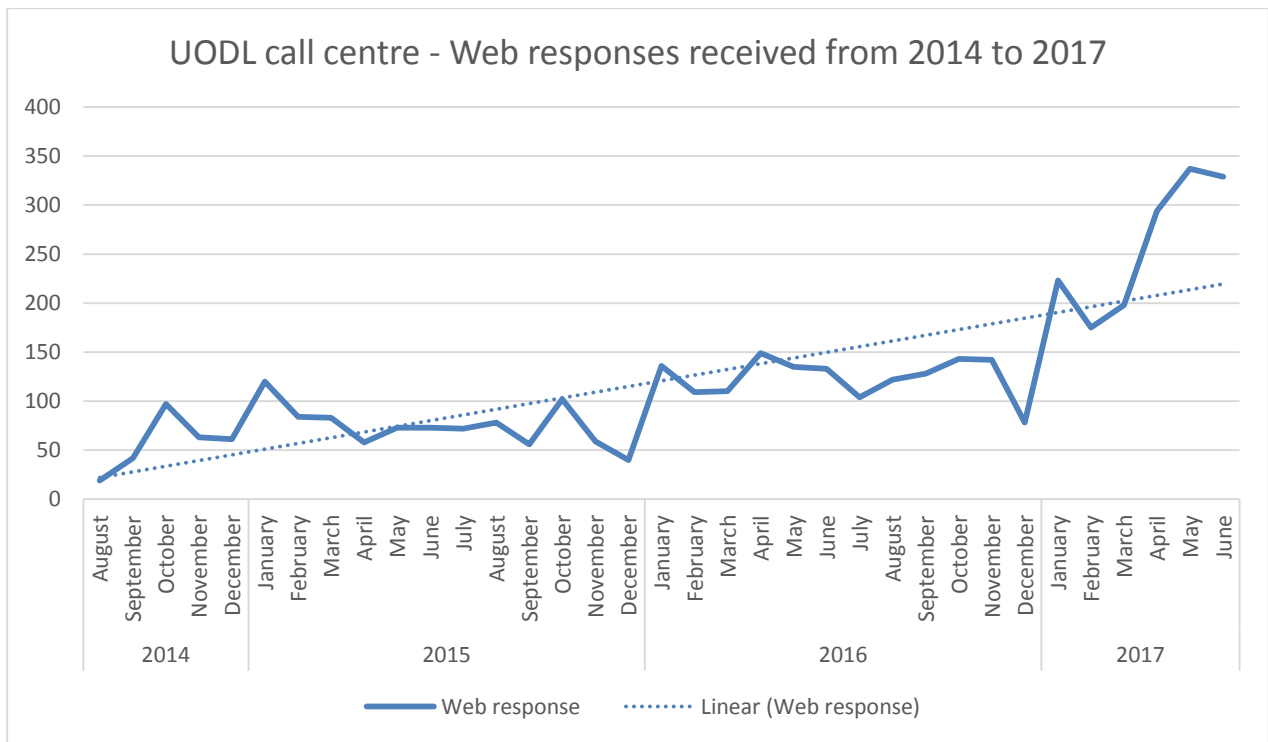
The average web responses received per month, only from August to December, for 2014, was 56 web responses, for 2015 the average web responses received was 75, an increase of 34%. In 2016, the average web responses per month increased with 65% to 124 web responses and in 2017, for the first six months, the average web responses per month increased by 109% to 259 web responses. The reasons for the increase could be that DE students have increased access to the internet to browse the UODL website and submit enquiries through the online service. The ability of smart phones to

access the internet also plays a role; this trend will keep on increasing. It is also a convenient method to contact the UODL call centre as DE students can submit enquiries after hours and receive feedback during the following day via email.



**Graph 3. 5: Web responses received at the UODL call centre from August 2014 to June 2017**

As illustrated in Graph 3.5, the most web responses are received in January each year, and slightly more in October. The increase in web responses is DE students inquiring about their applications in January, or requesting information regarding studies for the academic year, and the increase in web responses in October can be DE students requesting information on the next academic year's intake. The web responses in 2015 and 2016 are consistent with each other, but a huge increase in web responses was received in 2017. The two highest recorded web responses were in May and June of 2017, which means that the web responses received at the UODL call centre may keep on increasing. A slight increase in web responses can be observed each year in October, and in 2017, the number of web responses keeps increasing. The UODL website sees the most traffic then and should look at ways to increase marketing or visibility of courses or programmes so that more DE students can be reached.



**Graph 3. 6: Forecast trendline for Web responses at the UODL call centre**

In Graph 3.6, a statistically significant increase in the linear trend line can be seen. It is important in practice because 60.5% of the variation is declared through time. The average web responses increase by approximately 5.8 web responses per month. The lack of web responses earlier in 2014 may influence the total web responses received from DE students.

### 3.4.4 Short message service (SMS)

SMSs from prospective, current and future students are sent to 46677, and are then received in email format on GroupWise software. The SMSs are separated from the email, fax and web responses in their particular month and year folder.

The following steps were taken to determine the number of SMSs received:

1. Logged into GroupWise.
2. Go to File, Open Archive.
3. The monthly SMSs were sorted into folders.
4. Separated web responses, emails and faxes in other folders.
5. The SMSs were separated from the rest of the data, and then captured in an MS Excel spreadsheet like below.



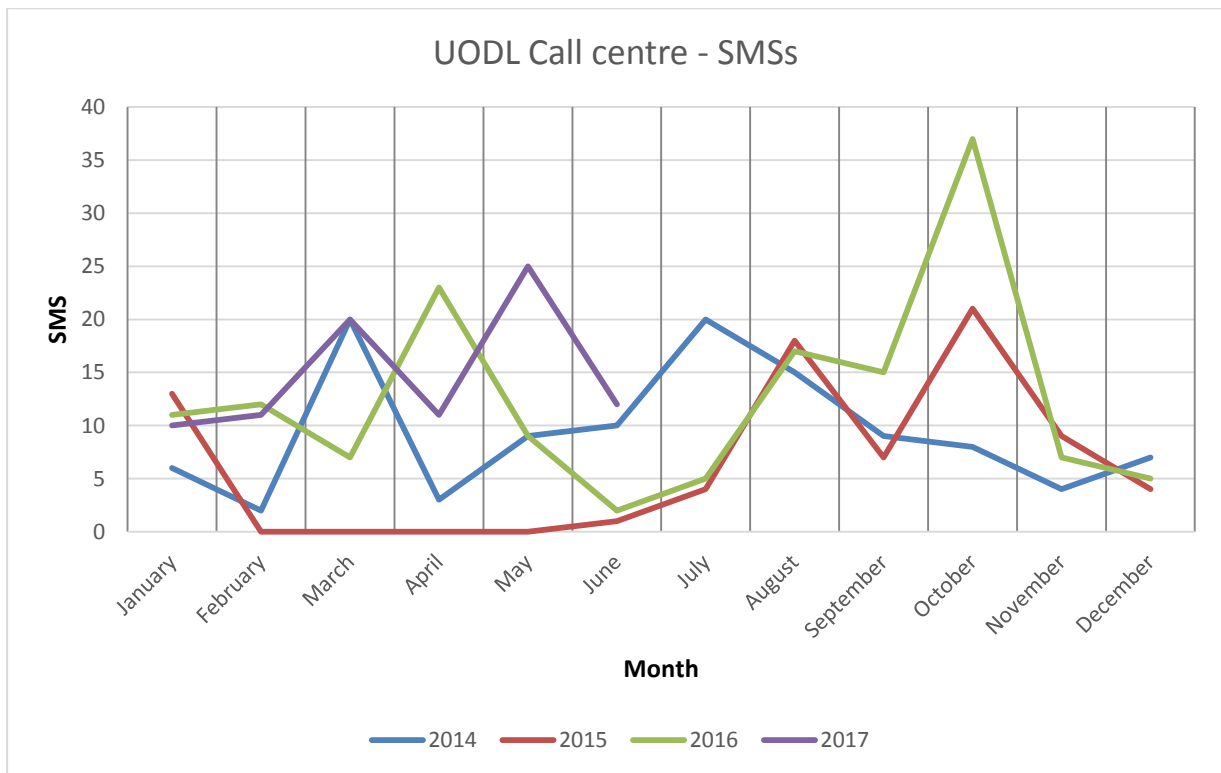
**Table 3. 5: SMSs received at the UODL call centre from January 2014 to June 2017**

