

**Student culture and changing identities: An investigation into the use of new media technologies to enhance educational engagement in open and distance learning.**

by

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submitted in accordance with the requirements for  
the degree of

**MASTER OF ARTS**

in the subject

**COMMUNICATION SCIENCE**

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: **Professor S O Sesanti**

January 2018

## DECLARATION

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Student culture and changing identities: An investigation into the use of new media technologies to enhance educational engagement in open and distance learning.

I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



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# Abstract

The objective of this study was to investigate how the integration of social media applications such as Facebook can be advantageous to students in Open Distance Learning (ODL) settings or environments.

This study was carried out in the context and recognition that the use of social media has become a norm in modern-day society where people in general, and students in particular, can upload videos, images and texts towards achieving a common purpose.

In order to achieve the objectives of this study, the researcher employed two theoretical frameworks, namely Connectivism and New Media Theory. The study also used Qualitative Research Methodology, particularly the qualitative content analysis research technique and focus group interviews.

The study found that the use of Facebook provided students with better access to online resources and facilitated more interaction with fellow students. In an ever-changing world, the study established that technology has the potential to innovate distance learning, providing students with an open space to learn, collaborate and communicate more effectively. This means that social media applications have the power to connect people and bridge the gaps of time and distance. This is especially relevant in ODL environments where students operate in isolated spaces and have little or no direct interaction with their lecturers and fellow students.

# Opsomming

Die doel van die studie is om 'n ondersoek te loods na sosiale media integrasie, meer spesifiek Facebook, en hoe voordelig die gebruik daarvan vir studente in die konteks van 'n Oop- en Afstandsonderrigleer (OAL) is.

Die studie was gedoen binne die konteks, en met inagneming van, hoe die gebruik van sosiale media 'n norm in die hedendaagse samelewing geword het, en hoe mense oor die algemeen videos, prente, en teks kan oplaai om 'n gesamentlike akademiese doel te bereik.

Ten einde die doel van die betrokke studie te bereik, het die navorser twee teoretiese raamwerke gebruik, naamlik Konnektivisme (Connectivism) en Nuwe media-teorie. Die studie het gebruik gemaak van 'n kwalitatiewe navorsingsmetode, meer spesifiek kwalitatiewe inhoudsanalise en fokus-groep onderhoude.

Die studie het bevind dat die gebruik van Facebook studente beter toegang tot aanlyn-hulpbronne verleen, en ook meer interaksie tussen studente bewerkstellig. In 'n veranderende wêreld het die studie bevestig dat die gebruik van tegnologie oor die potensiaal beskik om innoverende afstandonderrig aan te bied en ope platforms vir studente bied om met mekaar saam te werk asook meer effektief te kommunikeer. Sosiale media beskik dus oor die vermoë om mense nader aan mekaar te bring, en ook die gaping van tyd en afstand te oorbrug. Dit is hierin ook die geval waar studente dikwels in isolasie, met min of geen direkte kontak met dosente of mede studente in 'n OAL konteks, studeer.

# Dedication

To my beloved parents, **Ebrahim and Nazley Allie**, a thousand thank yous cannot express the appreciation for the unconditional love and support that I have received from you throughout the years.

# ACKNOWLEDGEMENTS

I wish to express my heartfelt gratitude to all those individuals who provided me with invaluable support, assistance, stimulating advice and inspiration. It is through your encouragement and understanding that I am able to complete and submit my dissertation.

- My Creator and Sustainer, Allah the Almighty
- My parents, Ebrahim & Nazley Allie
- My Supervisor, Professor Simphiwe Sesanti
- My mentor, my friend, Jacques du Toit
- Postgraduate Course coordinator, Soekie van Gass
- My editor, Adelheid Manefeldt
- My family, Tasneem, Zieyaad, Romla, Ebrahim & Imaan
- My friends, Giles Stevens & Phumza Hebe
- My colleagues at work William Boonzaaier, Kevin Brink, Sharon Wolf, Verne Koemalo, Neil Hector, Ayesha Sha & Lee-Ann Davids.
- A special thanks to all the interviewees who participated in my research study.

A huge *thank you* to all of you for your guidance and support to successfully complete this research study.

# ACRONYMS

ODL – Open distance learning

# KEY WORDS

Active participation

Connectivism

Facebook

Learning communities

New media technologies

New Media Theory

Online spaces

Open distance learning

Peer collaborating

Social media applications

Social Presence

Student engagement

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## Chapter One

### Introduction

#### 1.1 Introduction

New media technologies have played a significant role in the twenty-first century which has contributed to a more technologically advanced era in which computer-mediated learning and social media applications play a central role in tuition support at universities (Tu 2014:82). Social media networking applications have revolutionised the way in which people communicate, connect and share information with each other in all spheres of existence: from business and engineering to education (Poore 2013:06). The main advantage such technologies provide is that they are no longer limited to merely playing an enabling role in sharing information, but now also facilitate connection between people. This is made possible because these technologies facilitate “link[s] in the chain of the development process” (Hudson 2006:12). Social media networks have become influential in the way people connect with one another, especially among students enrolled at Higher Institutions of teaching and learning. In a research study conducted by Kim, Wang and Jeyoung (2016:264), it was observed that students have always adapted to changes within digital environments, and such is the reason for the prominence of social media networks. If integrated with education, social media can create an enhanced level of enthusiasm among students and facilitators (Selwyn 2009:158).

Through various social media applications available, the integration of new media technologies with university curricula have prompted students to enhance their educational engagement and structure their learning relating to their studies accordingly (Selwyn 2009:158). Many students have become more active on social media networks and have now incorporated ways to productively include such media learning to share videos and informally structure their studies to reach learning outcomes (Robelia & Greenhow 2009:121).

## **1.2 Motivation for the research**

In 2014, the University of South Africa in the Western Cape offered online academic literacies and context literacies support programmes to aid students with their academic reading and writing as well as their digital literacy skills. Amid such interventions, students often felt disconnected and lost in e-spaces, remarking on feelings of alienation and isolation in terms of their learning (Sahin 2012:444). However, through embedded and facilitator-driven support with social media applications, students were able to create a more confident social presence in the online world. In line with the foregoing observation, Poore (2013:7) argues that teaching can be complemented through the consideration of appropriate online communication practices.

The use of social media applications, and Facebook in particular, has afforded students with invaluable opportunities to transform the way they communicate, connect, collaborate and learn (Tess 2013:61). Through technologies, students have now gained access to platforms and learning opportunities which allow them to create their own content and monitor their own collaborative online learning environment (Poore 2013:06). Since the advent of social media technologies in Higher Education students are able to engage with their peers, tutors and lecturers concerning coursework queries and to interact in a peer-based environment which is much more structured than fundamentally-based pedagogy (Towner & Munoz 2011:36). However, amid attempts to facilitate learning, proper integration of new media technologies to mediate teaching and learning remains inchoate in various academic courses offered at the University of South Africa (henceforth referred to as Unisa).

While Open Distance Learning (ODL) institutions such as Unisa provide equal opportunities for students who are unable to access higher education on a full-time basis or through campus-based learning, services still need to be accessible to students regardless of time, space or geographic location (Letseka 2015:131). Through its institutional ethos, the description of such an intervention also needs to promote a setting and environment which can steer self-directed learning whilst eliminating a space of isolation due to lack of face-face interaction with other students, lecturers or immediate or synchronous support (Veletsianos 2010:63).

Active learning and social interaction among students in teaching and learning environments (especially those which are 'community-centred') can be enhanced through social media applications (Pereira, 2005:41). Pereira finds value in active learning and social interaction, especially where students are able to provide each other with emotional peer support and work together to solve problems and collaborate to achieve common objectives (Pereira 2005:41-42).

In this research study, the researcher was interested in investigating whether the integration of social media applications such as Facebook provides students with advantages in an ODL setting. In the last decade, the use of social media has become a norm in modern-day society because people in general, and students in particular, are able to upload videos, join groups to drive career-awareness, like and share pages, and even interact with one another as they are working towards a common goal. Social media applications can connect people and bridge the gap of time and distance.

Due to its ubiquity and value, Facebook has become a tool in higher education and the efficacy of new media technologies has promoted the way in which students think, communicate, collaborate and learn. By using social media applications, students and facilitators can create an active learning participation system, especially where distance and face-to-face lecturer and student engagement lacks. Furthermore, the study sought to investigate the benefits, if any, of using social media to support academic activities. The findings derived from this study could influence both the roles in creating and maintaining an e-learning community which could be beneficial to the use of new media technologies to support student engagement, as well as collaborative learning.

### **1.3 Problem Statement**

The central objective of this study was to investigate if the integration of social media applications such as Facebook provides students any advantages in an ODL setting. In more explicit and lucid terms, this study sought to investigate whether the use of social media applications such as Facebook make a difference in the quality of learning in distance learning institutions.

The social media application, Facebook, as a computer-mediated application, was chosen due to its popularity as social media networking site among students. New media technologies have created a modern society, where students are now able to engage with one another in a more effective and accessible manner. Unisa engages students through e-mail reminders, Messenger, telephone calls, online embedded radio, telecast recordings, podcasts and additional online resources. Yet, with increasing numbers of users amounting to more than 1.79 billion active users online (Statistica on Facebook, 2016), investigation into its usage of Facebook for academic purposes remains limited, especially in academia. While, there is a lot of research that covers the use of Facebook, much more needs to be done.

This research study focuses on how social media applications such as Facebook could enhance learning practices and experiences for students, especially in an ODL context.

In recent years, Facebook has become an emerging space for students to intellectually and socially engage, both synchronously and asynchronously, in Higher Education systems (Poore 2012:04).

#### **1.4 The context of the research problem**

In a world surrounded by new media technologies, students and lecturers have become increasingly receptive to the idea of integrating social media applications with learning (Veletsianos 2010:62). In the context of New Media Theory, new media technologies can be defined as the interaction between the Internet and technology which provides students with suitable electronic portals to engage in information sharing and communication through images, sounds and text messages (Friedman & Friedman 2008:01). Social media applications have provided many opportunities for individuals to engage with social activities, especially in distant communities (Kim et al. 2016:226). It is in this regard that new media technologies provide not only accessibility and efficacy to users, but also contribute to four important features that can be more beneficial to users, namely that of convergence, creativity, community and communication (Friedman & Friedman 2008:01). The advent of new media technologies has made online spaces

more attractive for people to engage socially, intellectually and culturally with each other. In a teaching and learning environment, students also make use of social media networks as alternative ways in which to enhance and self-monitor their studies, professional career development and learning.

In using social media networks such as Facebook, Skype and WhatsApp, people have become more digitally-savvy, and these digital skills have enabled them to use social media in a manner that is accessible, easily navigable and socially relevant. With the popularity of technologies and social media networks, the use of such applications has created better communication infrastructures, connectivity channels and distribution of information within seconds (Poore 2012:08). Users are now able to communicate and share information with each other instantaneously, bridging the gaps of time and space between people. According to Roblyer, McDaniel, Webb, Herman and Witty (2010:137) social and interactive social media applications can also enhance social interactions among students. Therefore, social media applications provide students with a sense of identity and belonging as these applications are tools of communication and connect users with other students and academics. Academics and regionally-based tutors often use Facebook as a communication medium to increase quality engagement with their students, thus creating an effective social learning setting for both facilitators and students.

In the last decade, students in Higher Education have become more adaptable and reliant on new media technologies as it is inevitable living in a competitive, modern society surrounded with new digital technologies, the internet and e-driven teaching and learning (Roblyer et al. 2010:134). Oyedemi (2014:146) elaborates that students have become more dependent on new media mainly due to their regular interaction on social media applications and the internet. Findings of Oyedemi (2014:146) indicate that 56.5% of South African students who had access to internet services at home were more confident than their peers to search for information as a popular activity. The study further points out that with regular access and immersion into computer-related activities and the Internet, students can explore a variety of online activities with more confidence and technological know-how. Another study conducted by Rambe and Bere

(2013:558), found that many students preferred to engage through WhatsApp for educational activities as it provides them a sense of freedom of expression in the monitoring of their own collaborative teaching and learning environment. It is imperative that university lecturers, tutors and facilitators explore innovative ways of teaching and learning when social media applications such as Facebook are integrated into conventional learning. This is particularly important as it promotes student interaction especially in an environment where there is quasi-separation in terms of lecturer and student engagement.

In embarking on this study, the researcher anticipated that findings would inform strategies to enhance new media technology strategies, especially for students that are studying at a distance learning university.

It is imperative, especially given learner variances and the changing demography of younger students entering distance learning universities in South Africa, that students are encouraged to use social media applications such as Facebook as a communication tool to engage with other fellow students and facilitators. By creating an online space through Facebook, students and facilitators can share mutual interests and concerns.

This research study is connected to the applied stream of communication science and media studies, as it highlights human interaction (students) and the use of new media technologies (social media networking sites) and how they create communication and information spaces for people to engage across distances. In addition, the research was conducted among higher education first year students at an ODL setting to explore why and how these students use social media applications for learning and education purposes.

### **1.5 Theoretical points of departure**

This study utilised New Media Theory and Connectivism to explore social media applications. These theories examine the impact of new media technologies on the processes of human communication, and the emergence of new age information and communications technology. New Media theory integrates the use of digital computer technology to disseminate and display content across cultural backgrounds (Manovich

2001: 62). Through the use of various technologically-related communication platforms such as blogs and wikis, social media applications provide interactivity and connectivity among students.

This study also examined the lived experiences of students in electronic spaces of learning. New media technologies are widely referred to as Web 2.0 and include a variety of web-related communication platforms such as blogs, wikis, social media applications and many more digital content (Friedman & Friedman 2008:01). Connectivism, as explained in this study, is a learning theory that was developed by Siemens (2006:03). This theory describes how learning can be managed through better understanding of emerging technologies and their relationships to knowledge networks (Veletsianos 2010:115). A more detailed explanation of the theories is presented in Chapter Two.

### **1.6 The objectives of the study**

The applied goal of research value is aimed at providing a broader understanding and/or to solve problems (Du Plooy 2011).

The following objectives have been formulated to achieve the research aim. The central objectives of this research study are to:

- understand the theories of student identity through the lens of New Media and Connectivism;
- explore the reasons why students engage with the social media application Facebook as a support strategy for their academic studies;
- describe and understand the role of the student in using new media in an open and distance learning environment;
- provide suitable recommendations to facilitators and lecturers in open distance learning;
- revisit online support and tuition support strategies to enhance student engagement in an online environment.

## **1.7 Research Questions**

The functions of research questions are to designate what is going to be investigated in the research study (Hansen & Manchin 2013:210).

### **Major Research Question**

The major research question of this study is: **In what way can the integration of social media applications such as Facebook be advantageous to students in an ODL setting?**

Below are the research sub-questions which clarify the major research question:

- In what way does Facebook make the learning of ODL students effective?
- What can institutions of higher learning do in order to make this type of learning more effective than is currently the case?
- What are the particular advantages that students have identified which are associated with Facebook learning?
- What are the particular disadvantages that students have identified which are associated with Facebook learning?
- Do students prefer to engage with students and lecturers through Facebook?

## **1.8 Research Design and Methodology**

This section outlines the research design and methodology employed in this study. The researcher also explains the relevance of, and the logic that informed the choice of the research design and methodology. The research design is outlined first, and then followed by the research methodology.

### **1.8.1 Research Design**

This study employed a 'case study' as its research design. A 'case study' refers to an intensive investigation of a single unit which could be an individual person, family, community, society or a team or any other unit in social life. For the purpose of this study, a case study research design was used to aid the researcher in understanding

the influence of social media connections from the study's perspectives (Creswell 2014:14).

### **1.8.2 Methodology**

A qualitative research methodology was employed for this study. A qualitative research methodology is aimed at exploring and understanding human problems from their own perspectives in their natural environment (Creswell 2014:04). Qualitative research enables the researcher to describe and understand human behaviour and to conduct research on cases that arise in the natural flow of social science (Babbie & Mouton 2001:53; Neuman 2011:151). A focus group study technique was employed during interviews to understand students' experiences relating to modern day social media applications. The methodology section will be discussed further in Chapter Four.

### **1.9 Chapter Outline**

Chapter 1: Introduction – this chapter introduces the study.

Chapter 2: Literature Review – this chapter reviews literature associated with the theme of this study.

Chapter 3: Theoretical Frameworks – this chapter discusses the theories employed in this study.

Chapter 4: Research Design and Methodology – this chapter discusses the research design and the methodology employed in this study.

Chapter 5: Research Findings – this chapter outlines the findings of this study.

Chapter 6: Data Analysis – this chapter analyses the research findings.

Chapter 7: Conclusions and Recommendations – this chapter outlines this study's conclusions and recommendations for future studies.

## Chapter Two

### Literature Review

#### 2.1 Introduction

The aim of the literature review is to provide insight into research that has already been conducted, which correlates to the research that will be conducted (Wagner, Kawulich & Garner 2012:28-29). A variety of reviews of literature has been read in order to attain information that is of quality and significance to the research study such as the literary works of McQuail 2010, Poore 2013, Van Dijk 2012, Downes 2010 and Siemens 2007. Babbie and Mouton (2007:565-566) explain that a literature review should indicate the general agreement and disagreements in previous research. It is imperative that the reader is aware of both the negative and positive effects of the topic of the research study and present suitable literature that will be relevant to the research project. The purpose of this chapter is to provide constructive and insightful information relevant to this study.

The growth of social media networks and the impact thereof on higher education have given cause to many research projects, as many students are increasingly turning to new media technologies for acquiring information and communication as additional learning tools (Greenhow & Robelia 2009:121). In research studies it is shown that social media networks such as Facebook have great potential for teaching and learning in higher education, as the intention of this open space is to connect people and encourage collaboration, engagement and a positive learning experience (Graham 2014:17).

Social media applications have been considered as alternative avenues to engage and connect with students and facilitators. Given the influence of social media applications on education and learning it has attracted a considerable amount of interests in the academic sector. The advancement of emerging new media technologies in an Open Distance Learning (ODL) environment can steer education and communication instruments for teaching and learning opportunities to enhance learner engagement. This literature review unpacks how the use of social media applications has been

integrated into the higher education environment, and the potential it has as a social platform for learning communities.

## **2.2 New media technologies**

New media technology platforms like Facebook, MySpace and WhatsApp can connect many people simultaneously through various devices such as computers, laptops, smartphones, iPads with the convergence of the Internet. New media technologies have proven to be an important and accessible way of communication that provides instantaneous information to users provided that they have access to these conveniences. McQuail (2010:144) explains that the use of new media technologies can be attributed to the fundamental characteristics of online engagement such as interactivity (the person decides with whom they want to interact with), social presence (the experiences that new media technologies give the user), autonomy (the person feels that they are in control of the content selection), playfulness (uses new media technologies for user's gratification) and personalisation (the degree to which the content is exclusive from others) (McQuail 2010:144).

For Castells (2004:06) and Van Dijk (2012:23), the influence of information and communication technologies has contributed to a 'network society'; a society that has become more interconnected through the exchange of information and communication. A network society can be defined as a contemporary society with an infrastructure of social and media networks that characterise a mode of organisation at every level: individual, group/organisational and society (Van Dijk 2012:24). The use of new media technologies has created a contemporary society where face-face interaction has been replaced with interaction through technologies and has given people a sense of autonomy and independence while allowing the creation of new relations outside of their world. Castells (2004:09) notes that the dynamic of social networks is that it has become the heart of social interaction and society's production of meaning.

With the advent of new media technologies, most people have distributed their own content and created their own mass self-communication with applications such as Facebook, Twitter, WhatsApp and personal blogs (Curran, 2010:08). Furthermore, the

appearance of mass self-communication has become an open space for social and current movements. Tapscott and Williams (2007:52) agree that young people are no longer content with mere customisation and control of existing products and want greater autonomy through designing and distributing products themselves. New Media Theory will be discussed in detail in Chapter Three.

### **2.2.1 Digital learners**

The emergence of technology has created a digital society – new generations of students have been termed digital natives (Thinyane 2010: 407). Growing up with an array of technologies and the Internet, many students have immersed themselves into technologies for communication and accessing or distributing information (Greenhow & Robelia 2009:121). Students in this digital age have become more interactive, innovative and informed, through early adoption of technology (Oyedemi 2014:138). Downes (2010:27-28) elaborates that through their interaction of modern communication technologies, learners are constantly changing, which is where the terms ‘digital natives’ and ‘net generations’ originated (Thinyane 2010:407:). It was Mark Prensky (2001:01) who coined the term ‘digital natives’, being those who are known to grow up in the digital age of technologies, the Internet and video games that have become significant to their existence (Zdanow & Wright 2013:65). One can even state that digital natives are digital learners and are active participants who rely on communication technologies to attain information and carry out social interactions. Therefore, if facilitators want to remain relevant in the lives of their learners it is important that they become resourceful and use strategies which accommodate the learning lifestyles of the digital native (Moyo & Abdullah 2013:135).

Technologies are very essential in young people’s existence as they are constantly surrounded by and immersed into new technologies in a manner which the older generations did not have access to such technologies and platforms. Prensky (cited in Poore 2013:168) argues that digital natives live in a different world than their predecessors; students can immerse themselves into digital environments, and process information differently. According to Prensky (2001:02), the use of Web 2.0 technologies has great potential to enhance learning requirements. For students, educational

technologies have become suitable instruments for learning because they are able to make use of various platforms to benefit them and be more active through online activities (Tu 2014:28). Students have consequently become more proactive and digitally savvy through Web 2.0 technologies and through access and use of these technologies (Thinyane 2014: 407).

### **2.3 Social media applications platform**

Through various social media applications available, the integration of new media technologies has prompted students to enhance their educational engagement and to structure their cognitive learning environments relating to their studies (Junco 2012:163). Many students have become more active on social media networks and have incorporated a productive way to include learning outcomes (Selwyn 2009:158). Poore (2013:82) defines social media networking sites as communication, sharing and connection which makes it ideal for the “fluid and dynamic nature” of peer learning. According to Tess (as cited 2013:60 in Joosten 2012), social media can be defined as any number of technological systems related to collaboration and community. Social media applications are internet applications that enable the sharing of things such as text messages, photos, music, graphics and information (Van Dijk 2012:180), and as the name suggests, social media encourages participation and engagement between people (Bell & Waters 2014:142). The features of these social media applications provide learners and facilitators with resources to build and maintain learning communities, where students are free to chat, text, have discussion forums, upload and download photos, videos and audio and share files (McCabe and van Wyk 2012:72; Tu 2014:22). Social media networking platforms such as Facebook, Twitter and WhatsApp are used to host events, debates, reviews, aggregate resources and support courses as well as reading circles (Mbodila, Ndebele & Muhandji 2014:115). Furthermore, these platforms create a collaborative and communicative learning environment for students by providing them with discussions and interactions. Indeed, the power of social media networking in education lies in the provision of learning opportunities to nurture student development.

