TOWARDS AN EFFECTIVE AND EMPATHETIC STUDENT SUPPORT SYSTEM IN AN OPEN AND DISTANCE EDUCATION AND E-LEARNING ENVIRONMENT: A CASE STUDY FROM A DEVELOPING COUNTRY CONTEXT

by

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DECLARATION

I declare that, **Towards an effective and empathetic student support system in an open and distance education and e-learning environment: a case study from a developing country context** 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

Faced with the influx of emerging technologies, educators must continuously equip themselves with the necessary skills to effectively impact on today's learners. Central to successful curriculum reform and student retention is the realisation that educators need to engage in continuous professional development, to meet the learners' needs. The purpose of this research study is to explore and study how educators' skills, knowledge and experience in e-learning can contribute to the successful achievement of the institution's and students' educational goals and to the design of a quality support system in an ODeL environment in a developing country.

A mixed-method research approach was adopted. The target population was the University of South Africa (Unisa) academic staff members who enrolled for an e-learning programme with the University of Maryland University College (UMUC) between the year 2012 and 2014. Convenience non-probability sampling was used and a total of 60 candidates were invited to participate in the study.

Most of the participants pointed to the empathetic support they received from the relevant UMUC staff and also indicated that they are now ready to create an empathetic learning environment for their own students at Unisa. It is the premise of this paper that academics cannot impart and/or transfer what they do not have or know to learners and it gives recommendations on striving towards an effective empathetic students support in distance education and e-learning continuous professional development to effectively impact on today's learners. The importance of pace, assignment due dates, use of rubrics, turnaround time for feedback, built-in support, and appropriate assessment strategies are also key findings in the report.

Keywords: e-learning, distance education, student support, empathy, transaction distance, community of inquiry, student centeredness, curriculum reform, continuous professional development

ACKNOWLEDGEMENTS

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ABBREVIATIONS

CPD	-	Continuing Professional Development
CHE	-	Council on Higher Education
CoI	-	Community of inquiry
DHET	–	Department of Higher Education and Training
DE	-	Distance Education
ETI	-	Educational Technology Initiative
F2F	-	Face-to-Face
HEI	–	Higher Education Institution
ICT	-	Information Communication Technologies
LORI	-	Learning Object Review Instrument
LMS	–	Learning Management System
MEd (ODL)	–	Master of Education in Open and Distance Learning
NADEOSA	–	The National Association of Distance Education and Open Learning in South Africa
NID	-	National Institute for the Deaf
ODeL	-	Open distance and e-learning
ODL	-	Open distance learning
OUUK	-	Open University of United Kingdom
OER	-	Open Educational Resources
PHEA	-	Partnership for Higher Education in Africa
POPI	-	Protection of Personal Information
SASSE	-	South African Survey of Student Engagement
SAIDE	-	South African Institute for Distance Education
TSDL	-	Tutorial Services, Discussion Classes and Work-Integrated Learning
UFS	-	University of the Free State
UMUC	–	University of Maryland University College
UNISA	-	University of South Africa

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CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1   INTRODUCTION

With the growing interest in more flexible learning and teaching modes, and the new policy recently released for the provision of distance education (DE) in South African universities, South African institutions are faced with the inevitable realisation that they need to equip themselves with the required skills to optimally facilitate learning using open, distance and e-learning approaches, support and satisfy the needs and demands of learners and competently participate in the relevant scholarship and discussions around this topic, locally and globally. According to Ngengebule, Molatlhegi, Tshaka and Mamadisa (2007), successful e-learning model(s) depend not only on the Information Communication Technologies (ICT) infrastructure of an institution, but also on maximising the satisfaction and successful completion of students' studies; this may require the design of student support services that are fit for purpose.

Faced with the influx of emerging technologies, educators need to continuously equip themselves with the necessary skills to effectively impact on today's learners.

According to Anderson and Garrison (1998:110), "Learning in a networked world presents many new roles and responsibilities for both the teacher and learner, and this radically changes the construction and delivery of the course content". The new and emerging technologies in an ODL and e-learning environment require that institutions readily adapt and adopt the new modes of teaching and learning.

Based on the premise that academics cannot impart or transfer to learners what they do not have or know, the research investigated how a quality support system can impact on the learning experience of students and increase the likelihood of successful completion of their studies. The resultant report provides recommendations for striving towards an effective empathetic student support system in distance education and e-learning.

1.2   BACKGROUND

Higher education exists within an environment marked by considerable transformations, not only in the education sector but also in wider society, and is increasingly being required to support a more diverse student body (Kirkwood & Price, 2006). Increased competition, decreased enrollments, greater numbers of non-traditional students and decreased real government funding are the most obvious problems higher education faces in the twenty-first century (Levine, 2001). The growth of computer technology has enabled the development and use of online technology to support more flexible teaching and learning methods and tools in order to address some of the above challenges.

In response to the current developments and trends in the open and distance learning (ODL) environments, the University of South Africa (UNISA) has recently implemented a new operational model – open distance and e-learning (ODeL).

Research is increasingly being done in the field of ODL and e-learning provision in developing countries; and the need for more contextual work to be done within the borders of South Africa, is rising as the government guidelines and students' needs change. For example, the Partnership for Higher Education in Africa (PHEA) Educational Technology Initiative (ETI) support interventions in universities for the effective use of educational technology to address some of the underlying educational challenges facing the higher educational sector in Africa (Saide, 2014). "The majority of Unisa students have a primary interest in securing a tertiary qualification that will enable them to advance their economic interests and social status" (Baijnath, 2013:2). There is also a need to focus on the support required by the students through the new and emerging technologies, and how institutions can equip themselves for the quality student support system needed for this new type of teaching and learning.

With the increasing developments in DE and e-learning in developing countries, Anderson and Garrison (1998:109) believe that, "Obviously new technical skills are required. They warn that, "Technical skills are the easiest to acquire but the task of helping teachers to embrace continuous change that will mark the relationship between teachers and content for the foreseeable future, is more difficult". Anderson and Garrison (1998) also emphasised the need for teachers to cope with a world where

knowledge development is continuous and subject matter expertise is only one component of the skill set necessary to create sophisticated and effective learning content for use by learners". Jones (2008) reiterated the reality that universities and other institutions around the world are coming under increased pressure to provide quality learning that is engaging and interactive thus, meeting the needs of a diverse student population. More interaction suggests more staff time per student which, militates against economies of scale and optimal use of the potential afforded by emerging technology.

Farha (2009:2) warned that failing to fully consider the relational dynamics in the online setting may produce greater feelings of isolation among distance learners, reduced levels of student satisfaction, poor academic performance, and increased attrition. While Woods and Baker (2004) assert that interaction is at the heart of the online learning experience. This study also supports and suggests the need for learner support to be at the center of successful delivery and management of any educational programme, whether face-to-face, distance learning, e-learning or blended. It is almost impossible to give support in distance education and e-learning environment without any form of interaction, which requires certain skills in the use of technology and other media. According to Brindley (1995), Saide (1995), Tait (2000) and Lentell (2003), learner support is an integral and critical aspect for the delivery of a quality ODL system, which means that in any new online and e-learning environment, it is essential that teachers learn how to interact effectively online with each other and with students.

According to Salomon (1981) as cited in Anderson and Garrison (1998:98), "Education depends upon acts of communication". Anderson and Garrison also believed not all communication fully qualifies as being educational; observing that communication for educational purposes should have an interactive component. This communication should form part of the student support system design that accelerates the objectives of both the institutions and the learners, which is to teach and learn and succeed in these. According to Moore (1993), physical separation leads to a psychological and communication gap, a space for potential misunderstanding between the inputs of instructor and those of the learner. Moore & Kearsley (2005:223) defines transactional distance as, "the gap of understanding and communication between the teachers and

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learners caused by geographic distance that must be bridged through distinctive procedures in instructional design and the facilitation of interaction".

Anderson and Garrison (1998:102) believed that support in campus or distance-based higher education is dependent upon sustained two-way communication. They also argue that supporting learner-teacher interactions through technology requires access and opportunities to become proficient with the appropriate technology in use. Since Aristotle, we have recognised the importance of dialogue in the learning process. In social critical theory espoused by theorists such as Paulo Freire, as highlighted by Hudalla (2005), it is only through dialogue that we can construct an empowering transformational curriculum.

Boyd-Dimock and McGree (1995) maintained that new skills and knowledge also lead to increased confidence among lead teachers and a stronger commitment to teaching. Their research suggested that professional growth was more often the result of collaboration with peers than activities separated from the normal school routine. Boyd-Dimock and McGree (1995) also found that growth occurred as lead teachers observed and assisted other teachers, worked with administrators, and were exposed to new concepts and ideas.

Research supports the idea of staff development as an important consideration when implementing any innovation, including the implementation of technology initiatives. (Bates, 1997; Levy, 2003; Baltaci-Göktalay, 2006; Jones, 2001; Jones 2004; Cresswell, Bates & Sheikh, 2013)

According to McLendon and Cronk (1999) as cited by Levy (2003) many online distance learning programme implementation plans lack provision for student services, and support and the concomitant faculty training. However, Kirkwood and Price (2006:1) argued that, "Environmental changes (societal, educational, and technological) make it necessary to adapt systems and practices that are no longer appropriate, and a critique of continuing professional development (CPD) for using ICT in teaching and learning that impact upon the assumptions, goals, and strategies which underlie and shape an organisation's educational practices".

1.3   STATEMENT OF THE PROBLEM/RESEARCH PROBLEM

Since early in this century, various new educational technologies had been adopted and integrated into the curriculum with varying degrees of success (Baltaci, Göktalay & Ocak, 2006). UNISA is one of the institutions faced with the challenges and opportunities brought about by these changes and developments. Unisa's strategic drive to adopt a fully-fledged online learning model was actualised in 2013. In order to successfully and positively impact on each other, educators and learners alike are expected and required to learn to use the available technologies for the successful completion of studies. This study explored the following question:

What are the critical skill development strategies needed for an effective and empathetic student support system in distance education and e-learning in a developing context such as South Africa?

In seeking an answer to this question, the study explored the following sub-questions:

- What evidence is there for how empathetic student support can improve the learning experience, (outcomes) or successful completion of studies for online teaching and learning in higher education? What are the key high impact practices?

- What level(s) of educators' proficiency of ICT skills are necessary for the adoption of such effective high impact student support practices for online teaching and learning in higher education?

- How do academics/educator's own personal/individual experiences in e-learning affect their approach to students and student support in higher education in implementing these high impact practices?

1.4   RESEARCH OBJECTIVES

The purpose of the study is to explore and study how educators' skills, knowledge and experience in e-learning and quality student support systems can contribute to the successful achievement of the institution and student's educational goals and to the

design of a quality support system in an ODeL environment in a developing country. With the new educational technologies being introduced to higher education institutions, educators are required to use these technological tools to teach the current learner.

1.5 MOTIVATION AND IMPORTANCE OF THE STUDY

Institutions are increasingly joining the field of ODL and e-learning in developing countries; the case at hand is the University of South Africa, which recently launched its new operational model – ODeL and implemented a few signature modules that are offered fully online. This research study explored how the educational institutions in such contexts can develop the relevant high impact support services for learners in an ODeL environment.

1.6 CONTRIBUTION OF THE STUDY IN RELATION TO THE EXISTING BODY OF KNOWLEDGE

The research was envisaged to contribute to the higher education landscape in South Africa in the following ways:

- To provide recommendations for good practice in the development of empathetic student support systems in online teaching and learning environments for a developing country.
- To provide recommendations for the facilitation of a positive adoption of appropriate e-learning strategies by educators in higher education in a developing country.

1.7 PRELIMINARY LITERATURE REVIEW

The online learning environment is characterised by the need for interaction; this is evidently reported by research globally (Woods & Baker, 2004; Parker, 1999; Chongwony, 2008). In his doctoral dissertation entitled, "An investigation of social presence in postsecondary learners enrolled in online learning environment", Chongwony (2008) pointed out the need for a combination of skills and techniques

among "those tasked with designing online learning environments that will influence learners' perception of interaction and social presence" (Eastmond, 1998), and this in turn has an impact on the learner's meaningful learning experience and success rate of completion of studies.

Anderson and Garrison (1998) described the three more common types of interaction involving students in a distance education and learning context; student-student; student-teacher; student-content and later extended this to include teacher-teacher interaction, teacher-content interaction, and content-content interaction (Anderson, 2003:105). "Teacher-teacher interaction considers the professional development efforts of teachers to engage one another in order to enhance their own pedagogical abilities. Such interaction might occur at conferences, in seminars, or through informal electronic communication".
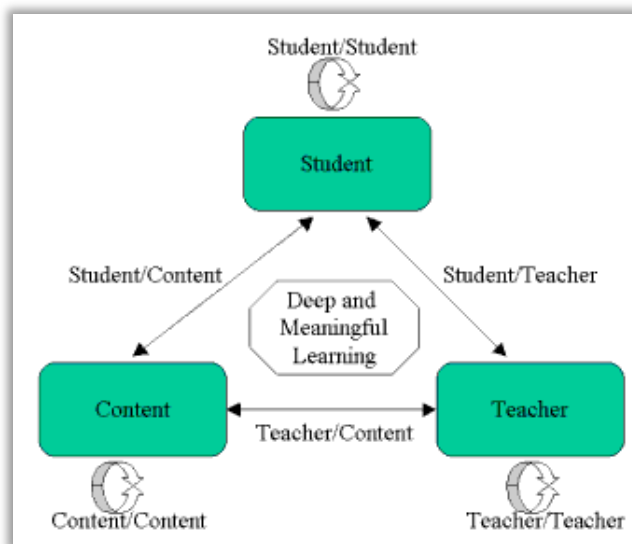
Figure 1.1 Modes of Interaction in Distance Education from Anderson and Garrison, (1998)

Teacher-content interaction, generally viewed as a prerequisite to the distance course, is proposed as another component in the interactive model, because new technologies enable teachers to interact with the content far more easily and creatively than in the past. The authors note, "The opportunity for teachers to interact with the learning content provided by other teachers is increasing dramatically as a result of the World Wide Web (WWW) (Woods & Baker, 2004:108), particularly if content is shared under

an open license". Similarly, they note the growing sophistication of online tools such as databases, search engines, and intelligent agents, and propose content-content interaction. While they note that this is the most embryonic type of interaction, more recent technologies such as blogs, wikis, and content syndication aggregators merely increase the likelihood of content-content interaction actually occurring in a meaningful way.

According to Thweatt and McCroskey (1996:545), "The more immediate a person is, the more likely he/she is to communicate at close distances, smile, engage in eye contact, use direct body orientations, use overall body movement and gestures, touch others, relax, and be vocally expressive. In other words, we might say that an immediate person is perceived as overtly friendly and warm". In a distance education and online environment, this kind of interaction is almost impossible, but the proficient use of ICTs may bring some form of comfort and confidence in students and educators, and may bridge the distance gap.

Kearsley (2000:78) described the most important role of the instructor in online classes is to, "ensure a high degree of interactivity and participation". Parker (1999) similarly highlighted the pedagogical benefits of student interaction, but offered the caveat that while it is a much-needed component of online courses; it is less likely to occur without the careful orchestration by the instructor.

Higher education institutions in South Africa and globally, are faced with a new generation of students with diverse needs and expectations, which are evolving with the rapid pace of technology. This new generation's needs and expectations demand that educators, curriculum designers, administrators in many institutions adopt more flexible educational opportunities (Baltaci-Göktalay & Ocak, 2006).