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2014	6	2	20	3	9	10	20	15	9	8	4	7	113
2015	13	0	0	0	0	1	4	18	7	21	9	4	77
2016	11	12	7	23	9	2	5	17	15	37	7	5	150
2017	10	11	20	11	25	12							89

Source: Adapted from GroupWise (2017)

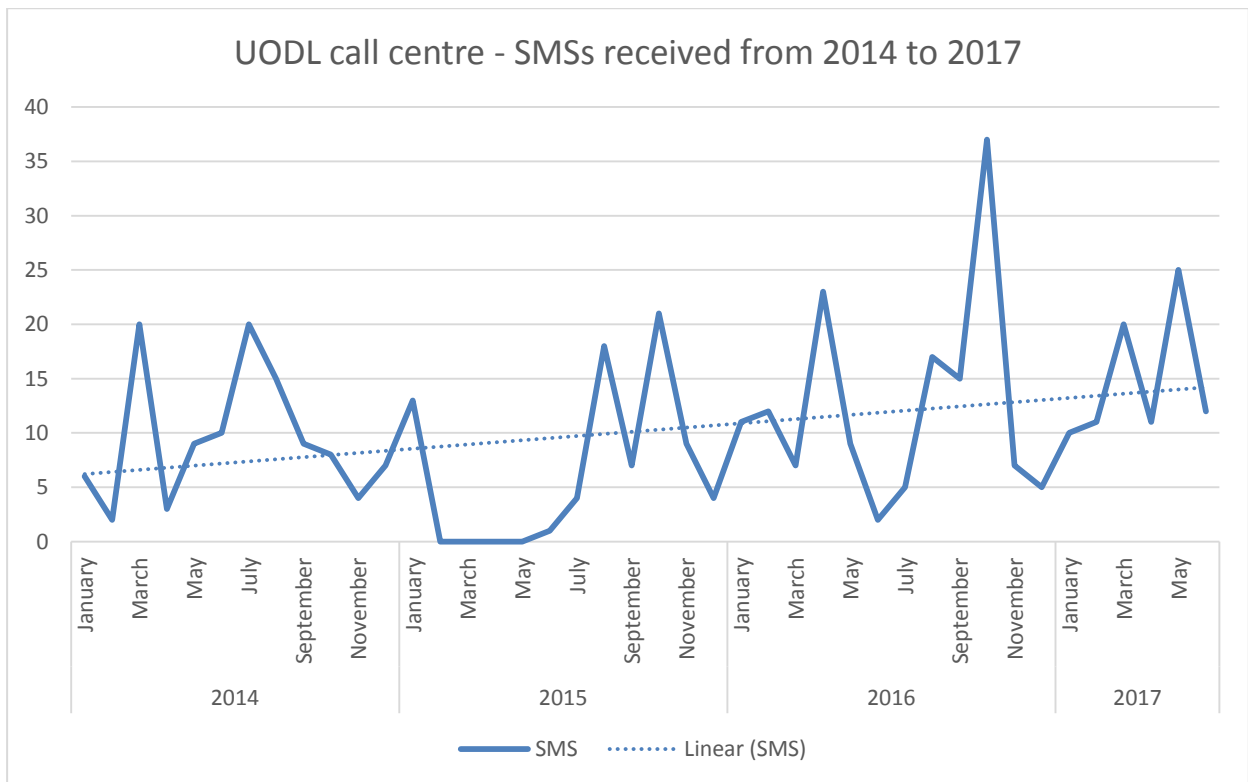
In Table 3.5, the total SMSs received each month was captured from January 2014 to June 2017, and the data was extracted from GroupWise. In 2014, 113 SMSs were received; the number of SMSs declined by 32%. The overall number of SMSs received was not astonishing and the most SMSs received were in 2016, with 150 SMSs. In 2017, the SMSs received increased dramatically in the first six months compared to previous years.

The average SMSs per month for 2014 was nine SMSs, for 2015 the average SMSs was six, a decrease of 33%, in 2016 the average SMSs per month increased with 117% to 13 SMSs and in 2017, for the first six months, the average SMSs per month increased by 15% to 15 SMSs. Most of the DE students do have cell phones and are able to SMS. The low number of SMSs received might be due to the limitations of SMSs; students can only submit short messages of up to 160 characters.



**Graph 3. 7: SMSs received at the UODL call centre from 2014 to June 2017**

Compared to phone calls, emails and web responses, the number of SMSs received is a fraction of communication from DE students received at the UODL call centre. In Graph 3.7, no certain month indicates that there is a pattern, or which time is busy; however, in 2015, no SMSs were received from February to May at the UODL call centre. In October 2016, the most SMSs were received, at a total of 37. The SMSs seem to decrease in November and December of each year, which might be that the examination is in November and DE students are on leave.



**Graph 3. 8: Forecast trend line for SMSs at the UODL call centre**

According to SCS, the SMSs do not show any significant changes for the data captured. An average of 10 SMSs was received each month from 2014 to 2017. As indicated in Graph 3.8, there is an increase in SMSs received as shown with the linear trend line.

### 3.4.5 Faxes

Prospective, current and future students sent faxes to 087 234 4957, which are then directed to the UODL call centre email address on GroupWise software. The faxes received are then separated from the emails, SMSs and web responses and archived in their month and year folders.

The following steps were taken to determine the number of faxes received:

1. Logged into GroupWise.
2. Go to File, Open Archive.
3. The monthly faxes were sorted into folders.
4. Separated SMSs, web responses and emails in other folders.
5. The faxes were separated from the rest of the data, and then captured in an MS Excel spreadsheet like below.