### ***2.3.1 Efficacy of social media for learning and education purposes***

Social media networking sites such as Facebook have become emerging spaces for students to intellectually and socially engage with peers and with learning facilitators (Selwyn 2009:158). Social media networks have grown exponentially in higher education where most of the users are digital natives (Rosmala & Rosmala 2012: 157). Most universities have adopted the trend to use social media networking sites as a Learning Management system (LMS) to support academic engagement (Mbatha & Manana 2012:114; Rosmala & Rosmala 2012:157). Roblyer, McDaniel, Webb, Herman and Witty (2010:137) agree that social media networking sites have become prominent avenues for social communication and effective contributors to successful learning, and that interaction has become a key indicator for online learning.

Van Wyk (2013:370) notes that scholars have found that social media applications to be characterised as learning resources of the twenty-first century. Moreover, media applications highlight the necessity of active participation, connectivity, collaboration and sharing of information and knowledge among peers. Ivala and Gachago (2012:153) agree that social media can be viewed as a supplementary learning and teaching method as it promotes collaboration, peer support and student engagement. It also enhances students' learning experiences through customisation and personalisations since students are in control of their learning skills and communities (Tu 2014:13). Social media sites offer valuable tools for collaborative learning (Moran, Seaman & Tinti-Kane 2011:03), especially in higher education institutions (Mbatha & Manna 2012). Social media networking sites have been notable for providing channels for informal and unstructured learning (Selwyn 2009:158). For instance, social media networking sites offer opportunities to re-engage individuals with learning and education and promoting "critical thinking in learners" as part of their academic endeavours (Selwyn 2009:158).

Greenhow and Robelia (2009:120) distinguish between social media networks and virtual communities that afford users (individuals) to articulate and make visible their social networks. In addition, this allows other users to view your profile and interact online, thus creating online social connections. Rosmala and Rosmala's (2012:164)

research revealed that the most dominant function of social networking sites is to serve as an academic resource for material sharing and searching. These networking sites allow students and teachers to share resource with one another. Furthermore, the study also revealed that 60% of respondents use social media networking for distributing communication and to support facilitator-driven activities.

Bardaglio and Putman (as cited in Greenberg 2013:24), social media applications can be classified as an advancement in education since they can aid the disbandment of existing boundaries within learning and teaching. This is mainly due to social media applications' capacity for building social capital, that may facilitate learning environments where learners are producers and consumers of information (Bardaglio & Putman 2009:83) and thus boosts student participation in learning environments. Van Wyk (2014:371) notes that the dynamism of social media tools and what they present to students facilitates active participation or co-production rather than passive consumption of content, therefore learning becomes participatory rather than a passive social process.

Van Wyk (2014:371) notes that social media application tools have inspired students to become active participants or co-producers in their learning activities. In the past, students were passive consumers of learning content, as feedback was slow and only facilitators were able to manage the content (Poore 2013:05). Social media applications such as Facebook have challenged this paradigm since the premise is to form a networked media that allows instantaneous, simultaneous commentary, and reaction to material posted on the internet through a process of collective communication (Poore 2013:05).

Of all the social media applications available, compared to other social media applications Facebook has been widely investigated as a communication tool among students and the connection it has with higher education (Bosch 2009:194). In recent years, students have become more immersed into new media technologies, or as Prensky (2001:02) pointed out, they become digital natives. Facebook in particular, has been viewed as a communication facilitator for student motivation in learning activities

and creates an affective learning and classroom climate (Mazer, Murphy & Sidmonds cited in Dogruer, Menevis & Eyyam 2011:2643).

One of the most popular and influential social media platforms to date is Facebook. Since its inception Facebook has created much interest in the social media context and has an online platform for users to connect.

## **2.4 Facebook**

In 2004, Mark Zuckerberg created Facebook to facilitate 'closed connections' between students at Harvard University. Two years later, Facebook was extended to the rest of the world, providing features such as quizzes, games, creating personal profile pages and many more (Grossecka, Bran & Tiru 2011:1425). To sign up to Facebook, users had to provide valid e-mail address to ensure authenticity (Scialdone 2014:05). In 2014 Facebook announced that it attained 802 million daily active users and 1.28 billion monthly active users (Facebook Inc., 2014), making it the most active social media networking site to date. Indeed, Facebook has become the largest multilingual social media networking site on the Internet which could be accessed through mobile technologies and the Internet (Grossecka. et al. 2011:1425) therefore making it more accessible for the students and facilitators to foster positive relationships (Roblyer, et al. 2010:136). Heiberger and Harper (cited in Mbodila & Ndebele 2014:117) define Facebook as a synthesis of many Internet-based communication tools previously in wide but disconnected use. The authors further elaborate that it integrates static-user-designed webs (personal pages, synchronous (instant messaging) and asynchronous chats , picture uploading, group formation, event hosting, web development tools, dynamic searches, RSS feeds (dynamic real-time news feeds), blogs (web logs) mass and individual messaging and email, as well as two unique features networks and friends. In addition, the networks and friends give these users a method of socialisation in an online environment filled with other users.

### ***2.4.1 Benefits of using Facebook in academia***

Among the various features that Facebook presents to its users are Facebook groups have become widely popular as discussions forums and allow specified threads based

on common topics and activities, this functionality is made possible user recruitment and instantaneous messaging through, also known as social media networking (Park, Kee &Valenzuela 2009:729). Facebook has become a global social network of choice for many young people and enables them to build relationships with fellow students who are studying the same modules or are in the same academic field so that they can share ideas and support one another (Bell& Waters 2014:151). According to Kim, Wang and Oh (2016:265), Facebook provides students with a sense of belonging which allows them to facilitate interactive communication and connect with people who share similar interests and social support. In addition, Facebook provides users with a sense of digital identity thus enabling users to create a social presence to collaborate and connect with one another in a more confident and positive manner (Poore 2013:82). Social media applications such as Facebook and lately also Twitter have become potentially engaging for students especially in higher education (Junco 2011:163), with the central aim being to connect groups of people and encouraging them to share and create information (Graham 2014:16). The effective ways of learning through social networking sites have been identified as partnership, presence ownership and a sense of control (Donlan 2012:575 cited in Salavuo 2008). Minocha (2009) notes that Facebook can be implemented for academic activities such as course-related information to students, an online space for discussions about the successes and failures about study work and effective ways to build and maintain a strong communication line between students and lecturers' engagements. Moreover, Facebook has become beneficial in terms of collaborative learning due to common interests shared among students in a manner that is not usually catered for in the immediate educational setting (Selwyn 2009:158). Through social media applications, students feel more confident and positive to engage with one another in a way that provides improvement in learning outcomes. According to Moyo and Abdullah (2013:142) Facebook has a variety of educational applications that provide learners with opportunities to enhance their diverse academic activities, especially through reading and writing.

In recent studies, many scholars have identified social media as a phenomenon that will enhance quality of education and learning. In a research carried out by Tess (2013:63)

he found that 78% of students felt Facebook can be used as an effective learning tool, as it increases active participation in course-related discussions and posted lecture notes and assessments, which are beneficial to student development. In a study conducted by Roblyer et al. (2010:138), they found a significant difference in the way lecturers and students perceive the role of Facebook as a social networking site, rather than an educational medium. The study found that students were much more open to the idea of Facebook as an educational channel than teaching staff. Grossecka et al. (2011:1429) found that 70% of students who participated in an online survey believed Facebook has become a cheap communication tool to promote knowledge in a higher education setting. In addition, the study also indicated that 57% of the students view Facebook as a social learning environment, and 30% of students felt that Facebook provided an environment for research and completing assignments. Bicen and Cavus (2011:946) suggest that students' use of Facebook applications and tools such as games and questionnaires help increase knowledge acquisition, concentration, research ability and motivation. In addition, Facebook provides a way to maintain and strengthen social ties with fellow students, which improves social and academic settings.

In a study conducted by Cheung, Chiu and Lee (2011:1341), they found that a key factor informing students' use of Facebook was social presence. These authors explain that features of social presence encourage collaboration. For instance, the newsfeed allows users to connect and collaborate with their friends online and be part of the activities that their friends engage with. McQuail (2010:144) notes that there are various factors that draw people to social media networking sites such as social presence, connection and a level of social belonging which enable users to be part of a social community, posting or liking comments by other users by using the Facebook community. Anonymity provides users a sense of invisibility; they can be whoever they want to be and have the liberation to be expressive in their views and dictating their own rules of engagement. Moore (2013:157) notes that the more learners engage themselves with their peers and the facilitator, the more they become comfortable and build trust between one another. Moore (2013.) further observes that trust is fundamental as it provides a learning community where ideas, feedback and thoughts

are shared without criticism, and as interaction enhances these, thoughts are then constructed into knowledge and understanding.

In the South African context, Bosch (2009:188) conducted virtual ethnography questionnaires and interviews and a qualitative content analysis on the responses of 200 students. The results showed that students mostly engaged with Facebook for academic purposes, sharing ideas about assignments and lecture/study notes and topics they would prefer the lecturer to cover. In addition, lecturers engaged with Facebook to provide important study notes, tips and answer questions for students who might not have the courage to ask in a normal class setting. In a similar study conducted by Mbodila et al. (2014:122) the authors indicate that the majority (87%) of students use Facebook to access information, and that it enhances ease of communication with both other students and lecturers. In another study conducted by Ivala and Gahago (2012:153), it was established that the social media site, Facebook, had enhanced students' levels of engagement and that lecturers in their study have used Facebook as a supplementary teaching and learning resource to face-to-face learning.

#### ***2.4.2. Concerns of Facebook***

Although the integration of new media technologies has ushered various opportunities to higher education, students say it also presents various concerns (Donlan 2014:575). Although social media networking sites such as Facebook can improve learning and education experiences for both students and facilitators, it also hosts various relevant concerns for academia. These concerns are of too much social media can lead to addiction; being on Facebook can lead to social chatting, playing online games, the obsession with posting and commenting on live-statuses and cyber stalking. The younger generations are likely to spend more time on social media conversing with other users than conversing face-to-face (Warschauer 2004:159). Being reachable all the time with an unlimited access to communication and information has contributed to an over-consumption of communication and information (Van Dijk 2006:263). Research carried out by Karpinski and Kirschner (cited in Tess, 2013) found that students spend less time studying, and more time online chatting, uploading images and writing on

Facebook walls, compared to those students are non-users. This led to the authors to consider whether students spend too much time on Facebook and fewer hours studying that this could have an adverse impact on their academic performance if not closely monitored. In Moyo and Abdullah's (2013:135) view, although social media can improve learners' educational experience, the use of social media can cause overindulgence.

Zdanow and Wright (2013:64) acknowledge that Facebook can promote narcissistic behaviour among users, as Facebook provides users a sense of validation and fulfillment. Furthermore, this validates users as part of the 'in-crowd', even though it is virtual or temporary. Hew (2011:663) notes that the potential negative effects that Facebook may have includes students posting inappropriate photos of themselves on their Facebook wall, and that these photos may endanger their chances of finding employment since companies investigate suitable candidates via social media applications. In research carried out by Ivala and Gachago (2013:162) at a University of Technology on the use of Facebook and blogs for teaching and learning encountered challenges, it emerged that one of the challenges were that students who had insufficient access were unable to log on to Facebook regularly, and due to limited computer facilities at the university, compounded by certain computers in the computer laboratories and libraries being blocked, students were prevented from accessing Facebook. Mbatha and Manana's (2012) research indicates that access to the Internet for low-income students and those from rural areas low-speed Internet connections, prevent these students from using the web to the fullest capacity.

Despite the usefulness of using Facebook in the education sector, such as enhanced communication, student and learning engagement, not many facilitators engage with Facebook for academic purposes (Towner & Munoz 2011:37). In an earlier research conducted by Ajjan and Hartshorne (2008) it was established that only 8% of the academic staff use social media networking sites for academic and learning purposes, whilst 74% do not use and have no intention whatsoever to make use of Facebook. Rambe's (2012) research on critical discourse analysis in the study of Facebook posts during a course taught at a South African university found it is imperative that instructors allow students in critical academic engagement rather than to just receive teacher-

generated content passively. Furthermore, weak study skills and over-reliance on the facilitator can be overcome by creating an effective learning community through Facebook (Tess 2013:64).

Selwyn (2011:05) points out that the growing use of social media has not all been equitable or democratic as it depicted to be. The researcher further explains that even though those students have access to technologies, their preferences for social media networking sites might be distinctive. This is the case, for instance, in students' preferences for particular social media applications (Facebook or MySpace) over others, socio-economic differences in the individual preference to produce online content, be it posting to network sites, sharing resources or creating profiles (cited in Selwyn 2011:05 in Schradie 2009). In another study conducted by Donlan (2014:584) regarding students' views on Facebook, the researcher found several students in the focus group reported that they actively avoided Facebook because there were too many links to click on and distractions. Some of the attendees stated that they saw Facebook just has a social tool and resent any perceived intrusion from academic staff in that domain (Donlan 2014: 584).

## **2.5 Understanding student engagement**

Students have become heavily engrossed with social media networks such as Facebook, therefore using social media to support educational endeavours'. This creates solid learning communities and to encourage student engagement (van Wyk 2014:372). The extensive influence of social media in higher education has sparked many positive reinforcements for student engagement on learning and academic success. Zepke (2014:698) recognises that it is very uncommon to identify engagement in the classroom or online environments. Given the increasing move towards a digital world, many researchers have become interested in the way social media applications can influence student engagement and create positive learning experiences.

Junco (2011:164) notes that it was Alexander Astin (1984) who developed the theory of college student involvement, which he later termed 'student engagement'. Astin's basis of the theory of student engagement stemmed from five tenets, namely:

- Student engagement refers to the investment of physical and psychological energy that students dedicate to educational activities (Ivala & Gachago 2012),
- energy occurs along a continuum – some students feel more comfortable to engage than others,
- the engagement is ascribed to both qualitative and quantitative characteristics,
- the amount of student learning and development that is associated with educational programme is directly related to the quality and quantity of student engagement in that programme, and
- the effectiveness of any educational practice is directly related to the ability of that practice to enhance student engagement (2010:07).

Coates (cited in Trowler 2010:07) acknowledges that student engagement entails a “broad construct intended to encompass salient academic as well as certain non-academic aspects of the student experience” that is comprised of the following:

- active and collaborative participation,
- participation in challenging academic activities,
- formative communication with the academic staff,
- involving enriching educational experiences and feeling legitimated and supported by the university learning communities.

Kuh, Cruce, Shoup, Kinzie and Gonyea (2009:542) define student engagement as the time and effort that students invest in purposeful educational activities and also the effort that institutions devote to using these effective educational practices which is directly linked to their desired outcomes.

Kuh (2009:683) explains that student engagement is multifaceted; the more time students spend studying, the more it leads to greater knowledge of the subject, which is reinforced by feedback from facilitators and collaboration from other peers. Moreover, the ability of reinforcement of feedback improves their academic skills and encourages

a deeper level of learning and problem-solving. For institutions to achieve a deeper student engagement it is imperative that institutional policies and practices encourage a great amount of engagement that be in-class and out-classes educational activities (Kuh 2009:683). Graham (2014:16) observes that if institutions want to implement such structure to enhance student engagement, social media networks should be used as a supplementary enhancer for academic attention.

### ***2.5.1 Effects of student engagement***

The merging of social networking and higher education sites has been shown to enhance student engagement. In a South African research, van Wyk (2014) explored the use of social media to support students of economics and teaching engagement in teaching practice at an open distance learning institution. The findings revealed that a great number of student teachers use social media tools to engage with fellow classmates outside of the class to prepare for assignments rather than using these same tools to discuss or complete assignments. Moreover, the results showed that when student-facilitator engagement is implemented, it often leads to alternative engagement, an area that ultimately leads to better socially-embedded infrastructure with technologies. This means that engaged students will often make use of available resources, which include both technological and social media resources which will enhance their educational experience. This is akin to research carried out by Mbodila et al. (2014:121) which investigated the impact of social media use on student learning and more specifically the level of engagement and collaboration through the use of Facebook. The results indicated that 83% of participants believed that technology has helped them to be engaged and informed about the module in- and outside the class. Students feel that they belong in a community of learners, thus increasing their engagement levels on social media platforms with other students as well as the course content which also increases the attainment of learning outcomes, such as critical thinking and student development.

Research by Junco (2012) indicates that time spent on Facebook can become both positive and negative enforcers for student engagement, depending on how students engage with it. For instance, students who engage with Facebook may be a positive

predictive of time spent on academic activities while playing games or on Facebook can be a negative predictive depending on the outcome of the variable (Junco 2012:170). Therefore, the use of Facebook largely depends on how students use Facebook that can be advantageous to their academic outcomes and student engagement. Kahu (2013:769) adds that the better our grasp of student engagement and the influences of student engagement, the better positioned it will be to meet the needs of the students that will overall enhance the student experience and educational outcomes.

## **2.6 New media and distance learning**

The use of new media technologies provides a new aspect to distance learning, as it offers novel possibilities for interaction in an online environment and through students' engagement with online activities (Moore 2013:284). Ashcroft and Rayner (2011:95) observe that distant learning education provides access to tuition for face-to-face and remotely, through age groups and across economic classes through via online platforms. Flowers (2001:94) acknowledge that new media technologies and distance learning are 'cousins'. This is because new media technologies can enhance the academy's contribution to society by improving learning efficiency and expanding higher education (Flowers 2001:94). In addition, accurately designed new materials can improve residential, distance and life-long learning, and enable a more improved educational experience. In distance education, students are invisible to one another, this being mainly due to increasing constraints on institutions when it comes to providing personal information about fellow students (Poelhuber, Roy & Anderson 2011).

### **2.6.1 University of South Africa (Unisa)**

The University of South Africa (Henceforth Unisa) originated in 1873 as a university college that offered courses to learners through correspondence (Mbatha 2013:543). Mbatha further notes that in later years the Unisa incorporated both former Technikon SA and Vista University. Unisa's main campus is based in Pretoria and offers distance learning programmes academically to students nationally and internationally (Bitzer 2009:405).

In the past, the University of South Africa has relied on the myUnisa as a Learning management system to encourage communication and interaction between students and the university. According to Mbatha and Manana (2012:15) the main objective of this website was to close geographical spaces between students and the university as part of an e-learning platform for teaching and learning. Currently, social media networking sites such as Facebook have been used as an alternative online space for students to communicate in the twenty-first century. Mbatha and Manana's (2012) research indicates that most participants prefer communication with their peers through Facebook. The platform is more convenient for these students in facilitating peer communication since they are on Facebook most of the time. Learning environments through social media applications, especially in the ODL context, enhance active participation and social engagement among students, since students can provide one another with emotional peer support, and working together to achieve common goals (Pereira 2005:41). Social media networking sites, particularly Facebook, have become emerging spaces for students to collaborate, communicate and engage both synchronously and asynchronously in an ODL setting (Beldarrin 2007:140). Mbatha (2013:544) notes that meaningful engagement and discussions through these technologies can assist Unisa in achieving this in an ODL context.

### ***2.6.2 Distance learning***

Distance learning occurs when teachers and students are separated from one another through space and time (Pereira 2005:243). Therefore, the assumption is that because students and teachers are in different places, they must be independent and autonomous students. The 'distance' in distant education has created many challenges for students due to lack of social interactions in the form of face-face interactions (Veletsianos 2010:63). According to Knowles (1975) most students only know how to be taught and not how to learn, which causes more isolated and leaves students ill-prepared for studying at a distance learning institution. Since dialogue is more indirect due to the learner interrogating the materials in isolation, this can often lead to confusion and doubt in learners who are not already confident or have insecurities about learning (Veletsianos 2010:63). In order to provide support and assurance to the learners, an online dialogue can be created though social media, which provides

opportunities for learners to interact with peers and facilitators (Knowles 1975). At Unisa, students who enter higher education are expected to learn intricate new study materials independently, all the while adjusting to new methods of learning in a distance learning setting (Letseka 2015: 96). The collaboration between students and facilitator through digital technologies has created a supporting infrastructure' that could be seen as an establishment for a more innovative way of learning. In Moore and Kearsley's (2012:02) view, distance education is teaching and planned learning in which the teaching takes place in a different setting from learning, this requires communication through technologies.

As new media technologies emerge, the existence of distance learning education relies on learning communities through technology, interactivity and collaboration (Pallof & Pratt 2009; Beldarrain 2006:140). Talbot (2003) observes that good distance learning involves students to be actively engaged in the learning process. In addition, students also need to be able to use of learning materials effectively. Furthermore, distance learning can sustain active learning situations that favour creative and artistic expressions (Poore 2012:11). Tait (2010:288) observes that contemporary ODL is premised on two dimensions of change. The first is the revolution of information technologies that has transcended from print materials to a variety of new media and digital technologies to empower students to be more active learners. The second dimension is also closely related to the Information and Communications Technology (ICT) revolution, but it sees the student as the customer, where ODL institutions have to compete with other institutions for costs and services, as well as keeping up with student culture, meeting their demands and supplying services for completing their qualifications.

In distance learning, communication takes place through some technology, and the most common technology is a computer that is linked to the Internet which allows delivery of text, audio and video messages to provide interaction between learners and facilitators (Moore & Kearsley 2012:15). The growth in new media technologies and the availability of social media interactions has created a learning system for digital learning environments by connecting, organising and managing three learning networks, namely:

content, people and technology (Clarke 2008:14; Tu 2014:14). Synchronous new media technologies have the potential to offer new avenues for student learning and support systems in distance education which can improve learning, increase student engagement and alleviate dropouts observed in education (Poelhuber, Roy & Anderson 2011). Clarke (2008:20) agrees that there are increasingly higher dropout rates in distance learning than conventional face-face courses. The key is to provide student support through e-learning spaces (Clarke, 2008). In a study carried out by Özmen and Atıcı (2014), they found that distance education activities supported by social media applications and face-to-face learning environments yielded positive learning outcomes on student achievements.