In order for the higher education providers to be relevant and to deliver optimal student outcomes and retain enrolments, in the face of new flexible modes of teaching and learning, they will need to be flexible.

While ODL and DE are often associated with independent learning, emergent learning in an online environment requires a certain degree of dependency not only upon the learning material and resources, but also how these are designed and delivered (SAIDE

course design guide, 2014). Support balances independence and reflects the range of human and non-human resources that can facilitate meaningful and worthwhile learning. Today's students not only learn by engaging with materials, but they also learn from their peers and therefore, demand social learning opportunities, and it is the duty of educators to look at a range of fundamental digital pedagogies that can be successfully used to leverage motivation and participation.

1.8   LEARNER SUPPORT IN ODL AND E-LEARNING

The concept of learner support in the Unisa open and distance teaching framework is informed by the international research and trends (Ngengebule, Molatlhegi, Tshaka & Mamadis, 2007). UNISA (ODL Policy, 2008) defines learner support as, "A generic term which is applied to the range of services offered by institutions in order to assist the students to meet their learning objectives; to gain knowledge, expertise and skills to be successful and to complete their studies".

According to the Commonwealth of Learning (2005), well designed materials, whether print-based, or offered through some other technologies do not in themselves constitute a 'learning experience', but rather a learning resource. The Commonwealth of Learning (COL) warned that students want and need dialogue and feedback, engagement and interaction; educators should be there to provide this important support in learning.

e-Learning and/or emerging educational technologies are able to provide instant and effective feedback and communication facilities required to create the much-needed dialogue and engagement. In line with the above discussion, Ngengebule et al. (2007), defined a contemporary ODL system emphasising three major components; academic system, administrative and learner support systems, as depicted in figure 1.2.
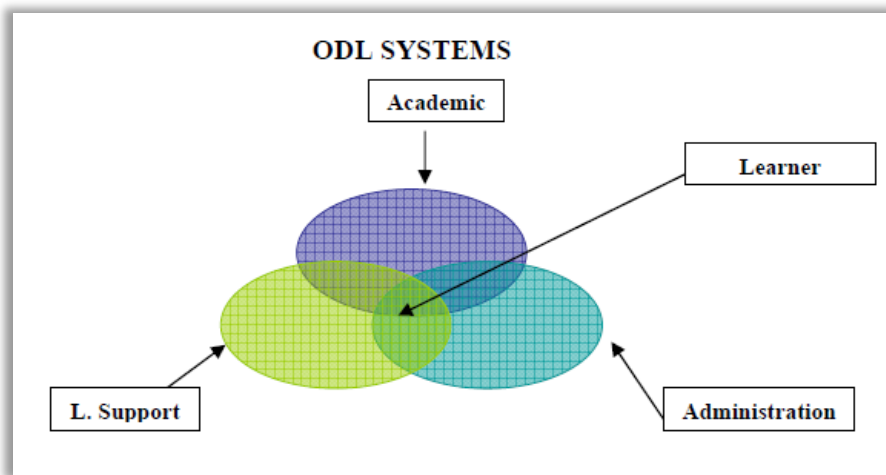
Figure 1.2: Contemporary ODL system (Ngengebule et al., 2007:2)

At the centre of any educational system is the learner therefore, for these components to work effectively, they need to be well integrated, to focus on the learner and to contribute to a rich learning experience.

At a recent think tank seminar on the new DE policy released by the Department of Higher Education and Training (DHET) in July 2014 - *Policy for the provision of distance education (DE) in South African universities,* key players, including policy makers, academics, and education practitioners discussed the implication of the policy for the higher education institutions (HEIs) in South Africa. "The policy identifies mechanisms for steering distance education and creating an enabling environment for quality distance provisioning. Development of the policy took place in the context of two important factors, the development and release of the white paper with its aim to expand the system dramatically, improve the quality of offerings, and increase penetration and affordability of ICT across South Africa." (UNISA, 2014. *Going the distance in a digital age*, Para. 4).

The DHET *White paper for post-school education and training* wants the HE system to almost double in size and the Technical and Vocational Education and Training (TVET) sector to quadruple (DHET, White Paper). According to the keynote speaker, Dr Engela van Staden, Chief Director for Academic Planning and Management Support in the DHET, the current infrastructure within the South African university sector, cannot

accommodate the required expansion; DE and e-learning would make a significant contribution to the required growth in the sector and are seen as the only viable option to meet those demands (UNISA, 2014, *Going the distance in a digital age*, Para. 3).

There was a general agreement among the panelists, that in the face of new and emerging technologies in the higher education arena, the importance of using "appropriate" ICTs was emphasised – not what is being used globally, but what is relevant for the South African and African context. The panelists also warned that people must not be excluded from higher education because of the incorrect use of ICTs or because of educators' inadequate skills.

It is against these new developments in South Africa that my personal experience as an e-learning student at an international university and also as an administrator of one of Unisa's new signature courses that are run fully online highlighted learner support as a cause for concern.

Although, it is well documented that e-learning can assist the university to advance academic tuition goals, it is important to note that these goals may be influenced by the lecturers' attitudes and behavioural intentions towards e-learning. The lecturers need to have the necessary skills to execute the new teaching methods. Research shows evidence that some electronic learning (e-learning) initiatives have failed because the institution and its constituencies were not ready for the e-learning experience (Aydin and Tasci, 2005; Borotis and Poulymenakou, 2004; Karmakar and Wahid, 2009; Ncube, Dube and Ngulube, 2014). According to Holomisa and Dube (2014), the notion of electronic learning (e-learning) readiness is complex, involving, integrated, inclusive and continuous processes of identifying underlying factors likely to impact negatively on the deployment of e-learning and actively seeking to mitigate these. Proficiency in the use of ICTs for teaching and learning is one of the key ingredients for successful implementation of e-learning initiatives. Figure 1.3 depicts proficiency and support in transactional relationships in higher education as one of the key elements that impact on the learning experience.
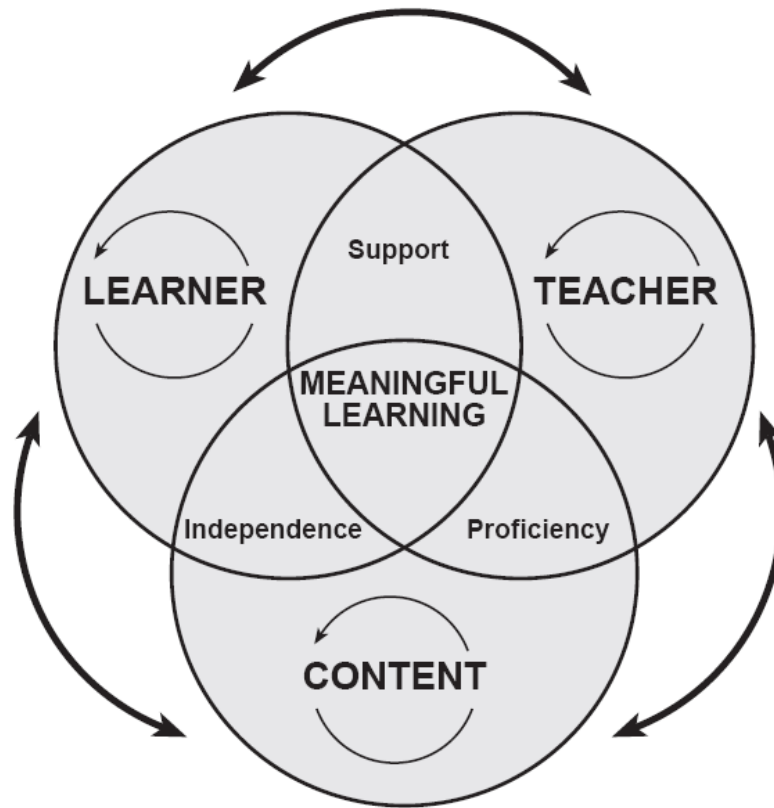
Figure 1.3: Transactional Relationships in Higher Education *(Adopted from Garrison,* 1989)

There is evidence from a large study initiated by Apple Classrooms of Tomorrow that indicated, students are only engaged by technology as a teaching tool when the teacher is proficient with the technology and is enthusiastic about its use (Barron, Kemker, Harmes, Kalaydjian & 2003; Dwyer, Ringstaff & Sandholtz, 1991), also as depicted by figure 1.3.

This premise is supported by various studies of technology adoption (Baltaci-Göktalay & Ocak, 2006; Sugar, Crawley & Fine, 2004), in which researchers agree that, "Teachers' beliefs about technology adoption can be [a] reasoned, deliberate, intentional decision-making process, as reflected in Ajzen's (1985:1) Theory of Planned Behaviour". As technology becomes ubiquitous in classrooms, faculty will be asked to utilise these new technologies in their instruction (Baltaci-Göktalay & and Ocak, 2006).

Massy and Zemsky (1995), in an analysis of the economics of higher education, conclude that higher education cannot become more productive or hold costs down unless colleges and universities embrace technological tools for teaching and learning.

In general, when someone is confronted with a new technology, he/she goes through an adoption decision process in which he/she gathers information, tests the technology, and then considers whether it offers a sufficient improvement to warrant the investment of time and energy that is required to add it to his/her repertoire of skills (Rogers, 2000). The faculties being urged to integrate technology in their courses face a similar situation (Rogers, 2003).

1.9   RESEARCH METHODOLOGY

According to Fouché and Delport (2002), most authors agreed that in real life, human sciences research uses both qualitative and quantitative methodology – sometimes consciously, sometimes unconsciously. Creswell (2003) is of the opinion that, "A mixed methods design is useful to capture the best of both quantitative and qualitative approaches". The study followed the mixed methods design in order to explore and describe the research question. This section discusses the envisaged plan of action and research approach for this study.

1.10   RESEARCH APPROACH

A mixed method research approach was followed involving both qualitative and quantitative elements to interrogate reality and to try to triangulate findings. The process involved a mixed mode method involving the following strategies: literature review, questionnaires (email and online), interviews (contact and email). Questionnaires and interviews were structured according to categories suggested by the literature review, focusing on the concepts under consideration but also involved primarily open-ended questions.

The initial research strategy employed was in the form of a survey, with the use of a standard questionnaire; the participants were approached and requested to complete the questionnaire. The questionnaires were distributed by email to selected participants

and were completed strictly online, using Unisa's Lime Survey. Some of the participants were invited to a follow-up interview. While this may have resulted in a concern for anonymity, participants' identities were not revealed and the response reported in the final paper dealt only with the responses and not who responded as discussed further in the ethical clearance section.

The aim of this exercise was to obtain more in-depth descriptions of participants' perceptions regarding the use of educational technologies and student support in higher education. All the data was analysed, interpreted and integrated.

1.11   POPULATION AND SAMPLING

The study limited the selection of the participants from the University of South Africa (UNISA) who participated in the partnership certification programme with the University of Maryland University College (UMUC).

The quantitative data was collected by means of a survey design, from a sample using a standard research instrument in the form of a questionnaire. Qualitative data was collected by means of contact and/or email interviews. Purposive sampling selection methods were also used. There were about 50 Unisa academic staff members who participated in the UMUC programme, including those that have completed the programme and those that were still participating at the time of the data collection.

1.12   DATA COLLECTION, ANALYSIS AND INTERPRETATION

The research process involved a mixed mode method involving the questionnaires (email and online), interviews (contact and email), and review of documentation, and was analysed using the process of triangulation.

After the data were collected, the researcher made use of a qualified statistician who then assisted in the analysis of the data.

1.13   DELIMITATION OF THE STUDY

The study was delimited to the following:

- The scope of this study was limited to the University of South Africa.
- The focus was only on the experiences of about 50 staff members who participated and/or are participating in the UNISA/UMUC partnership online programme - Certificate in Technology in Distance Learning and e-learning from the University of Maryland University College (UMUC).
- The impact of student support services in an online environment in a developing country as the major aspect that was studied, focused on the experiences of the participants who enrolled for an online programme from a developed country.

1.14   CONCEPT CLARIFICATION

Below are the key terms that guided this study. The study also adopted the definitions of certain terms from the Unisa Open and Distance Learning Policy (ODL Policy version 5 – 16 09 08, 2).

- **Blended learning**

According to Garrison and Vaughan (2008:24), the basic principle of blended learning is that face-to-face oral communication and online written communication are optimally integrated such that the strengths of each are blended into a unique learning experience congruent with the context and intended educational purpose.

Unisa defines blended learning as accomplished by using multiple teaching and learning strategies, a range of technologies in combination with face-to-face interaction and the deployment of both physical and virtual resources (Unisa ODL Policy, 2008).

- **E-learning (online learning)**

Sangrà, Vlachopoulos, and Cabrera (2012) and Bates and Poole (2003) suggested, an inclusive definition of e-learning would be worth considering since there are different types or forms of e-learning and even different models of applying it. The following definitions of e-learning will be adopted for this study:

o "E-learning is defined as information and communication technologies used to support students to improve their learning" (Ellis, Ginns & Piggott, 2009).

o "E-learning refers to educational processes that utilise information and communications technology to mediate synchronous as well as asynchronous learning and teaching activities" (Jereb & Šmitek, 2006).

- **Distance education**

Distance education is defined as a set of methods or processes for teaching a diverse range of students located at different places and physically separated from the learning institution, their tutors/teachers as well as other students. (Unisa ODL Policy, 2008)

- **Open distance learning (ODL)**

ODL is a multi-dimensional concept aimed at bridging the time, geographical, economic, social, educational and communication distance between student and institution, student and academics, student and courseware and student and peers. Open distance learning focuses on removing barriers to access learning, flexibility of learning provision, student-centeredness, supporting students and constructing learning programmes with the expectation that students can succeed (Unisa ODL Policy, 2008).

- **Student support**

Unisa gives a comprehensive definition of student support - a generic term that is applied to a range of services developed by UNISA to assist students to meet their learning objectives and to gain the knowledge and skills to be successful in their studies. Student support includes:

o tuition support in the form of detailed, individualised and timely feedback to formative assessment; regional tutorials in a medium (face-to-face, online, telematics etc.) that is accessible to students; remedial interventions such as responsible open admission programmes to help underprepared students achieve success in order to decrease the distance between student and teacher;

o peer support in the form of institutionally arranged and supported peer self-help groups;

o in-text support in the form of well-designed and well integrated courseware creating rich environments for active learning with a sensitivity for context, different;

o voices, etc. and promoting dialogue between teacher and student in order to decrease the distance between student and study materials;

o administrative support in the form of timely, accurate and accessible information from institution to students about all aspects of the learning process, from registration to graduation;

- **Student centeredness**

According to Unisa, student centeredness requires that students are seen as the main foci of the educational process and they are supported to take progressive responsibility for their learning and research. However, the pedagogy employed should:

o enable successful learning through rich environments for active learning,

o establish links between students' current meanings and contexts and new knowledge to be constructed, and

o encourage independent and critical thinking.

- **Continuous professional development (CPD)**

CPD can also be defined as the conscious updating of professional knowledge and the improvement of professional competence throughout a person's working life. It is a commitment to being professional, keeping up to date and continuously seeking to improve (Khan, 2012).

1.15   OUTLINE OF THE RESEARCH REPORT

Chapter one has introduced the study, stating the research problem, aim and purpose. The following chapters are outlined as follows:

- **Chapter Two** will address some pertinent theoretical opinions about the research topic and give an in-depth literature review of the topic.
- **Chapter Three** will detail how sampling, capturing, analysis and interpretation of data collected were conducted.
- **Chapter Four** will process the evidence and results of both data interpretation and findings, and
- **Chapter Five** will provide an outline summary and recommendations of the study based on the findings. The chapter assesses the data collected, indicating its gaps, shortcomings, flaws and limitations.