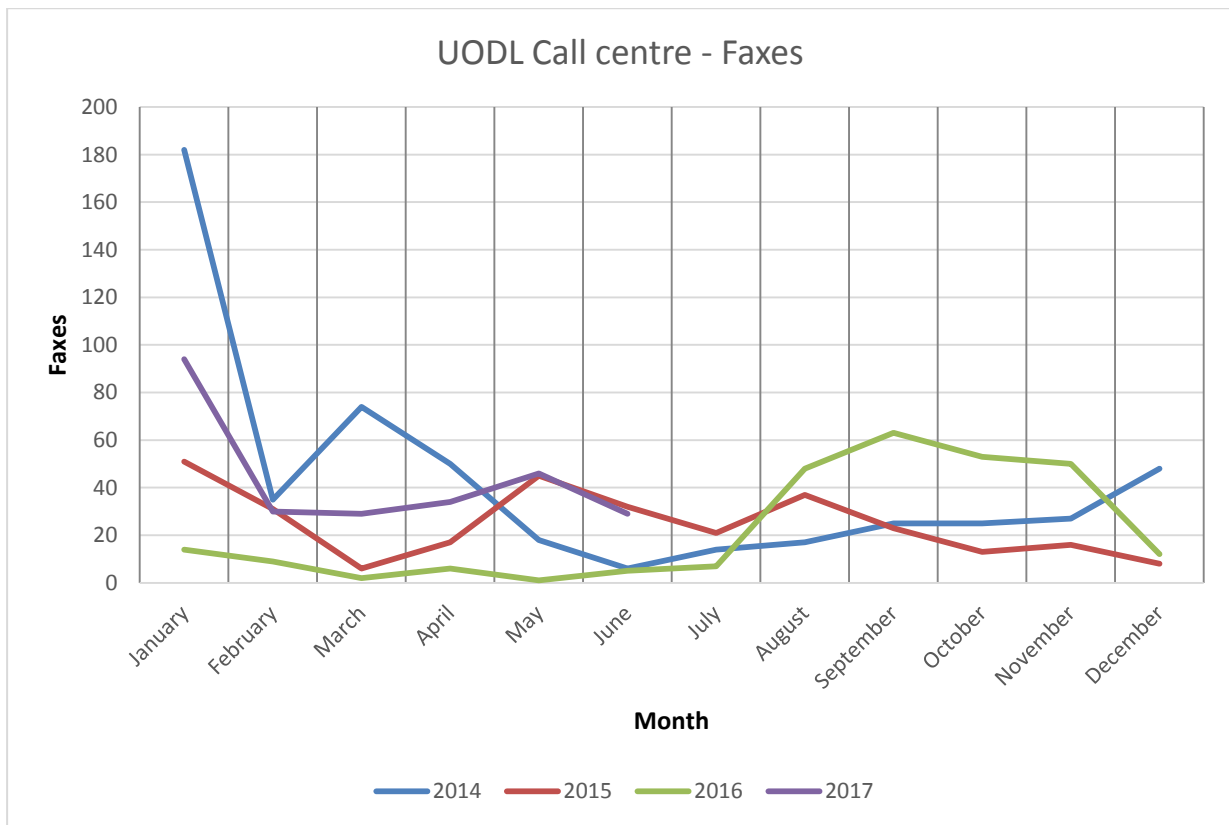
**Table 3. 6: Faxes received at the UODL call centre from January 2014 to June 2017**

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2014	182	35	74	50	18	6	14	17	25	25	27	48	521
2015	51	31	6	17	45	32	21	37	23	13	16	8	300
2016	14	9	2	6	1	5	7	48	63	53	50	12	270
2017	94	30	29	34	46	29							262

Source: Adapted from GroupWise (2017)

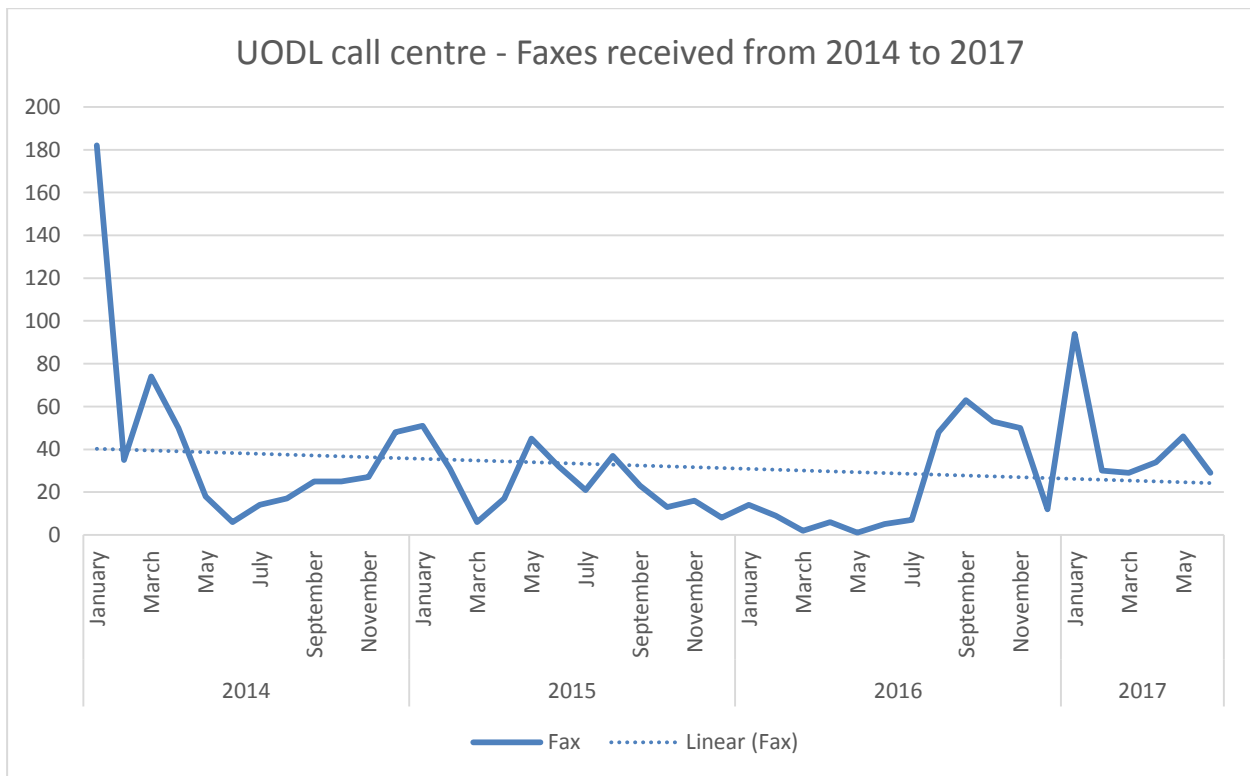
In Table 3.6, the total faxes received for each month was captured in an MS Excel spreadsheet for each month from 2014 to June 2017. The data was extracted from GroupWise software. The data of the faxes received includes failed faxes (only a few pages received). In 2014, the total faxes received were 521, the number of faxes received in 2015 decreased by 43% and decreased again by 10% to only 270 for 2016. In 2017, the number of faxes increased drastically, and by June 2017 almost the same number of faxes was received as in the whole of 2016. The reason may be that more courses were available to students, and that these courses are paper based and not electronic based as some new programmes. Another reason can be that more faxes failed to go through and DE students repeatedly sent failed faxes.

The average faxes per month for 2014 was 43 faxes, for 2015 the average faxes were 25, a decrease of 42%, in 2016 the average faxes per month decreased again with 8% to 23 faxes; however, in 2017, for the first six months, the average faxes per month increased by 91% to 44 faxes. The decrease in faxes may be due to an older technology, but increased significantly in 2017, this can be due to students being aware that the UODL call centre receives the faxes through email, or students from more rural areas who only have access to faxing facilities contacting the UODL through fax. New courses or programmes available at the UODL might influence the number of faxes received; DE students send application and registration forms via fax if there is no other way of sending the forms, as it is quicker and more reliable than posting a form.



**Graph 3. 9: Faxes received at the UODL call centre from 2014 to June 2017**

The most faxes were received was in January 2014, with 182 faxes per month received at the UODL call centre. The number of faxes received in January would most likely be students who are applying for the academic year and send their forms via fax. There are no significant changes in the number of faxes received in certain months. As illustrated in Graph 3.9, in 2016, the number of faxes received until July was at a minimum; the number of faxes started to increase until December 2016. The number of faxes received in 2017 increased exceptionally according to Graph 3.9.