## **2.7 Emerging technologies**

The use of new media technologies in higher education has proven to be advantageous especially in relation to finding workable learning management systems that can enhance teaching and learning activities (Donlan 2012:574). Nichols (2003) notes that learning management systems are mainly used for online courses and online tuition support programmes and refers to the term as e-learning. The main features of learning management systems technology are personal communication via e-mail, group communication via discussion forums, posting content, updating events and building interactive communication on students' platforms (Naveh, Tubin & Pliskin 2010:128). According to Downes (2010:29), interfaces and functionalities of social networking technologies can be replicated for content and learning management systems.

By combining learning management systems and social networking sites it is possible to create spaces of engagement in a community where the skills meet the content within teaching and learning syllabi (Downes 2010). There are many ways in which Facebook can be used as an LMS, for instance setting up Facebook group discussions, uploading course content, videos and audio, organising weekly tutorial sessions and administrative or registration queries. In current trends, teaching and learning links (either within Facebook or outside of the Facebook page) can be used to connect and share content with other users where students are able to use Facebook as an e-learning tool to collaboratively work together. According to Beldarrin (2006:157)

educators have come to realise the power of wikis, blogs, and podcasts as well as emerging social media applications. Facebook groups, which can be converted into study groups between facilitators and students, can become alternative learning management systems. The group administrator has the option to close or open the group to public viewing. In the case of a closed group, activities and feedback will not be shown on the user's personal wall and activities will only be disclosed among the members of the study group (Meishar, Kurtz & Pieterse 2012:37). Woo Quek and Yang and Liu's (2012:435) findings concur that Facebook has the potential to be used as an LMS for announcements, sharing resources, partaking in online discussions and activities which form the basic functions of LMS.

### ***2.7.1 Studying through e-learning***

In ODL institutions, the advancement of emerging new media technologies is influential in creating e-learning spaces (Veletsianos 2010:272). E-learning is defined by Laurillard (2004:01) as the use of new technologies or applications for learner support. One of the fundamental functions of e-learning is to provide a technical service and assistance for people studying at home or at a distance (Clarke 2008:14). According to Ashcroft and Rayner (2011:243) e-learning is used to facilitate the supply of necessary learning and teaching documentation, to provide learning activities and replace face-face interaction. The use of e-learning spaces has created numerous opportunities for students to learn through technological innovations and the Internet. Students who study at a distance learning institution are expected to engage in some of the elements of e-learning such as discussion groups, e-mailing, web-based learning, and one-to-one chat (Talbot 2005:32). In addition, e-learning resources are used by institutions and students to bridge geographical distances and serve as support systems (Mbatha & Manana 2012). Research carried out by Cunningham (2000 cited in Bhauthram & Kies 2012:02) found that students felt the use of e-learning resources was non-threatening and non-challenging, and that it improved their writing abilities and grades.

E-learning has prompted a considerable interest and pro-active stance in using technology, thereby transforming the nature of higher education (Pollock & Comford, 2000; Castells 2003:284). It has created a significant impact on how students learn, how

quickly students obtain information, how easy it is to study (if they have e-learning skills) and how much they enjoy learning through technologies (Laurillard 2004:02). Letseka (2015:122) acknowledges that e-learning platforms through mobile technologies could be more accessible for students as mobile technologies present the idea of 'learning anywhere and at any place'. Mobile technologies also offer facilitators alternative approaches to learning, suited to the diverse needs of the students since mobile technologies offer access to resources outside the traditional classroom (Castells 2004:286). In addition, the diverse use of integrating technology adds value to the process of teaching and learning by creating a richer teaching and learning, thus providing more options to meet the needs of the students.

For Laurillard (2004:01), e-learning platforms are essential as interactive platforms since they promote collaboration between students and facilitators, and make digital versions of material accessible via e-learning. Moreover, e-learning platforms, whether they are social media applications, programs, and/or websites can provide a learning experience for individuals (Moore, Dickson-Deane & Galyen 2011:130). A fundamental part of e-learning is that it provides both facilitators and students beneficial ways to organise teaching and learning as it enables variable learning preferences which is more accommodating than conventional learning platforms. Neither students nor facilitators need be in the classroom and are liberated from the traditional requirements of place or time to teach and study (Castells 2004:284).

### ***2.7.2 Online learning communities***

The ubiquity of new technologies in higher education has provided instructional designers and educators possibilities to foster interaction and collaboration by creating learning communities (Beldarrain 2014:140). Tu (2014:14) explains that the students of today are regarded as network learners who are empowered by open, social and network technologies by personalising their digital learning environments through connecting, organising and managing three learning networks, namely: content, people and technology (PLE). Tu (2014.) further elaborates that by appropriating a variety of tools and connecting with other people, resources and tools, students are then able to meet their learning needs and interests. According to Zhao and Kuh (2004:116), most

learning communities incorporate active and collaborative learning activities and promote involvement in complementary academic and social activities that go far beyond the classroom. Tess (cited in McCarthy 2013) indicates that Facebook is an effective host for a blended learning environment. His research found that 95% of participants agreed that the inclusion of Facebook has aided these students to develop peer relationships as well as an interactive virtual community.

## **2.8 Social-economic realities in the South Africa's Higher Education system**

The foremost teaching and learning challenges that the South African higher education system is facing, are student diversity in academic preparedness, language barriers and schooling backgrounds (Jaffer, Ng'ambi & Czerniewicz 2006:02). According to Bhauthram and Kies (2012:03), most South African students are at a disadvantage when entering higher education. This is mainly due to poor socio-economic backgrounds and the inaccessibility of computers and the Internet. In many instances these students come from disadvantaged backgrounds, attended schools with limited resources (Letseka 2015:96) and do not have adequate computer literacy to use new media technologies for academic purposes. These students then enter tertiary education ill-prepared and require a more supporting structure to expand their knowledge and skills (Jaffer et al. 2006:03). In many ways e-learning resources are used to reach students studying through open and distance learning. However, the lack of internet connectivity, poor technical backup and unreliable electricity supply disable students from having access and skills to e-learning resources (Ashcroft & Rayner 2011:242). Lesame (2013:78) concurs that digital exclusion contributes to digital illiteracy and lack of e-skills. As noted above, digital illiteracy or digital inequalities, infers that digital skills are often influenced by unequal access to technologies, which is primarily attributable to socio-economic factors. According to Oyedemi (2014:152) social stratification and social inequalities have an impact on the pattern of Internet access and digital skills in South African universities.

In a research study carried out by Ngulube, Shezi and Leach (2009:59), they found that students who do not access internet (social media applications, blogs, and wikis) have limited knowledge to access information and network information resources. The

authors point out that that this may have occurred due to shortage of computers and lack of training in the use of internet facilities at the institution. In addition, high costs of connecting to the Internet have also attributed to negative effects on students' digital skills (Oyedemi 2014:151). In recent years, mobile broadband has been used as the most common form of internet connection for many households; in order to connect to the Internet and engage with online activities, users need to purchase monthly data. However, due to the high cost of data bundles, fewer people can afford to engage with content online (Oyedemi 2014:151). For students to survive in a knowledge-based society, it is imperative that they are knowledgeable about digital technology (Naude 2010:58).

South Africa is a multilingual country with a diversity of eleven official languages. In South Africa, English is an additional language, especially in rural and township areas (McCabe & van Wyk 2012:138). In many instances, for most students English is considered as a second or foreign language as they are taught in their mother tongue, and when they do enter the higher education environment, it is difficult to shift to a new language which they are required to be taught in (Jaffer et al., 2006). Lecturers assume that students are proficient in the language of learning (English), and when students submit poorly written assignments or exam papers, it is assumed that these students are lazy or less intelligent (Gravett & Geysler 2004:73). The concern is that English has become a dominant language not only in higher education but also in the world of new media technology, making it difficult for rural people to understand because the lingua franca is not their home language (Lesame 2005:197). Technological innovation should therefore facilitate multilingual learning resources to provide students the same material in one or more of the students' languages (Gravett & Geysler 2004:75).

### ***2.8.1 Strategies for using social media networks (Facebook) for education and learning purposes***

According to Junco (2011:373), higher education administrators, facilitators and other students can help students use Facebook in a way which is beneficial to their needs, engagement and academic experience. It is a given that Facebook will continue to be popular among students and that universities are always interested in engaging with

students. It is imperative that facilitators encourage new approaches in electronic and academic scaffolding in learning. Beldarrin (2006:157) notes that it should be the responsibility of the facilitators, administrators and technology experts to investigate the most applicable tools for providing interaction in synchronous and asynchronous distance learning environments.

Ivala and Gachago's (2012) research observes that the integration of Facebook in teaching and learning should be supplementary. Through the use of supplementary resources, additional materials can be offered to students to deepen their understanding through alternative perspectives on coursework and by providing a supportive infrastructure. Moreover, facilitators who wish to integrate Facebook in their teaching to engage and collaborate with students should encourage Facebook etiquette to ensure ownership of the learning space and respect for other users. Kelm 2011 (as cited in Donlan 2012:574) recommends that facilitators should be observant of the way students use social media technologies and should steer teaching and learning strategies within the educational context of higher education. Facebook has social, cultural and technological affordances to its accessibility, where lecturers or learning facilitators can post announcements, sharing ideas and resources and implementing online discussion for educational purposes.

In order to provide equal access to e-learning resources and social media engagement between all socio-economic groups, it is imperative that more attention and support be given to the less-advantaged and rural communities so that they are able to reap the benefits in using social media applications such as Facebook. The Facebook group has the potential to be used as an LMS. It has pedagogical, social and technological affordances, which allow putting up announcements, sharing ideas and resources, and implementing online discussions.

## **2.9 Chapter Summary**

This chapter reviewed literature on new media technologies, social media applications, Facebook as a social media application, student engagement, new media and distance learning, emerging technologies and South Africa's higher education landscape. In recent years, students have created new ways to enhance student engagement, learning communities and learning activities through social media networks. The uptake of social media applications tools is gaining much interest in the educational industry, especially in an ODL sector. Moreover, the potential of these applications for distance learners is to enhance their learning experiences at a geographical location.

## Chapter Three

### Theoretical Frameworks

#### 3.1 Introduction

Using technologies in the twenty-first century for teaching and learning no longer requires, and is not confined to, traditional classrooms. In distance learning practices, technology and pedagogy have become increasingly more intertwined, making integrative pedagogies more instrumental in higher education, especially in creating learning environments for learners to engage with course content.

This chapter engages with the theories chosen as tools of analysis in this study, namely New Media Theory and Connectivism, with special reference to how new media technologies have afforded assistive spaces for students to enhance digital learning environments. Many scholars such as Veletsianos (2010), Anderson and Dron (2010), Moore (2006), and Danher and Abdurrahman (2010), have drawn attention to the efficacy of new media and how these serve as learning tools for students, especially in an ODL institution. Flowers (2001:110) observes that new media technologies afford institutions opportunities for training and use humans for education.

In ODL institutions, it has always been assumed that interactivity can only take place through face-to-face interactions (Letseka, 2015). However, with new technologies, interactivity through computer-mediated technologies has become more engaging (Rafeli 1988:126). As the world transformed into a network society with technologies, people have become more connected to one another (Castells 2004:03). New media technologies have provided spaces to share information and connection between societies and cultures. New media technologies can create social movements, bridging gaps between cultures, politics, trends, time and space (Curran 2010:08). New media technologies such as Facebook have revolutionised the way people connect to one another (Donlan 2012:573). One can argue that the impact that new media has on users can be largely attributed to the sharing of information between societies and cultures.

As indicated in the opening statement of this chapter, learning is no longer confined to traditional classrooms, but is extended outside classrooms through networks where people can interact with one another. George Siemens (2005:05) has called Connectivism the learning theory of the digital age due to the fact that learning through technology can change the ways people learn and share knowledge through networks of communication.

Connectivism is a theoretical framework that applies to the understanding of learning through such networks (Kop & Hill, 2008:02). According to Kop and Hill (2008) learning occurs when knowledge is stimulated through the student connecting to and feeding information through a learning community. One can argue that learning through technology can provide students with a sense of self-knowledge and academic rigour as they seek information and knowledge themselves, especially in an open and distance learning context. The next section elaborates and discusses the relationship that new media technologies have on the process of human communication, and the emergence of a Communication Age.

### **3.2 New Media Theory**

With new media technologies, people have opted for a more modern way of communicating and sharing information with one another. New Media Theory has provided scholars with an array of opportunities to engage with primary functions such as communication and entertainment (Berger 2012:133). McQuail (2010:136) defines new media as a set of disparate communication technologies, which offers certain features that, make it possible through digitalisation and are used for personal usage as communication devices.

New media technologies are also widely referred to as Web 2.0, including a variety of web-related communication technologies such as blogs, wikis, social media applications and digital content (Friedman & Friedman 2008:01; Vaast, Davidson & Mattson 2005:1070). The use of new media technologies has seen the emergence of social trends and self-mass communicators (Curran 2010:08). The underlying premise of New Media Theory is that it explains the way people communicate, connect, and interact in

the Information Age with digital technologies. People are always evolving and seeking new, creative and innovative ways to connect and communicate with one another. Through new media technologies, information is sent and gathered in seconds, bridging the gap of time and space. McQuail (2010:136) describes new media as a set of communication technologies that share similar features through digitalisation for personal use. For Manovich (2001:62) new media can be seen as cultural objects that use digital technology to distribute and share information. Lesame, Mbatha and Sindane (2011:04) agree that the primary function of new media is its digital nature and that it encourages interaction through the Internet.

Edwards, Edwards, Wahl and Myers (2013:258) describe the characteristics of new media as that of interactivity, creativity, flexibility and that it is always evolving. The scholars further explain that one of the key characteristics of new media is that it is mutually active, and this encourages users to constantly find information through interactive technologies such as the Internet, text messaging, e-mail, instant messaging and social media.

New media also enables users to filter and personalise their content according to their preference in a unique way, as well as providing a sense of self-expression (McQuail 2010:144; Edwards et al. 2013 259). In addition, new media technologies can adapt to new, different, or changing requirements, one example being the ability to check online feeds at any time of the day or night. Lastly, new media is always evolving, and there will always be newer or better ways to reach audiences at any time or place. McQuail (2010:144) and Lievrouw and Livingstone (2006:25) agree that new media technologies provide users with a sense of social presence and autonomy as users feel that they have complete control over their content. Moreover, users have realised how to incorporate new media technologies as important instruments into their lifestyles, creating social movements, and autonomy that differs from traditional media.

### ***3.2.1 New media and old media***

The radical advancement of new media, digitalisation and the Internet have resulted into a technological revolution that sets it apart from traditional media (McQuail: 2010:544). Scolari (2009:945) observes that in the 1980s traditional media was becoming obsolete

and there was a shift toward models of media that accommodate interactivity for most of new media communication technologies.

The use of the Internet and technological devices has enabled people to become active audiences, no longer the passive audiences that were used by traditional media. Moore (2006:2015) notes that with new media the audience is no longer a passive audience but active co-creators of the content, which gives the co-creator more control of content and presentation as opposed to the older media. In the past traditional media was aimed at specified audiences, for instance magazines and newspapers were aimed at readers, television was aimed at viewers and radio was aimed at listeners. New media technologies and the internet make it more possible to recruit as many audiences as possible because it features across communication borders.

Manovich (2001:66) observes that new media entails interactivity in contrast to traditional media where the order of presentation is fixed. McQuail (2014:141) adds that while traditional media is more concerned with authorship, publication, production, distribution and reception, new media provides users opportunity to actively participate in creating their own content at their own time. Bell, Berry and van Roekel (2004:140) add that new media is electronic communication that provides faster communication than traditional media. In addition, while traditional media offers bundled content packages (magazines, television programme schedules), new media technologies, particularly the Internet, offers unbundled content items (articles, songs, social media) catering to various audiences.

According to McQuail (2010:144), one of the most important characteristics that new media technologies offers audiences is social presence which allows individuals to become part of a social community. By posting, commenting or liking comments and pictures with other audiences, social media provides interactive spaces to send information and communication within seconds. In addition, new media technologies provide users a sense of autonomy, where individuals can share information with each other in their own time and space. Lievrouw and Livingstone (2006:25) add that new media affords users to be more selection in their choice of content, information, communication and interactions with other individuals; something which is impractical in

traditional media. In addition, new media technologies have changed the dynamic from a one-way mass communication towards a more interactive communication among users (Livingstone 1999:62). Communication has changed in the twenty-first century – it is no longer a one-way process, and it includes creating social communicating networks around the world (McCabe & van Wyk 2012:64).

### ***3.2.2 New media and modern society***

Like traditional mass media, new media invoke radical change in society. There is no doubt that with new media technologies, societal and cultural norms have changed. As Manovich (2001:43) states, we are in the middle of a new media revolution. Lievrouw and Livingstone (2002:136) observe that computer-mediated communication brought along a fundamental change in modern society. The scholars further explain that time and space, body and mind, subject and object, human and machine have drastically revolutionised practices carried out on selected network spaces. Many scholars such as Lievrouw and Livingstone (2006), Castells (2004) and Manovich (2001) attribute media richness and social presence of computer-mediated communication to people's preference to interact online rather than face-to-face. Lievrouw and Livingstone (2006:119) explain that social presence indicates the degree of interaction that individuals receive through a medium. For instance, the gratification that users receive through new media technologies, such as social media applications for communication purposes, is quite profound. Starkey (2012:15) indicates that social networking sites in the digital age have changed the way in which many people connect and communicate with one another. According to Harasim (2012:02), the personal, professional, social and cultural lives of people are embedded and transformed through technologies by the computer networking revolution such as e-mail, cell phones, text messaging, engaging in social networks and many other digital activities every day.

Access to new media technologies, particularly mobile and online media, means that people can organise their activities on the move and create social trends on the move (Dwyer 2010:06). For many people, mobile internet is a solution, as opposed to traditional internet, as mobile networks require a different set of fixed infrastructures (Chigona, Kankwenda & Manjoo 2008:2197). Berger (2012:134) observes that large

numbers of people have cellular phones due to the devices' usefulness and convenience. Furthermore, people use these technologies to organise their lives for business and pleasure, as well as for imaginative and virtual activities (Dwyer 2010:42-43).

Clearly the mobile internet has flourished through the years, courtesy of smartphones and other devices allowing people to send and receive e-mails, tweet and log onto social media networking sites such as Facebook anytime and anywhere (Goggin 2012:63). Through mobile devices such as MP3-players, portable gaming devices, handheld tablets and laptop, people can employ these for various uses and gratifications (Rennie & Morrison 2013:94). Castells (2004:219) notes that the increasing uptake of mobile devices and wireless communications has brought computer-mediated communication out of the home and onto the streets, extending the boundaries of communication (McCabe & van Wyk 2012:90). Due to the accessibility of smartphones that are integrated with other devices, smartphones can combine new features such as multimedia, messaging, and telephony, and thus computing has become a norm in society and allows people to constantly stay connected (Rennie & Morrison 2013: 94).

A study conducted by Chigona, Kankwenda and Majoo (2008), focused on how people use mobile internet services in South Africa. Their findings revealed that the main use of the mobile internet was for social innovators (online chatting). In the area of education, the characteristics of mobile technologies include multiple entry points and pathways, supporting multi-modality, enabling student improvisation and supporting in the sharing and creation of student artefacts on the move (West 2012:40). Oyedemi (2014:134) notes that students these days have become early adopters of technology due to their regular interaction with mobile technologies and the Internet. The next section looks at the network society.

### **3.2.3 Network Society**

The influx of information and communication technologies has created a 'network society' that has become more interconnected with one another (Castells 2004:05). In the information age, this type of society is viewed as a contemporary society due to the

way people use technologies to create social, political, economic and cultural trends. Curran (2010:07) affirms that new media technologies have allowed people to create their own system of mass self-communication through social networking spaces. In addition, these new media technologies have made self-directed networks of horizontal communication possible that have created new forms of communication infrastructures called self-mass communication. On this basis, use of the Internet has created a sense of freedom and autonomy. Curran (2010:08) argues that social movements are not created by technology but the manner in which society utilises technology.

According to Castells (2004:06), Connectivism originated in the information age of a networked era due to ubiquitous access to networked technologies. McCabe and van Wyk (2012:39) add that Connectivism emphasises collaboration within a network society. This theory forms the theoretical foundation of learning skills and tasks for students to thrive in the digital age (Rennie & Morrison 2013:20). Hence, one can argue that the rise of technology has also impinged on educational institutions.

As the possibilities for educational technologies in the twenty-first century become more ubiquitous, mobile, and personal, higher education institutions have also migrated their materials and platforms for tuition, to provide students a virtual learning experience (Beetham & Sharpe 2013:05). This is mostly due to learners' independent access to networked technologies which has provided an intermixing of personal, social and academic practices, which have made learning accessible to the learner (Beetham & Sharpe 2013:13). Prensky (2001:02) notes that digital natives (students) are used to receiving information on a rapid basis, function better when they are networked together and thrive on constant gratification. In addition, these network learners do not just consume learning materials but also have the ability to edit and create these materials collaboratively with their peers (Tu 2014:149). The next section examines the theory of Connectivism.

### **3.3 Connectivism**

An additional theory that was used for this study is Connectivism which has an impact on education and learning techniques. Duke, Harper and Johnston (2013:07) define

Connectivism as actionable knowledge, where the understanding is to acquire the knowledge then answering what that knowledge encompasses and how. The theory outlines that learning is a network phenomenon influenced by socialisation and technology. In other words, learning has changed how people seek knowledge within an organisation or database (Siemens 2005:05).

The Learning theory of Connectivism explores the engagement between students, the facilitator, the environment and technology to enable access within an ODL setting (Siemens 2005:04). According to McCabe and van Wyk (2012:11), Connectivism is a more social than individual process, and this theory has become part of a cultural practice. The availability of networks of information, networks of computers and digital technologies, and networks of individuals linked by technology enable a social learning environment (McCabe & van Wyk 2012:19). This theory recognises the influences that emerging technologies have on human cognition, and theorises how technology has reshaped the way humans create, store and disseminate information (Veletsianos 2010:114). In addition, these networks provide social context of learning and they describe learning as the development of conversations within Web 2.0. Internet applications such as Mxit, YouTube, Twitter, Facebook, podcasts and blogs have become primary learning environments in the modern world.