1.16   SUMMARY

In any society, educators have the ability to make an enormously positive contribution in shaping the future. Shelly, Gunter and Gunter (2010) asserted that educators must willingly embrace new teaching and learning opportunities. Technology is constantly, almost instantaneously changing the way we conduct business, our target audiences are also changing and therefore, academics' prerogative need to keep abreast of new technological developments (Modise, 2014). Education research showed that technology can support learning in many ways (Shelly, Gunter & Gunter, 2010; Komza, 2003; Clark, 1994) but optimal use of technology to support learning can result only from conscious, evidence-based decisions to use particular technologies in particular ways. It is therefore, important for staff to get the relevant training and acquire the

necessary skills that will enable quality provisioning and quality student support systems. The preliminary literature review suggests that learner support is an integral part of the curriculum to be designed in from the outset and not something that is ancillary and to be treated as an optional after-thought. If effective learning indeed requires integrated learner support, then academic staff recruited on the basis of their research and disciplinary expertise rather than their teaching competence would need to learn how better to support their learners through the learning process. The CHE calls for improved teaching and learning and also the work of SASSE at UFS (CHE 2007, 2013; Strydom & Mentz, 2010). This will entail inter alia using the enhanced communication and interaction potential of emerging ICT to be more effective in achieving the intended learning outcomes and graduate competences.

CHAPTER 2

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1   INTRODUCTION

One of the primary goals for learner support in distance or online education according to Floyd and Casey-Powell (2004) should be to assist students in self-development and independent learning, helping and teaching them to accept responsibility for developing their own skills, so that efforts can be geared towards ensuring a systematic quality assurance of all units of distance or online education institution. As mentioned in the previous chapter, Boyd-Dimock and McGree (n.d.) maintained that new skills and knowledge also lead to increased confidence among lead teachers and a stronger commitment to teaching. With this in mind, Floyd and Casey-Powell (2004) also argued that an institution should then support the faculty and develop them so that they in turn can effectively develop their learners.

The following discussion is based on the premise that educators cannot impart and/or transfer what they do not have or know to learners. Central to successful student support systems is the realisation that educators need to engage in continuous professional development, to meet the changing learners' needs. In particular, faced with the influx of emerging technologies, educators should continuously equip themselves with the necessary skills to effectively impact on today's learners.

As we teach in distance and online, merely knowing and mastering subject matter for academics is no longer enough: today's lecturers need also to acquire relevant technical skills good enough to provide relevant support to the learners. A fundamental problem at the heart of international distance education is the problem of low student retention and high dropout (Simpson, 2008, 2013; Roberts, n.d.; Stewart, 1992; Anderson, 2006; Kim, 1999) and technology can help us to do manage this better than ever before.

To gain an understanding of the current state of thought and the philosophical thinking on interactions and student support in distance education and e-learning environments,

this study specifically focuses on the works of Anderson, Garrison and Archer's *Community of inquiry* (CoI) and related works of Holmberg's *Empathy* and Moore's *Transactional distance*. This chapter provides an overview of previous studies that while facilitating meaningful educational experiences in distance education and online environments through effective empathetic student support services lead to the improved success of students.

The chapter starts with a discussion of the elements of the frameworks and how they relate to student support and/or how they can be used to study the issues around student support in distance education and e-learning, then it looks at how previous studies have operationalised dialogue, interactions and technology to bring about the desired learning outcomes in online programs and studies, to instil critical thinking - the ultimate goal of higher education. Finally, in line with the focus of this study, the implications for professional academic development were explored.

2.2   LITERATURE REVIEW

Although, constructivism argued that humans generate knowledge and meaning from an interaction between their experiences and their ideas (Vygotsky, 1978; Piaget, 1971; Dewey, 1938; Glasersfeld, 2007; Bruner, 1960). For decades this has been the hallmark of adult education; Unisa, like many distance education institutions has recently been receiving an influx of younger generation learners entering the distance education and e-learning arena directly from school. This much younger intake presented new challenges for distance education institutions, to relook at the learning and teaching theories that have guided distance education for years.

A study by Moore and Kearsley 2005, that referenced Noel-Levitz, Inc. (2009) and Thompson (1998:20), revealed that in the United States of America, typically, the majority of students who enrol in an online course or degree programme are Caucasian females between the ages of 25-50. They varied in economic and marital status, and the majority took online classes as opposed to face-to-face classes because of the convenience and flexibility (Noel-Levitz, 2009). According to a study by Van Zyl and Barnes (2012), the majority of students enrolling generally for Unisa courses are black

persons aged between 25 to 39 years. With the newly implemented ODeL model at Unisa, the institutions may expect increasing enrolments from other racial groups who have more access to computers and the internet, making their student body even more diverse.

The development of theory in distance education has been crucial and inevitable for the sustainability of this educational sub-system. Many scholars have attempted to theorize distance education and e-learning activities, and to explain underlying initiatives and endeavours (Gokool-Ramdoo, 2008). Some of the theories that are suitable to ensure the sustainability of quality distance education in a technology-driven world are the Community of Inquiry (CoI), developed by Garrison, Anderson, and Archer (2000), Holmberg's *empathy* (*1989*) and Moore's *transactional distance (1993).*

2.2.1 Community of inquiry (CoI) by Anderson, Garrison and Archer

The CoI framework comprises three interdependent and dynamic key elements: social presence, cognitive presence, and teaching presence, as shown in Table 1. The framework suggests that learning occurs within the community through the interaction of these three core elements, and was founded on the collaborative constructivist view of teaching and learning (Akyol, Garrison & Ozden, 2011). According to Garrison and Anderson (2003) and Garrison and Vaughan (2008) in Akyol, Garrison, and Ozden (2011:66), "the CoI emphasis on critical thinking and collaboration provides a well-structured model and set of guidelines to create effective learning communities in online and blended learning environments".

The CoI framework was chosen for discussion in this study because of its prominence as a model of teaching and learning in online and blended learning environments (Akyol *et al.* 2009), and because it has been widely adopted and studied by researchers to inform the practice of distance education and e-Learning, (Burgh & Yorshansky, 2011; Akyol, Garrison & Ozden, 2011; Doig & Groves, 2011; Anderson & Dron, 2011).

Consistent with John Dewey's (1958) work on community and inquiry, the founders of the CoI framework conceptually grounded it in theories of teaching and learning in higher education. Dewey believed that inquiry was a social activity and went to the

essence of an educational experience, and he developed a model of Practical Inquiry which has four phases - the triggering event, exploration, integration, and resolution, as shown in Figure 2.1.
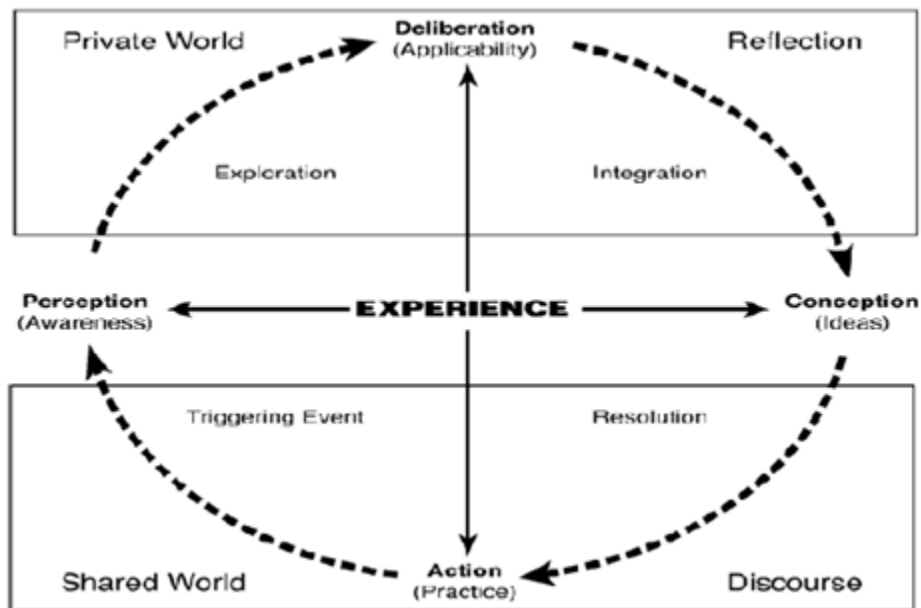
Figure 2.1: Practical Inquiry model (Garrison, Anderson, & Archer, 2001)

Anderson, Garrison and Archer (2010:5) emphasised that this framework emerged in the specific context of computer conferencing in higher education – i.e., asynchronous, text-based group discussions, rather than from a traditional distance education theoretical perspective which assumed that students worked independently from each other.

The goal of CoI was to define, describe and measure the elements of a collaborative and worthwhile educational experience. In this regard, Anderson, Garrison and Archer (2010) maintained that the CoI framework is a process model, because the framework attempted to outline not only the core elements (social, cognitive and teaching presence), but also the dynamics of an online educational experience. The CoI framework is dependent upon the interaction of all presences to a greater or lesser degree depending on the subject matter, the learners and the communications technology.

2.2.2 The elements of Community of inquiry

The three interdependent and dynamic elements together are effective in creating a deep and meaningful (collaborative-constructivist) learning experience (Garrison, Anderson and Archer, 2000). According to the premise of Community of Inquiry, a group of individuals engage collaboratively in a purposeful critical discourse and reflection to construct personal meaning and confirm mutual understandings (Garrison, Anderson & Archer, 2000). The key elements are defined below, and also shown in Figure 2.2, with Table 1 outlining the categories and indicators within the CoI presences.
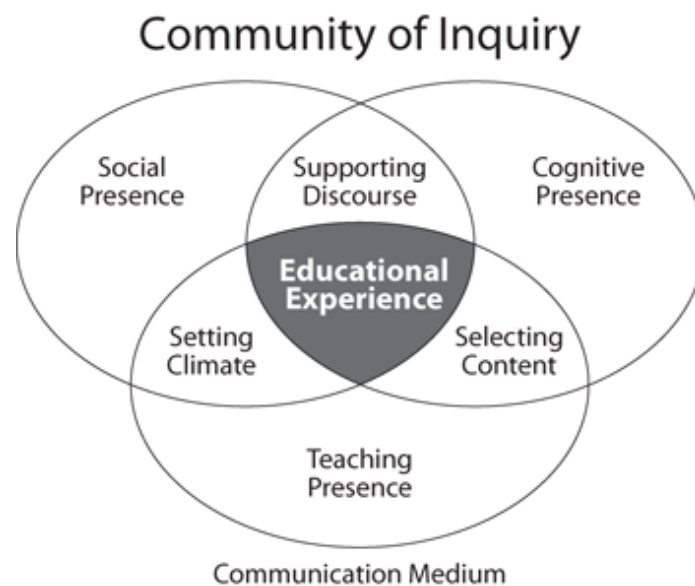
Figure 2.2: The CoI Model (Garrison, Anderson & Archer, 2000)

2.2.2.1 Social presence

Garrison (2009) defined social presence as the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities.

Although Garrison *et al.* (2001) noted that more studies of the relationship between social presence and cognitive and teaching presences was needed, social presence is a dimensional construct associated with an emotional sense of belonging but also connected to the teaching and learning elements of a community of inquiry (Swan & Ice, 2010).

There is evidence to suggest that the first priority for most students in a formal educational context is shared social identity (i.e., the purpose of the course), and not personal identity (i.e., interpersonal relationships) (Garrison, 2009b, Swan & Ice, 2010). Social presence has three categories whose quality and effects can be measured within the community: effective expression, open communication, and group cohesion, as depicted in Table 1. It is argued that the three dimensions of social presence may be defined in terms of the participants identifying with the community, communicating purposefully in a trusting environment, and developing interpersonal relationships (Garrison, 2009b).

Table 1: Elements of CoI model (Garrison, Anderson, and Archer, 2001)

Elements	Categories	Indicators
Social Presence	Effective Expression Open Communication Group Cohesion	Emoticons Risk-free Expression Encourage Collaboration
Cognitive Presence	Triggering Event Exploration Integration Resolution	Sense of Puzzlement Information Exchange Connecting Ideas Apply New Ideas
Teaching Presence	Design and Organisation Facilitating Discourse Direct Instruction	Setting Curriculum and Methods Sharing Personal Meaning Focusing Discussion

The studies of Swan *et al.* (2009) and Shea and Bidjerano (2009) concluded that social presence must be seen as a mediating variable between teaching and cognitive

presence. Furthermore, the results of their study indicated that teaching presence causally influenced social and cognitive presence.

Garrison and Shale (1990) suggested that sustained, contiguous, two-way communication between student and instructor was the appropriate hallmark of distance education because this process allows learners to negotiate and structure personally meaningful knowledge much like the educational transactions that occur in traditional classrooms. This need for sustained dialogue is integral to and interwoven throughout the CoI framework. Several authors (Garrison & Arbaugh, 2007; Shea & Bidjerano, 2009a; Garrison, 2009b; Shea *et al.* 2010) have asserted that knowledge construction within a community of inquiry must be a "moment by moment" negotiation of meaning as it occurs in a physical classroom setting. Without group-based interaction, learners cannot create the common values, goals, and language necessary for effective learning to occur. The many-to-many types of interactions this connotes are operationalised primarily within the concept of social presence.

Akyol, Garrison, and Ozden (2009), referencing Garrison and Anderson (2003:67), considered social presence to be critical and "an important antecedent to collaboration and critical discourse because it facilitates achieving cognitive objectives by instigating, sustaining, and supporting critical thinking in a community of learners".

Akyol, Garrison, and Ozden (2009), as cited in Annand (2011) saw social presence as a means to "share ideas", to express views, and to collaborate. A few studies have found social presence to be beneficially linked to some aspects of higher education learning experiences (Boston *et al.* 2009; Kupczynski, Weisenmayer & McCluskey, 2010, Nagel & Kotze, 2010), even at a small or auxiliary level (Annand, 2011). This is also consistent with the thinking around communities of learning and practice (Lave & Wenger *et al.*).

2.2.2.2 Teaching presence

The concept of teaching presence in CoI recognizes that both teacher and students have a responsibility to contribute to the learning process (Taite, 2012). Teaching presence is defined by Anderson, Rourke, Garrison and Archer (2001:5) as the design,

facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes.

Teaching presence according to Arbaugh and Hwang (2006) as cited in Taite (2012) has been the least cited construct throughout the online learning literature. While some researchers suggested that well-designed courses negate the need for the presence of instructors in graduate level courses (Anagnostopoulos *et al.* 2005), others suggest that the course structure and instructors are critical to the successful and meaningful learning experience (Jefferies, Grodzinsky & Griffin, 2003; Marks, Sibley & Arbaugh, 2005; Vonderwell, 2004).

The main finding over the last decade with regard to teaching presence is the growing evidence as to the importance of this element. Teaching presence is seen as, "a significant determinant of student satisfaction, perceived learning, and sense of community" (Garrison and Arbaugh, 2007:163).

2.2.2.3 Cognitive presence

Cognitive presence is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison, Anderson & Archer, 2000). Cognitive presence is the most basic and significant element in the CoI model because it looks at the student's ability to learn. It focuses on higher-order thinking rather than leaning outcomes and aligns it with the ultimate goal of higher education institutions - to promote critical thinking for lifelong learning (Taite, 2012).