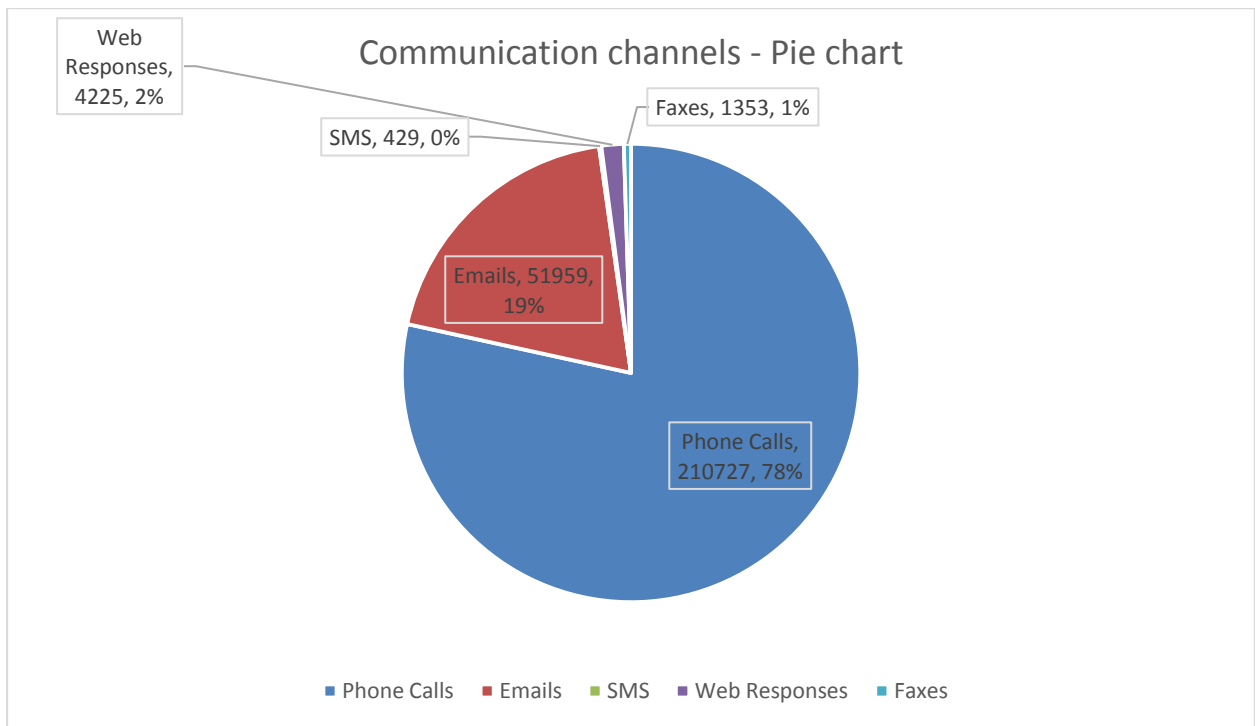
**Graph 3. 10: Forecast trend line for faxes received at the UODL call centre**

As seen in Graph 3.10 above, the linear trend line shows a decline for the number of faxes received at the UODL call centre. The linear trend line starts at approximately 40 faxes a month and ends at just above 20 faxes a month.

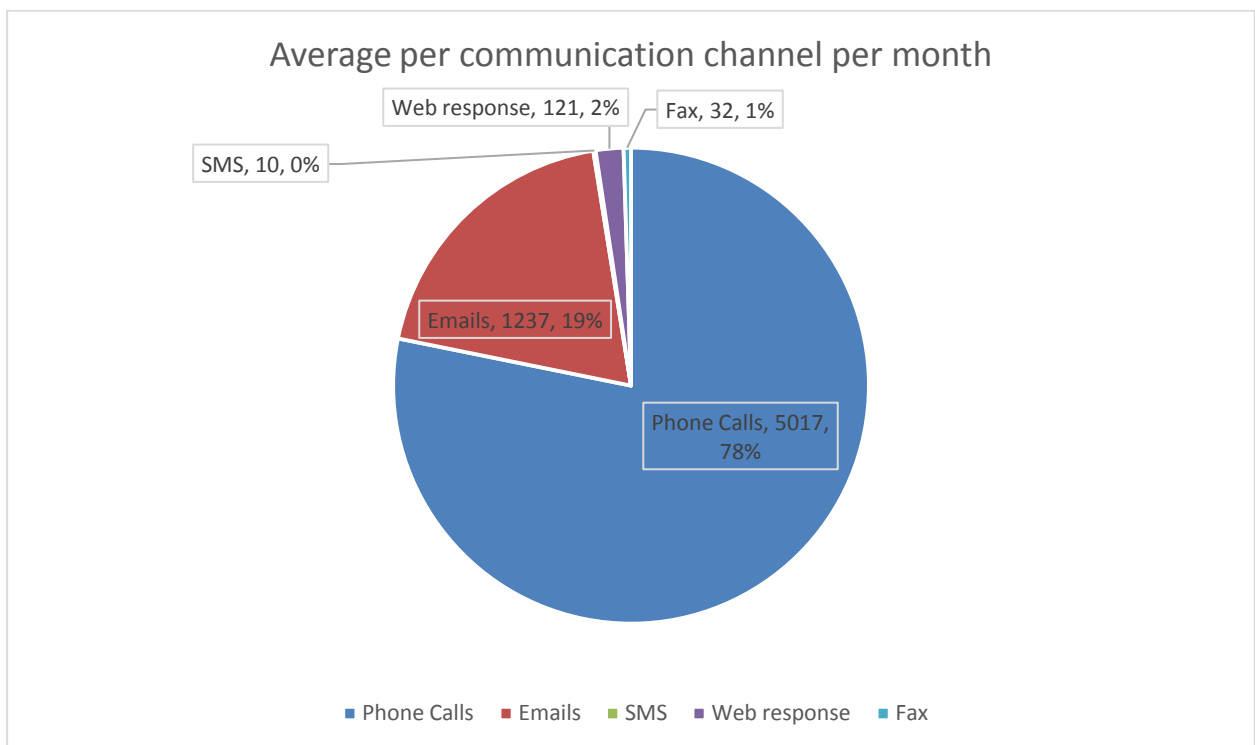
### 3.5 Statistical analysis of data

According to Johnston (2014:620), secondary data is an “under-used technique” and should be used as a systematic research method. The researcher utilised the Statistical Consultation Services (SCS) of the NWU who conducted the statistical analysis of the data. Table 3.7 was presented to SCS to evaluate and determine trends and frequencies in the data.

In Graph 3.11, the total number of each communication channel is set out; phone calls were the majority of preference used by DE students, at 78% of the total enquiries, whereas emails were second most with 19%, and web response with 2% in total. In total, the phone calls for the duration of the study were 210 727, the emails were 51 959, the web responses were 4 225, faxes received were 1 253 and the SMSs received were 429. The sum total of all enquiries from January 2014 to June 2017 received at the UODL call centre for phone calls, emails, faxes, web responses and SMSs were **268 693**.



**Graph 3. 11: Total number of enquiries received at the UODL call centre**



**Graph 3. 12: Communication preference average per month**

In Graph 3.12, the monthly average of the communication channels is depicted in a pie chart. For the duration of the study, the average phone calls per month was 5 017, the

emails were 1 237 a month, the web responses were 121 a month, the faxes were 32 a month and the SMSs were 10 a month.