George Siemens and Stephen Downes developed Connectivism as a learning theory for the 'digital age'. According to Siemens and Downes (2010:29), one of the main intentions of this learning theory was to facilitate the transition from a neat, constrained and centralised learning management system to a well-distributed environment through which learners and facilitators can employ multiple online services and applications. Downes (2010:29) further elaborates that Connectivism must be seen as one of the first distributed theories to be created, not simply distributed in terms of time or place, but in terms of websites or applications. Coined by Siemens (2005:05), Connectivism describes a form of knowledge and pedagogy that is largely based on the concept that knowledge is distributed across a network of connections and that learning consists of the ability to construct and traverse those networks. This suggests that the pedagogy (1) seeks to describe 'successful networks' which characterise diversity, autonomy,

openness and connectivity and (2) seeks to describe the practices both in the individual and in society (Downes 2007:02).

Connectivism advocates that learning institutions are not limited by conventional ways of transferring knowledge from the educator to the student, and learning does not occur in a single environment (classroom), but that knowledge is distributed across the Internet, and individuals' engagement constitutes learning (Kop 2011:13). On the basis that technologies and networks are everywhere, and people are linked by these technologies, Veletsianos (2010:1140) notes that digital appliances, hardware, software, and network connections have the ability to enhance the social context of learning (McCabe & van Wyk 2012:19). The scholars further explain that social media networking sites such as Facebook, Twitter, Mxit, WhatsApp, podcasts and blogs have become primary learning environments in the modern world.

Connectivism entails creating and facilitating meaningful networks that include technology-mediated learning with the central idea that learning occurs when we communicate with one another.

According to Kop (2011:20), four main types of activity enhance learning, namely:

- aggregation, access and collection of a variety of resources to read, watch, or play,
- reflection after reading, watching or listening to content, the learner might reflect and relate to what he or she already knows due to previous experiences,
- after the reflection and sense-making process, learners might create something out of their own such as blog posts or Facebook page, or open a social booking site using services on the Internet, YouTube, Google groups, etc., and/or
- sharing learners might share their work or findings on social media networking sites and this constitutes participation through learning.

This theory aims to provide a theoretical framework for the way individuals, organisations and technology engage with one another to facilitate knowledge and learning. In a study conducted by Starkey (2012:34), the author observes that

knowledge develops through relationships and connections in a digital society. In addition, this enables individuals to build and create positive and learning relationships that will be beneficial for students, especially in an ODL environment. Siemens (2006:38) encourages students and facilitators to foster and create new approaches to learning that are aligned to the environment. Downes (2010:28) explains that learning networks capture an important component in making learning both accessible and meaningful in today's information era. In the work of Downes (2010), Downes argues that the best way to teach students is simply to teach them how to learn and manage their own learning through networks, a support and interactive learning.

*Principles of Connectivism by Siemens (2005:05) are outlined below:*

- Learning and knowledge are constructed in a diversity of opinions.
- Learning is a process of connecting specialised nodes or information sources.
- Current and accurate knowledge is the intent of connective learning.
- The capacity to know more is more imperative than what is currently known.
- The capability to see connections between fields, ideas and concepts is a necessary skill.
- Learning may exist in non-human appliances.
- Nurture and maintenance of connections are essential for facilitating continual learning.
- Decision-making itself is a learning process.

This following section provides an overview of the theories that engage with chaos, network, complexity and self-organisation.

### ***3.3.1 Connectivism and the integration of other theories***

Siemens (2005:5) describes the Connectivism theory as a theory that integrates with other theories such as chaos, network, complexity and self-organisation. For instance, learning may occur in an environment that is nebulous to the individual, with not much of a supporting structure. This is particularly apparent as ODL students tend to be

geographically dispersed, and isolated in terms of time and place. Through technology and connections, students can engage with one another beyond their physical settings and through this remote interchange they are able to find information and share ideas (Starkey 2012:24). The way individuals experience technology acknowledges various theories and how connected these theories are to one another.

To understand the significance of the chaos theory is to understand the 'mediamorphosis' and the development of new media, and the connection it has to the theory complexity (Bucy 2005:41). Siemens (2005:04) elaborates further that chaos theory recognises the patterns, which appear to be hidden, and that the creation meaningful connections between specialised communities are important to activities. In other words, chaos theory is the attempt of the learner to understand through creating tasks. Chaos theory postulates that meaning does exist, but it is up to the student to seek out and recognise the patterns that appear to be hidden. Hence, chaos brings about the creation of new ideas and innovative methods to vitalise the educational system (Bucy 2005:40). According to Starkey (2012:04) complexity theory refers to connections between people, groups and resources that move beyond organisational levels, where ideas, innovations and events are discussed, evaluated, modified and sometimes embedded. Knowledge emerges through connections with others, either internal or external, that are made during the learning process (Starkey 2012:05).

Siemens (2005:05) defines networks as connections between entities, which he refers to as nodes. Nodes in the context of Connectivism can be seen as individuals, groups, systems, fields, ideas or communities. In the connectivist model, the node is used to describe a learning community which forms part of a larger network (Kop & Hill 2008:02). Moreover, nodes form the basis of the connecting points that are found on the network. According to Castells (2001:03), nodes increase the importance of the network by understanding relevant information and processing it efficiently. Self-organisation theory defines learning as a process that requires the system (personal or organisational learning systems) to be informationally open, that it able to classify its own interaction with an environment, and capable of changing its structure (cited by Siemens 2005 in Rocha 1998). Siemens (2005:04) further notes that the key is the

capacity to form connections between sources of information, and in this manner practical information patterns are required to learn in the network society. Bucy (2005:41) acknowledges that the behaviour of complex systems is that the richness of the interactions that occur within the living systems permits a spontaneous self-organisation. Bucy (2005.) further explains that human communication is an adaptive system and all forms of media live in a dynamic and interdependent universe. Furthermore, when the external pressures are applied and new innovations are introduced, each form of communication is involved in a natural self-organising process that instinctively occurs within a system.

### ***3.3.2 Connectivism as a learning theory***

The purpose of learning theories is to define the actual process of learning and not the value of the content being learned in a network society – the way information is acquired is worth exploring (Siemens 2005:03). In the view of Harasim (2012:04), the main aim of learning theories is to understand how people learn.

In proposing Connectivism as a learning theory of the digital age, Siemens (2005:01) characterises Connectivism as a successor to behaviourism, cognitivism and constructivism for distance learning. He identifies the limitations of these theories as:

- Their intrapersonal view of learning,
- Failure to address that the learning is located within technology and organisations, and
- Lack of contribution to the value judgements that need to be made in knowledge-rich environments.

The rationale is that the previous learning theories (behaviourism, cognitivism and constructivism) were developed during a time when learning was happening in different technological contexts (Sahin 2012:441). The author further notes that the learning theories which served previous generations are replaced for greater relevance to present the needs of today, which includes technology and connection-making as learning activities. Bell (2011:103) points out that the exponents of Connectivism

characterise it as a network theory of learning that forms part of a set of theories that comes from learning, education, philosophy of knowledge management that are situated within a discourse of change in education. These are related to the transformative opportunities that are offered by emerging technologies.

According to Duke et al. (2013:07), Connectivism is regarded as a learning theory for numerous reasons, such as that it is characterised as an enhancement for students to learn with the knowledge and perception gained through a personal network (Siemens, 2004). Through these networks, learners can acquire a diversity of opinions to learn from and make decisions that will be informative to them in addition to collaborating with other students. Anderson and Dron (2011:87) add that the theory focuses on building and maintaining network connections which are current and flexible that would be applicable to existing and emergent issues. Secondly, the amount of knowledge databases that is available for the student enables the student to seek more knowledge that facilitates thorough research and interesting patterns. Moreover, Connectivism believes that information is in abundance and the role of the student is not to memorise or understand everything, but to find information and apply knowledge where it is needed (Anderson & Dron 2011:87). The latter authors hold the view that traditional learning theories have been limited due to the rapid involvement of technologies. In addition, technologies have provided learners more opportunities to acquire knowledge beyond the traditional spectrum. The next section looks at the critical perspectives of Connectivism.

### ***3.3.3 Critical perspectives***

Opposing viewpoints from Verhagen (2006) advance the argument that Connectivism can be viewed as a curriculum rather than a learning theory. He further argues that the aim of learning theories is to provide insight to learners on how to facilitate learning and meaning-making at an instructional level, and that Connectivism is directed at an examination level of what is learned at a curriculum level. Furthermore, if Connectivism is a learning theory of just being able to connect students, provisions should also be made to enhance students' learning (Duke et al. 2013:06). Kerr cited in Garcia, Mel and

Elbeltagia (2013:15) supports Verhagen's criticism that there is indeed something interesting about this theory, but it is not at the level of what a learning theory is about.

In addressing Verhagen's challenges to the Connectivism theory, Siemens (2006:04) states that he stands by the theory of Connectivism and that learning is a network phenomenon, influenced by socialisation and technology. He further explains that learning is about the instrument rather than the content within the instrument and that it is more important for the student to acquire information and share the knowledge with other students. In addition, he adds that a challenge for any learning theory is to actuate known knowledge at the point of application (Siemens 2006:03). In a comprehensive research analysis conducted by Kop and Hill (2008:11), they conclude with the same beliefs as Verhagen and Kerr (2007); that Connectivism cannot be constituted as a learning theory on its own. However, the authors further assert that Connectivism is influential in the development of new pedagogies to transform the discourse of education, and that it provides possibilities offered by new emerging technologies.

Connectivists argue that the importance of social presence and interaction through the creation and maintenance of networks are pertinent to achieving learning goals (Ubon & Kimble as cited in Dron & Anderson 2011:88). Social presence is a prerequisite to establish an online learning community where students can connect and collaborate with one another. Kop (2011:22) observes that the level of presence is proportional to the level of involvement in the online activity, which makes the level of presence in Connectivism theory significant as it increases the depth of learning. Beldarrain (2006:149) explains that the degree of social presence can mould the quality and quantity of interaction. The use of emerging technologies can bring students involved in an online learning community.

Social presence is retained and promoted through online activities such as comments, contributions, and insights of students engaged in the course, either presently or in the past (Kop 2011:22). The lower the presence is in the online learning community and the less it brings about connections with other peers, the more limited academic discussions are, including shared problem-solving and collaborative learning through

peer connection (Starkey 2012:32). According to Kop (2011:22), the lower the presence of other students in the online learning community who support learning, the higher the need for particular capabilities in the self-directed learner. Moreover, the self-directed student can extend his/her knowledge by finding useful information that enable him/her to create something meaningful to put it on the web for other students to engage with and learn from. The next section discusses the role of connectivism learning in distance education.

### ***3.3.4 Connectivism learning in distance education***

According to Zawacki-Richter and Anderson (2014:250) the most compelling argument for using connectivist approaches in distance learning is that they have the innate capacity for and valorisation of change. The methods and technologies to learning and teaching embrace innovative change and participation in the process of knowledge creation and not only knowledge consumption (Kop & Hill 2008:02).

Clearly the necessary requirement for ODL institutions is that students need to be technologically connected in order to close the geographical distance between students and facilitators. West (2012:80) argues that technology provides many opportunities for distance students as it bridges the gap between geographic disparities, creating a variety of rich educational resources and interactive materials for students to engage with. Distance education employs a correspondence model in which study materials are sent to students so that assignments and portfolios are completed in a given time. However, distance-learning institutions' students often feel isolated due to lack of contact or face-to-face discussions (Pereira 2006:43). With computer networks, virtual discussions forums are created to attain an active online learning system. By enabling communication technologies for distance learning courses, student support initiatives are enhanced and offers additional support in the form of group tutoring and discussion forums. Studying online provides these students the opportunity to learn beyond their physical environments (Starkey 2012:36). Furthermore, students can use these new technologies to search for library books, journals, articles and other information resources and share information gained with their peers (Zawacki-Richter & Anderson

2014:113). Castells (2001:11) observes that new technologies provide distance educators with the flexibility that has created a broad interest of knowledge creation and sharing (Bell 2011:98).

Starkey (2012:25) points out that knowledge is constantly being created, shared and reviewed and this takes place through connections between people and information sources. Connectivism theorists assume that students have access to powerful networks, and that these students are computer literate and confident to exploit these networks in completing academic tasks (Anderson & Dron 2011:87). In addition, these students are supposed to be autonomous and able to learn independently away from educational institutions and engage with sharing and creating online activities (Kop 2011:21). With the availability of various technologies, learners need to have continual access to these technologies that require a variety of selection for knowledge (Siemens 2006:32). In other words, students need to be technologically savvy in selecting a suitable 'learning technology' that will contribute in knowledge creation and sharing. Downes (2008:03) agrees that Connectivism focuses on autonomy, and it is through the interactions with other people and their perspectives that they can arrive to a new knowledge.

Like distance learning, Connectivism applies self-directed learning which means that the students are responsible for creating their own learning goals and are actively involved in the construction of knowledge (Conradie 2014:255). Connectivism identifies the importance of social and collaborative interaction in the construction and creation of knowledge (Danher & Umar 2010:108). The use of a connectivist approach in distance learning empowers students and provides insight and skills for learners to flourish in the digital era and to become more independent regarding what and how they learn (Siemens 2005:08).

### 3.4 Chapter Summary

The aim of this chapter was to discuss the theoretical background and the theories that were employed in this research namely, New Media Theory and Connectivism. The New Media Theory provides insight on how new media technologies have changed society, particularly the way people use online platforms. New media technologies can connect people instantly. One can argue that the media impacts people by contributing to sharing of information between societies and cultures. Moreover, the use of new media through Connectivism adds to the value that social, instructive and emotional engagements can mediate access to information and communication.

Distance education has rapidly evolved through technologies, and e-learning platforms have become online spaces for students to learn and engage with. The popularity of social media networking sites has created much enthusiasm and interactive use for educational and learning purposes. It has been noticed by scholars such as Siemens (2005) and Downes (2007) that learning is no longer confined to just the traditional spaces of learning but can now be achieved outside the classroom. Learning takes place through interactions with other people. In practice, it has become clear that the integration of social media networking sites and education can create successful, multi-level support for to students (especially at a distance university), offering complementary and value-added initiatives for creation of knowledge which takes place through connections.

Connectivism theory underlines the importance of technology to assist learners beyond the physical environment. Through the use of new media and digital technologies, students can connect and collaborate with other students and achieve learning perspectives views from one another.

## **Chapter Four**

### **Research Design and Methodology**

#### **4.1 Introduction**

The main aim of this chapter is to outline the research design and methodology used for this study and the reasoning behind this selection.

The use of new media technologies has become a norm in the twenty-first century. Students have discovered newer and innovative ways to use new media technologies such as Facebook as a tool of communication and information. This statement draws on an assortment of research questions in which the central question of the study is:

In what way can the integration of social media applications such as Facebook be advantageous to students in an ODL setting?

The sub-questions below were used to help answer the central research question:

1. How, and for what purposes, do university students engage with Facebook?
2. What type of access do University students have in order to login to social media applications?
3. How often do students log in, and what are their experiences using these social media applications?
4. How advantageous, if at all, has Facebook been for students in terms of education and learning purposes?
5. Do students prefer to engage with other students and lecturers through Facebook?

#### **4.2 Research Design**

According to Durand and Chantler (2014:29), the aim of a research design is to provide a plan or structure for the research study that will collect and generate the type of data providing answers to the research question. In addition, the research design is not just about the data collection methods, but also refers to the logic behind the data collection.

The research design ensures that the topic, research question, methodology and methods that are used in this study all fit together within the same research framework cited in Wagner et al. (2012:22 in Durrheim 2006). Wagner et al. (2012:27) describe a research design as something similar to an architectural blueprint that is followed in the construction of a building. Like the architectural blueprint, the research design indicates how the research is going to be conducted.

In this study the research question and the aim of the objectives have influenced the selection of the research design, being that of a case study. The case study will be discussed further below.

### **4.3 Case study**

A case study can be defined as an in-depth analysis of a single system (du Plooy 2011:180) such as a village, a family or a juvenile gang (Babbie 2010:309). Wimmer and Dominick (2011:140) explain that case studies are employed when a researcher wants to understand or explain a phenomenon. In this study, the researcher aimed to understand how Unisa students experienced social media applications particularly as an academic support strategy in the distance learning environment. Furthermore, the research further sought to understand students' experiences with using social media application for learning purposes.

According to Rule and John (2011:05), a case study is referred to the process of conducting an investigation (*studying the case*), the unit of the case (the case that is studied) and the product of this type of investigation. The unit of the case study is the identified case that is studied, and this could be people, classrooms, an institution, organisation, situations or events. Rule and John further point out that the word 'unit' suggests singularity and distinction from others. Therefore, identifying the unit answers the question: "What does the case study, study?" The authors further explain that the process involves following several steps, such as identifying the case, gaining access to people, places, gathering information about the case, analysing the data, writing it up and presenting it. Describing the process answers the question: "How is the case study conducted?" The product refers to the output that comes out from the process of

investigation. This could be a masters' dissertation, journal article, reports and books. The product asks the question: "What does the case study produce?"

Wimmer and Dominick (2011:142) observe that the criticism against case studies is that it lacks general scientific rigour. In certain instances, the researcher becomes sloppy and allows equivocal evidence to influence the findings and conclusions. Further criticisms by Wimmer and Dominick (2011) include that case studies are not adaptable to generalisations, and that they are time-consuming and may produce quantities of data that makes them difficult to summarise.

Although the researcher acknowledges the criticisms against the case study, the purpose of the study is to examine the instance in the participants' environment. The researcher is influenced by Rule and John's (2011:07) views that cases studies can be conducted in such a manner that it would generate insight into a particular instance in this case using Facebook as a teaching and learning platform by providing enriching description of the case and illuminating its relations in broader contexts. Secondly, case studies can be used to explore a general problem within a limited and focused setting. Thirdly, case studies can shed light on similar cases, providing a sense generalisation or transferability. Fourthly, case studies can be used for teaching purposes, to illuminate broader theoretical or contextual points.

There are different types of case study which will be briefly discussed below:

- Intrinsic case study – this case study looks at a subject purely out of interest, to identify or to illuminate a theoretical point. This case study enables the researcher to gain a better understanding of a particular case (Thomas 2016:20).
- Instrumental case study - the inquiry is to serve a particular purpose. In other words, the case study is employed as a tool to gain insight into an issue or a particular situation (Thomas 2016:20).
- Collective case study - this type of case studies occurs when there are several case studies that are studied to investigate a phenomenon (Silverman 2013:43).

In the case of this research both intrinsic and instrumental types of case study are well

suited. Both case studies provide insight into the study; however with the instrumental case study the aim is to facilitate a better understanding for improving a situation. In this research the instrumental case study was selected.

#### **4.4 Research Methodology**

By employing this research design, the researcher was able to identify the unit of analysis with whom the researcher wanted to conduct research (Babbie 2014:73). The unit of analysis will be discussed in more detail in the next section.

Research methodology is defined as the study of the principles of investigation including the philosophical foundations of the choice of methods (Durand & Chantler 2014:03).

There are two different methodologies that can be utilised: 'quantitative' and 'qualitative' research methodologies. Before revealing which research methodology this study employed, both methodologies are defined.

##### **4.4.1 Quantitative**

According to Creswell (2014:04), quantitative research is an approach for testing objective theories by examining the relationship between variables. Neuman (2012:89) observes that quantitative researchers often employ a positivist approach that follows a linear research path which understands the language of variables and hypotheses. In addition, this emphasises the precise measurement variables and test hypotheses that are linked to general causal explanations. Henning, van Rensburg and Smit (2004:01) affirm that the quantitative research approaches focus mainly on the components in their actions and representations of the participants (variables). Furthermore, this method is concerned with how often a variable is present and employs numbers to communicate the quantities (Wimmer & Dominick 2011:49). Quantitative methods are employed for questions that relate to 'quantities' as they are about questioning or measuring the phenomena that relate to questions such as 'how many' and 'how frequently' (Durand & Chantler 2014:09). For instance, the quantitative measurements can be used to determine the frequency in which participants engage with Facebook.

#### **4.4.2 Qualitative**

Wagner, Kawulich and Garner (2012:126) observe that qualitative research is concerned with the understanding of the processes and the social and cultural contexts which shape behavioural patterns. Creswell (2014:04) explains that qualitative research aims to explore and understand the importance of the way in which persons or groups contribute to a social or human problem. Qualitative research creates a story seen through the eyes of the participants and incorporates their story into the study so as to understand and represent their experiences and actions as they encounter, engage and live through situations (Wagner et al. 2012:126). Wimmer and Dominick (2011:48) note that qualitative research allows the researcher to view the behaviour of the participants in a natural setting and provides a deep understanding of the phenomenon under investigation. Henning et al. (2004:03) agree that in qualitative research, the researchers wish to give as clear and detailed an account of actions and representations of actions as possible so that a better understanding can be gained of the world, and ideally use the findings to implement social change. Durand and Chantler (2014:09) explain that qualitative research is mostly used for questions that relate to the 'quality' or variations of experience, or the meaning of experience by different people.

Babbie (2010:23) and Punch (2014:03) observe that the main distinction between quantitative and qualitative is the distinction between numerical and non-numeric data. Therefore, numerical data can be expressed as numbers, and non-numeric data can be expressed as words, visual images, sounds or objects. Henning et al. (2004:03) note that the difference between quantitative and qualitative paradigm lies in the quest for understanding and for an in-depth inquiry. Furthermore, qualitative studies are aimed at investigating the qualities of the phenomenon rather than the quantities.

For the purpose of this research, the researcher has employed qualitative research methods, namely focus group interviews and content analysis. This focus group interview was selected as a suitable method for the study and allows the researcher insight into students' experiences, attitudes and views related to the use of social media applications (Facebook) as part of their academic strategy, especially in an open and

distance learning environment. Content analysis was selected to analyse the responses and to record the frequency with which certain symbols or themes appear in the responses.

In the next section the purposes of the research, time dimensions and the phases of the research are discussed.

#### **4.5 Various types of research strategies**

Generally, there are three purposes for conducting research, namely; explaining, describing, and exploring. In some cases, the purposes of the research can be grouped together based on what the researcher wants to accomplish (Neuman 2011:16). In this study, the research has multiple purposes, but before stating which two will be selected, an explanation of all the three, namely; explanatory, descriptive, and exploratory – in that order – will be given.