Cognitive presence (CP) has been identified as the most difficult element of the CoI framework to study and the most difficult element to develop in the online classroom (Garrison and Arbaugh, 2007; Garrison and Cleveland-Innes, 2005). According to Taite (2012), higher-order thinking may be difficult to detect because it involves individual thought processes, and the majority of the research assessing CP has used transcript analysis of asynchronous discussions (Garrison *et al.* 2001; Meyer, 2004). Although, transcript analysis is useful for accurate, detailed assessment of public discourse, Taite (2011:19) argues that this type of analysis may not fully assess the private thought processes.

Cognitive presence is operationalised through the Practical Inquiry (PI) model based on the more elaborate phases of Dewey's notion of reflective thought. Dewey believed that a worthwhile educational experience should be based on a process of reflective inquiry (Swan, Garrison & Richardson, 2009).

Described by Arbaugh (2007) in Taite (2012:18), these phases are: "(1) a triggering event, where some issue or problem is identified for further inquiry; (2) exploration, where students explore the issue both individually and corporately through critical reflection and discourse; (3) integration, where learners construct meaning from the ideas developed during exploration; and (4) resolution, where learners apply the newly gained knowledge to educational contexts or workplace settings".

Garrison and colleagues (2000) proposed that phase three typically requires an enhanced teaching presence to probe and diagnose ideas so that learners will move to higher level thinking in developing their ideas.

2.2.3 Community of inquiry and its application within distance education and e-learning environments

According to Giossos, Koutsouba, Lionarakis, and Skavantzos (2009), theoretical approaches provide the potential for hypotheses concerning what one can expect from distance learning, under what conditions and circumstances and through which practices and procedures. In this section, we look at the application and relevance of CoI in distance education. It is also argued that CoI is effective for use in online and blended learning environments (Burgh & Yorshansky, 2011; Akyol, Garrison & Ozden, 2011; Doig & Groves, 2011; Anderson & Dron, 2011).

In a learner-centred and collaborative era of distance education and e-learning, the Community of Inquiry approaches learning by allowing students to individually ask questions, it gives a platform for collaboration, sharing ideas and finding solutions with other students within the community (Akyol, Garrison & Ozden, 2011; Anderson & Dron, 2011). Palloff and Pratt (2005) argued that creating and sustaining a learning community is valuable to enhance student satisfaction and learning through community involvement.

CoI is relevant to distance education because it allows the institutions to provide tools and techniques for learners to acquire skills and knowledge that optimise their independent learning. By its nature, CoI supports collaborative teaching and learning delivered in online and blended learning environments through the use of synchronous and asynchronous communication technologies (Garrison, Anderson & Archer, 2000; Akyol *et al.* 2009), and therefore it assists institutions in maintaining relevant technologies to facilitate communities of inquiry. In their article on the implications of online learning in distance education, Garrison, Anderson and Archer (2000) identified two fundamental approaches to online learning in distance education; self-directed learning, and collaborative construction of knowledge.

CoI theory thrives on *interactions* between the prime actors of distance education; students, teachers and content, using computer mediated communication (Garrison, Anderson & Archer, 2000; Anderson, 2003). These interactions are encouraged, facilitated and guided by teachers, and co-managed with students. Teacher presence

outlines the essential roles of instructors as content experts and course designers within the educational experience in distance education.

CoI aligned well with several other theories of distance education and provided a broad framework of the pedagogy. It allows the generation of an almost endless number of hypotheses for research. For example; CoI caters for Moore's theory of transactional distance, which observed the development of a particular form of interaction between *teacher* and *learner* because of their geographical separation (Giossos *et al.* 2009). Whereas, Moore distinguishes between two primary concepts pertaining to distance learning: *distance teaching* and *learner autonomy,* CoI included the interaction between students and other students and the use of communication technologies.

Although CoI applied some of the theories in distance education and identifies crucial prerequisites for a successful higher educational experience, such as student autonomy, active participation, structure, curriculum design, and so on, it did not effectively address the issue of power-sharing and democracy in education (Burgh & Yorshansky, 2011) and cyber-bullying (Reigle, 2007) within the social presence element. Studies showed that some of the cyber-bullying is expressed and targeted towards instructors (Reigle, 2007; Mason, 2011), and instructors need to be well equipped to deal with bullying in virtual classrooms. This is however, an opportunity for further exploration of the theory or new theories.

2.2.4 Holmberg's empathy theory

Empathy could help distance education learners feel less isolated in their studies which would therefore motivate students: His theory of empathy use in DE (earlier referred to as guided didactic conversation), was dubbed "Remedy for Separation'' (Holmberg, 2004). He applied this theory by adopting a conversational style (simulated conversation), individual correspondence and feedback on assignments for students. He also noted the importance of demonstrating empathy through quick turnaround in communications with learners.

Holmberg (2006) concluded that if we cater for this empathetic approach in distance education the outcomes of the study will be improved. Basically, the theory implies that what applies to the creation of empathy in face-to-face teaching also applies to distance education – provided special measures are taken to make sure that students are engaged in decision-making, that the style of presentation is lucid, problem-oriented and conversation-like, that friendly non-contiguous interaction between students and tutors is brought about and that liberal organisational-administrative structures and processes are created (Holmberg, 2006).

According to Holmberg (2006), the friendly atmosphere is essential also in the interaction between students and instructors/tutors. Helping and teaching students is the main purpose of this interaction. This naturally means teaching, explaining and providing examples etc. Awarding marks (grades) is only a possible secondary part of the tutor's work.

Empathy between those who teach and those who learn is universally a good basis for learning: easily understandable, conversation-like presentations and friendly interaction helps students to learn, this is according to a study by Bernath and Vidal (2007).

2.2.5 Moore's transactional distance

"Transactional distance is the gap of understanding and communication between the teachers and learners caused by geographic distance that must be bridged through distinctive procedures in instructional design and the facilitation of interaction" (Moore & Kearsley 2005: 223).

According to Moore (1993), physical separation leads to a psychological and communication gap, a space for potential misunderstanding between the inputs of instructor and those of the learner. It is a continuous rather than a discrete variable, a relative rather than an absolute term. In any educational programme, there is some transactional distance, even where learners and teachers meet face to face. Special organisations and teaching procedures are therefore essential. Figure 2.3 depicts the

three sets of variables; dialogue, structure and learner autonomy from Moore's theory of transactional distance.

Transactional Distance implies that the application of a methodological approach - empathy-creating conversational style leads to an increased motivation to learn and better results than conventional presentation of learning matter. This is a predictive theory that generates intersubjectivity testable hypotheses, which can be, and have been empirically tested (Holmberg, Schuemer & Obermeier 1982; Holmberg, 2003).
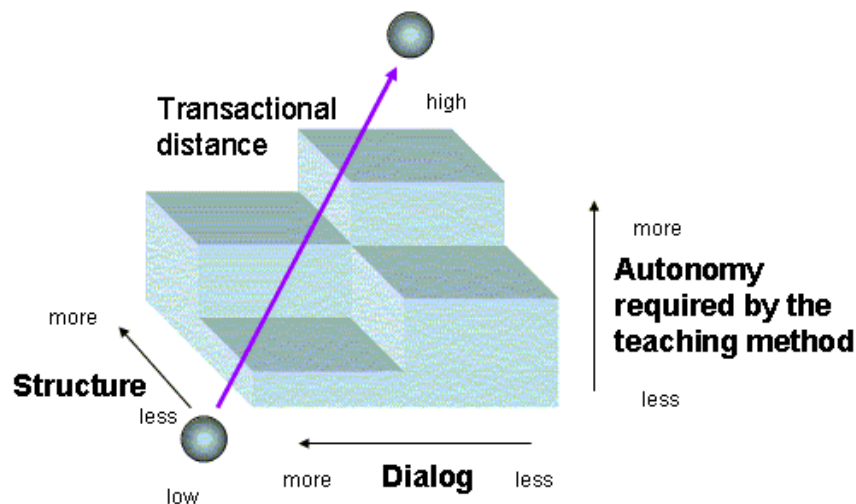
Figure 2.3: The Three Dimensions of Transactional Distance: Dialogue, structure, transactional distance and autonomy (Source: Learning Architecture Online, *n.d.*).

Three sets of variables: dialogue, structure and learner autonomy

Moore and Kearsley (1996:3) stated that, "Dialogue is the interchange of words, physical actions, or any other type of intercommunication between students and instructors when instruction is given and the students respond". Dialogue describes the interaction (interplay of words and actions) between the teacher and learner when one gives instruction and the other responds. The extent and nature of dialogue is determined by the educational philosophy of the individual or group responsible for the design of the course, the personalities of teacher and learner, the subject matter of the course and, environmental factors.

Structure expresses the rigidity or flexibility of the programme's design, educational objectives, teaching strategies and evaluation methods (Moore, 1993:26). Having planned or been given a curriculum, a programme of content to be taught, course designers and instructors must stimulate, or at least maintain the student's interest in what is to be taught, to motivate the student to learn, to enhance and maintain the learner's interest including self-motivation and stimulating the higher order cognitive skills with associated attitudes and values (analysis and criticism) that learners are expected to develop in higher education.

What determines the success of distance teaching is the extent to which the institution and the individual instructor are able to provide the appropriate opportunity for, and quality of, dialogue between teacher and learner, as well as appropriately structured learning materials (Moore, 1991:5-6).

"Learner autonomy refers to the teaching/learning relationship as the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program". However, Moore (1993) argued that not all adults are at a state of readiness for fully self-directed learning, as suggested by Malcolm Knowles (1970), that autonomous behaviour should be natural for the adult, who has a self-concept of being self-directed. On the contrary, because learners are trained to be dependent in the school system, "adults are typically not prepared for self-directed learning; they need to go through a process of reorientation to learning as adults" (Moore, 1993). While only a minority of adults might be practicing as fully autonomous learners, the obligation is on teachers to assist them in acquiring these skills. If the teacher does not possess the necessary technical or pedagogical skills to teach at a distance or online, to accommodate this need, it is obviously to the detriment of the student and the institution.

Other studies suggested that many adults feel far from self-directed (Brookfield, 1988; Chene, 1983; Mezirow, 1981 and Mezirow, 1985). In Moore's theory (1997), three clusters of variables control the extent of transactional distance. Within these relationships, then, it can be seen:

- By manipulating the communications media it is possible to increase dialogue between learners and their teachers, and thus reduce the transactional distance. (p.2)
- When a program is highly structured and teacher-learner dialog is non-existent the transaction between learners and teachers is high. (p.3)

According to Bornt (2011), Moore's theory has a direct bearing on e-learning. Bornt believed Moore's theory explains and quantifies the learning relationship between instructor and student in the e-learning situation, where there is a substantial physical or temporal distance between the two.

2.2.6 Interactions in distance education and e-learning environments

Interaction has been identified as key to the success of distance learning. It is key in fostering, supporting and engaging in the learning process (Mbwesa, 2014). A point of consensus among many DE researchers and practitioners as noted by Taite (2012, p 34) is that, interaction is a crucial element for learning; and thus, for effective online education (Bannan-Ritland, 2002; Boyle & Wambach, 2001; Gunawardena & McIsaac, 2004; Moore, 1993; Strijbos, Martens & Jochems, 2004). Interaction among students enhances the learning experience and increases students' satisfaction with the course (Bull, Kimball & Stansberry, 1998; Palloff & Pratt, 1999). Furthermore, interaction among learners and instructors increases learners' positive attitudes toward and motivation to learn. In transactional distance theory, Moore and Kearsley (2005) explained how interaction and structure are critical to success in online education.

According to SAIDE (2014), "Learner support strategies seek to enhance learner-learner, learner-staff, learner-institution, learner-community and learner-curriculum interaction, active engagement and to promote increasing levels of learning autonomy in a structured way", which also links up to NADEOSA's (2005) Learner Support Quality Criteria.

Thurmond, Wambach, Connors, and Frey, (2002) noted the interaction that transpires between students and faculty is intended to help reinforce student understanding of the material or elucidate meanings. Interacting with instructors can help students clarify

nebulous points and reinforce correct interpretation of course information. The instructor is especially valuable in responding to the learner's application of new knowledge (Moore, 1989).

2.2.7 The importance of communication in DE and e-Learning

Studies have shown that a basic element in traditional classroom learning is communication among the students: the ability to ask questions, to share ideas with others, or to disagree with others is found to be a basic need in the learning process (Alavi, 1994; Palloff & Pratt, 2001; Trentin, 1998).

These three pedagogical frameworks emphasised the importance of communication in any educational environment, and how this can be designed and executed to bring about the desired goal of education, which is to instil critical thinking, and simply to help students successfully achieve their learning goals. They also represent an opportunity to implement practices seeking the critical emancipation of the educational agents (Birochi & Pozzebon, 2011).

According to Barbero (1987), communication as a means of facilitating the education process crosses over into the field of mediation theory. Jacquinot-Delaunay (1998) stated, "The theories of communication, akin to theories of learning, currently converge to replace the paradigm of 'transmission' of knowledge, such as values, with the paradigm of 'mediation' defined as an interpretive and relational model of knowledge appropriation".

Mediated learning

Mediated learning is a vital approach that ensures effective learning. According to Seng (1997), a mediator is a parent, teacher, or someone with a vested interest in the learner's life that provides a suitable stimulus (homework, test, assignment, etc.), and then observes the learner's response to the stimulus. Based on the response, the teacher *interacts* with the learner (praise, criticism, encouragement, grades new assignments for example) and the process is continued until either the teacher or the learner is satisfied with the learning experience. The human mediator interposes himself

between the learning organism and the world of stimuli to interpret, guide and give meaning to the stimuli. In this kind of interaction learning is intentional (Seng, 1997:6).

2.2.8 Transactional distance, community of inquiry and empathy and distance and online education

According to (Holmberg, 2006) scholarly theories imply a systematic ordering of ideas about the phenomena of a field of inquiry and are usually of two kinds. One is concerned with understanding, while the other is concerned with explanation and prediction. He classifies Moore's transactional distance and Anderson, Garrison and Archer's community of inquiry (CoI) theories to be of the former kind, and his theory to be of the second.

Holmberg's theory hinges on the fact that teachers and students are physically separated and sought a means of remedying this fundamental gap between them. Transactional distance linked the methodological approach – empathy (conversational style) to the increased motivation and better results than conventional presentation of learning matter (Holmberg, Schuemer & Obermeier 1982, Holmberg, 2003). Holmberg (2003) believed it feasible to recreate the teaching and learning environment of traditional classrooms by use of various strategies. This is not what Unisa would want to do, but since traditional classrooms tend to be content and teacher-centered and transmission mode, technology can be used simply to replicate bad teaching at scale and to disrupt this, to challenge traditional conceptions of teaching as content transmission to create environments for shared, collaborative and open-ended inquiry.

Holmberg (1983) proposed actions related to interpersonal communication in his theory of guided didactic conversation. Dialogue should be grounded in strategies such as empathy-based conversation, whose aim is to recreate ties between learners and teachers by means of simulated communication. The teacher must also deploy strategies which foster motivation in students, such as exploiting the pedagogic structure available, including printed materials, and sound recordings, to enhance ties with learners.

Garrison (2000) held that two-way communication between teacher and learner is imperative. The variables of dialogue and debate should provide agents with a high level of interaction in communicational processes to widen the education transaction. Two-way communication is therefore, pivotal in strengthening the links between teaching and learning. Dialogues must be meaningful; teachers must be knowledgeable in the subject matter and have the technical skills necessary to use in time of need or with struggling or curious students' enquiries. Institutions such as Unisa embark on international collaborations and partnerships in an effort to develop cultural, scholarly and scientific ties of operation, where the academic exchange and collaboration is encouraged through skill training and transfer between institutions.