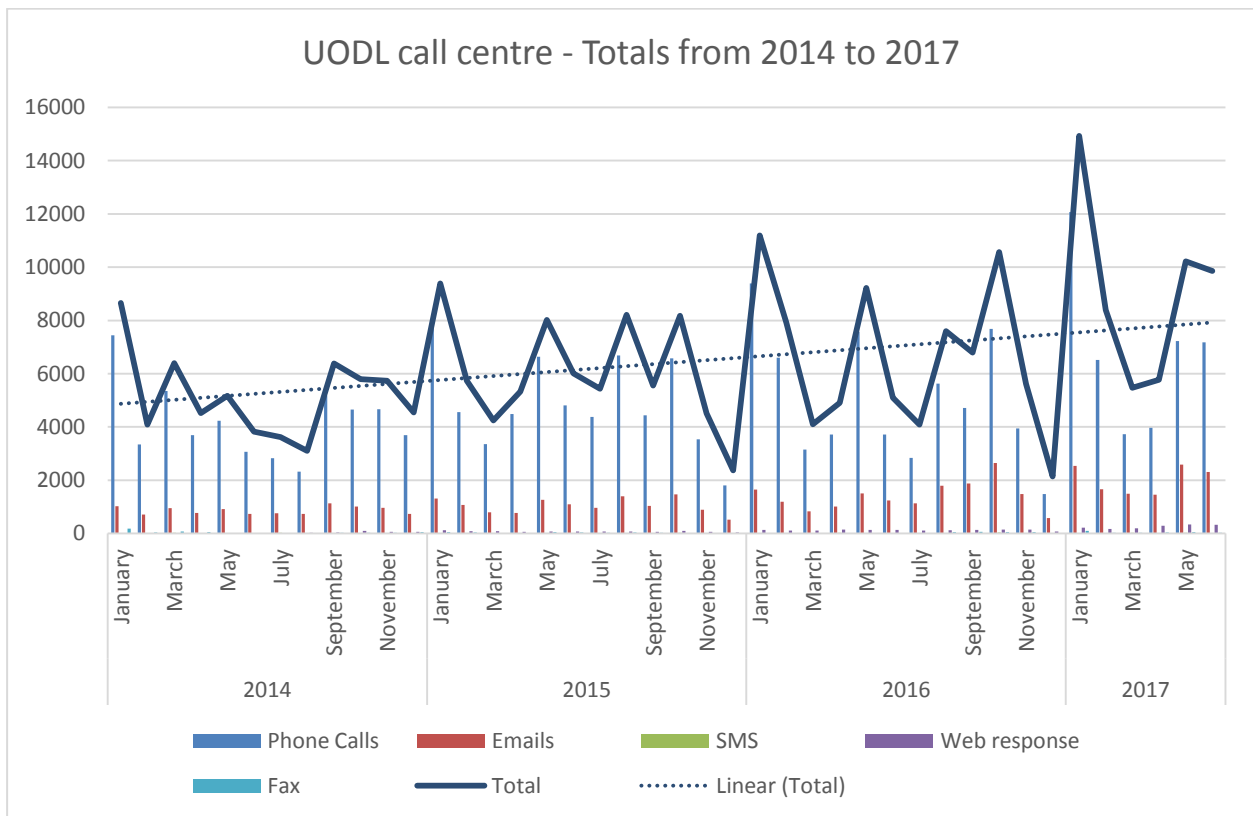
**Table 3. 7: UODL call centre data presented to SCS**

Year	Month	Calls	Emails	SMS	Web response	Fax
2014	January	7446	1024	6	n/a	182
	February	3342	708	2	n/a	35
	March	5348	950	20	n/a	74
	April	3697	771	3	n/a	50
	May	4227	914	9	n/a	18
	June	3071	737	10	n/a	6
	July	2825	758	20	n/a	14
	August	2325	729	15	19	17
	September	5185	1129	9	42	25
	October	4658	1009	8	97	25
	November	4667	968	4	63	27
	December	3691	735	7	61	48
2015	January	7893	1315	13	120	51
	February	4555	1066	0	84	31
	March	3360	800	0	83	6
	April	4481	787	0	58	17
	May	6632	1266	0	73	45
	June	4810	1097	1	73	32
	July	4376	961	4	72	21
	August	6682	1395	18	78	37
	September	4436	1032	7	56	23
	October	6579	1464	21	102	13
	November	3533	896	9	59	16
	December	1798	513	4	40	8
2016	January	9389	1643	11	136	14
	February	6604	1190	12	109	9
	March	3148	835	7	110	2
	April	3715	1014	23	149	6
	May	7570	1506	9	135	1
	June	3715	1240	2	133	5
	July	2834	1134	5	104	7
	August	5627	1788	17	122	48
	September	4710	1877	15	128	63
	October	7684	2650	37	143	53
	November	3938	1479	7	142	50
	December	1477	572	5	78	12
2017	January	12072	2535	10	223	94
	February	6517	1659	11	175	30
	March	3733	1486	20	198	29
	April	3969	1460	11	294	34
	May	7228	2582	25	337	46
	June	7180	2305	12	329	29

The data in Table 3.7 is a summary and overview of the secondary data of the UODL call centre captured. In Graph 11 below, the total number of each month was indicated with the trend line showing a constant increase from approximately an average of 5 000 pieces of communication received from DE students in January 2014, in January 2015 the total number of communication pieces is just under 6 000, in January 2016 the estimate is 6 750, in January 2017 the number of communications received was at



7 800, and increased to approximately 8 000 communications received per month by the end of June 2017.



**Graph 3. 13: Total communication received at the UODL call centre**

A steady growth is shown in the number of communication pieces received at the UODL call centre. The researcher can predict that the total could be at 9 000 at the beginning of January 2018. It is evident in Graph 3.13, that January, May, August and October of each year are the busiest times at the UODL call centre.

### 3.5 Validity

Tavakol and Dennick (2011:53) state that the validity of a measuring instrument is the degree to which an instrument measures what it was intended to measure, in this case official software captured data at the UODL call centre. The following software is used for official operational reports and monthly feedback:

- Loway QueueMetrics – the reports are retrieved from a database and cannot be altered or changed; the data is definite and 100% accurate.
- GroupWise software – the data is saved, archived and backed up. The data is kept for inquiries made by DE students previously and to keep for reference purposes, should there be problems.

To increase the validity of the data, the most recent data was retrieved, and for secondary data, the validity will be retained or reserved for longer. The size of the sample also increases the validity of the data, as it is more representative of the population. The researcher is the manager of the UODL call centre and has experience in using the software and knows the systems and data collection procedures. The data is available on request in the archives of the UODL call centre manager.

### **3.6 Limitations**

According to Simon and Goes (2013:1), limitations are occurrences that are present in a research study, which are out of the researcher's control. Limitations of this research study include not being able to determine the communication from DE students through Facebook. Not all calls received at the UODL call centre were DE related. A number of calls may have been the wrong number, personal calls or miscellaneous calls. The researcher was aware of this study being conducted, and record could have been kept on a daily basis from 2014 to 2017. Web responses only became accessible to DE students from August 2014. The focus of the study was only on the previous, current and prospective DE students' communication with the UODL and not all DE institutions in SA; therefore, the sample cannot be considered representative of all DE institutions. This study does not include questionnaires and opinions of DE students on their communication preferences.

The UODL call centre is dependent on technology, equipment that can fail, or servers can misdirect or throw calls out. DE students do not always have the necessary technology at home to contact the UODL call centre.

### **3.7 Summary**

In Chapter 3, the research methodology, the sample and study population were discussed to provide more in-depth information on the secondary data. The data gathering process was discussed on how the researcher obtained the data. The statistical analysis of data, and the validity and limitations of the data were discussed to provide an overview of the research study. In the following chapter, the conclusions and recommendations of the empirical study will be discussed as well as possible areas for further study in the future.