##### ***4.5.1 Explanatory***

In the explanatory research, there is already adequate knowledge about a topic, and it has already been described (Wagner et al. 2012:08). Moreover, it addresses ‘why’ questions, as this type of research is conducted to look for reasons and causes of an occurrence. According to Neuman (2011:17), explanatory research identifies the sources of social behaviours, beliefs, conditions and events, as it documents causes, tests theories, and provides reasons.

##### ***4.5.2 Descriptive***

The purpose of descriptive research is to describe situations and events. The researcher observes, and then describes what was observed (Babbie 2010:93). It paints a detailed picture of a social situation and relationship, and addresses ‘how’ and ‘who’ questions (Wagner et al. 2012:08). Descriptive research is applicable when there is already basic information about a social phenomenon which is ready to be described in much detail (Neuman 2011:17). Furthermore, the researcher commences with a well-defined issue or question and then designs a study to describe it accurately. The

researcher then paints a detailed picture with specific details of a social situation and relationship (Wagner et al. 2012:08).

#### **4.5.3 Exploratory**

In the exploratory research, a researcher investigates a new area of interest to formulate questions that can be addressed in future research (Neuman 2011:16). In addition, topics that are new or have not been written about extensively are conducted through exploratory research (Wagner et al. 2012:08). According to Babbie (2010:92) exploratory research is commonly done for three purposes: (1) to satisfy the researchers' curiosity and desire for a better and enriching understanding, (2) to test the feasibility of undertaking a more extensive study, and (3) to develop methods that can be employed in a subsequent study.

According to Neuman (2011:17), descriptive and explorative research is often employed together. In the case of descriptive research, it questions the participants' classification, profiles and indicates the percentage of people who hold a particular view or engaged in a specific behaviour. Bless and Higson-Smith (1995:42) explain that the main purpose of exploratory research is to increase knowledge about the situation, for instance to explore how certain participants feel about using social media applications such as Facebook as a supplementary academic instrument.

The study was conducted through an exploratory and descriptive research method. This form of research method was selected to enable understanding on how Unisa students experience social media applications especially as an academic support strategy in the distance learning context. Furthermore, this study sought to describe and understand students' experiences of using social media application for learning purposes. Exploratory and descriptive research is often conducted in a cross-sectional study.

#### **4.6 Time Dimensions**

There are two types of time dimensions that a researcher needs to take into consideration when conducting research, namely, cross-sectional and longitudinal. Some studies that employ cross-sectional research are interested in collecting data at

the same time, whereas other studies prefer longitudinal research that collects data over an extended period (Bless & Higson-Well 1995:66 & 67).

#### ***4.61 Longitudinal***

Longitudinal research involves research that is conducted at different points over a longer period of time, for example two or more years (Wimmer & Dominick 2011:210). Neuman (2011:18) notes that this type of research is more complex, and costly, yet more powerful and informative.

#### ***4.6.1 Cross-sectional***

Du Plooy (2009:91) observes that cross-sectional research occurs during a short period of time, which takes place within days. According to Babbie (2010:106), a cross-sectional study involves observations of a sample, or cross section of a population or phenomenon that is conducted at one point in time. Neuman (2012:18) observes that an advantage of conducting a cross-sectional study is that it is the simplest and least costly alternative.

In this research study, a cross-sectional timeframe was conducted so that findings can be interpreted immediately within days or weeks (six - twelve months). The research sought to describe and explore the students' experiences in using social media applications for learning purposes by using a focus group method.

### **4.7 The phases of the research study**

The aim of the phases of the research study was to explain in detail how the researcher conducted the research study. The following phases were applied:

**Phase One:** During this phase the researcher conducted an in-depth literature review to expand the researcher's understanding and knowledge about social media applications in an educational context. It was also aimed at seeking out students who were interested in participating in the focus study in order to gain perspective of their thoughts and experience in using social media applications for the purposes of education and learning. The researcher then recruited participants through purposive sampling (based

on shared characteristics and qualities that the respondents have in common). In addition, arrangements were made in order to conduct the focus group in a location and time that was suitable for all the participants.

**Phase Two:** During this phase, the researcher e-mailed the participants to inform them about the focus group interview and ensured that all materials to be used during the interview were available. In this phase the focus group interview was conducted among students who participated in the study. Semi-structured interviews were conducted in English. The use of semi-structured interviews enabled the researcher to draw up a list of questions that were useful in the focus group, as well as to identify and explore new emerging lines of inquiry that might be directly linked to the topic being studied (Wagner et al. 2012:135). The research study began by explaining the purpose of the research study in order to create a friendly and at ease environment for the participants to express themselves. In addition, the researcher employed notetaking, recording the procedure (with the consent of the participants) and captured verbal cues from the participants to gather data.

**Phase Three:** During this phase of the study, the aim of the researcher was to transcribe, analyse and interpret data that was conducted in the focus group interview. The researcher incorporated the recommendations and experiences shared by the students on their engagement with social media applications as additional learning resources. The data collection procedures are explained in the next section.

## **4.8 Data collection**

The methods and techniques that were employed to collect data include participation observation, qualitative content analysis, and open-ended questions in questionnaires, interview guides or focus groups (du Plooy 2011:89). The research technique 'focus group' was employed for this research study. The next section elaborates as to why the focus group was selected, and the steps taken to conduct the focus group.

### **4.8.1 Focus group**

According to Neuman (2011:412) a focus group can be described as a technique in which people are informally interviewed together in order to promote a discussion on a

particular topic in depth. This type of method has become trendier in recent years as it provides data that is rich in opinions, ideas and attitudes from the participants' point of view (du Plooy 2011:199). Focus groups usually consist of several people, between six to twelve participants simultaneously. The participants are chosen based on their common characteristics (Fourie 2009:498), for instance, all participants (students) are active on social media networking sites such as Facebook. The participants were both males and females between the ages of 18-55. Wagner et al. (2012:136) explain that the composition of the focus group is integral as it should be participants that represent the target population.

Durand and Chantler (2014:66) observe that focus groups provide an opportunity to not only experience people's attitudes and experiences, but also the way they communicate in a naturalistic setting. Furthermore, a natural setting provides participants an open space to engage in, and express ideas and experiences with one another freely (Neuman 2011:412). Here, participants can build on one another's ideas and comments (Wagner et al. 2012:135). According to Wimmer and Dominick (2011:132), most of the questions in the focus group are predetermined, the sequence of the questions is established, and the questions are further implemented to reach the goal of the research. In some cases, unexpected comments and new perspectives can be explored and can add value to the study (Wagner et.al 2012:135). Furthermore, it is useful as it provides a diversity of opinions, establishes whose opinions are more dominant and marginal in the group, indicates resistance and dissent, and observes how the conversations shift according to the understanding of the participants in the group (Rule & John 2011:66).

In this focus group, the researcher was only interested in the participants' attitudes, experiences and ideas relevant to the particular topic. In this research the researcher sought to understand the students' experiences in using social media applications for academic purposes in an ODL environment. In addition, a focus group interview was conducted to understand students' experiences relating to modern day social media applications through social, intellectual and emotional online engagement.

#### **4.8.2 Steps in the focus group**

The aim of these steps was to provide an overview of how the focus group was conducted. The following steps were applied to conduct the focus group:

##### *Step 1: Determining the number and composition of the focus group*

According to Fourie (2009: 499), the composition of a group refers to the degree to which variables such as age, gender and education engage with social media applications (Facebook). Rule and John (2011:66) agree that when selecting participants, attention should be given to the gender, age and status of participants. Wagner et al. (2012:136) explain that the composition in the group is crucial to the success of the focus group interview, since the chosen participants represent the target population. The data was collected through two focus group interviews comprised of fifteen participants and explored their perceptions and experiences on social media applications (Facebook) and was conducted at the Unisa Parow campus. The researcher was able to access participants through computer labs, study areas, library and the premises of Unisa. The researcher would ask permission to contact and speak to potential participants and explain the reason for the research study and ask them whether they would be willing to participate out of their own accord.

The participants encompassed the characteristics of genders (7 males and females), ages (18 - 55), ethnicity (White, Black, Coloured, Indian and Other), and employment (students, employees, entrepreneurs, teachers, police officers, administrators, government official, shop assistant, electrician, librarian, public relations practitioner and nature conservation officer). The units of analysis were based at Unisa Parow campus which enabled the researcher to gain access to the participants. In addition, the individuals were accustomed with the social media network (Facebook), allowing the researcher to collect their experiences, attitudes and views through the focus group interview.

##### *Step 2: Recruit the participants*

The researcher selected a suitable size that varied between five and twelve participants; fewer than five will have provided limited answers and above twelve will provide a fuller

participation from the participants (Wagner et al. 2012:136). Purposive sampling implies that participants are selected to represent the knowledge of the population and further the aims of the study (Fourie 2009:447). According to Morgan (1997:35), focus groups are generally conducted with purposive selected samples in which the participants are selected from a limited number of sources. Therefore, purposive sampling was used to recruit participants for the study who share similar characteristics such as the use of social media applications (Facebook). The purposive sample will be discussed in more detail in the next section.

According to Wimmer and Dominick (2011:135), it is essential to select more than one group for study groups; this assists the researcher in comparing results to determine whether there are any similarities or differences. The data was collected through two focus group interviews at the Unisa Parow campus, comprised of six to eight participants on their perceptions and experiences with social media applications (Facebook).

#### *Step 3: Setting the meeting, date, time and location*

In selecting the date, time and location it is essential that it should be convenient for the participants, and that it does not conflict with their schedules (Krueger & Casey 2009:75). In this step, the venue of the focus groups was determined. It was imperative when choosing a venue that it would be accessible to the participants for participation in the focus group. The focus groups were conducted in one of the venues at the Unisa campus (Regional Online Learning Laboratory). In order to book a venue at the campus, a consent letter was drawn up to ask permission to use the University's venues for conducting the focus groups.

#### *Step 4: Preparing the study mechanics*

This step involves the study mechanisms of the focus group. Here, the researcher had to ensure that recruiting the participants were achieved through telephone and e-mails and that the venue of the focus groups was confirmed. Krueger and Casey (2009:76) observe that a day before the session, the participants should be contacted to remind them about the session as well as to confirm their attendance.

The moderator was enlisted and briefed about the purpose of the focus groups.

Wimmer and Dominick (2011:136) observe that each aspect of the focus group must be planned in detail beforehand; with a particular focus on including the moderator needs in facilitating the focus group. Here, the researcher used guidelines to conduct the focus groups such as which topics to address, the experiences, attitudes and perceptions of using Facebook, and whether new media technologies have the potential to assist students with academics. The role of the researcher was to conduct the focus group interviews, and a co-moderator was enlisted to capture the discussions by means of field notes.

Additionally, the researcher also collected data by means of field notes. The main reason that the researcher chose field notes for the data collection process was that field notes provide a useful guide to collect information from the participants and record conversations that take place within the focus group (Fourie 2009:492). For instance, by writing up field notes the researcher was able to collect data relevant to the focus groups such as the setting and the timing of the focus groups, while simultaneously paying attention to the interactions of the participants (verbal behaviour), and noting who speaks more or less about the topic (Wagner et al. 2012:154).

#### *Step 5: Conducting the focus group*

Krueger and Casey (2009:96) observe that the first few minutes of the focus group is critical. The researcher has to give enough information to make participants feel comfortable with the topic, create an accommodating atmosphere, provide ground rules and set the tone of the discussion. In this step, the focus groups were initiated by explaining the purpose of the research study. In addition, the moderator was responsible for ensuring that the discussion would solicit in depth qualitative research data through sets of structured or semi-structure questions and open-ended questions to elicit a group discussion of the participants' general views and opinions. Therefore, it was imperative that the researcher create a question strategy to avoid yes or no answers as well as long and complex questions. It was the moderator's responsibility to ensure that the participants were comfortable and at ease when they partook in the discussion. The next section will discuss field notes as a means of collecting data.

## 4.9 Field notes

In general, field notes can be described as a record of notes (Wagner et al. 2012:154). Wimmer and Dominick (2011:129) observe that field notes constitute the basic corpus of data. The authors further elaborate that by using field notes, the observer records everything that happened, what was said, personal views, interpretations and feelings of what was observed. Furthermore, a researcher must pay close attention to conversations between participants, recording verbal and nonverbal behaviour, who speaks to whom, pauses in the conversation, degree in which participants touch each other (kinesics), and how close participants stand to each other (proxemics).

Kruger and Casey (2009:94) note that there are three variations of taking field notes:

- *Recording notes and quotes*  
In this variation, the moderator draws a vertical line down the page and uses the left side for notes and the right for quotes. On the notes' side the moderator uses check marks to indicate whether a topic has reoccurred, and insightful quotes are captured on the right. As the moderator moves to the next question, a horizontal line is drawn and s/he writes the number of the next question. Here, the moderator can refer back to locate comments to specific questions, key notes and quotes.
- *Capture details and rich descriptive information*  
In this variation, the moderator writes down everything that is heard, putting space between speakers and a line between questions.
- *Identifying each speaker in a transcript.*  
The moderator focuses on who the speaker is and documents what the speaker is saying. Codes may be used to identify a speaker, and the first few words of each speaker and key notes of each speaker.

Writing up field notes provided information in great detail and the data was collected and analysed in such a manner which would accommodate later findings and conclusions. The next section discusses the population and sampling methods which were employed in the selection of the participants.

## **4.10 Population**

Population can be described as a collection of objects, events or individuals that have certain similar characteristics which the researcher is interested in studying (Mouton 1996:134; Wimmer & Dominick 2011:87). Mouton (1996:34) further notes that a population consists of a set of elements and their characteristics which allow for conclusion to be drawn on the common or overlapping characteristics of the sample.

### ***4.10.1 Target population***

Du Plooy (2011:109) explains that target population refers to the actual population to which the researcher wants to generalise results from. Mouton (1996:135) observes that these are the elements that are relevant for the research and provide the researcher with information. There is a distinction between target and accessible population. Whereas target population refers to the total pool or section of society that the researcher is interested in, the accessible population refers to the section to which the researcher has access in order to draw a sample (Fourie 2009:435). Therefore, the target population in this study was those students who were reachable (students who visit the Unisa Parow) to conduct the research, and who had access and engage with social media applications such as Facebook.

### ***4.10.2 Accessible population***

The accessible population is the subset of the target population, also known as the study population (Babbie 2010:199). According to Du Plooy (2011:109), accessible population consists of the unit of analysis in the target population, which is reachable and accessible to the researcher. The author further notes that accessible population refers to the elements from which the sample is selected.

In this study, the accessible population refers to the students who attend Unisa (Parow campus) and who are regular Facebook users. These were the students that the researcher had access to and able to ask them whether they would partake in a study. In addition, a purposive sampling (defined below) was employed in this study. The researcher was able to gain access to potential participants through computer labs, the

library, study area and in the premises of Unisa (Parow campus). The researcher asked for permission to contact and speak to potential participants and explain the reason for the research study and asked them whether they were willing to participate. They participate by consent, out of their own free will.

#### ***4.10.3 The unit(s) of analysis***

Bless and Higson-Hall (1995:64) note that the unit analysis refers to the participants who provide information to the researcher. In this study, the unit of analysis comprises of both male and females between the ages of 18 and 55 and various ethnic groups. The units of analysis will be based at the Unisa Parow campus which will enable the researcher to gain access to the participants. In addition, the individuals are familiar with the social media network (Facebook).

#### **4.11 Sampling**

According to Mouton (1996:132), sampling refers to selection procedures which involve some form of random selection from a target population. The main aim of sampling is to take a portion of a population that the researcher wishes to conduct research upon. The sample must also be able to represent the target population's characteristics, attitudes and behaviours of the research issue (Smith, 1988:78). Sampling methods can either be probability or non-probability.

##### ***4.11.1 Probability sampling***

This sampling method involves a random process in which everyone in the population has an equal chance of being selected in the sample (Durand &Chantler, 2014:123). In this method of sampling, Wagner et al. (2012: 89) explain that the researcher has equal access to the whole population, and randomly selects several people to make up a sample.

##### ***4.11.2 Non-probability sampling***

This sampling method involves selecting people based on appearance and convenience, because they seem to meet certain requirements that are qualified for the study (Wimmer & Dominick 2011:93). In non-probability sampling, people are selected

from a population in a non-random manner (Durand & Chantler 2014:123). This includes convenience sampling, snowball sampling, quota sampling and purposive sampling (Wagner et al. 2012:92; Wimmer & Dominick 2011:95).

- *Convenience sampling*

This method of sampling is the most inexpensive and effortless; the researcher selects whoever is available. Here, the researcher can draw units of analysis that are conveniently available and accessible to the researcher. However, it does not represent the entire population (Wagner et al. 2012:92).

- *Snowball sampling*

In this sampling method, the researcher randomly contacts qualified participants, and asks these people for names of their relatives and friends who would be interested in participating in the study. Based on referrals, the researcher would contact these people and determine whether they qualify to participate in the study (Wimmer & Dominick 2011:94).

- *Quota sampling*

In this method of sampling, the researcher would create various strata (subgroups) that are a representative of the sample according to their proportioned population. These subgroups may suggest gender, age, education levels and ethnic groups. Here, subjects are selected to meet a predetermined or known percentage as required in the focus group (Wagner et al. 2011:93).

- *Purposive sampling*

Also referred to as judgement sampling, the researcher selects participants in such a way that these individuals could be representative of the population, and specific selection criteria are employed to identify the most prospective participants (Wagner et al. 2012:93). It mainly involves the researcher's deliberate choice of participants and their knowledge of the topic of interest. Therefore, in this study purposive sampling was employed to select individuals who are students at Unisa and are avid Facebook users.

## **4.12 Data Analysis**

Once all data has been collected, this step involves analysing the data that derived from the focus group. (Berg 2001 as cited in Wagner et al. 2012:229) describes the process of data analysis as the process of data reduction (focusing, simplifying and transforming data), data display (organising data into tables, tally sheets, summary sheets) and conclusions/verifications (evaluations and decisions drawn from and confirmed by the data). According to Creswell (2014:195), data analysis goes together with the data collection techniques and writing up the findings. Babbie (2012:352) observes that in qualitative research, the researcher looks for patterns or relationships early in the study, even when collecting the data. The main aim of the data analysis is to examine the information, interpret the information and to draw up conclusions.

As part of the data analysis procedure, the researcher used the theoretical framework New Media Theory and Connectivism on how social media applications (Facebook) was integrated in the Higher education sector. This integration sought to provide a correlation between the theories and the data interpreted in the focus group as to how students use social media applications (Facebook) for academic purposes. New Media Theory enables students to understand their own experiences in modern day social media applications.

Furthermore, the research analysis procedure followed the qualitative content analysis steps as outlined by Tesch (1990:141). Below is an outline of the steps that were used to code data into categories and create themes or concepts (Neuman 2011:460).

### ***4.12.1 Steps in the data analysis***

In this research Tesch's (1990:141) approaches were used to analyse focus group interviews.

**Step 1:** The first step entailed that the researcher read through all the field notes with careful consideration and organise the data in a structured manner. The data was organised in such a way that it was easy for the researcher to search for extracts, refer back to the original source when necessary, and keep a record during the process of

data interpretation (Durand and Chantler 2014:79). Field notes and interviews were transcribed, typed and arranged according to similar responses to create a record of the data (Creswell 2014:198). In addition, a table was created to provide descriptive information about the participants which was useful when analysing data.

**Step 2:** Morgan (1997:62) observes that interpreting data distinguishes between what participants find 'interesting' and what is 'important'. For instance, if a participant discusses a particular topic in detail, it is an indication that they find the topic interesting, but it is not the same as saying it is important. In this step, the field notes were read, recorded and arranged, and the researcher tried to make sense of the data. In some instances, the researcher had read the notes several times to establish what the participant was conveying. This means that the researcher selected one transcript and asked, "What is this about, or what are the perceptions of this participant?" and thought about the meaning of the information. For instance, the researcher was able to reflect on the attitudes and opinions of the participants' responses, as this provided the basis of the interpretation of the data. Additional notes were written on the margins of the field notes to provide a general outline of the data received.

**Step 3:** In this step, a list is made up of all the themes or topics. Similar topics are clustered together. This exercise is referred to as 'coding'. Coding can be defined as an act of transforming raw data into standardised form (Babbie 2010:338). Creswell (2014:197) explains that codes are tags, names or labels, and coding is therefore the process of putting these tags, names or labels against pieces of data. These pieces may be the participants' words, small or large pieces of the data. In addition, the aim of assigning these labels is to attach meaning to the pieces of data, and these labels then have several functions and interpretations. The coding process was started by transforming raw data into a form of suitable analysis (Fourie 2009:19). This was done by organising the data and writing a word that represented the category. The researcher then clustered together all the participants who have similar views and created clusters according to themes. Leftover topics were also arranged into columns in order to provide additional information to the research study. Moreover, the researcher made a list of the participants' responses, written in a narrative format explaining the responses of the participants.

**Step 4:** In this step, the researcher applied the list of themes or topics to the data. Once the list had been completed the researcher referred back to the data to make sense of the information derived from the focus study. In order to comprehend the data, the researcher abbreviated the topics as codes (Creswell 2014:199). The codes were written next to the applicable segment of the transcript, as this aided in identifying emerging new categories or codes.

**Step 5:** This step involves using descriptive wording for the themes or topics and creating categories. Lines are drawn between categories to show the relationships. In this study, descriptive words were turned into categories. The data retrieved from the focus group interviews were used as descriptive words.

Next, the researcher used descriptive wording for the topics which were then turned into categories. For instance, the descriptive word could be 'connect'. The researcher would be able to categorise the responses of the participants who might use social media (Facebook) to connect with other students for educational or learning purposes. In addition, the researcher sought ways to reduce the total list of categories by grouping similar topics together. For instance, categories such as 'connect', and 'collaborate' might relate to one another, because students might connect with one another so that they can collaborate in order to achieve academic success.

**Step 6:** In this step, the researcher drew lines between categories to indicate interrelationships and the codes were alphabetised.

**Step 7:** In this step, data that belonged to each category was assembled in one place, and a preliminary data analysis was performed. Tesch (1990:144-145) suggests looking at the collection of the material in one category at a time. In particular, to look at (a) commonalities in content, (b) uniqueness in content, (c) confusions and contradictions in content, and (d) missing information with regard to the research question/topic. It was also necessary that existing data be recorded. Moreover, the researcher described the interpretation of the data and compared it to the theories and literature review.