In essence, Anderson, Garrison and Archer's community of inquiry teaching presence is pivotal for ensuring the reduced gap between learner and teacher (or tutor) (Moore's transactional distance), while cognitive presence ensures that elements of motivation, encouragement and feedback (Holmberg's empathy) is present in the communication setup. According to Moore (1993:3), "A dialogue is purposeful, constructive and valued by each party". Each party in a dialogue respectfully and actively listens; contributes and builds on the contributions of the other party or parties.

Like with CoI, the concept of transaction is derived from Dewey (Dewey & Bentley 1949). As explained by Boyd and Apps (1980:5) it 'connotes the interplay among the environment, the individuals and the patterns of behaviours in a situation'. The transaction/separation between teachers and learners profoundly affects both teaching and learning (Boyd & Apps, 1980:1).

Shearer's (2009:12) exploratory and descriptive study, which supported Moore's theory of transactional distance, maintained that the concept of "transaction" can denote an exchange of goods or services, an exchange of money, or in an educational setting it can represent an exchange of intellectual ideas or interaction between people. Shearer also believed Moore's theory provides a framework for the exchange of intellectual ideas (dialogue), arguing that as dialogue increases transactional distance decreases. In other words the greater the level of communication or dialogue the more effective the exchange or transaction.

Lowell's (2004:13) work looked at the effects of social presence, fluency, and context on transactional distance, dialogue, and structure. In his work, Lowell described dialogue as, "An exchange of ideas between two respondents made up of a series of communication transactions". The main finding of the study highlighted social presence as the only key factor affecting the perception of transactional distance and a feeling of connectedness to the educational experience. However, other studies by Braxton (2000), Lowell (2004), and Zhang (2003) highlighted that multiple dimensions of interactions, social presence, cultural influences, and other aspects of human interaction affect transactional distance.

Even though transactional distance, empathy, and community of inquiry (CoI) are student-centered theories, they put an enormous emphasis on the important role of the teacher, educator, or tutor. It is from this premise that the researcher felt educators need to be aware of their roles, their content mastery and technical skills, especially now in the digital era, where emerging technological tools are constantly changing the ways in which we can learn and teach. Simpson identified several key support skills necessary to bring about a meaningful educational experience, as shown in figure 2.4.
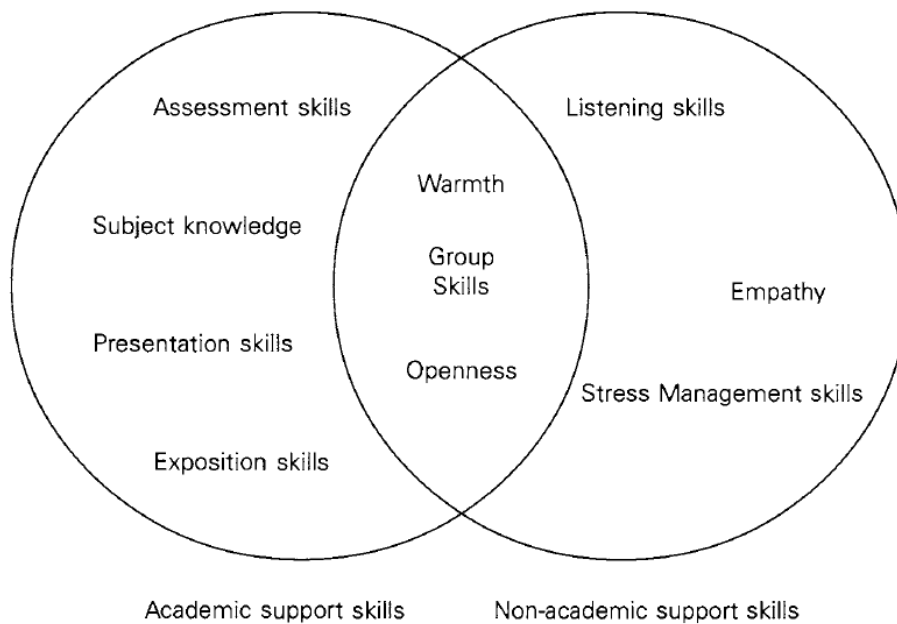
Figure 2.4: Support skills (Simpson, 2000)

Devlin (2014), Simonson, Smaldino, Albright, and Zvacek (2012) and Birochi and Pozzebon (2011); echoed Simpson's focus on support skills, arguing that the characteristics central to distance education are personal relations, pleasure of study, empathy between all parties involved, sense of belonging (which affect motivation to learn), students involvement in decision-making, conversation-like presentation of material, friendly noncontiguous interaction, and liberal administrative structures/processes.

It may seem that many distance education institutional systems are heavily dependent on the use of external services for tutoring purposes. If an institution outsources the teaching of online subjects/courses to tutors and e-tutors, how much control does it have on the learner-teacher transaction? Although, this speaks to educational management issues, elements of support need to be seriously considered, beyond simply the management of processes and systems.

Even with learner-learner transactional distance, the teacher has some level of facilitation, in many cases, the teacher may still be required to initiate and maintain the processes.

2.2.9 Student support in distance and online education

Distance education has rightly been recognised and acclaimed for its ability to "open doors" for large numbers of learners who have no other access to further education and training. Beyond the effort to increase students' retention or to reduce dropouts in open, distance or online education, support services should facilitate more meaningful learning experiences for all. Distance education and e-learning students expect to receive support services that will enable them to succeed in their educational endeavours (Floyd & Casey-Powell, 2004).

Simpson (2000) defined student support according to two categories; the first is academic (or tutorial) support, which deals with supporting students with the cognitive, intellectual and knowledge issues of specific courses or sets of courses. This included, for example, developing general learning skills, numeracy and literacy. The second is

non-academic or counselling support, the support of students in the affective and organisational aspects of their studies. There are further sub-divisions within these two divisions (Simpson, 2000), illustrated in figure 2.5.
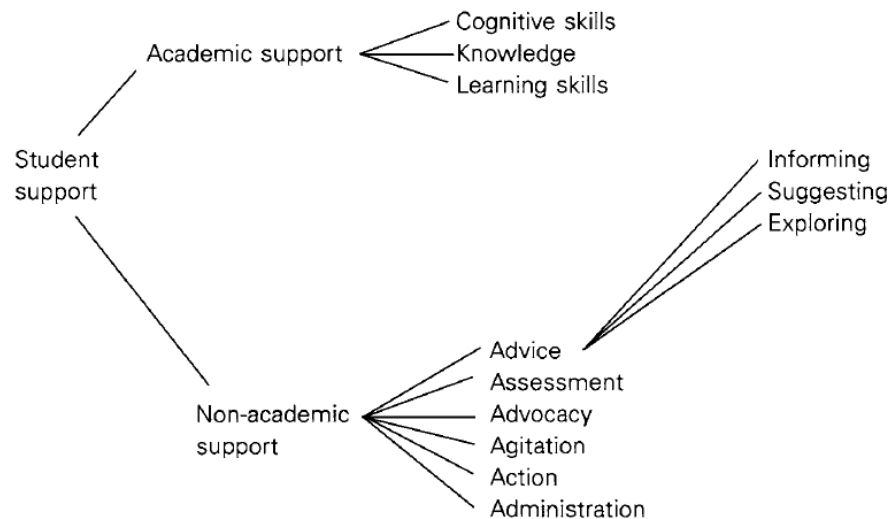
Figure 2.5: The structure of student support (Simpson, 2000)

Simpson (2000) further classifies qualities and skills within the affective and organisational aspects of students' studies, see Figure 2.6. Simpson warns that while some improvements will be possible by redesigning course materials much more will have to be achieved through enhancing and developing student support.
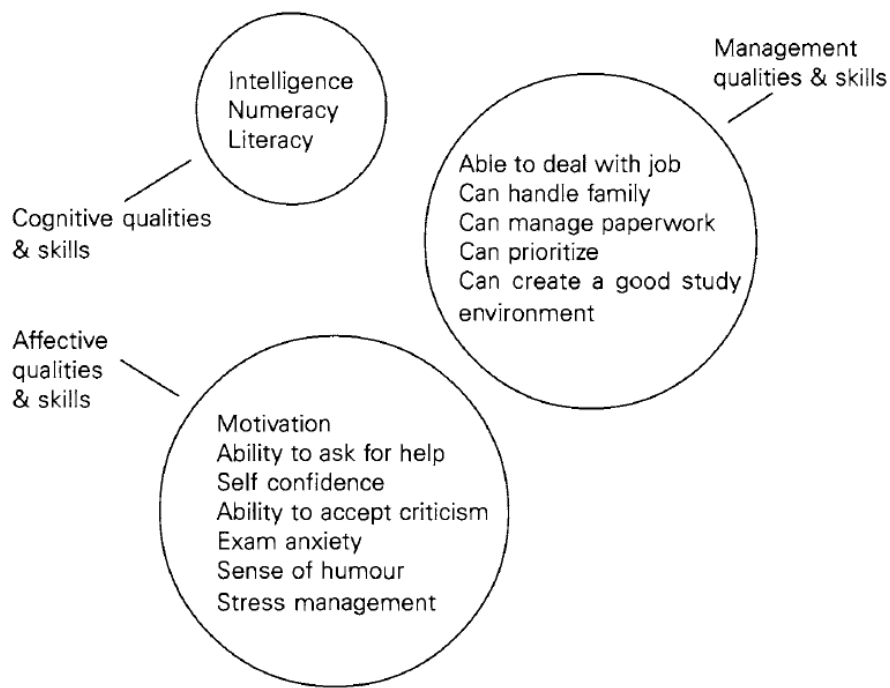
Figure 2.6: Classifying qualities and skills (Simpson, 2000)

Challenges of distance and online education

According to Roberts (n.d.), the major challenge to Higher Education institutions in South Africa today, is a response to the Higher Education Act, 101 (1997) and the expectations in the Education White Paper, (2013). Through policies of open access, many more students, some prepared, some partially prepared and some without preparation are entering Higher Education, increasing problems of retention and a low pass rate that already existed.

Support should form an intentional internal part of the course and not an external and optional service (Andrade, 2014) and institutions should take advantage of the possibilities that technologies provide to support all the students, aiming at addressing both general and specific needs in distance education and e-learning.

Learner support programmes therefore, became critical to all institutions since South Africa and abroad, especially when governments require increased participation rates and increased graduate output as expected outcomes and when taking an increasingly instrumental view of education by linking funding to these outcomes (Roberts, n.d.; Simpson, 2000).

Sewart (1992) similarly believed that the objectives must not focus only on the production of highly acclaimed course materials but rather on the production of successful students, while Roberts (n.d.) argued that effective learner support is likely to lower the dropout rate and increase the pass rate the very issue that South African Distance Education Institutions struggle with.

The 2003 research of the South African Institute for Distance Education (SAIDE) found that there was a lack of understanding of the particular character of learner support in distance education (SAIDE, 2003). Learner support according to SAIDE is rather "support available for every learner that directly affects his/her success and is part of the teaching and learning on the course".

According to SAIDE (n.d.), "Learner support is seen to include efforts made to address academic, social/personal and informational counselling and support needs of learners, as groups and as individuals, for the entire learning journey from marketing and pre-registration, through teaching and assessment, to graduation and the student's continuing role as an alumnus".

Bruso (2001:9) warned that, "The diversity of student population increases, particularly in the area of students' proficiency with technology". The challenge to especially new institutions is to move swiftly, purposefully and productively to embrace the concept of learner support (Roberts, n.d.), more so now with the introduction of a new model of teaching and learning ODeL at Unisa. Roberts asserted that institutions should allocate more of their finances to learner support.

According to Floyd and Casey-Powell (2004), one of the characteristics of successful online support services is that they should aid both students and faculty. They further suggested that institutions support faculty and create learning environments and campus cultures that support the teaching of online classes. RDR Associates (1998:17) as cited in Floyd, Deborah Casey-Powell (2004), suggested that, "Successful distance learning institutions support their faculty who, in effect, become both students and users of the technological tools they will use to deliver the courseware".

As noted earlier, a fundamental problem at the heart of international distance education is student retention and dropout (Simpson, 2013; DHET, 2014). According to Simpson,

figures for student dropout from distance education seemed much higher than in conventional education, as depicted in figure 2.7. Studies such as of Dodds, Lawrence and Guiton (1984), Dillon, Gunawardena and Parker (1992) and Shin and Kim (1999) indicate that there are many different reasons why students withdraw from distance and e-learning education. According to Candy (1991), adults are powerfully affected by aspects of their backgrounds, including family and prior education, in ways that limit and constrain their ability to be self-directing in certain learning situations.
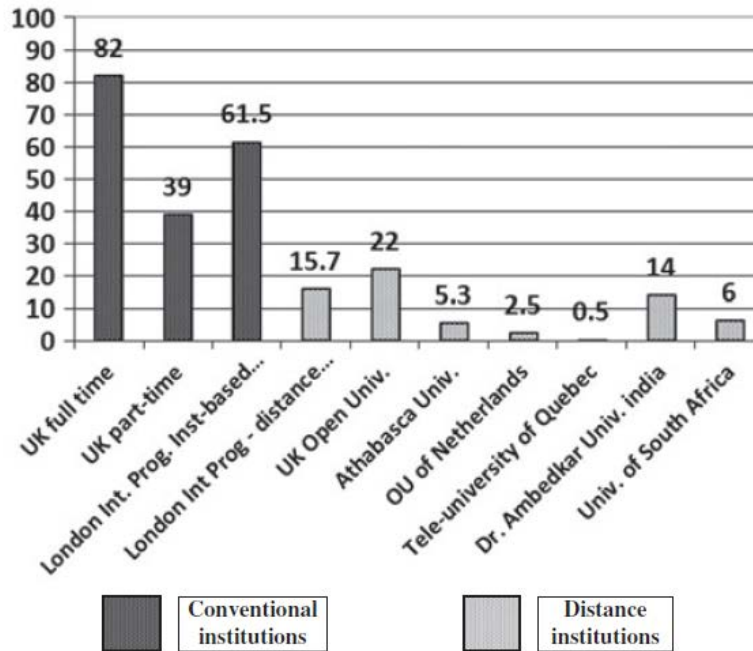
Figure 2.7: Graduation rates across a variety of higher education institutions (Simpson, 2013)

Graduation rates for the distance institutions in Figure 2.7 appear to vary between 5% and 20% compared to more than 80% for full-time education in the United Kingdom (Simpson, 2013). Simpson thoroughly discussed the 'distance education deficit' and gave reasons why it may occur. He suggested there was a 'distance education deficit' leaving many distance institutions having less than one-quarter of the graduation rates of conventional institutions (2013: 107).

The figure depicts a very concerning picture of graduate rates at distance education institutions compared to the conventional institutions. Although successful in many other ways, DE institutions need to find ways to increase the number of students that actually

complete their studies. The Department of Higher Education and Training (2014) found that between 2010 and 2012 in South Africa on average contact mode students yielded more passes (80%) compared to the distance mode students (68%)".

According to John (2013), "About 46% of all students who started studying for degrees in 2005 at South Africa's 22 universities, excluding Unisa, had dropped out by 2010". The Council on Higher Education omitted Unisa's statistics "because distance-education programmes generally take far longer to complete" (John, 2013). What was concerning was the national figures that worsened dramatically after the Unisa numbers were included. When looking at Unisa's performance alone during the same period, an alarming 68% of Unisa students left without graduating (John, 2013).