# **CHAPTER 4**

## **CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 Introduction**

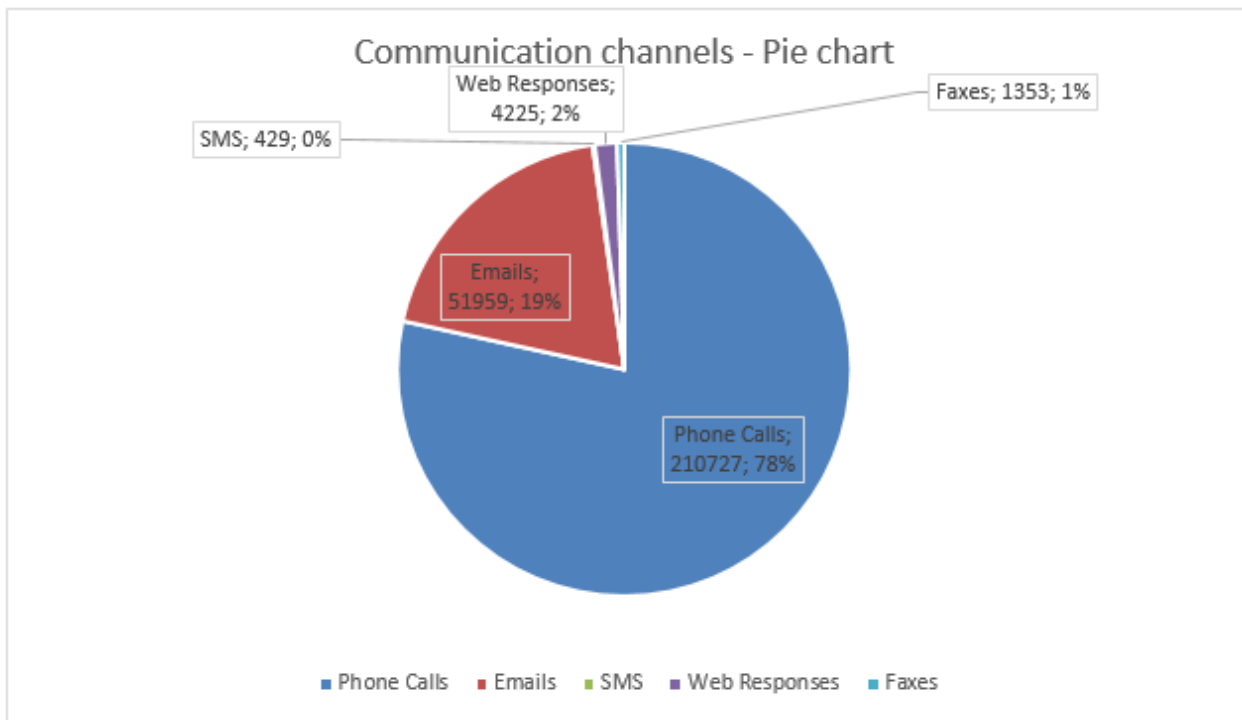
The purpose of Chapter 4 is to provide recommendations for a more improved management structure at the UODL call centre, which were attained after an analysis of the secondary data. The main objective of the study was to determine the communication preferences of DE students at the UODL. The secondary data for phone calls, emails, web responses, SMSs and faxes received at the UODL call centre from DE students were taken into consideration. The researcher relied on secondary data obtained from Loway QueueMetrics software programme and GroupWise email manager information systems to address the research question stated in Chapter 1, while also determining the communication preference of DE students.

In this chapter, conclusions are drawn from the analysis of the data analysed and discussed in Chapter 3. Recommendations are made based on the conclusions drawn from the secondary data analysis.

### **4.2 Conclusions**

The findings from the secondary data enabled the researcher to draw conclusions and make recommendations pertaining to the following communication channels utilised at the UODL call centre (see Graph 4.1 below):

- Phone calls
- Emails
- Web responses
- SMSs
- Faxes



**Graph 4. 1: Communication preferences percentages**

In Graph 4.1, the percentages of the communication preferences are depicted in a pie chart, which enabled the researcher to formalise conclusions and recommendations, as well as the additional information and tables in Chapter 3.

#### **4.2.1 Phone calls**

Phone calls were the primary method DE students utilised to communicate with the UODL call centre, with 78% of the total number of inquiries received (2014-2017). The number of phone calls received each year also increased by approximately 10 000 phone calls each year. This means that phone calls as communication preference play an important part in the communication preference of DE students contacting the UODL. Students' preference in this communication method can be contributed to its easy functionality quickness and DE students' ability in obtaining information immediately.

#### **4.2.2 Emails**

Emails were the second most popular communication preference for DE students, with 19% of the total inquiries received at the UODL call centre during the period 2014 to 2017. The number of emails received increased from 20 to 30%, and the researcher can forecast an increase of approximately 25 000+ emails in total for 2017. The analysed data indicated that this communication preference is growing and in the near

future can double or increase to approximately 40% of the total communication methods with the UODL call centre. The DE students preferred this method of communication as it is convenient, easily accessible, anywhere at any time, while being economical.

#### **4.2.3 Web responses**

Web responses were the third most popular communication preference with 2% or 4 225 web responses received at the UODL call centre during the period 2014 to 2017. The analysed data of the web responses increased drastically in 2017 and with the internet and technology becoming more accessible, DE students opted to use this method in the future. It is also a convenient method of contacting the UODL as it is economical and the web response can be accessed anywhere at any time. The researcher can forecast that the UODL call centre will receive approximately 4 000 web responses by the end of 2017.

#### **4.2.4 Short message service (SMS)**

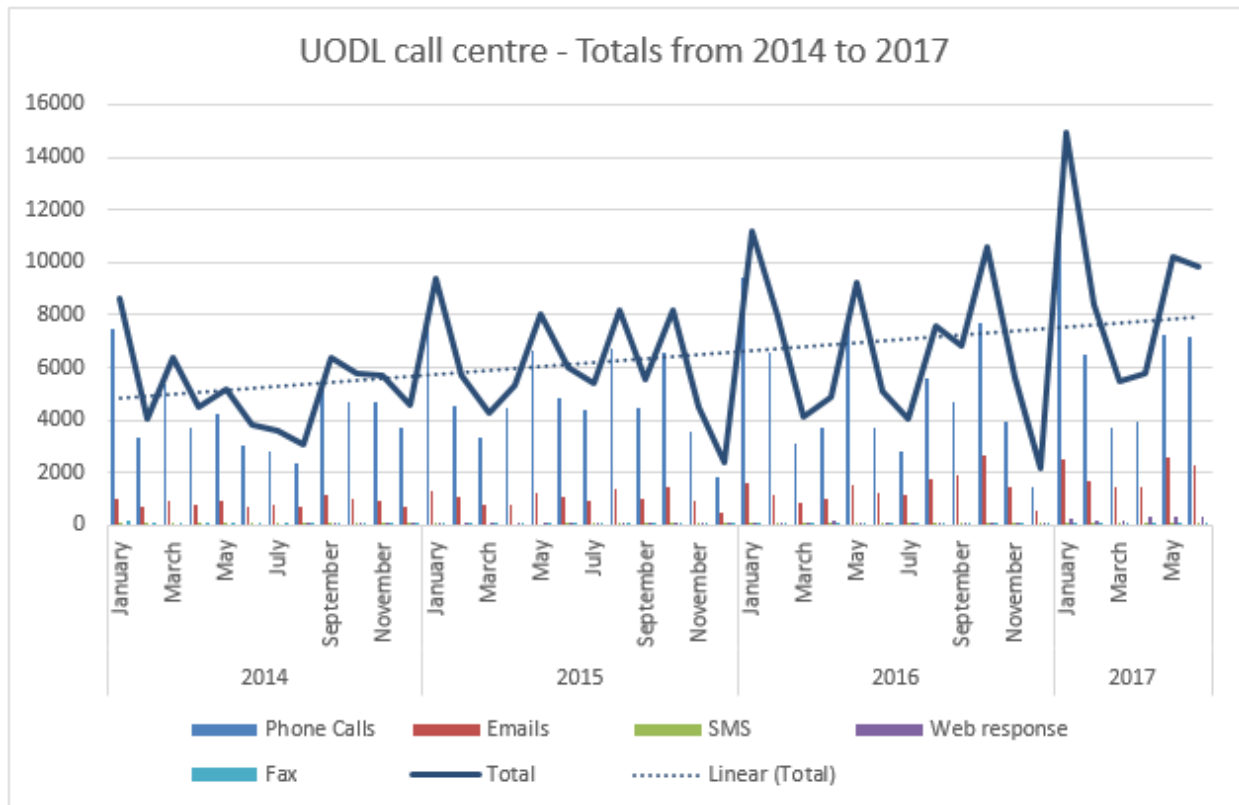
Short message service (SMS) was the communication preference used minimally by DE students, with less than 1% of the total inquiries received at the UODL call centre from the period 2014 to 2017. An increase in SMSs received at the UODL call centre was noted by the researcher, but the increase is not significant. The DE students chose this method as the number of words used to send an SMS was limited. The number of SMSs the UODL call centre receives will increase to approximately 300 SMSs by the end of the year. Management might want to stop this method of communication for enquiry purposes to the call centre, and only use it as communication to students where students should respond to SMSs. In this way, important information can be extracted from the reports.