**Step 8:** In this step, the researcher recodes existing material if it is necessary (Tesch 1990:145). During this step the researcher handed information to the co-moderator and independent coder to cross-check references within the focus group as derived from

qualitative coding. Reliability and validity are key factors of research. This will be discussed further in next section.

#### **4.13 Issues of reliability and validity**

According to Wagner et al. (2012:243), when the researcher is interpreting the results of the research study, s/he needs to be certain of the validity of the results. Creswell (2014:201) observes that quantitative validity should entail a researcher's checks for the accuracy of the findings; whereas qualitative reliability is concerned with the consistency of the measures. Bless and Higson-Smith (1995:130) observe that reliability is concerned with the consistency of the measures.

##### **4.13.1 Reliability**

Mouton (1996:144) explains that reliability refers to different research issues being tested by the same instrument at different times and producing the same results. As Durand and Chantler (2014:97) note, the function of reliability is the extent to which an instrument is free from error. According to Bless and Higson-Smith (1995:130) an instrument that generates different scores every time is known to have low reliability.

##### **4.13.2 Validity**

Durand and Chantler (2014:97) state that validity is the extent to which the researcher is measuring what is supposed to be measured. The researcher, therefore, is measuring what s/he is going to measure (Wagner et al. 2012:81; Wimmer & Dominick 2011:59). Punch (2014:239) explains that an indicator is valid to the extent that it is empirically representing the concepts it purports to measure. There are three types of validity: content validity, criterion validity and construct validity.

To test the criteria that will be used in the research study, it is crucial to ensure that the trustworthiness of the data is all-encompassing. The researcher also had to maintain ethical professionalism in analysing data that would be characterised under the following headings:

**Credibility:** The main purpose of this research study was to explore how the integration of social media applications such as Facebook can be advantageous to students in an ODL setting. Therefore, the researcher aimed to comprehend the experiences and

perspectives of the participants using these social media applications and how this has impacted their lives. Focus group discussions were conducted to 'understand the subjective experience of the participants' (Fourie 2009:498).

**Transferability:** To achieve the effectiveness of transferability, the researcher described the research context, aligned the findings to the theoretical frameworks (New Media Theory and Connectivism). In addition, the researcher ensured that coding was complete, together with a literature control to reconceptualise findings.

**Dependability:** The context and engagement with new media technologies and their changes were taken into consideration. In order to secure dependability, the researcher strove to ascertain the accuracy of the field notes, which would ensure the confirmability of the findings, ultimately leading to the conclusions of the research study (Wagner et al. 2012:242).

**Confirmability:** Here, the researcher focussed on the criterion above, and on the alignment between the findings and the data. Information was gathered from the responses of the participants.

The researcher used an independent coder and a co-moderator to cross-check references made within the focus group discussions and analysed and interpreted the data analysis as derived from the qualitative coding. This was aimed at ensuring preciseness, reliability and accuracy that are aligned to trustworthiness strategies.

#### **4.14 Ethical considerations**

According to Punch (2014:36) research is a branch of applied ethics that focuses on specific contexts of planning, conducting, communicating and following up with the research. Ethical responsibility and considerations are some of the most valued principles that the researcher must adhere to when conducting credible and virtuous research.

##### **4.14.1 Confidentiality**

The research was conducted in a confidential and respectful manner; the researcher ensured that no harm was done to the participants. The feedback provided by the

participants was used for academic purposes only. Bless (1990:103) observes that the researcher can recognise the participants in the study. Therefore, the participants must be assured that that the information they have given will be treated in a confidential manner and the data will be used only for the stated purposes. Wagner et al. (2012:64) state that ensuring confidentiality involves hiding the participants' identity, research location, and not disclosing any information that may embarrass or harm the participants.

In this case, the researcher assured the participants in the study that the information derived from the study would be used to explore the benefits of using social media for education and learning purposes. In addition, the researcher ensured that the identities of the participants would not be revealed, and therefore personal information would not be asked to ensure anonymity and confidentiality. It was imperative that the researcher reminded the respondents that the researcher could be trusted, and the study was not for publications but for academic purposes only. The researcher, co-moderator and independent coder signed an agreement so that information of the participants would not be disclosed. Data was stored in the researcher's personal computer which is password-protected, together with files which are password-protected. Nobody other than the researcher has access to this data. In addition, confidentiality agreements with the transcriber and independent coder were signed.

#### **4.14.2 Informed consent**

Informed consent forms are pivotal in the research process. Wagner et al. (2012:68) observe that the guiding principle of the informed consent form is an individual's personal right to agree (or not) to participate in the research study and fully understand the research process and consequences.

According to Wimmer and Dominick (2011:71) the researchers should disclose the following in the informed consent form:

- the purpose of the research, expected duration and procedures
- the participants' right to decline to participate and withdraw from the research once the participation has started
- the foreseeable consequences from declining or withdrawing

- reasonably foreseeable factors that may influence the participants' willingness to participate, such as potential risks, discomfort or adverse effects
- any prospective research benefits'
- limits of confidentiality
- whether incentives are offered
- contact details of the researcher
- whether the participants have questions or uncertainties about the research

In this research study, participants had to sign informed consent forms agreeing that they would participate in the research study of their own accord. Before conducting the focus group interviews the researcher explained the purpose of the informed consent letter and how and why the research would be conducted. Moreover, the informed consent letter contained information that the participants had to be aware of, such as that participation in the study was voluntary and the participants could withdraw from the research at any time without giving a reason.

#### ***4.14.3 Additional information***

In focus groups discussions, students may experience a sense of discomfort or emotional distress as part of the reflection process. The researcher strove to ensure that the focus group discussions were conducted in a conducive setting and guaranteed that information derived would be treated as fully confidential. In addition, the researcher was bound to the Unisa Ethics of Research Policy document by Unisa, and all steps to ensure confidentiality were taken. The main focus of the researcher during this point was to ensure that the participants felt that their contribution in the study was meaningful and appreciated in the research process. The intention of the researcher was to conduct comprehensive, accurate and legitimate research that would enhance students' experiences by using new media technologies. This could be beneficial in the field of Communication Science within both a South African and ODL teaching and learning context. Moreover, research ethics was aligned to ensure that the research study does not contain any harmful effects towards the participants.

#### **4.15 Chapter Summary**

This chapter looked at the methods and techniques that the researcher applied to conduct the research in order to collect and analyse accurate data for the findings of the research study. The methodology that was chosen is a qualitative format, which means the researcher was able to collect the responses through words. In addition, the researcher described the stages of the research study; this was to demonstrate how the research was conducted. A focus group research technique was conducted in this study. A case study research design was utilised. Attention was given to issues of reliability and validity. Furthermore, this chapter highlighted the ethical issues that the researcher had to prepare for and always adhere to as a commitment to ethical responsibility towards the participants and the research. The next chapter outlines the research findings of this study.

## **Chapter Five**

### **Research Findings**

#### **5.1 Introduction**

This chapter outlines the findings of this study. In the previous chapter, it was stated that theoretical frameworks of New Media Theory and Connectivism will be used as tools for the analysis.

One of the most important aspects of new media technologies is that the convergence of the Internet and technologies have created a well-connected society where students can connect and share information about anything, even for academic purposes. In this study, the major research question was: *In what way can the integration of social media applications such as Facebook be advantageous to students in an ODL setting?*

#### **5.2 Overview of student profile**

During the academic period of 2018 focus group interviews were conducted. The aim of these focus group sessions was to understand the experiences and attitudes about using social media applications such as Facebook as an additional learning resource. All 15 participants who partook in the focus groups were students who attended Unisa and were avid social media application users. The participants were comprised of male (7) and female (8) students, between the ages of 18 and 55, from various ethnic groups (White, Black, Coloured, Indian and Other) and holding various types of employment (students, employees, entrepreneurs, teachers, police officers, administrators, government official, shop assistant, electrician, librarian, public relations practitioner and nature conservation officer).

#### **5.3 On students' opinions in using social media applications such as Facebook as part of their studies at Unisa.**

In the focus group interviews, all fifteen students provided their opinions on using Facebook as part of their studies at Unisa. Their general view was that Facebook served as a convenient and accessible platform to interact, communicate, collaborate



communication instantaneously. Similarly, participant thirteen concurred that WhatsApp and Facebook allowed people to be more verbally active in a rapid manner. On this basis, social media applications such as Facebook and WhatsApp have become platforms of communication for students to engage and communicate freely in an accessible manner.

Even though this research study focused on the social media application Facebook, twelve of the fifteen participants have also pointed out that WhatsApp and Facebook Messenger were also used as a communication platform to discuss their studies with other peers. Facebook Messenger provides users the ability to communicate actively with one another online. Participant five reported that Facebook Messenger was also used to send private messages to students. In addition, participant eleven stated that Facebook Messenger made it easier to see who was online and willing to assist with related issues that impacted on their studies.

Similar to Facebook Messenger, WhatsApp has become a useful open space for students to engage actively by sending texts, videos and images within seconds. In the interview sessions, the participants reported that they engaged with the WhatsApp application in learning by sharing information on their mobile devices with other students in their WhatsApp group. Furthermore, they stated that WhatsApp was used as a supplementary interactive communication platform for Facebook. This means that these twelve students would often use both Facebook and WhatsApp together to share information and discuss matters pertaining to their studies. In the interview sessions, participant three noted that WhatsApp was used to make appointments, connect and share ideas immediately. Participant one and Participant five agreed that WhatsApp helped with sharing information across a distance at a lower cost with other students that were able assist with their educational activities and experiences. It emerged during the interviews that participants (twelve of fifteen) employed WhatsApp as a supplementary student platform to discuss questions, opinions and input from other students. WhatsApp provided students with other means for communication and information by using instant messaging. These students were able to share and collaborate with one another either through group discussions or individually. In

addition, WhatsApp afforded students the ability to communicate with one another instantaneously, eliminating barriers of distance and time. These interactive platforms (WhatsApp & Facebook Messenger) provided students an alternative platform to communicate, inform and connect about activities that pertained to their studies. The next section focuses on the reasons for students engaging with Facebook.

#### **5.4 Main reasons students engage with Facebook**

Users engaged with Facebook for various reasons that gratified their specific needs. During the focus group interviews, thirteen out of fifteen participants noted that among the reasons that led them to engage with Facebook were to communicate, disseminate information and collaborate with their peers. Without exception all the students expressed agreement that they also made use of Facebook for academic and social reasons, to communicate, connect and be informed about content that pertained to their studies. Based on the foregoing, it can be said that students engaged with Facebook as an alternative method to engage with students and enhance learning outcomes.

One of the main reasons students engaged with Facebook which also emerged during the interview sessions was that being distant students was a very isolating and intimidating experience as students were geographically separated from tuition support practices. Students expressed a desire to be part of the academic community so that they could enhance their learning experiences with other students. The next part of this chapter will provide an overview of how and why students nurture the engagement with Facebook.

##### ***5.4.1 Connecting with other students***

In the past, Unisa provided the institution's students with a list of fellow students completing the same qualifications and modules and, consequently, students were able to interact with interested peers.

During the research period students were able to connect with their peers via Facebook and this provided the students with a privacy setting so that users were in control of what information they shared and with whom.

According to Participant four, the reason he engaged with Facebook was that Unisa no longer provided the student list which allowed student interaction. Engaging with Facebook allowed them to once more connect with fellow students who were studying the same modules that they were registered for. Before the rise of Facebook, according to Participant four, the only way to connect with other students was via a student list that was issued by Unisa.

Open distance learning has evolved through the convergence of technologies and the internet, making it more accessible for students to connect with others and create online study groups. The impact that these technologies have on distance students is that they increase student engagement and collaboration and remove the barriers of isolation among students. The next session outlines the reasons why students engaged with Facebook in distance learning.

#### **5.4.2 Distance learning**

According to the responses of the interviewees, Facebook provided students with opportunities to be in control of their learning experiences, especially studying through an ODL institution. At an ODL university, students can engage with one another at any time and place. Ten students observed that the experience of studying alone caused a feeling of despondence. However, through emerging technologies integrated with social media applications such as Facebook, students felt that they were provided with immediate access to other students studying the same modules. Some students indicated that it provided a learning tool for distance students because it mediated their learning and interactions with other students to discuss ideas and partake in active learning outcomes.

*“It makes me feel less isolated and alone, being an ODL student, because we feel a sense of relief and understanding knowing other students have the same apprehensions that we do”. (Participant One).*

Participant three noted that studying through distance was a very isolating and lonesome experience and that having people who regularly check their Facebook statuses, eliminated factors of isolation. There was a common feeling expressed by the interviewees that being in contact with other students eliminated the barriers of isolation and loneliness and enhanced their learning experiences. In line with the abovementioned results, Mbatha's (2013:550) research confirms that using Web 2.0 (web-based utilities through technologies) applications for open distance learning creates new opportunities that extend and enrich learning experiences and reduce isolation among students. In a similar research study conducted by Conradie (2014:225), the results indicated that Web 2.0 is an important element that enables student autonomy and, therefore, supports student self-directed learning. In line with the above observations, Beldarrain (2007:147) notes that technology tools facilitate the integration of student engagement in a distance learning context. The next section focuses on the participants' experiences using Facebook.

## **5.5 Students' reflections on their experiences of using Facebook**

Students' experiences in using Facebook varied, as some students indicated that it was a positive experience, whereas others experienced difficulties. Below, positive experiences are presented, followed by students' negative experiences.

### ***5.5 .1 Positive experiences***

As already stated above, ten of the participants indicated that studying through a distance learning institution has been overwhelming at times, but the use of social media applications has encouraged students to engage with fellow students not only in a social capacity, but also academically. Moreover, the participants also indicated that because of the time and space factors of being distance learners, Facebook had the ability to enhance their learning experiences through new media technologies. Social media applications enabled collaboration and engagement among students as it provides quick feedback and gratified their learning experiences. Eleven of the participants also indicated that it was more convenient and affordable than alternative platforms to share information with one another such as uploading files (video and

information), promoting student participation and interest through online discussions, and mainly creating a learning community for students and by students



From the word clouds (*wordles*), the responses above indicated the students' experienced that using Facebook provided quick feedback, enabled quick communication with fellow students and provided them with confidence to communicate with one another. The students' responses are in line with Ebele and Oghenetega's (2014:22) findings that students experience social media such as Facebook to be one of the fastest ways of receiving and sending information timeously. The next section focuses on the negative experiences of the participants.

### **5.5.2 Negative experiences**

Although thirteen of the fifteen students have highlighted that they used Facebook to engage with other students, there were also a few students who indicated the threatening aspects of this phenomenon. Participant eight stated that in some instances, students sent files and content that did not pertain to their studies which caused frustration and distraction. Participants eight and thirteen also noted that time was often wasted reading unrelated messages or watching videos and images that did not relate to the modules themselves. This caused major distraction from learning. Two of the participants noted that sometimes they also got distracted by Facebook features



From the word clouds (*wordles*), the responses above indicated that the students' expectations varied. Ten participants noted expectations such as student engagement and support would result in them becoming motivated, thus facilitating the building of relationships and confidence, promoting a spirit of cooperation and interaction, and having informative interactions. Five (one, five, eight, eleven and fifteen) of the participants observed that they expected students' participation and that interaction be both fun-filled and helpful. Participant seven and nine also noted that engaging with like-minded individuals who were serious about their studies and who shared common interests was important. Based on the foregoing, it can be said that the participants expected that their engagements with fellow students would be collaborative, actively participative and being supportive in terms of sharing information related to their coursework in order that learning outcomes and academic goals be enhanced. The next section outlines how students used Facebook for their studies.

## **5.7 On how students use Facebook for their studies**

This section will deal with the type of access that students have to login into their Facebook account for academic purposes.

### ***5.7.1 The type of access students had to log into Facebook***

All fifteen of the participants reported that they mostly used mobile technologies to access Facebook for their studies. Eight of the participants indicated that they used their smartphones; four indicated they used their iPhones and three of the participants used personal computers because of its accessibility. The participants also reported that they had used work computers and the computers at the computer lab (Unisa Parow Campus) to gain access to Facebook.

Students revealed that they often had access to Facebook through their phones, smart devices or went to Unisa (Parow campus) to use the computer facilities there. The prospect of accessing Facebook through their mobile technologies gave distance learners the opportunity to increase their interaction and collaboration with other peers. In addition, this provided them with instant feedback regardless of time and space, and the ability to be connected anywhere. In line with the responses given by the students

interviewed, Lesame (2005:58) observes that mobile technologies enable students to become active participants in the distribution of information. On the foregoing, the possibilities of accessing Facebook on mobile technologies gave distance learners more frequent access to information and communication at hand. The next section reports on the students' habits on using Facebook for academic studies.

### ***5.7.2 Students' habits on using Facebook for academic studies***

Nine (two, three, four, five, six, nine, ten, eleven and thirteen) of the participants stated they logged onto Facebook whenever they received notifications. Five participants (two, three, four, eight and fourteen) stated that whenever they had the time to log into Facebook, they always had their mobile phones with them. Three participants (one, seven and twelve) indicated that they logged into Facebook about three or four times a day just to check in with the Facebook groups. Three of the participants also indicated (three, seven and fifteen) that they accessed Facebook occasionally or whenever they found the time. Based on the foregoing, it appears as if technologies have become influential in how students access social media applications and have provided a revolution for instant information and communication opportunities.

Participant four noted that he usually logged into Facebook as soon as he received any notifications from the group. It helps him to be updated about my studies and responds instantly to messages and participate in discussions. Eight (two, six, eight, nine, ten, eleven, thirteen and fourteen) participants shared similar experiences, noting that they logged into Facebook when notifications were received or whenever there was free time. Five (one, three, seven, twelve and fifteen) students stated that they logged into Facebook about three to four times per day. The next part reports on how students used Facebook for their academic studies. The report below is different from the section above that reported on students' 'habits' in using Facebook for their studies.

### **5.8 On the explanation of how students used Facebook for their academic studies**

Facebook has become an alternative online space for students to structure and facilitate their learning and academic aims. In addition, Facebook allows students to

communicate with one another, enhance their learning experiences and share their knowledge and ideas regarding their coursework. It was also observed that the participants utilised Facebook as an online space to mediate their own learning and enrich their learning experiences through guidance and support from fellow students.

Participant 2 reported that Facebook was used as a shared platform to improve communication, learning experiences and collaboration with other students studying the same coursework. It provided instant feedback to make well-informed decisions that could alter their studies. Seven (one, two, four, eight, nine, eleven and twelve) of the participants concurred that they used Facebook to collaborate with their peers and seek information regarding their coursework. Three (three, five and fourteen) of the participants noted that they used Facebook to find assistance with structuring assignments and input from students about the modules. Participant 9 stated that Facebook was useful for academic studies as it assisted students with resources to connect with other students. The participant further elaborated that it improved understanding of the course much better, knowing that there were other students in the same boat.

Based on their experiences, five (six, seven, ten, thirteen and fifteen) participants indicated that Facebook had been useful in facilitating their learning and education. In a study conducted by Towner and Muñoz (2011:47), their findings indicated that Facebook has become effective as a course instrument for communication and assisting students in their learning and education objectives. Mayende, Birevu, Isabwe, Walimbwa and Siminyu's (2014:336) research findings indicated that Facebook could be used as a tool to mediate learning since it afforded students the opportunity to interact, share and discuss ideas with their teachers and peers. The next part reports on how students viewed Facebook as an e-learning platform.

### ***5.8.1 Facebook as an e-learning platform***

E-learning has rapidly become an integral component for students to engage with especially in distance education. Unisa has implemented e-learning platforms such as MyUnisa and MyLife for students to facilitate their learning, participate in group

discussions and construct information and knowledge together. With set facilitation times with a facilitator on Facebook, students have merged it as part of authentic e-learning experiences that support collaborative construction of knowledge (Herrington, Reeves & Oliver 2010:18). Participant eleven stated that one could view Facebook as an e-learning platform because Facebook groups enable students to collaborate and engage with one another. For instance, students can upload and download resources through discussion groups. It also helps to create new threads and allow replying to students on the discussion groups. Four (three, seven, eleven and twelve) of the participants shared the same views as Participant eleven that Facebook can be viewed as an e-learning platform as it affords learner support such as sharing resources and connecting through technologies and social media applications. In line with the participants' experiences, Wang, Woo, Quek, Yang and Liu's research (2012:433) found that Facebook groups as an e-learning platform can be used as a supplement for ideas and resources sharing as well as engaging in online discussions.

It emerged in the interview sessions that two of the participants did not know how to employ Facebook for academic studies. As Participant three stated:

*"Honestly, I don't know how to use Facebook for academic studies, for example if I want to know how to reference I am not going to find it on Facebook. I will have to go on Google, on the Internet itself".*

According to Rose and Meyer (cited in Veletsianos 2010) the barriers of learning are not inherent in the students but are consequences of students' interactions with inflexible materials and methods. Taking this response into consideration, students need to be informed about how to use Facebook for primary functions such as communication, interaction, discussion and sharing resources (McCabe 2012:72). The next section focuses on the challenges for students that do not use Facebook.

### **5.8.2 Challenges for students who do not use Facebook**

As stated in the Chapter Two of this study, a lack of computer skills and limited access to the internet is an ongoing challenge in South Africa. Mbatha (2013:544) observes that one of the main reasons that students are not interested in embracing Facebook as part

of enhancing learning and education outcomes is that they lack knowledge skills on how to use technologies and social media applications. It is also believed that not many students have access to computers, mobile devices and internet resources which makes it difficult for them to engage with other students. According to Participant twelve, not everyone has equal access to technologies and the internet, which makes it difficult to get hold of other students. Participant twelve further stated it was costly to download content such as videos, images and written texts because data bundles were expensive. Four of the participants noted that due to limited computer facilities at the computer labs and library, this also prevented students from accessing their Facebook groups, or felt rushed due to other users waiting to use computer facilities.