There are many reasons why students drop out and never finish their DE and online studies. For example, lack of resources such as emotional counselling, multilingual support, funding, and quality tutorials; most of which amounts to a lack of good quality student support systems. Nevertheless, it is the institution's responsibility to study this phenomenon with respect to its specific systems and procedures and to find ways to counter the trend.

Moore's theory (1990) of transactional distance suggested that, it is the inherent distance between students, institutions and tutors that contributes to lack of communication between them and thus, makes dropping out more likely. The theory implied that improved interaction between students', tutor and institution would improve student retention.

As most educators would agree on the central importance of motivation to a learner's success, in searching for a new theory of learner support, Simpson (2008) suggested a focus on learning motivation. Anderson (2006) believed that student dropout was largely due to one factor–loss of the motivation to learn and recommended 'proactive motivational support', Simpson (2013) suggested that since many students now have access to smartphones, tablets and e-books, institutions should use these as a medium for proactive motivational support.

Reforming student support in the digital age

According to Street (2010), if HEIs allow students to take risks with their time, money and self-esteem, they have an obligation to help them achieve their goals as effectively as possible. HEIs need to examine evidence from students such as that gathered by Street (2010), which indicate their understanding of the major causes of failure to progress in online learning. These include:

- time pressure
- self-management
- family
- logistics and support (including technical support)
- curriculum relevance

Inadequate educational preparedness would also surely need to be added as a factor. It is this set of barriers to success, lying both within and outside the institution's direct control, that have to be acknowledged in any account of how students should be supported. It is noteworthy that the issues lying within the institution's control do not suggest separation of teaching, curriculum and student support, but should rather be conceptualised together rather than in silos.

2.2.10 Attitudes and perceptions

There are some pre-existing assumptions evident in the approach of learner support in higher education institutions, one of those is the belief that 'students do not read' and therefore, educators tend to approach distance and online education with that same attitude, badly affecting the level of the quality of support they provide to students.
Johnston and Simpson (2006) suggested three main attitudes that staff in distance institutions can display about student dropout; those that believe in 'survival of the fittest' (Darwinists), those who believe that students drop out for reasons beyond their control (Fatalists) and those who believe that students most often dropout because of lack of proactive support (Retentioneers).

Simpson (2013) suggested that increasing student retention in distance education is not only a matter of finding ways to enhance learning motivation at a distance but is also a question of changing attitudes.

2.2.11 Role of student support services in distance and online education

Tait (2003) gave a reflective analysis of the role of student support services in distance education, and lists the following reasons for having student support integrated in an ODeL system; s*tudents want support, the reduction of dropouts, and the nature of learning.*

He further identified four categories of students;

- students who need student support services but don't want them
- students who need student support services and want them
- students who don't need student support services but want them
- students who neither need nor want student support services (Tait, 2003).

Chen, Pedersen and Murphy (2011), identified elements that are likely to contribute to the state of unpreparedness for online learners; limited learner readiness, the amount of information presented to the learner at once, quality of information and medium interface. Students who enter institutions of higher learning are expected to have a certain level of digital skills so that they are able to interact with other students, tutors and academic staff online and do other activities. They are expected to possess reading and writing skills that would assist them to read texts, understand and participate in discussions online. According to Valcke, 2002, as cited by Chen, *et al.* (2011), many students have inadequate prior knowledge. They may also have inadequate English reading/writing proficiency (Eastmond, 1995 as cited by Chen, *et al.* 2011). Hence, the more diverse the target audience, the more expansive the scope of learner support that can be anticipated.

2.2.12 Ethics in student support

The issue of ethics in student support has not been an attractive research focus, but institutions need to consider ethical dimensions of learner support, including sensitive issues such as who makes decisions, when, and why, which are critical if an institution is driven by a transformative socio-critical perspective or even a transcendent post-modern perspective. Kelly and Mills (2007) pointed out that ethical issues naturally arose in the student support arena: there are many situations in which decisions had to be made, either by individuals or institutional committees, but those decisions raised issues about equity, fairness or responsible behaviour, all of which may affect or prevent some staff or students from achieving their goals, The Protection of Personal Information (POPI) Act No. 4 of 2013 and the emerging work on learning analytics also represent potentially conflicting issues in this area.

Peters (1966) in Demiray and Sharma (2009) believed that, "All educational activity is to some extent ethically driven" (p. 91). Although, often both the students and the instructor seem to ignore this fact and act in an unethical manner towards each other. For example; instructors may be faced with the challenge of balancing the equality of treatment and the tension arising between being fair to all students and being responsive to individual student needs. Kelly and Mills (2007) grouped ethical dimensions into three main areas: (a) *ethics and institutions* - openness and fairness in admissions policies; (b*) teaching and learner support* to enable student success; and (c) *ethics and governmental policy* - the impact on learner support.

The increasing dependency on teaching assistants and e-tutors by HEIs brought much concern with regard to issue of ethics in student support. This brought questions on the quality of the support given to each learner, decision-making processes, involvement of lecturers in the actual teaching and support of online students, and so on.

Because students invest large sums of money as course fees and other course-related costs, Simpson (2013:111) warned of the ethical issues such as inviting potential students to enrol without making it clear that the chances of them benefitting from their studies may be quite small, especially when some take out study loans to enrol for these courses. Simpson (2013), explored the economic concepts of 'return on investment', 'willing to pay', 'resale value of an education' and 'investment risk' as they

apply to distance education, and advises institutions to note that studying through distance and online education is not an emotional decision instead, students are more empowered to make informed decisions as to which institution to enrol with and to opt to switch to another institution should they not find satisfaction in the current institution.

2.2.13 The integration of student support with teaching for online provision in an ODL environment

According to Rashid and Rashid (2010), there is an increasing emphasis on the student learning at a distance, rather than the institution teaching at a distance, and because of this, individual support services have become an integral part of an effective distance education system, with the main purpose being to help students both academically and personally. However, it may seem that this is still a big challenge facing Higher Education Institutions (HEIs) providing distance and online education (Jacklin & Le Riche, 2009).

Jacklin and Le Riche (2009) argued that student support is a socially situated, complex and multifaceted concept, which should not be seen as essentially individualistic and problem-focused in its orientation, highlighting the possibility that the effects of support could be negative as well as positive. They asserted that institutions adopt a socio-cultural perspective. There are some who would argue of course that all learning is socially constructed, regardless of mode of provision: arguing if there is no interaction, there can be no meaningful learning.

Tait (2000) also argued that support needs to be understood in terms of the range of its services, but also in terms of its functions. He identified the three main functions of support as being cognitive (supporting learning), affective (ensuring a supportive environment) and systemic (ensuring effective administrative systems) as illustrated in Figures 2.5 and 2.6. This conception of support has resonances with Wisker and Brown's (1996) analysis, which argued that strategic approaches to student support should be designed to promote three things: the facilities, the atmosphere and attitudes (to learning).

Rashid and Rashid (2010) identified the prominent student support services for distance education to include printed media like course books and study guides, electronic media, broadcasting media, tutorials, workshops, assignments, self-study opportunities etc. These support services work well for residential and ODL institutions, but innovative support services need to be crafted for online students, especially for developing countries where there are challenges regarding the general countries' ICT developments and culture of teaching and learning.

2.2.14 Academic development and support

With the rise of new learning and teaching modes, the emerging technologies, and the new policy recently released by the department of Higher Education and Training (DHET) - Policy for the provision of distance education (DE) in South African universities. South African institutions are faced with the inevitable realisation to equip themselves with the required skills to optimally facilitate learning in these new platforms, support students through to success, and satisfy the needs and demands of learners and competently participate in the relevant scholarship and discussions around this topic.

Garrison (1998) believed that, "Obviously new technical skills are required", with the increasing developments in DE and e-learning, especially in developing countries.

According to Ngengebule, Molatlhegi, Tshaka and Mamadisa (2007), the successful e-learning model(s) depend not only on the Information Communication Technologies (ICT) infrastructure of an institution, but also on the satisfaction and successful completion of students' studies. For students to successfully complete their e-learning endeavours, those who teach and train the students ought to have relevant and competent skills.

The University of South Africa (Unisa) is known for its years of open distance learning provision in the African continent and internationally, with physical printing, warehousing and distribution of materials, physical submission and return of assignments via the post and courier services at the center of the university's operations. Unisa has more than

400 000 students spread across the globe (About Unisa, 2014), and is rolling out an e-learning initiative to all undergraduate modules starting from 2013, in line with its new open distance e-learning (ODeL) model.

In their studies, on e-learning readiness, Holomisa and Dube (2014:295), found that in the Unisa's Cape Region, staff felt that, "There is no clarity on the specific skills needed for supporting e-learning implementation and that they are not sure of the appropriateness of their skills". Ncube, Dube and Ngulube (2014:363) also found that most colleagues in the department of Information Science reported that, "Technology might be intimidating as it usually leaves little room for errors that could be inevitable especially when one is also going through the learning process". In their study, other colleagues also reported that the process of the e-learning initiative was going too fast for them.

Although, the value of e-learning and the technological imperative (Bates & Poole 2013:9-10) is recognised, there is evidence that some electronic learning initiatives have failed because the institution and its constituencies were not ready for the e-learning experience (Ncube, Dube & Ngulube, 2014).

The authors echo the critical need to determine beforehand whether an institution has the strategic leadership, sound financial base, infrastructure, technological and pedagogical support and lecturer capability and readiness (Ncube, Dube & Ngulube, 2014). They also warned that disregarding the readiness of lecturers to implement e-learning might be dire, as it might negate or undermine not only the e-learning deployment and uptake by students, but also the achievement of institutional goals and objectives (Aydin & Tasci 2005, Borotis & Poulymenakou 2004, Govindsamy 2002, Karmakar & Wahid, 2009; Kaur & Abas 2004; Tubaishat & Lansari, 2010-2011).

The increasing importance of distance education compels postsecondary institutions to 1) reduce existing barriers to faculty participation in distance education, and 2) provide support services that will ensure student access to high-quality instructional programs (West, 1999). The growth of computer technology has enabled the development and use of online technology to support more flexible teaching and learning. With the

increasing developments in DE and e-learning in developing countries, Anderson and Garrison (1998) believe that, "Obviously new technical skills are required". They also believed that technical skills are the "easiest to acquire but, more difficult is the task of helping teachers to embrace continuous change that will mark the relationship between teachers and content for the foreseeable future".

Teachers will have to cope with a world where knowledge development is continuous and where subject matter expertise is only one component of the skill set necessary to create sophisticated and effective learning content for use by learners (Anderson and Garrison, 1998:109). Jones (2008) also reiterated the reality that universities and other institutions around the world are coming under increasing pressure to provide quality learning that is engaging and interactive thus, meeting the needs of a diverse student population. More interaction suggests more staff time per student, which militates against economies of scale. Institutions need to be very strategic about how and when and who interacts, perhaps institutions and educators may need to put more emphasis on peer interaction.

Research supports the idea of staff development as an important consideration when implementing any innovation, including the implementation of technology initiatives (Bates, 1997; Levy, 2003; Baltaci-Goktalay, 2006; Jones, 2001; Cresswell, Bates & Sheikh, 2013).

According to McLendon and Cronk, (1999) many key components of online distance learning programme implementation plans lack sufficient provision for student services and support and related faculty training and support. However, universities are identifying and implementing strategic partnerships that are key to the development of knowledge sharing and skill transfer. For example, Unisa has embarked on strategic partnerships with various institutions and organisations, academic, government and business, through which relevant skills, capabilities and know-how and technologies are exchanged, shared and learned. One such is the partnership with the University of Maryland University College (UMUC), which ensures that Unisa is well equipped with the know-how for the emerging educational technologies in higher and distance education.

2.3   TUTOR DEVELOPMENT

Many successful distance institutions use different strategies to support to students. One of the most common strategies used by institutions is a tutorial support programme. Tutor support can be provided face-to-face or online to students studying in an Open Distance Learning (ODL) environment. Unisa opted to use both strategies in the form of a blended approach to teaching and learning. Tutoring in ODL encompasses a broad range of teaching, coaching, mentoring and monitoring activities that guide students through their courses, mediating the packaged learning materials and facilitating the learning process (Unisa ODL Policy, 2008, p3).

Many universities are dependent on tutorial programmes, where support is given to thousands of students who are struggling, for example, the Open University UK (OUUK) (Tait, 2003), University of Maryland University College (UMUC) and University of South Africa (UNISA), and many more. Unisa's system has always been using a blended-model system, where face-to-face classes were, and in some cases still are, offered in conjunction with the distance learning and teaching. The challenge always has been, however, that not all students could be reached in this way and often the students who might have benefitted the most from such services are often the ones who did not participate in them.

Tutors employed in this programme are all professional people who have extensive practical and theoretical knowledge of the course/s in which they conduct tutorials (Unisa, 2012), but are not necessarily teachers or rather ODL/online educators; this is something that management should look into. Is the training given to the tutors sufficient, especially now with the introduction of e-learning initiatives? Do the relationships between tutors and academics (subject lecturers) enable the kind of support the institution envisaged for their learners?

The curriculum development process is said to be conducted by a team involving academics, curriculum and course designers, student support specialists, student counsellors, language specialists, tutors, relevant external stakeholders and, where possible, representatives of current and past students (Unisa ODL Policy, 2008:7). More

meaningful tutor involvement in curriculum development may prove beneficial, as it may highlight key relational stepping stones between academics and tutors, benefiting the primary stakeholder, the learner, and also emphasising the student-centred approach. According to the Unisa ODL Policy, the role of the tutor at undergraduate level is to:

- Facilitate and guide the learning of the students so that they gain knowledge, understanding of the content and acquire the necessary skills and competencies to cope with their studies. In at least all high-volume first year modules, students are assigned a tutor who is responsible for liaising with students and motivating them to complete.
- Prepare students to become self-directed learners, attending to any difficulties they might have, conducting tutorials as prescribed in the course design, and marking and providing feedback on assignments. This is normally done through face-to-face, telephone and *now* online tutoring (e-Tutoring).

The academic departments with the support of the Directorate appoint tutors: Tutorial Services, Discussion Classes and Work-Integrated Learning (TSDL). In order to provide individual support to students both subject specific and interventions supportive of progress and success are addressed.

In comparison, the tutor's role at the OUUK (Open University of the United Kingdom) can be summarised as:

- Providing individual support through teaching and grading of assignments, the core vehicles for learning;
- Having a key role within the assessment scheme is the ultimate recognition of learning through credit and qualification;
- Paying particular attention to the progress and success of individual students, both through response and intervention;
- Providing opportunities for social learning where possible in groups, and a dimension of the local and familiar through a face-to-face contribution to learning;

The deployment of part-time tutors allowed the necessary scale of Open University operations to be realised, with centrally produced teaching materials supported by a

cohort of local part-time tutors whose task is not the construction of curriculum but rather the support of learners through the modules.

Student support now has the imperative to become an integrated part of the overall curriculum design and learning and teaching system, and no longer a separate subsystem in its concerns, professional sub-groupings and scholarly literature.

2.3.1 The Academic Role of the Tutor

Tutoring and the support that students receive directly or indirectly from the tutors are recognized as being the most prominent form of learner support in ODL and play critical roles. The ODL literature, for example; Lentell, (2003), NADEOSA (2000) and Ngengebule (1998) concurred that the key academic role of the tutor is to: Facilitate and guide the learning of the students so that they gain knowledge, understanding of the content and acquire the necessary skills and competencies to cope with their studies. To achieve this, tutors must develop and practice a multitude of skills and strategies. It is arguable that these skills are no different to those employed by teachers in a contiguous (face-to-face) classroom setting.