#### **4.2.5 Faxes**

The number of faxes received at the UODL call centre was the second last communication preference chosen by DE students, with 2% of the total inquiries received. The number of faxes did decrease from 2014 to 2015, but increased again in 2017, indicating that this method is still a viable option for DE students. The DE students might have chosen this method as it was the only way to send documents to the UODL; no internet is needed to send a fax, or DE students in rural areas who can only send faxes. The researcher can forecast that the UODL call centre will receive approximately 500 to 600 faxes by the end of 2017.

### 4.3 Recommendations

In this section, the researcher provides recommendations to the UODL call centre regarding phone calls, emails, web responses, SMSs and faxes received at the UODL call centre.



**Graph 4. 2: Total communication received at the UODL call centre**

The researcher used the information depicted in Graph 4.2 to make recommendations for the UODL call centre. Overall, the number of inquiries received at the UODL call centre is increasing, and management should look at appointing more staff to ensure the effective operation of the call centre; especially during certain periods of the year where the workload is higher due to seasonal activities such as registration and examinations. The following recommendations can be made:

#### 4.3.1 Phone calls

The researcher recommends that the UODL call centre must employ more call centre agents available during peak times, especially in January, May, June, August and October. More phone calls can then be answered; this will increase serviceability and minimise the number of missed phone calls. Call centre agents can take leave in December, February and July, making it easier to manage employees of the UODL call

centre. The researcher recommends an optimum time that a phone call should last, to help time management and keep phone calls to the point and rule out unnecessary information.

A programme can be acquired or internally developed by the Information Technology (IT) office of the NWU to track each enquiry with a tracking number, providing quicker feedback to students when the student provides the tracking number. As mentioned in Chapter 2, technology will play a pivotal role in call centres, a system that flags certain words in conversations, to assist managers automatically as to which enquiries are picking up, so they can plan accordingly. For instance, when “registration forms” or words such as “struggle, help” are mentioned, the gaps in service delivery can be filled if the problems are known. The voice tone can also be tracked to notify the call centre manager or office head to step in and assist the call centre agent.

#### **4.3.2 Emails**

The researcher recommends that the UODL call centre should have dedicated agents only answering emails in peak times, and when the emails are up to date, these call centre agents can assist with the phone calls, depending on how many employees are made available by management. A target needs to be set that at least 100 to 150 emails are handled per day; afterwards, these agents can help with the phone calls. Peak times are almost the same as the phone calls, with January, May, August and October as the busiest months of emails received at the UODL call centre. The quieter months for emails are February, April, June, July, November and December. In the examination period, the number of inquiries decreases drastically and the UODL call centre agents can assist other offices with student applications or registrations.

As mentioned under phone calls, a tracking number system would work perfect to assist students, and agents should have access to all tracking numbers and the progress on each. The UODL call centre does have an auto response with basic information, but if IT can create a bot (a computer programme that responds automatically to customer emails), to send a specific response to the email received, so an agent does not have to respond to the email, only when a DE student flags an email as insufficient of information, an agent can assist.

A current problem experienced in the UODL’s call centre is that all agents do not have access to the archives, which is pivotal when a DE student is doing a follow-up. The

agent then needs to ask the call centre manager or office head to check the archives, for instance documents sent or received; a cloud system where all data is stored can be helpful, to give instant access in solving DE student problems.

#### **4.3.3 Web responses**

The web responses received at the UODL call centre have stayed constant throughout the year and should be monitored by the manager. From 2017, the web responses increased drastically. The researcher recommends that a call centre agent should prioritise the web responses before emails and phone calls, giving the responsibility to one person to answer the DE students as soon as possible.

The web responses can work in a similar fashion with a bot responding to frequently asked questions (FAQs). The DE student then flags the response if the information provided is not sufficient. The IT office can develop artificial intelligence (AI) so that the bot can learn from previous enquiries received and so fill its database with automatic responses. The call centre manager can also upload a list of FAQs on the website to assist any DE students.

#### **4.3.4 Short message service (SMS)**

The researcher recommends that the UODL should shut down the SMS service and only use SMSs to send information to DE students. Rather use SMSs for outgoing communication than incoming communication. DE students can respond to SMSs that are sent in bulk, the UODL call centre can then work with the responses, if necessary. The reasons are that an SMS is only limited to a few words, and there is a cost implication on the students and the UODL call centre to contact DE students.

As mentioned, this method is more practical to send out the SMSs to DE students and let them respond to the SMS, than to pull a report from the system. This method can be replaced by a live-chat on the UODL website to assist DE students.

#### **4.2.5 Faxes**

Faxes play a crucial part for DE students in rural areas, even if it is a communication preference that is not that popular. The UODL call centre receives a staggering number of application forms via fax. The researcher recommends that DE students should be made aware of the fax number, but also other communication technologies, which are free and more legible.



The DE students' faxes are received via email as e-faxes, so they count as emails. A reference number for each fax received will help the call centre agent to assist with follow-up enquiries from DE students.

### **4.3 Recommendations for further studies**

Recommendations are listed for further studies. They can be used to improve or better understand the communication preferences of DE students at universities:

- Research on the different types of inquiries DE students contact universities for.
- Research on more methods, including social media and the effect and response rate of a call centre.
- Research on the importance of communication channels in DE institutions.
- Questionnaires to be sent out to get personal feedback from DE students instead of using secondary data.
- Research the effect between the communication preferences of full-time students and DE students.

### **4.4 Summary**

This chapter summarised the conclusions and recommendations of each of the communication preferences of DE students. This chapter included recommendations for further studies regarding the communication preferences of DE students.

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## **APPENDIX A**

**- Permission letter to use data -**

**Appendix A**

Barend Jacobus Schutte  
58a Rissik Street  
Bult Area  
Potchefstroom  
2531

**03 October 2016**

Prof EJ Spamer  
Executive Director: Unit for Open Distance Learning  
North West University  
Private Bag X6001  
Potchefstroom

Prof Spamer

**PERMISSION TO USE CALL CENTRE'S (UODL) DATA TO CONDUCT A RESEARCH STUDY**

I intend to conduct a research study at the NWU School of Governance & Business for partial fulfillment of the requirements for the degree *Masters in Business Administration*.