*“There are other students who do not have a Facebook account and not technological, or not into social media. So, they might not be able to enjoy or prefer it that much.” (Participant four)*

Participant six also shared the same views, noting that there were some students who did not use Facebook because it was not user-friendly since the students lacked computer and digital skills, and experienced difficulty as a result. It was also noted that some students might not like employing social media sites for learning and education purposes, because they had the potential of causing distraction for their studies. Some students experienced difficulty in using Facebook because they did not have access or knowledge on how to use these types of technologies for a learning and engagement platform. In line with the students' experiences, Bosch's (2009:197) research found that it could be a challenge employing computer-based learning strategies as most students indicated that they had a lack of computer literacy's skills and had no access to resources that enabled such learning to occur. Mayende et al.'s (2014:337) research revealed that many students had limited access to computers, and that there were few computers at the campus at their disposal. In addition, it was also noted by the students that internet access was a challenge as it hindered their Facebook usage, and some students did not have Facebook accounts nor mobile phones that provided internet access. The next section focuses on the way in which Facebook met participants' expectations.

### **5.8.3 Students' perceptions on technologies**

Although there are challenges for students not using technologies as part of their computer-based learning strategies, there are students who are technologically savvy and able to employ technologies to create a social and collaborative platform to engage with. According to Downes (2010:28), the core of social media networks is to create links between people through technologies and implement participation activities as well as content creation. In the interview sessions, students encouraged one another to engage through networks where they are exposed to other people's ideas, knowledge and way of thinking.

Participant five reported that he felt he was part of a study group through technologies and could share the experiences and fears of the group. Participant eleven noted that technologies provide students a sense of belonging so that they can interact with other students who are willing to assist at any time. The foregoing responses indicate that students felt that doing their studies with the convergence of technologies and the internet created a platform for connecting with other students and made them feel like part of a community of students. Technologies have become useful supplements to enhance students' learning experiences and activities.

Currently, online learning is dominated by the development of new media technologies, and technologies influence how students participate in their own learning (Downes 2010:28). In the interview session, students indicated that Facebook is a contemporary medium that is useful in assisting in the facilitation of their studies. As one student indicated:

*"In today's society everything is online, and, therefore, students use technologies and the internet as an alternative collaboration platform". (Participant 9).*

Veletsianos (2010:62) notes that Web 2.0 tools and social media applications are becoming instrumental in the education industry, particularly in distance learning. The next section reports on how Facebook meets the needs of the students' expectations.



## **Chapter Six**

### **Data Analysis**

#### **6.1 Introduction**

This chapter outlines the data analysis of the findings presented in the preceding chapter. The data was collected through focus group interviews. The data analysis procedure entails the qualitative content analysis as outlined by Tesch (1990), with the central frameworks of New Media Theory and Connectivism.

This chapter is divided into two parts. The first part will provide a recapitulation of the theories relating to Connectivism and new media. The second part of the chapter aims to answer the research questions of the research study.

#### **6.2 Theoretical Frameworks**

In Chapter Three of this study, detailed focus was provided to highlight the theoretical frameworks of New Media Theory and Connectivism. Here, only a brief discussion will be given.

##### ***6.2.1 New Media Theory***

New Media Theory originated due to the rise of technological revolution, especially through information and communication technologies that have an influence on global, social, economic and cultural movements (Lesame 2004:02). Manovich (2001:43) notes that we form part of the new media revolution, as the shift of our culture to computer-mediated forms of production, distribution and communication is already taking place. Manovich (2001:66) further points out that new media entails analog media that are converted to digital representation. Lievrouw and Livingstone (cited in McQuail's 2010:39) define new media as a composite way of linking information and communication technologies associated with social contexts that brings together three elements: (1) technological artefacts and devices, (2) activities, practices and uses, and (3) social arrangements and organisations that form around the devices and practices.

New media technologies, often widely referred to as to Web 2.0, include a variety of web-related communication technologies such as social media applications, blogs, wikis and virtual worlds (Friedman & Friedman 2008:01). Bell (2011:100) argues that the rapid development of Web 2.0 has made people producers of information, whether the information is their online presence (chatting), commenting on other people's posts or tagging of content. McQuail (2010:39) observes that the features of new media are interconnectedness, accessibility, interactivity and social presence. On this basis, new media technologies have contributed to a more well-connected society that has opened newer and more effective channels for people to create and disseminate content instantaneously. The wealth of technologies has increased significantly to the extent that they have reshaped the way in which resources are made available and how learning has occurred beyond the traditional classroom. This next section looks at Connectivism theory.

### **6.2.2 Connectivism**

Connectivism was developed by George Siemens (2005) and Downes (2008) and is described as a learning theory for the digital age. Siemens (2005:5) observes that learning occurs by forming connections with other people that enable them to sort through important and unimportant information. It is through this perspective that connectivist learning encourages participants to make their own choices (about what they learn) and this aids them in developing distinctive perspectives with whom they can share within these communities (Downes 2008:03). In essence, Connectivism theory takes into account that learning is influenced by new learning technologies (Siemens 2005). Downes (2008:02) observes that Connectivism as a theory focuses mainly on autonomy and diversity within networks. Moreover, it is through the interactions of various perspectives that a community can receive new knowledge. According to Kop (2011:20), Connectivism is not a body of knowledge to be transferred from educator to learner as learning does not take place in a single environment. Instead, knowledge is distributed across the Web, and people's engagement with it constitutes learning.

### 6.2.3 A connective approach

The Connectivism theory implies that students learn and share knowledge through the provision of technologies and networks of communication (Siemens 2006). Learning occurs when students engage and share information with one another, thereby creating a learning community. The theory suggests that students who have access to these technologies and devices can create spaces for their own content, make connections with peers of their choice and actively participate in enhancing their learning abilities. Students encourage one another to engage through networks, and are exposed to other people's ideas, knowledge and way of thinking.



*(Image retrieved from google)*

Students can facilitate their own learning through a connective approach, that is; connect with each other through technologies (smartphones, laptops and other devices) and social media applications (Facebook) to creating learning communities that are accessible and relevant.

One of the most important aspects of Connectivism is that students have a strong social presence when using a platform such as Facebook, as this enables students to increase their engagement with other students (Kop 2011:22). Moreover, this enables them to build connections with their peers by forming a sense of belonging and confidence which enhances active participation in learning communities. Through these

networks, students are connected through similar interests and goals and can share their successes and challenges pertaining to their studies.

In their responses, the participants felt that enrolling for their studies with the convergence of technologies and the internet has created a space for connecting with other students and make them belong to a community of students. In a research study conducted by Garcia, Brown and Elbeltagi (2013) their study focused on whether a connectivist-learning model could be considered to enhance learning from an academic and student perspective when using Web 2.0 applications such as blogs. This research study found that technology-driven integration increased collaboration and interaction. In addition, students felt empowered to create learning communities and communication, collaborate and engage when using technologies. In line with the theories of Connectivism and New Media Theory, Facebook provides students a platform to share their learning experiences and enhance their innovative abilities. Similarly, Peeters (2016) found that students who collaborated through Facebook enabled fellow students to create networks of peers, as they shared agency relating to the learning outcomes with their peers. In line with these findings, Beldarrain (2007:147) points out that those technologies afford students a sense of belonging (presence) where students feel comfortable and at ease to engage and collaborate with their peers. A sense of belonging speaks to Connectivism, a sense of being connected. The next section discusses new ways of learning.

### **6.3 New ways of learning**

Kop and Hill (2008:09) observe that the augmentation of technologies, Web 2.0, mobile devices and the growth of the internet have created new and innovative ways for educational structures. In our modern-day society, online learning is dominated by the development of new media technologies and technologies which influence how students can become active participants in their own learning (Downes 2010:28). The research study indicated that students see Facebook as a contemporary medium to assist in the facilitation with their studies. As one student indicated, in today's generation "everything is online", and this being the case, students use technologies and the internet as an alternative collaboration platform. In line with the New Media Theory, technologies have

changed how individuals engage, communicate and are informed due to the accessibility of technologies with the convergence of the Internet. Veletsianos (2010:62) articulates that Web 2.0 tools and social media applications are becoming instrumental in the education industry, particularly in distance learning. Moreover, Web 2.0 tools have the potential to address the needs of distance students, enhancing their learning experiences through increased connectivity, customisation, personalisation and opportunities for networking and collaboration. The next section discusses social presence.

#### **6.4 Social Presence**

Social presence plays a significant role in online learning as it impacts collaborative, networked knowledge construction on how learning can be enhanced and elaborated through social media applications such as Facebook (Siemens 2006:22). In the interview sessions, it was revealed that the participants who employed social media applications and mobile devices as part of their learning strategy have enhanced their social presence and engagement with their peers through online discussions. Anderson and Dron (2011:88) articulate that social presence is created through comments, discussions, contributions and insights of students who are engaged in the course.

Kop and Hill's (2008:88) research showed that involvement and engagement in connectivist learning enhances the social presence of the facilitators and participants which in turn enhances the community as it forms a sense of belonging that builds confidence and stimulates active participation. Conradie's (2014:256), results also indicated that peer presence and sense of connectedness all contribute to the learner's self-directed learning. In the interview sessions, students indicated that they felt a sense of belonging and connected with one another through shared learning, and that they belonged to a community of learned students. The frameworks of Connectivism assert that learning occurs in communities where learners connect and engage with one another which enrich their source of learning with one another. Siemens (2005:09) explains that technology enables newer ways to learn, think and ways of sharing knowledge through connections. Furthermore, the participants revealed that they preferred to work together collaboratively rather than in isolation, and that the online

discussions, instant messaging and social networking facilitated a constructive learning community which involves students teaching one another as well as learning from one another. The above experiences are in line with the connectivist theory which states that knowledge is motivated through the process of learners connecting to other learners and sharing information, ideas, and knowledge into a learning community within which they share similar interests and objectives. The next section discusses distance learning.

### **6.5 Distance learning**

Distance learning implies that teaching and learning are removed in time and space from the learner. In the past, distance learning was developed to address the barriers associated with classroom-based teaching in learning (Letseka 2015:08). With the inception of new media technologies, distance learning has provided new and attractive ways in which students and instructors engage, share ideas and information, and inspire dialogue (Veletsianos 2010:68). During the focus group interviews, students identified key concepts associated with studying through distance learning such as *loneliness, isolation, intimidating spaces, nervousness, fears, objections and struggling*. Students indicated that the integration of technologies and social media enabled them to be part of a larger learning community that is collaborating and sharing information among users. Moreover, students indicated that being able to engage with their peers created understanding and camaraderie that eliminated the aforementioned barriers and problems associated with distance learning. The use of the connectivity approach promotes active learning and participation for students outside the traditional classroom where learning occurs through online communities. Furthermore, the new media technologies such as social media platforms create spaces for relationship building and enhance supportive learning in ODL through connections with other students.

It was found during the focus group interview sessions that the convergence of technologies and social media applications such as Facebook provided students with an alternative platform for academic activity regardless of physical distance. In distance learning, few students can meet their peers and facilitators. Facebook facilitated a learning community for students to participate, motivate, collaborate and cooperate with

one another. The connectivist approach emphasises that learning occurs in communities through technologies where students actively participate. Moreover, Facebook has become an online learning community that provides a social context for learning (McCabe & van Wyk 2012:19). Thus, a virtual space has been created that provides distance learning students with opportunities to empower their own learning and studies. Technology and internet resources enable students to seek out more effective ways of learning, which further enables students to steer their communication and connect to their peers in an open and distance learning environment. In a digital world, technology can innovate distance learning as it provides students with a platform to learn, engage, communicate and collaborate. The theoretical framework of New Media Theory and Connectivism demonstrate that relationships and connections are established through digital technologies where students can engage, collaborate with one another and construct knowledge and learning.

The next section discusses the social media activities.

## **6.6 Social media activities**

Facebook (aside from the WhatsApp application) formed the basis of social media platform initiatives in which students engaged with mostly. These initiatives were employed by learning facilitators in this study so that students were informed about activities pertaining to their modules in real-time, as well as promoting interaction and communication with fellow students. These social media applications also served as platforms for disseminating information and sharing links to online resources, as well as creating individual learning communities and collaborate with one another. Facebook was used in this study as an educational tool to elicit student interest and interaction in online discussions that were of interest to students in higher education. Connectivism and new media theories demonstrate that students need to be the centre of their own learning, which means they have to monitor their own collaborative learning environment and their levels of engagement. In an ODL environment, students have to practice self-directed learning and actively be involved in knowledge construction.

What was interesting in this particular study was that WhatsApp, as a free cross-

platform messaging tool, was also used as an interactive supplementary platform for students to engage and communicate by using instant messaging through mobile technologies which enabled students to acquire information and knowledge across space and time. In research conducted by Rambe and Bere (2013:552), which investigated the influences that WhatsApp had on students and how it assisted in education participation, it was found that the students prefer to use WhatsApp as a supplementary resource for educational activities. Connectivism postulates that learning occurs socially, and students feel that they are familiar with WhatsApp and know how to use it for educational and learning activities, whilst acquiring and sharing information and knowledge across contexts and environments. The next part of the chapter will answer the research questions.

## **6.7 Research Questions**

The main aim of the research questions was to investigate in what way the integration of social media applications such as Facebook and how they can be advantageous to students in an ODL setting.

- How, and for what purposes, do university students engage with Facebook?
- What type of access do University students have in order to log onto these social media applications?
- How often do students log onto these social media applications?
- How advantageous has Facebook been for students in terms of education and learning purposes?
- Do students prefer to engage with other students and lecturers through Facebook?

The next section discusses how and why do university students engage with Facebook.

### ***6.7.1 How, and for what purposes, do university students engage with Facebook?***

In the focus group interview, students were asked to provide comments on how they engaged with Facebook and the usefulness of this social media application to their

studies. Mostly, students indicated that they engaged with Facebook for communication, information (downloading educational videos and written files), peer collaboration (engaging in discussion groups), research purposes, clarity on assignments and coursework. Participants stated that Facebook as learning platform provided engagement and support for them in terms of assignments, portfolios and exam guidelines through peer-to-peer engagement. This is in line with the theory of Connectivism which states that learning occurs through technology and knowledge is distributed across the internet, and it is through students' engagement, collaboration and communication with one another that positive learning experiences are achieved. This suggests that Facebook can be seen as a supplementary educational platform for students and can mediate their learning and educational experiences. The next section discusses the use of technology.

### ***6.7.2 The use of technology***

The convergence of mobile technologies and the internet makes it possible for students to access social media applications. One can argue that mobile technologies such as smartphones and iPhones enable users to be more active in disseminating information and communication. Students indicated that they used Unisa computer labs to access Facebook for learning and communication purposes. The research question on what type of access University students had to log into these social media applications was supported by the responses that students log into Facebook with their mobile devices, because of their accessibility and convenience. This is in line with the New Media Theory which states that the use of mobile technologies with the convergence of the internet provides instant connection and, therefore, learning occurs anytime, and anywhere.

Peeters' (2016:86) research study found that the majority of students (82%) accessed social media applications via mobile technologies. Using mobile devices have surpassed standing and desktop-based personal computers to access the internet and to make it more accessible for students to access information and communication

instantaneously. Thinyane (2010:409) and Bosch (2009:197) reported that students' access to, and use of, technology was identified and that mobile devices provided unrestricted access to update Facebook statuses. Similarly, Ivala and Gachago's (2012:158) research found that the primary source of Internet access was via the students' mobile phones, and that accessing social media platforms can promote student interaction and engagement. It was also evident in the research conducted by Rambe and Ng'ambi (2011) that it was easy to access Facebook using mobile technologies at anytime and anywhere. However, Bosch's (2009:194) research also indicated that students accessed Facebook on their mobile technology more for social connectivity than for educational purposes. The study confirmed that with regular access to computers and the Internet, students can explore a variety of online activities with more confidence and technological know-how.

One of the shortcomings that the participants addressed was that not many students had access to computers, mobile devices and Internet resources which made it difficult for them to engage with other students. According to Letseka (2011:134), due to inequalities that are widespread in South Africa, most people are still technologically illiterate. Due to limited Internet access or computer facilities at home, students indicated that they utilised the computer lab at the regional Unisa campus. Limited computer facilities at the computer labs and library also prevented students from accessing their Facebook groups. In addition, students feel rushed to engage with other students as other users want to use the computer facilities for library and auxiliary-learner support tutor sites. The participants also claimed that data played a pivotal role in gaining access to social media applications and it has become very expensive to log onto Facebook all the time, download pictures and videos. While Connectivism through technologies can be a strong motivation for students to enhance their learning experiences, it can also be damaging and precarious when other students are excluded. Therefore, limited access to computers and technologies, digital literacy and expensive data prices should be considered as shortcomings of Connectivism and new media. These theoretical frameworks underline the importance of technologies, and Connectivism is the learning theory of the digital society (Siemens 2005:03). The next section discusses the students' usage of Facebook habits.

### **6.7.3 Students' Facebook habits**

It was observed that most of the students logged onto Facebook as soon as they received notifications via their mobile phones of learning ventures. Through mobile technologies, it has become more accessible and affordable for students to log onto Facebook, as one participant indicated that is accessible to log onto Facebook at any time if they have their mobile phones with them. Therefore, one can ascertain that logging onto Facebook has become a daily habit for students, and that they connect with people and reaping the benefits of instantaneous communication, interaction and cheaper to connection even through distance and time. In the context of Connectivism and New Media Theory, technology provides students access to sources immediately, and can improve their digital, social and academic literacy skills. In these theories, flexibility and accessibility to technologies (Sahin 2012:447) links students to one another and closes geographical and time disparities. The next section examines the students' experiences in using social media applications.

### **6.7.4 Students' experiences in using social media applications**

Students' experiences pertaining to the use of social media applications such as Facebook to enhance their levels of engagement in learning, through the promotion of collaboration, interaction and communication between students was mostly positive. For distance learning students, it provided them an alternative platform to share their experiences, fears, shortcomings and successes with their peers and offered opportunities for active learning. It was also observed that employing Facebook as part of a learning and social infrastructures enabled students to become more confident and reassured about their studies as well as themselves as a student. Students were more comfortable and confident to relate issues that impact on their studies, both positively as well as negatively. This made for a closer relationship and students felt more at ease to open and share their triumphs and concerns. Moreover, the immersion into social media created a space for peer interaction in their support structure, where students were able to participate in group work activities, encourage peer feedback and learn from one another in a space where meaningful learning could take place. Furthermore, peer

learning through social media offers the transfer of discussions, communication, information and articulation of ideas and knowledge to the online environment.

The theoretical frameworks of New Media Theory and Connectivism assert that technologies have afforded students accessibility to engage, collaborate, communicate and form meaningful connections with other students. Social media applications such as Facebook have created new endeavors for students to connect to an online learning community, where students are able to learn from one another. By doing this, students enhance their knowledge and resources they have acquired from and thus enhance their social capital as they become valued resources for other students (Veletsianos 2010:35). Furthermore, this allows students to remain current in their field through the connections they have formed and thus creating shared learning among students (Siemens 2005:06). The next paragraph will discuss the negative experiences of the students.

Students also identified negative consequences of using Facebook as part of their studies and engaging with other students. It was revealed that there some students are classified as 'academic lurkers'. An academic lurker is regarded as a person who reads messages in a discussion group but does not participate in the discussion (Burr 2015). Academic lurkers would find answers to their questions but do not acknowledge the source and go through the Facebook feeds without liking or commenting on the posts (Burr 2015). There were some of the participants who fell victim to students who expected assistance but could not mutually assist them, hindering the active learning process. In order to reap the benefits of employing Facebook as part of their learning strategy, it is important for all students to participate in the active learning process by contributing to the discussions.

In terms of theory, Connectivism through New Media Theory emphasises that technologies promote and enhance active participation and facilitation of student learning through discussions and sharing of knowledge and information which is critical in the digital age society (Starkey 2012:47). Participants also revealed that there were students who uploaded unnecessary content (videos, messages and images) that did not pertain to their studies and increased their data cost or served as distraction to their

studies. Furthermore, students also revealed that they become easily distracted by the Facebook features such as games, quizzes, would read through Facebook profiles. In the theoretical context of Connectivism, the use of social media applications is to create online learning communities. The New Media Theory indicates that being surrounded by technologies have an influence on how individuals engage with technology, either in an innovative or imitative way, which is mainly attributed to individuals' perceptions, attitudes and behaviour towards technologies. Okereke and Ebele (2014:23) research showed that Facebook activities caused a low performance among Nigerian students. This was particularly the case where self-management of academic time was not effectively monitored by the student. In line with the research study, there are students that do not engage with Facebook in a beneficial manner that will enhance their learning experiences. The next section examines the advantageous of Facebook for education and learning purposes.

#### ***6.7.5 How advantageous has Facebook been for students in terms of education and learning purposes?***

The participants revealed that they used Facebook for their learning and education purposes for clarity on assignments, portfolios, examinations (key study notes, examination dates), sharing resources (videos, images, journals) and links as well as collaborating with students who are registered for the same coursework. It was observed that the use of resources in conjunction with academic activities created a student-centered environment. Moreover, the participants revealed that engaging with other students made them feel that they belonged to an online community of learned students who share information, collaborate and engage, thus enhancing their learning experiences. It was also noted that the advantageous of using Facebook for learning and education purposes was mainly used as alternative platform to communicate, share ideas. Connectivist learning is characterised by how learning is influenced by new technological developments, especially in the field of education According to (Starkey 2012:49) collaboration and connections through technologies allow sharing and critique of knowledge development. Therefore, Facebook is seen as an alternative platform because knowledge is distributed across the Internet, and it is through students'

engagement with it that learning takes place (Kop 2011:20).

Mbatha's (2013:549) research revealed that the benefits of using Web 2.0 for teaching and learning are that it speeds up communication and information exchange as well as the sharing of ideas. Similarly, Bosch's (2009) research revealed that the benefits of using Facebook was that students used Facebook to identify with one another and assisting each other on how to find study materials on the Internet, connect with other students about projects and share lecture and study notes. Mbodila, Ndebele and Muhandji' (2014:123) research showed that students found that Facebook aided their need to receive information about their modules. Based on the students' experiences and the above cited sources, in terms of the theories this means that social media applications have been receiving much attention in the field of education. The theoretical frameworks of Connectivism and new media underline the importance of learning augmented through technology that allows collaboration and knowledge construction among students and facilitators in an educational setting (Facebook).