Students want and need dialogue and feedback, and the tutor is there to provide this important support in learning. The tutor helps students to develop skills, which will enable them to interact with and understand difficult areas of their study material.

The relationships between subject lecturers and tutors need to be re-evaluated and improved upon, because the overall meaningful formative and summative assessment and the success of students depend entirely on these relationships.

Tutoring services as a form of student support for online provision in an ODL environment

Tait (2014) examined in detail the issues of student dropout as the major challenge for student support in distance and e-learning, and argued that educational mission, not

mode of delivery, is the more powerful explanatory driver. He proposed that student support should now be understood as integrated with teaching and assessment, not separately organised structurally and professionally. Tait (2014) used the technologically led approach of Nipper (1989), the institutional history analysis of Peters (2004), and the pedagogical frames of analysis of Anderson and Dron (2011) to place student support within his analysis of the generations of distance education. He observed the gradual integration of learner and learning support from a peripheral to a central consideration.

As noted, one of the strategies used by institutions is a tutor support programme. Tutor support can be provided face-to-face or through online to students studying in an Open Distance Learning (ODL) environment. In reaction to the high rate of student dropout the OUUK invested very substantially in student support (Tait, 2014). The university plans to implement the following roles for tutors:

- Tutor for each module, as locally based as possible with continued optional face-to-face meetings in majority of modules.
- Student support teams, nationally based on qualification basis, to provide enhanced subject and qualification based expertise by phone and email, irrespective of geography in England.
- The teams that have integrated subjects, qualifications and guidance focus specifically on a qualification group and over the duration of the study for that qualification.

The OUUK's modus operandi is similar to that of Unisa, where the tutoring system is used and managed at regional offices. Unisa recommends face-to-face tuition for certain selected subjects only, whereas the OUUK implements the system for each module. With regard to supporting teams, the University of Maryland University College (UMUC) has a similar approach in the sense that the 'team' allocated for each online module comprises of professionals with relevant skills, expertise and qualifications within that subject matter, whereas at Unisa, the 'team' comprises of Teaching Assistants (TAs), and e-tutors for online modules and tutors for face-to-face support.

Tait (2003) warned that higher education institutions (HEIs) need to look at student support services and systems with a different lens; especially open and distance learning (ODL) and e-learning. He suggests ODL institutions need to ask a critical question: What are the main reasons for having student support integrated in an ODL system? Primary to this question is the issue not only of what students need, but what they want and/or demand. According to Tait (2003) the rationale for student support is:

- Cognitive (supporting and developing learning).
- Affective (that is related to the emotions that support learning and success).
- Systemic (helping students to manage rules and systems of the institution in ways that that support persistence).

Many theories exists that attempt to explain and influence the design and practice of student support in HEIs. Many of these crucial frameworks present ideas against which such explanations can be tested.

The factors to be considered when addressing student support arose from the characteristics of the students themselves, the demands of academic programmes and courses, the geographical environment, the technological infrastructure, the scale of the programme and the requirements of management. According to Tait (2003), the elements stand in tension with each other, requiring tradeoffs that between them represent the core management achievement in the design of such systems. Given the differences faced by planners in different settings, it is not surprising that there can be no universal blueprint for the design of student support services. The factors interact in complex ways, such that while none can be ignored, none can be given overall priority (Tait, 2003; Sweet, 1993).

It is therefore, important that planners, strategists and designers of student support systems are sensitive to the needs, demands and evolving nature of teaching and learning, and continue to evaluate and redesign systems that benefit all stakeholders.

2.4 THE IMPACT OF ICT FOR THE INTEGRATION OF TEACHING AND STUDENT SUPPORT

ICT made it possible to reintegrate student support with curriculum and assessment. The classic accounts of distance education systems, which separate subsystems for learning materials and student support, now have to be revised (Rumble, 1997:6; Weller & Anderson, 2013). Duranton and Mason (2012:81) argued that, "Distance delivery can have a very positive impact on recruitment but that the quality of the students' experience depends upon the capacity of the organisation to support course development and delivery, both in terms of instructional design and management of student support". They believed that the transformative potential of technology-enhanced learning is so dazzling that it can make a spectacular contribution to the quality of the student experience, but it can prove difficult to gain acceptance from sceptical colleagues within institutions.

Duranton and Mason (2012) warned of the importance to acknowledge the enormously wide range of experience and skills the students come with so that no assumptions should be made about their ability to engage easily in learning technologies. However, it is also important to keep in mind the different trends and needs from various cultures, especially in developing countries.

Unisa caters for a heterogeneous group of students, which can be a challenge in any learning context, more so, for online provision where students might be drawn from across national borders, therefore designing course material for online teaching and learning should go beyond just 'content'; it should be about the overall learning experience, from the logging on to the learning management systems (LMS), to interacting with the study material (content), interacting with students, educators, submitting assignments, receiving feedback and interacting with other students. Content can be reusable, and experience can impact on lifelong learning, and the overall brand of a university.

According to Van Zyl and Barnes (2012), amongst the four main racial groups, Africans remain the most representative amongst students at Unisa (66.6%). The majority of Unisa students (55.7%) fall in the age category 25 to 39 years, followed by the younger age group (<25), 26.3%. It is therefore, important to be cognizant of the changing make-

up of the student demographic of an institution in design and delivery of its programme offerings.

2.4.1 Technology choice and adoption

West (1999) argued that colleges and universities are beginning to change the way they do business because their students are changing. West attributed the increasingly changing demographics of learners entering higher education to their needs, expectations and demands, the changing expectations of employers, and generally from society.

With the tools also changing, new technology that offers learning opportunities anywhere to anyone at any time, learners, colleges and universities are forced to respond. It is also reported that institutions start making "technology central to the teacher preparation process" and will require teacher candidates actually to demonstrate competency in the use of technology (West, 1999). This is also a requirement of the Minimum Requirements for Teacher Education Qualifications promulgated in 2011 and updated in 2015.

It is therefore, important for management to understand that support of faculty and staff is not only with money and technical support, but also includes support for training, released time, acknowledgement of intellectual property rights, and academic credibility for tenure and promotion. Plans need to be made to build the much-needed competency in the use of technology to support learners and learning and to create an enabling and empowering environment.

An increase in the number of technological tools emerging for teaching and learning, in face-to-face (F2F), distance and online education, has led to various measures developed to evaluate the usability of these tools. According to Rouse (2010), business or tool performance measurement should touch on its key performance areas; customers, financial, internal processes, growth and learning. The score card is often used for such measurements. Performance scorecards are often said to be a visual answer to the question, "How are we doing?" (Rouse, 2010)

Educational technology tools or Web 2.0 tools, like other technology tools, are designed solely to meet the needs of users and to enable users to perform the tasks for which the tool is designed, in this case educators and learners.

When evaluating literature on the subject of learning objectives and criteria for evaluation, the Learning Object Review Instrument (LORI) approach seems to be used as a benchmark to evaluate learning tools and to develop other evaluation tools. LORI uses the following criteria to examine learning objectives, as explained by Krauss and Ally (2005): (1) presentation: aesthetics; (2) presentation: design for learning; (3) accuracy of content; (4) support for learning goals; (5) motivation; (6) interaction: usability; (7) interaction: feedback and adaptation; (8) reusability; (9) metadata and interoperability compliance; (10) accessibility (Annexure 1). The main purpose of LORI is to support evaluation of multimedia learning objects (Leacock and Leacock, 2007). Each measure was weighted equally and was rated on a four point scale from "weak" to "moderate" and "strong" to "perfect" (Kurilovas, 2005; Edutech Wiki, 2007).

It is important that the learning tools bring ease of collaboration with other tools. Many institutions fall into the trap of buying and/or adopting a famous technology that often is not relevant or in line with the institution's particular business model. This is where management and leadership should take a major role, together with key stakeholders such as the primary users of the technology. Rogers (1995) explained the technology adoption decision process and warned that staff development is an important consideration when implementing any innovation. Visioning, planning, and financing are necessary steps in the implementation of technology initiatives. Rogers (1995) described adoption periods take from a few months to several years.

Lynch (2002) asserted that many faculty members are hesitant to embrace technology because it is perceived as a source of stress. The Institution's staff's psychological readiness need to be ascertained by management and the leadership, because it does not help having the world-class technology when the 'users' are not ready or willing to use it. The implication is that the adoption process needs to be thoroughly planned and meticulously implemented, to gain much buy-in from the relevant stakeholders, and they

are more likely to use it themselves if they have a positive experience of learning how to use by using it.

The success of ODL programmes depends on management policies and initiatives that are sensitive to the needs of learners, not merely on the adoption of new technologies. Shifts in management come at the institutional level; and at all levels, policy development and management of ODL programmes must accommodate overall changes in ODL practices.

2.5 DISTANCE EDUCATION AND ELEARNING IN DEVELOPING COUNTRIES

Albrecht and Ziderman (1992) noted the quantitative expansion of higher education causes serious financial crises in many developing countries. "The root of the financial crisis in higher education in many developing countries lies in the combination of a dramatic and continuing growth in student numbers - the outcome often imposes liberal admissions policies to ensure wide access to higher education - unmatched by public expenditures on higher education".

Many well-intended university initiatives are failing due to a lack of sustainable funding. According to Professor Kuzvinetsa Peter Dzvimbo, a former African Virtual University (AVU) rector and chief administrator (Kigotho, 2013), **"**Financial constraints forced the lead partner universities to stop delivering programmes to AVU; the initiative was finally scrapped in 2007". Financial constraints also affect the quality of support that academics and students receive from their institutions.

One of the major challenges crippling the successful take-off of ODeL practices in African countries is the creation and implementation of ODL and eLearning policies. According to Konayuma (2012), "Generally eLearning practitioners have tended to provide eLearning and distance learning without a policy framework or where one exists a weak policy framework".

A policy is naturally designed to guide operational decisions to achieve and deliver the intended outputs. However, there is a trend in some African governments where the universities have relied on their operational policies to achieve rational outcomes. For

example, Unisa implemented its ODeL model of operation in 2013, but it was only in 2014 that the 'Policy for the provision of distance education in South African universities in the context of an integrated post-school System' was implemented. In Zambia, the Policy and Policy Guidelines had not been implemented in 2011 (Konayuma, 2012), even though a few universities had already been practicing ODL. Konayuma (2012) warned that, "Having a good policy is not the end of the road in policy making", and pointed out the need "for wider consultation of all stakeholders in ODL and eLearning to ensure that the policy is relevant and effective".

Other major challenges facing developing countries include financial crises, technological resource constraints including a shortfall in critical ICT skills (both in students and educators), integrating ICTs in education, student support strategies in many spheres of higher education, and so on. Kigotho (2013) pointed out the challenges faced by distance learning in East Africa including poor teaching and learning practices, slow internet connectivity and low bandwidth, dynamic pace of technological development, and others.

Universities around the globe are faced with improving the quality of their offerings to the thousands of students entering higher education. The focus of quality, according to Albrecht and Ziderman (1992:ix), means "new ways of providing learning opportunities in higher education including better use of technology, cooperative learning situations, internships, tutoring and so on". Albrecht and Ziderman (1992) further highlighted the importance of establishing more adequate library resources and access to reservoirs of documents through electronic vehicles.

It is important to give access to computer capabilities for all students. This needs to happen in conjunction with the simultaneous training and developing of the current educators for them to be proficient in the use of ITC's to teach and to learn. Universities and governments alike are facing their own learning curves, while at the same time striving to provide necessary support for the students.

It cannot be emphasised enough the overarching importance of assessment in distance education and e-Learning. Institutions together with governments should strive to work together in designing multidimensional assessment strategies that will enable students

to successfully complete their studies, while both the governments and educational institutions continuously improve their performance.

Depover and Orivel (2012) echoed the 'distance education deficit' as noted by Albrecht and Ziderman (1992), and align the deficit to the lack of *responsive interaction.* Depover and Orivel (2012) pointed to the advantages of digital technologies, which is the new 'affordances' for both, *course development* and *interaction.* However, the rapid emergence of digital technologies seemed to conquer the student-teacher interaction challenges experienced over the years, only to highlight issues raised by the Iron Triangle (cost, access and quality).

The iron triangle seeks to investigate and explain the three major concerns dominating the minds of many HEIs' principals – "the increasing cost of higher education; the challenge of providing access to new generations of students; and the need to maintain and improve educational quality" (Immerwahr, Johnson and Gasbarra, 2008:10; Lane, 2014). Immerwahr et al, (2008) pointed out trends that suggest the country and its institutions of higher education are facing a historical test of competing social needs and economic realities.

2.6   CONCLUSION

The development of theory in distance education has been crucial and inevitable for the sustainability of distance education. Since their initial formulation, frameworks have been adopted and adapted by educators worldwide and used in a variety of ways to inform both research and practice in online and blended learning.

Specific frameworks were chosen for this discussion because of their prominence and relevance as models of teaching and learning in online and blended learning environments (Akyol *et al.* 2009). Theories that advocate effective instruction, self-directed and collaborative learning are important in a learner-centred and collaborative era of distance education, and these theories manage to achieve that.

One of the recent trends is that many students enter the institutions of higher learning fresh out of high school; most of these students are under prepared or unprepared for

learning in an ODL institution. Proper support should be given by the institution in order integrate them into the ODL environment and to develop capabilities that would assist them to succeed.

The elements that are likely to contribute to the state of unpreparedness for online learners as identified by Chen, Pedersen and Murphy (2011), and their general inadequate English reading/writing proficiency as suggested by Valcke (2002), and Eastmond (1995), clearly speak to the importance of proper skills development by the educators. Teachers need not only to learn to use appropriate technology in appropriate ways, but they also need to be able to support students in developing a much wider range of competencies than simply those related to their discipline.

It is important to understand and continuously study trends within the distance and online education environments, the role players and their needs, and the tools and technology that affect our everyday lives. It is the ethical and legal responsibility of institutions to provide relevant support to their students to ensure the successful return on investment for their studies.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The purpose of the study is to explore and study how educators' skills, knowledge and experience in e-learning and how the design of a quality support system in an ODL and e-learning environment in a developing country can contribute to the successful achievement of the institution and student's educational goals.

This chapter presents the philosophical assumptions underpinning this research, the research strategy and the empirical techniques applied. The chapter defines the scope and limitations of the research design, the population and the sample. The chapter also discusses the instrument used to collect the data, including methods implemented to maintain validity and reliability of the instrument.

3.2 RESEARCH APPROACH AND DESIGN

Brink and Wood (1998:100) stated that the purpose of a research design is to provide a plan for answering the research question and "is a blueprint for action". It is the overall plan that spells out the strategies that the researcher uses to develop accurate, objective and interpretative information.

Cohen, Manion and Morrison (2000) identified three broad approaches to research in education - normative, interpretive and critical. The first, based on the 'scientific' paradigm, rests upon the creation of theoretical frameworks that can be tested by experimentation, replication and refinement. The second approach seeks to understand and interpret the world in terms of its actors and consequently may be described as interpretive and subjective. A third, emerging approach that takes account of the political and ideological contexts of much educational research is that of critical educational research.

According to Fouché and Delport (2002), most authors agreed that in real life, human sciences research uses both qualitative and quantitative methodology, sometimes

consciously, sometimes unconsciously. De Vos *et al.* (2011) reported a 'widespread' acceptance of a mixed methods approach in research. Creswell (2003) is of the opinion that, "A mixed methods design is useful to capture the best of both quantitative and qualitative approaches".