The theme of the study deals with the communication channel preferences of distance education students at the UODL. I hereby apply for permission to conduct this research with the data of the UODL call centre.

The study includes the data of calls received on QueueMetrics call centre manager, emails, SMSs, Faxes, Web responses received on Groupwise and the data on the UODL Facebook platform.

I commit myself to the professional code of ethics for researchers which include among other:


- An unobtrusive research method will be used;
- No interference with the general and administrative programme
- The findings of the research will be made available upon completion to the Executive Director of the UODL.

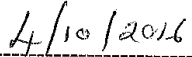
If you need any additional information about the research, you are most welcome to enquire in this regard and I will gladly provide you with the requested information.

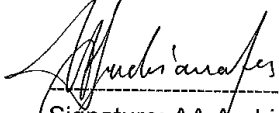
Yours truly

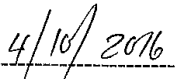
Ben Schutte  
MBA Candidate (North-West University)  
(Student nr: 13156780)  
Contact number: 084 587 8886


Study leader: Mr. Rooies Andrianatos  
Unit for Open Distance Learning: Academic Manager

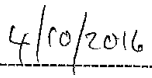
  
-----  
Signature: Prof EJ Spamer  
Executive Director: Unit for Open Distance Learning

  
-----  
Date:

  
-----  
Signature: AA Andrianatos

  
-----  
Date:

  
-----  
Signature: BJ Schutte

  
-----  
Date:



NORTH-WEST UNIVERSITY  
YUNIBESITHI YA BOKONE-BOPHIRIMA  
NOORDWES-UNIVERSITEIT  
POTCHEFSTROOM CAMPUS

Private Bag X6001, Potchefstroom  
South Africa, 2520

Tel: (018) 299-1111/2222  
Web: <http://www.nwu.ac.za>

## CERTIFICATE OF REGISTRATION 2017

It is hereby certified that

**BAREND JACOBUS SCHUTTE**

(Date of birth: 1985/08/18)

(Student number: 13156780 - 2004)

is registered as student on the **Potchefstroom**  
PC Faculty of Economic and Management Sciences

for

### MASTER OF BUSINESS ADMINISTRATION

Curriculum - MBA (E701P)

**PARTTIME CENTR (Final)**

Academic year : 2

Historical year : 2

#### Modules:

MBAC 8 11	STRATEGIC MANAGEMENT	Core module
MBAC 8 12	COMPANY PROJECT	Core module
MBAC 8 13	FINANCIAL MANAGEMENT	Core module
MBAD 8 21	LEADERSHIP (NEA)	Core module
MBAD 8 22	MARKETING MANAGEMENT	Core module
MBAD 8 23	ENTREPRENEURSHIP	Core module
MBAC 8 73	MINI-DISSERTATION	Core module

Registration date: 2017/01/12

Date of issue: 2017/06/28

	<b>Last date of qualification and module amendments:</b>
First semester	2017/02/17
Second semester	2017/07/28
Year Subject	2017/02/17

pp CAMPUS REGISTRAR

Noordwes Universiteit - North West University  
Potchefstroom Kampus - Potchefstroom Campus  
Oop Afstandsonderwys - Open distance learning

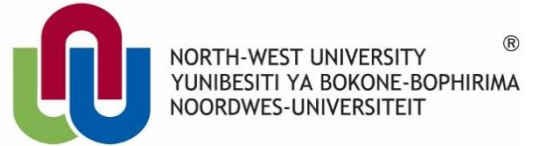
2017-07-05

Registrars - Registrations

## **APPENDIX B**

**- Ethical clearance data -**





13156780  
SCHUTTE, BJ MR  
13156780@nwu.ac.za

**NWU School of Business & Governance**

North-West University  
Private Bag X6001, Potchefstroom  
South Africa 2520

**Prof CJ Botha**

Tel: (018) 299 1672  
Email: christoff.botha@nwu.ac.za

16 March 2017

## ETHICAL CLEARANCE

This letter serves to confirm that the research project of **SCHUTTE, BJ** has undergone ethical review. The proposal was presented at a Faculty Research Meeting and accepted. The Faculty Research Meeting assigned the project number **EMSPBS17/03/06-01/27**. This acceptance deems the proposed research as being of minimal risk, granted that all requirements of anonymity, confidentiality and informed consent are met. This letter should form part of your dissertation manuscript submitted for examination purposes.

Yours sincerely

Prof CJ Botha

Manager: Research – NWU Potchefstroom Business School

## **APPENDIX C**

**- Registration of title -**



NORTH-WEST UNIVERSITY  
YUNIBESITHI YA BOKONE-BOPHIRIMA  
NOORDWES-UNIVERSITEIT  
POTCHEFSTROOM CAMPUS

Private Bag X6001, Potchefstroom  
South Africa 2520

Tel: 018 299-1111/2222  
Web: <http://www.nwu.ac.za>

Higher Degree Administration  
Tel: 018-299 2626  
Email: [21711542@nwu.ac.za](mailto:21711542@nwu.ac.za)

02 June 2017

Dear Mr Schutte

## REGISTRATION OF TITLE

At the recent Faculty Board meeting, the faculty of Economic and Management Sciences approved your title as follows:

**Identifying the communication preferences of distance education students at the Unit for Open Distance Learning**

The abovementioned title may under no circumstances be changed without consulting your supervisor/promoter and obtaining the approval from the Faculty Board.

Should you wish to submit for examination, please inform your supervisor. If you intend on not submitting, please submit the Notice of not submitting form. The form is available at the M & D department or the administrative manager of the faculty.

### Dates of submission of copies for examination:

- 1 April 2017 to 30 April 2017 to qualify for the September/October 2017 graduation ceremony
- 1 October 2017 to 31 October 2017 for the May 2018 graduation ceremony

Should you neglect to submit by 30 October 2017, the possibility exists that you will not qualify to graduate in May 2018. You will then be required to register again for 2018 to qualify for the next graduation ceremony in September/October 2018.

Your attention is drawn to the following publications / web addresses:

- A Rules:  
[http://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/i-governance-management/policy/7P-Arules2015\\_e\\_1.pdf](http://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/i-governance-management/policy/7P-Arules2015_e_1.pdf)
- Manual for Postgraduate Studies:  
<http://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/i-research-support/Manuals/ICRI/2016-04-06%20ICRI%20Manual%20for%20M%20and%20D%20students.pdf>

We wish you a pleasant and successful period of study.

Yours sincerely

**Ms N Pretorius**  
FOR CAMPUS REGISTRAR

Original details: (1051217) C:\Users\10512187\Desktop\Title registration.docm  
9 March 2015

File reference: 7.1.11.1

**APPENDIX D**

**PROOF OF LANGUAGE EDITING -**

To whom it may concern

Cecile van Zyl  
Language editing and translation  
Cell: 072 389 3450  
Email: Cecile.vanZyl@nwu.ac.za

26 October 2017

Dear Mr / Ms

Re: Language editing of dissertation: (Identifying the communication preferences of distance education students at the Unit for Open Distance Learning)

I hereby declare that I language edited the above-mentioned mini-dissertation by Mr Ben Schutte 13156780

Please feel free to contact me should you have any enquiries.

Kind regards



Cecile van Zyl  
Language practitioner  
BA (PU for CHE); BA honours (NWU); MA (NWU)  
SATI number: 1002391