In the interview sessions it was found how advantageous Facebook was to students for education and learning purposes:

- It affords students the ability to engage with other students and improve their social skills for learning purposes.
- It provides instant feedback to make well-informed decisions that can alter the students' studies.
- Engaging with like-minded individuals seems to be a motivating factor, especially to those who were serious about their studies and their ambitions
- Facebook is useful to their academic studies as it assists students with the ability to access resources and with other students
- Facebooks also connect students with peers so that they can share information, collaborate and discuss their studies regardless of distance and time.
- Facebook is beneficial for academic purposes as it provides students to collaborate and interact with other students at any convenience.
- It encourages active participation and peer learning amongst students

- Facebook also assist students to identify and relate to other people and interests.
- Online resources helped students to develop critical thinking skills as well as a clear understanding to the requirements of completing assignments.

Based on the responses received, and the theoretical frameworks of Connectivism and new media, social media networks afford students to engage through various perspectives that enhance their knowledge. The focus of these theories is to build and maintain networked connections that are current and flexible enough to apply for students to share their knowledge and learning experiences with one another. Constant access to technologies and social media applications have fundamentally changed how students engage, function, communicate, connect and learn. Furthermore, Connectivism takes into account the trends of learning through the use of technology and networks and how advantageous it can be in the educational sector.

Facebook can be viewed as a potential supplementary platform for students to engage with socially and educationally. Participants indicated that Facebook allows students to be active participants that enhance their peer learning experiences by working collaboratively to discuss problem areas in their studies, share their opinions and ideas, and finding solutions. Similar to the scholastic perspective of Starkey (2012:32) connections with students' peers provide a rich source of learning where all parties can provide each other emotional and mental support, building friendships, feedback and making learning more fun and enjoyable. The next section examines' student's preference for engaging with students and lecturers through Facebook.

#### ***6.7.6 On students' preference to engage with other students and lecturers through Facebook***

As stated in Chapter Three, student engagement refers to the amount of involvement and participation that students invest in enriching their educational experiences (Trowler 2010:07). Student engagement is defined as the quality of effort and involvement in productive learning activities that are empirically linked to the desired outcomes of college, and what institutions do to urge students to participate in these activities (Kuh

2009:683). These activities comprise time spent engaging with peers and facilitators as well as time spent engaging in active and collaborative learning activities. According to Coates (2005:26), student engagement draws upon considerations such as student learning, institutional environments, learning resources and teachers, and it maintains a focus on students' involvement with their studies. Furthermore, student engagement activities may include active learning, involvement in enriching educational experiences, seeking guidance from facilitators or working collaboratively with their peers. Conrادية (2014:24) observes that student engagement is encouraged through peer feedback and peer collaboration which contributes to student participation and self-regulation. Thus, it allows students to be actively involved in the learning process which influences positively to motivation and academic performance.

Fredericks, Blumenfeld and Paris (cited in Trowler 2010:05) identify three dimensions in student engagement:

- Students who are behaviorally engaged would typically conform to behavioural norms such as attendance and involvement.
- Students who are emotionally engaged experience affective reactions such as a sense of belonging, interests and enjoyment.
- Students who are cognitively engaged would invest in their own learning and seek out information and knowledge beyond the requirements and delight in challenges.

Trowler (2010:05) notes that each dimension can have both a positive and negative effects on the student, whereas each represents a form of engagement, separated by a gap of non-engagement. For instance, in a positive manner, students might find that engaging with other students broadens their interaction and develops relationships with other university students (Sutherland, Davies, Terton & Visser 2018:21). In a negative manner, students may experience identity struggles and a sense of being an outsider (Kahu 2013:764). This could occur because students do not have the necessary social skills and knowledge to engage with their peers. Reeves & Tseng (cited in Alshuaibi, Alshuaibi, Shamsudin and Arshad 2016:627) note that these three components (behavioral, emotional and cognitive engagements) do not reflect the reality and

dynamic nature of student-teacher interactions because students are not necessarily passive receivers of knowledge and information. Rather, they also contribute constructively and proactively to what they learn and thus share their knowledge and ideas through engagement with others.

The theoretical frameworks of Connectivism and new media asserts that learning through technologies involve active engagement with other students and resources (Kop 2011:20). It is through constant engagement with other students that enhances online communities and creates a sense of belonging that derives from students' interests, ideas triumphs and challenges. Furthermore, engagement occurs when students collaborate, interact and support one another and they can mediate their own learning through online learning spaces such as Facebook. The array of and availability of technologies, knowledge and information is distributed across the Internet and it is through students' engagement with one another and resources that knowledge is constituted and learning amongst students takes place (Kop 2011:22; Starkey 2012:48). Moreover, Facebook encouraged students to enhance their emotional, cognitive and behavioural engagement with their peers. The next section examines the influence of Facebook on students' engagement.

### ***6.7.8 Influence of Facebook on student engagement***

Social media applications such as Facebook can influence how students engage with one another to achieve their educational purposeful activities (Coates 2005:27). On the basis that Facebook focuses mainly on social activity and engagement, students become active in their learning process. With Web 2.0, information is not only easily accessible, and the way students interact, function, communicate and learn has changed. Moreover, knowledge is distributed across the web, and it is through students' engagement with each other that learning is constituted (Kop 2011:20). The theoretical frameworks of Connectivism approach through new media technologies emphasises the importance of social and collaborative engagement in the construction and creation of knowledge (Danhur & Umar 2010:108). According to Siemens (2006:31) learning occurs in communities, and the practice of learning is derived through the participation

of the community. Learning activity is vital through communication with other members of the community (Veletsianos 2011:34). Therefore, the practice of learning occurs when students engage and participate in the learning community.

In the interview sessions, the participants all agreed that they prefer to engage with other students as well as with their lecturers on academic content. Students, who engaged with Facebook, found it user-friendly, thought it encouraged student participation and involvement, and that it generated interests since learning is both fun and helpful. It was also revealed that it was a more convenient and accessible way to meet other students that share the same modules, and a bond was nurtured through working together and experiencing education together. In addition, students indicated that the most enjoyable part of engaging with students and facilitators was the ability to collaborate and engage as well as working through assignments and improving their digital and social skills. Students were eager to engage with one another through social media as is assumed that effective learning takes place through social interaction. New media and Connectivism theories offer students the necessary tools to learn beyond a traditional classroom. Facebook provides students with the tools, an interactive platform to engage and collaborate with other students and facilitators to assist with their studies. Connectivism is about learning through technology and how people share knowledge through networks, and it is through students' engagement with social applications that constitutes learning (Kop 2011:20).

Participants stated that they prefer to engage with facilitators on Facebook as an alternative method to support their learning. Participants also stated that they felt happy and at ease when lecturers engaged with them, and that lecturers provided them with a better understanding of their studies such as the requirements for completing the assignments and working towards examinations. Their comments also showed that they would feel positive toward the lecturers and because of the level of comfort that they experienced with their facilitator; they were able to openly discuss and ask questions relating to their difficulties and problem areas. This is in line with Ivala and Gachago's (2012:161) research which revealed that the use of Facebook had the potential to enhance student levels of engagement through interaction and communication between

lecturers and students. Furthermore, Facebook provided students a space where they could discuss their successes and challenges and offered peer support and collaboration for active learning. Peeters' (2016:80) research study found that Facebook was commonly used by students to engage with other students to communicate and disseminate information. Moreover, it served as a peer collaboration platform for students to actively participate in contextualising their own content and engaging with students. Similarly, Alshuaibi et al.'s (2016:636) research showed that the integration of social media into education could be purposeful in a manner that promotes students' cognitive engagement and enhance their learning experience. As cognitive engagement is about knowledge and understanding of the module, the researchers suggested that various strategies could be considered on how to develop these skills using social media.

### **6.8 Chapter Summary**

In this data-analysis chapter, the data was interpreted through qualitative coding as derived from focus group interviews and the theoretical frameworks of new media and Connectivism consulted.

## **Chapter Seven**

### **Conclusions and Recommendations**

#### **7.1 Introduction**

This chapter constitutes the conclusions of this study, points out limitations and gives recommendations for future research. The main aim of this study was to investigate in what ways the integration of social media applications such as Facebook can be advantageous to students in an ODL setting.

Having used the theoretical frameworks, namely, the New Media Theory and Connectivism, as theoretical frameworks, this study concludes that social media applications such as Facebook can provide students with infinite possibilities to transfer information and knowledge through technologies to their peers whilst creating a learning infrastructure. This study was based on the participants' experiences, attitudes and opinions of using a social media application, namely Facebook, for learning purposes by using a focus group research technique.

#### **7.2 Literature review**

Since the study focused on the use of new media technologies and how beneficial it can be used for teaching and learning in the digital age, the literature review engaged with literature that provided insight on how social media applications such as Facebook can enhance academic engagement and create alternative online spaces to engage and connect with students and facilitators. One of the most attractive features that social media presents for education is their 'socialness' (Poore 2013:08). The ability for students to enter networks of collaborative learning based on similar interests and fellow feeling of belonging can create and build meaningful relationships that in turn are beneficial in their learning process whilst promoting critical thinking in students. Although social media applications have been positive in higher education, there are still underlying issues that need to be addressed, such as the limited levels of digital literacy among students who limit their own participation in the learning process, the lack of e-learning skills and unequal access to digital devices which contribute to digital

seclusion. Technological and digital innovation should be implemented so that all students can reap the benefits of using social media applications to better their learning abilities.

### **7.3 Theoretical frameworks**

This study made use of two theoretical frameworks, the New Media Theory and Connectivism. This study showed that students can employ social media applications such as Facebook with mobile technologies to engage with their peers. It was found that digital spaces provide students with an understanding of how to use digital devices and platforms for educational purposes, and to connect, collaborate and participate with other students. Connectivism makes provision for a range of learning processes and the ways in which new media technologies, particularly social media applications, can facilitate individual learning through collaborative construction of knowledge within the distributed network communities (Siemens 2005 & Ireland cited in Danhar and Umar 2010:108). Therefore, Connectivism and New Media Theory are intertwined.

### **7.4 Research methodology**

This study used the qualitative research methodology, specifically using content analysis (Tesch 1990) and focus group interviews. Employing the combination of the content analysis and focus groups interviews enabled the researcher to take note of the reliability and validity of what was said in the interview sessions and field notes which were written in an interview style, in a narrative format. Through this research methodology, the research was able to describe and explore the students' experiences, attitudes and views on utilising social media applications such as Facebook as part of their academic support strategy, especially in an ODL environment. Next are the conclusions drawn by the researcher in this study.

### **7.5 Conclusions**

This section provides the conclusions that were drawn from the research study, the theoretical frameworks and the interview sessions. In line with Connectivism and New Media Theory, the study found that participants were open to the idea to use

technologies and social media applications as an alternative avenue to enhance their academic and learning achievements and experiences. The study was based on the participants' engagement and how they perceived their level of engagement with social media networking sites such as Facebook as part of their learning strategy.

### ***7.5.1 Focus group interviews***

In the interview sessions, students indicated that the most enjoyable part of using social media applications for learning and academic purposes was to engage with other students in a proactive way. In addition, it was found that online learning communities provided students a comfortable and more welcoming learning space to discuss issues pertaining to their studies, as well their general well-being. The ability to engage, collaborate, and connect with fellow students made them active participants in working together to gain a better understanding of the modular skills and content requirements for completing assignments, whilst working toward assessments and examinations.

### ***7.5.2 Open distance learning and technologies***

Distance learning provides education, although it is traditionally difficult to educate learners across a distance. However, living in the twenty-first century, technologies have become ubiquitous, creating new ways of driving innovation in the ambit of teaching and learning. Technologies, in conjunction with social media applications such as Facebook, have provided distance learners with educational opportunities to enhance distance learning strategies, peer collaboration, and increase student engagement. By creating online learning communities via technologies and social media applications, students feel that they are part of a student-centered learning environment, to which the feeling of isolation, loneliness, objections, intimidation and fears have decreased. Furthermore, sharing information, knowledge and ideas in conjunction with participating in activities encourage independent and self-directed learning. As distance learning students' learning practices are not confined to traditional classrooms, using technologies and social media networks create meaningful spaces in which students are able to mediate their own learning environment whilst creating a meaningful sense of community among students.

### **7.5.3 Technologies**

Since the integration of Web 2.0 and mobile technologies such as smartphones, iPhones, laptops, tablets and other digital devices in classrooms, mobile devices have become more ubiquitous in higher education which students and facilitators are now able to exploit as part of their learning and education outcomes. Mobile technologies provide students ease of access to social media applications, thereby providing instant connection to other students. Students would log onto Facebook whenever they receive notifications or whenever they feel the need to post information, need clarification on assignments, upload or download content or just respond to comments. Mobile learning can be viewed as a learning opportunity when it meets the educational needs of the students and learning can occur outside the traditional classroom, particularly in an ODL context.

Due to data being expensive, students are prevented from accessing content such as educational videos, visiting external links, viewing pictures or journals. It was also noted that students utilised the computer labs at the Unisa regional campus, but felt that there were not enough computers available at all times due to Unisa's open and distance learning status. Moreover, because of limited computers or access to the Internet, students felt that they were rushed as other students needed to use the computer facilities as well.

In an ever-changing world, technology has the potential to innovate distance learning, providing students with an open space to learn, communicate and collaborate with one another. In some cases, not all students had access to computers and Internet at home, making it difficult to access study materials and participate in learning communities. It was also observed some of the students who participated in the focus group discussions did not have the necessary digital skills to engage with other students and use Facebook as a learning engagement platform. This remains an ongoing problem for those who do not possess the necessary digital skills to engage with social media, and those who are unable to negotiate meaning linked to this newly adaptive learning environment. It is therefore essential that structures should be considered to ensure that

students have equal access and the necessary digital skills to actively participate through Facebook to enhance their academic experiences.

Even though the social media application, Facebook, was selected to conduct the research, students mentioned that they used Facebook in conjunction with WhatsApp to communicate and share resources with other students.

## **7.6 Social activity skills**

The importance of social activities skills is important. For students to reap the benefits of utilising Facebook as an online learning space, it is necessary for students create a strong social presence which will enhance their engagement with other students. The focal point social and academic engagement is that Facebook can assist students in constructing their own content, peer collaboration and student engagement for learning purposes and socialisation, and such integration is beneficial in identifying a cohort of students who share similar academic objectives.

Social presence provides students with a sense of identity and belonging through feedback, collaboration and communication that facilitate the structures of online learning communities. Student engagement represents the time, effort, devotion and eagerness of students to actively participate to achieve their academic outcomes. Through social media it has become apparent that the more students interact and participate, the more they felt a sense of belonging in that they are part of a learning community. The results showed that the use of Facebook increased peer collaboration and engagement between students. Moreover, students preferred to engage with other students in the acquisition of information or knowledge across contexts and environments. It was important for students to establish their own level of presence and engagement to facilitate meaningful relationships and believe that participation was beneficial to them.

### **7.6.1 Experiences**

Students' experiences were positive as they indicated that Facebook provided them access to online resources and interaction with their fellow students. Students indicated that Facebook facilitated communication, collaboration and engagement with other

students which enriched their experiences, especially in an ODL setting. Thus, eliminating distance and space where students could share their ideas, knowledge, experiences and challenges together in an online learning community. Students also observed that alternative platforms and online applications were useful in enabling them to get to know fellow students that were registered for the same modules and knowing that there was a supporting online infrastructure.

Students noted that there were negative consequences when participating with certain students such as academic lurkers. There are students that have no intention to actively participate in discussions or share information, and these students tend to upload unnecessary content (videos, images and text messages) that causes distraction and frustration in the learning community. Digital literacy also played an integral part in students' experiences in an ODL setting. Suffice to say that there were students who were unable to participate in the digital revolution due to digital illiteracy, lack of social presence, or for whom access to technologies and the Internet is limited.

### ***7.6.2 Concluding notes of student's experiences***

- Students appreciated interaction with their fellow students.
- The Facebook page created a sustained and holistic online learning environment that promoted student engagement and active participation.
- Social Media applications have proven to be beneficial to educational and learning purposes, especially in an ODL environment.
- The use of mobile technologies provided students' ease of access to communicate and collaborate with one another outside the traditional classroom
- The level of engagement from the students had a direct influence on student participation, peer collaboration and student support in online discussions
- Personal interaction between students enabled openness in the sharing and understanding of concerns, which affected their studies and approaches to learning

### **7.6.3 Summary of the conclusions**

The aim of the research study was to investigate in what way the integration of social media such as Facebook could be advantageous to students in an ODL setting. Through a qualitative methodology, it explored possibilities for creating new learning environments, as well as ways to increase educational innovation.

Connectivism and new media technologies showed that the use of social media applications could enhance social, intellectual and emotional engagement using innovative platforms such as Facebook. Through the employ of Facebook for academic purposes, students were able to seek information, encourage peer collaborative and student enhance learning and educational strategies through student engagement. Social media applications such as Facebook and WhatsApp should be integrated i as alternative platforms, especially in an ODL context because they provide students a sense of belonging and identity and eliminate barriers of isolation, fear, objection and, creating a learning environment among students and even facilitators. In essence, these technologies afford distance students more online learning spaces to enhance and enrich their learning participation and experiences, and a learning environment where students can share study material and online resources with each other.

Clearly ubiquitous nature of technologies and social media applications create more possibilities for distance learners to internalise their own learning, and steer problem-solving and critical thinking skills through collaboration and engagement with fellow students. It was observed that living in the twenty-first century makes it imperative for all students to have equal educational opportunities. Therefore, in cases where students have access to technologies and social media applications, this not only provides a space to develop the students' digital literacy skills but also to find a way to enhance their learning and educational abilities. In addition, access also provides students opportunities to be actively and creatively part of their own learning. Next are the recommendations.

## **7.1 Recommendations**

Considering the discussions of research findings, and the subsequent limitations and conclusions of this study, the following recommendations need to be considered:

### ***7.7.1 Encouraging students to use technologies with social media to enhance learning***

It is imperative that more students are encouraged to use technologies integrated with social media platforms to stimulate their learning interests. Moreover, students in an ODL setting should have an alternative online platform to seek information, peer collaboration, student support and feedback that will assist their systemic, affective and cognitive enquiries. More inquiry is needed to integrate social media into the current myUnisa and myLife system, for students to nurture their online identity whilst feeling comfortable with sharing information.

### ***7.7.2 Digital and social media intervention workshops***

Although there are students who know how to use social media applications such as Facebook as a collaborative platform, there are students who do not have the skills or knowledge to use social media to its full potential. It is proposed that faculties consider hosting social media intervention workshop programmes to assist students in effective use of social media to benefit their academic endeavours. Students need to know how to upload and download resources, follow links (research journals, educational videos, texts and images), how to create learning communities, initiate communication, collaboration and acquire knowledge as part of their academic development.

### ***7.7.3 Creating online learning communities***

The focus would be to give students instructions, feedback or facilitate discussions on ideas pertaining to the sharing of learning strategies when using social media platforms. This will enhance student engagement, social presence and confidence when using these platforms as part of their learning strategies. It is recommended that workshops be run in computer laboratories so that students who want to utilise social media academically and socially can do so. Here, the facilitator can facilitate dialogue and

communications, encourage active participation and appropriate online etiquette, and provide students ways to create their own content and social presence. It is recommended that students be introduced to computer literacy laboratories and to ensure that they actively use the regional facilities. Student interaction with their peers and a facilitator can enhance their confidence in their ability to successfully complete their modules (assignments and exam preparation notes), whilst nurturing their digital identity. In addition, through computer laboratories, the facilitator can enhance a designated space to promote student interaction, group study and student autonomy. Online communities will help students sense a level of agency with fellow students, which can enable peer learning and to prevent students from becoming academically inactive.

#### ***7.7.4 Digital literacy should be considered***

Living in a digital society has contributed to a more enhanced way of connecting to other students and learning facilitators, and therefore it is critical that all students are given equal opportunities. Digital literacy should be considered so that all students have the same opportunities as those who are technologically literate. Digital literacy is pivotal in an ODL setting as students need digital skills to format documents, submit assignments online and overall so that first-time students can utilise functional myUnisa and myLife portals which are part of the Unisa e-learning platforms which is vital to their educational engagement. It is recommended that computer literacy workshops be contextualised, so that students can see the link between skills learnt and how they apply social media to instances of online learning. The focus would be to establish \ an active space of learning, making use of a structured online engagement that would steer learning processes. Moreover, students need to improve their digital skills and not feel disconnected from e-spaces or alienated and isolated in terms of their learning.

#### **7.8 Limitations of the research**

The study is applied within the frameworks of New Media Theory and Connectivism and through the lens of students in an open distance learning context and how the

integration of social media applications can supplement for learning and academic outcomes.

Although this study investigated how an inclusive, social media application such as Facebook to distance education students can enhance their learning and academic strategies, the foci included personnel involvement but excluded the perceptions and experiences of the facilitators. Additional studies should include academic perspectives and experiences from the facilitators, as well as observations in a computer lab to oversee student's participation.

Even though the purposive sample was selected for the study, it mainly relied on students' readiness and involvement to participate in the focus group. During that period students were busy with examinations and assignments, and therefore it made it a bit difficult to get a set date for all participants to agree on when to partake in the focus group.

### **7.9 Future projects to be considered**

Another research topic that would be useful would be to investigate students' use of online platforms for reading and writing purposes. The aim of this topic would be to explore the use of technologies and how they can be used to enhance reading and writing skills. The study would focus mainly on how students use technologies to select reading materials and engage with other students through reading and writing.

### **7.10 Concluding Remarks**

Technologies can connect students and facilitate the acquisition of learning abilities. The workshops, computer laboratories and online communities should be focused on further facilitating interaction in teaching and learning, especially within a blended environment, where students are encouraged to make use of online resources and discussions during workshop and discussion sessions. This should be under the auspices of a facilitator, who could advise on the basics of content and the technical skills required to conceptualise a well diverse online learning community to transfer skills and knowledge to students and encourage student engagement and collaboration.

Moreover, the emphasis should be on observing and facilitating students' computer literacy, digital fluency, social media engagement as well as language and communicative competence, and to develop student confidence and independence in an ODL setting. The aim of these interventions would be for students to see social media applications such as Facebook as an alternative platform to disseminate information and online resources, as well as a way for students to create individual learning communities centered on assisting one another through technologies and online spaces.

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**Addendum A:****Focus group Interview Guide**

1. At Unisa, what is your opinion in using social media applications such as Facebook as part of your studies?
2. What are the main reasons that you engage with Facebook?
  - a. What are your experiences using Facebook?
3. What type of expectations do you have when you engage with other students on Facebook?
4. How do you use Facebook for your studies?
5. Explain how you use Facebook for your academic studies?
  1. In what way does Facebook meet your expectations?