In order to explore and describe the research question, this study followed the descriptive-qualitative method. According to Poleyseugenio (2014), this type of research method involves describing in detail a specific situation using research tools like interviews, surveys, and observations. It also focuses on gathering of mainly verbal data rather than measurements. A descriptive research design was relevant for this study to enable an effective description of how a quality student support system can positively impact on the successful achievement of learning goals and completion of students' studies.

According to Brink and Wood (1998:289), a descriptive survey design may be utilised to "study characteristics in a population for the purpose of investigating probable solutions of a research problem".

3.2.1 Online survey design

Allison (2000) defines a research design to include the planning of the research procedure as well as the procedure for data collection and analysis.

An online survey was administered to a selected sample from a specific population identified from the Unisa staff members who participated in the UNISA/UMUC Programme between 2013 and 2015.

The term 'survey' is commonly applied to a research methodology designed to collect data from a specific population, or a sample from that population, and typically utilises a questionnaire or an interview as the survey instrument (Robson, 1993). Surveys are an important tool for collecting and analysing information from selected individuals, and are widely accepted as a key tool for conducting and applying basic social science research methodology (Rossi, Wright & Anderson, 1983).

Even though surveys are usually used when the samples are big – from a few hundreds and a few thousands (Maree, 2007), more information can further be collected by means of follow-up interviews.

According to McMillan and Schumacher (2001) and Crowther *et al.* (1994) as cited in Maree (2007), survey data is used to describe and explain the status of phenomena, to trace change and to draw comparisons. However, Crowther *et al.* (1994), warned that survey designers should take into account the salient aspects of the survey process such as, sampling strategy and size, questionnaires design issues, data collection methods (telephone, mail, email, personal interviews) and so on. The survey questionnaire link in this study was sent to the participants through the email system and the participants accessed the survey online, run on Survey Monkey website.

Surveys are sometimes difficult to manage as some respondents return incomplete questionnaires, and it takes little convincing and motivating for the people to participate in the study, but once this challenge is managed, questionnaire designs are cost-effective and easy to work with for statistical analyses.

While the researcher is aware of the limitations of the selected design, this design was chosen for its relevancy to the main object of study, and the size of the population. Strict considerations were made to minimise the effects on the quality of the study. Care was also taken to minimise the possible bias, and interpretations were monitored in order to provide an objective view of the matter under investigation, and to ensure the quality of validity and reliability.

3.2.2 The study population and sample

The target population is "the entire aggregation of respondents that meet the designated set of criteria" (Burns & Grove 1997:236). The target population in this study constituted.

The study was limited to the selection of the participants from the University of South Africa (UNISA) who participated in the certification programme partnership with the University of Maryland University College (UMUC) between 2013 and 2015. The

programme runs for about 18 months full-time but can also be taken for as long as the Unisa staff member is able to, taking into account an individual's workload.

There are about 60 Unisa academic staff members who have participated in the UMUC programme, the survey questionnaire was sent to all the staff members who participated. Participants were purposively selected from staff members who participated in the UMUC programme, the sample included:

- Students who have managed to successfully complete the programme;
- Students who did not complete;
- Students who are progressing in the programme; and
- Students who have just begun with the programme.

The targeted population and sample was selected using nonprobability purposive sampling, because all the Unisa staff members who participated in this programme were targeted and invited to participate in the research study.

3.3 DATA COLLECTION

Data collection is "a systemic way of gathering information, which is relevant to the research purpose or questions" (Burns & Grove 1997:383).

The research process involved a mixed method involving the questionnaires (email and online), interviews (contact and email), and was analysed using the process of triangulation. Triangulation is used to combine the advantages of both the qualitative and the quantitative approaches, and it is not aimed merely at validation but at deepening and widening one's understanding (Yeasmin & Rahman, 2012).

The quantitative data was collected by means of a survey design, from a sample using a standard research instrument in the form of a questionnaire. Qualitative data was collected by means of contact and/or email interviews. Purposive sampling selection methods were used for the interview participants.

Participants of the study were contacted by email explaining the research objective and invitation for them to participate by completing the questionnaire (Appendix X). The

email also contained a link to the Web-based survey to enter the survey. Follow-up email contacts were sent to increase response rate. The objective of the research was to gather information about the participants' perception of student support services for online studies.

The Web-based survey was conducted using surveymonkey.com, a survey software program offered online. For a small fee, the program offers many features including unlimited number of survey questions, result filtering, and the capability to export data for statistical analysis.

Responses to the survey were recorded, exported in a spreadsheet, and transferred to a statistical software package for in-depth analysis.

3.3.1 Pilot study

An informal pilot study was conducted with a small group of faculty members at Unisa. According to Adeoye and Tomei (2014:8), "Conducting a local pilot study allowed the researcher to ask participants for suggestive feedback on the survey and also helped eliminate author bias". This allows the researcher to modify the survey instrument as per the feedback received from the pilot study. The pilot study assisted in refining the questions, to validate the effectiveness of the instrument, and the value of the questions to elicit the right information to answer the primary research questions.

3.3.2 Data collection instrument

Babbie (2007) in de Vos *et al.* (2011), defined a questionnaire as a document containing questions and/or other types of items designed to solicit information appropriate for analysis. Questionnaires are used to gather information when research is interested in determining the extent to which respondents hold a particular attitude or perspective. Burns and Grove (1993:368) asserted that the information obtained through a questionnaire is similar to that obtained by an interview, but the questions tend to have less depth.

The questionnaire was selected because it enabled the investigator to be consistent in asking questions and data yielded was easy to analyse with the help of a statistician.

Apart from the advantages that have been listed above, questionnaires have their weaknesses; for example, there is the question of validity and accuracy (Burns & Grove 1993:368). The subjects might not reflect their true opinions but might answer what they think will please the researcher, and valuable information may be lost as answers are usually brief.

The questionnaire was designed in a Likert-type scale, using Vagia's (2006) scale response anchors of 'level of agreement' to the questions and/or statements made about the website, ranking from 1 to 5:

1 = strongly agree,
2 = agree,
3 = neutral,
4 = disagree,
5 = strongly disagree,

Likert scales are likely to produce a highly reliable scale and also easy to read and complete for participants (Bertram, 2006).

The questionnaire was sent to the entire sample by means of email. The respondents' email addresses were obtained from the ICT department through a vigorous ethical clearance process. The emails and other relevant information were requested using the ethical clearance letter from the CEDU ethics committee and the ethics committee of the University of South Africa.

The email contained the request to participate, explained benefits of the research, informed consent, and all relevant ethical information, together with the link to the website where the questionnaire was hosted. The survey was done completely online, using Survey Monkey.

3.4   VALIDITY AND RELIABILITY

3.4.1 Validity

Patten (2004) emphasizes that validity is a matter of 'degree' and discussion should focus on how valid a test is, not whether it is valid or not. According to Patten (2004), no test instrument is perfectly valid. According to Wallen and Fraenkel (2001) as cited in Richey and Klein (2007), validity involves the appropriateness, meaningfulness, and usefulness of inferences made by the researcher on the basis of the data collected (p). The researcher needs some kind of assurance that the instrument being used will result in accurate conclusions.

An instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed (Patten, 2004; Wallen & Fraenkel, 2001; Polit & Hungler 1993:448).

3.4.2 Reliability

Polit and Hungler (1993:445) refer to reliability as the degree of consistency with which an instrument measures the attribute it is designed to measure. Patten (2004:71) believes that validity is more important than reliability. According to Blanton and Jaccard (2006), validity is more important than reliability because reliable and invalid measures are potentially more dangerous than unreliable measures. However, every research project still needs to address reliability. Reliability relates to the consistency of the data collected (Wallen & Fraenkel, 2001).

3.5   ETHICAL CONSIDERATIONS

The conducting of research requires not only expertise and diligence, but also honesty and integrity. This is done to recognise and protect the rights of research participants/subjects. To render the study ethical, the rights to self-determination, anonymity, confidentiality and informed consent were observed.

McNamara (1994) identified five ethical concerns to be considered when conducting survey research. These guidelines deal with voluntary participation, no harm to respondents, anonymity and confidentiality, identifying purpose and sponsor, and analysis and reporting. Each guideline was addressed to help eliminate and/or control any ethical concerns in this study.

This study was conducted in accordance with all the necessary requirements of ethical considerations, this was done to recognise and protect the rights of research participants/subjects. The study followed the vigorous ethical clearance process at Unisa from which the ethical clearance and permission to collect data using Unisa students and staff was granted (Annexure 2 and 3). The interview participants were given the consent forms, whereas the survey participants were given all the necessary ethical information including informed consent, confidentiality and anonymity, option to cease from participating, etc.

3.6   DATA ANALYSIS

Levine and Roos (2002:1) define data analysis as, "A body of methods that help describe facts, detect patterns, develop explanations, and test hypotheses… It is used in all of the sciences, in business, in administration, and in policy".

Data analysis is an activity that permeates all stages of a study. According to Schneider (2005), concern with analysis should (1) begin during the design of a study, (2) continue as detailed plans are made to collect data in different forms, (3) become the focus of attention after data are collected, and (4) be completed only during the report writing and reviewing stages.

The data analysis consisted of examining the surveys for correctness and completeness, coding and keying data into a database and performing an analysis of descriptive responses according to frequency distributions and descriptive statistics.

Frequency tables and descriptive statistics were constructed to display results with respect to each research question. The discussion was also designed around and according to the triangulated research approaches.

3.7   CONCLUSION

The purpose of this chapter was to describe the research methodology of this study, explain the sample selection process, describe the procedure used in designing the instrument and collecting the data, and provide an explanation of the statistical procedures used to analyse the data.

According to Ligon (2013), "Data quality is more than accuracy and reliability. High levels of data quality are achieved when information is valid for the use to which it is applied and when decision makers have confidence in and rely upon the data".

In addition to the ethical aspects discussed above, the research was continuously conducted according to the Ethics and Research Standards as set out by the Unisa Research Ethics Committee, attached in Annexure 2 and 3.

CHAPTER 4

ANALYSIS OF RESULTS AND DISCUSSION

4.1   INTRODUCTION

The purpose of the study is to explore and study how educators' skills, knowledge and experience in e-learning can contribute to the successful achievement of the institution's and students' educational goals and to the design of a quality support system in an ODeL environment in a developing country. As explained in Chapter 1, with the new educational technologies being introduced to higher education institutions, educators are required to use these technological tools to teach the current learner. In order to successfully and positively impact on each other, educators and learners alike are expected and required to learn to use the available technologies for the successful completion of studies. Institutions need to learn, unlearn and relearn in order to meet students' demands and needs, and to remain relevant, competent and sustainable in the globally ever-changing higher education, distance education and e-learning environments. This study seeks to explore the following question: What are the critical skill development strategies needed for an effective and empathetic student support system in distance education and e-learning in a developing context such as South Africa?

The premise made by this study is that educators cannot give to students what they do not have themselves. Educators must have skills, knowledge or even information to pass on to students, and if they do not have it, they must acquire it. One of the most important needs of students in distance education and e-learning is empathy, as suggested by Holmberg (2006), and this too, educators must acquire in order to create a social presence in the ODeL environment.

The study involved a mixed method approach, using a questionnaire that was administered online using Lime Survey, interviews and document analysis, as well as documents sampled from the online discussion forums on *my*Unisa for the MEd (ODL) modules 'Curriculum Development for ODL' (ODL5902) and 'Management of ODL'

(DL5904). As described in the methodology chapter, a descriptive data analysis approach was chosen for the quantitative data and a thematic analysis method was used for the qualitative data. Frequencies and cross-tabulations were the predominant method used to summarise the results of the Likert scale questions, whereas the narratives were used for the qualitative data.

This chapter reports on the methods and approaches employed to collect and analyse the data. The pilot, setting and demographics are first discussed, followed by the data collection and analysis methods, and the results and evidence of trustworthiness and the summary of the chapter are also discussed.

4.2   PILOT STUDY

As described in the methodology chapter, for the questionnaire an informal pilot study was conducted with a small group of faculty members at Unisa. The pilot sample targeted some of the participants in the UNISA-UMUC partnership programme, staff members involved in the Unisa online signature modules and those that are involved in blended modules. The pilot study assisted in refining the questions, to validate the effectiveness of the instrument, and the value of the questions to elicit the right information to answer the research questions. The comments and suggestions received from the pilot were used in revising, rewording and sequencing of the questions. The questions for the interview were derived from the research questions and literature review, some were adopted from the questionnaire, and these were quality-assured by the supervisor of this research study (Annexure 6).

4.3   DATA COLLECTION

The data collection took place between August and October, although this is one of the busiest periods at Unisa due to preparation for the exams, both for the lecturers and for students. Most of the participants were willing to take part in this study but a few could not due to personal and/or organisational conditions at the time of the study, such as some were travelling to conferences, some had since left the institution and could not

be reached. However, this did not affect the collection and interpretation of the study results.

4.4   DEMOGRAPHICS

In an effort to develop cultural, scholarly and scientific ties of operation, UNISA and UMUC entered into a Memorandum of Understanding (MoU) in 2010, an agreement of international exchange and cooperation based upon the principle of reciprocity, encouraging academic exchange and collaboration, and looking towards the advancement of education and training in both institutions (2010, UNISA News, para. 1-2). Since the beginning of the agreement between UNISA and UMUC, about 60 staff members from various colleges and departments within UNISA enrolled and participated in the programme between 2012 and 2015, also indicated in Figure 4.1 and 4.2:

- 26 completed,
- 15 of the 26 are females and 11 males.
- 8 are white females and 7 are black females.
- 9 are black males, 2 are white males.
- 10 white persons completed and 16 black persons completed.
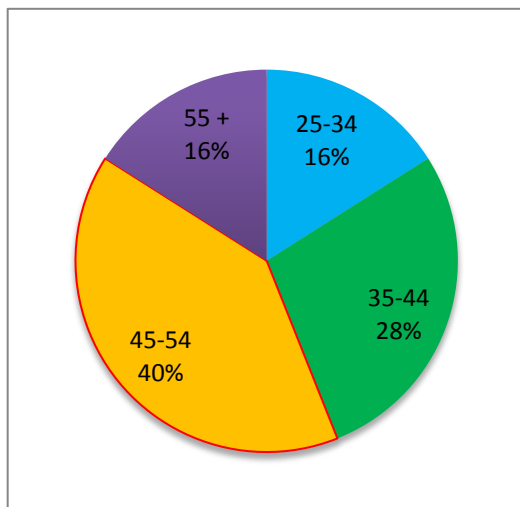
Figure 4.1 Age
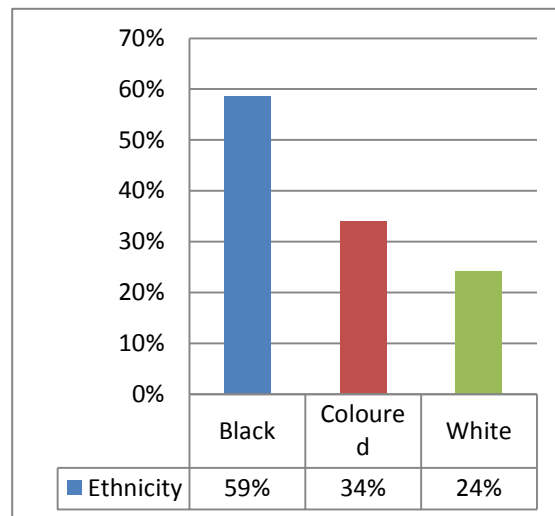
Figure 4.2 Ethnicity

The profiles of the participants ranged from lecturers to associate professors and professional staff members, mostly coming from either curriculum development or academic support structures of the university, as depicted in the Figure 4.3.
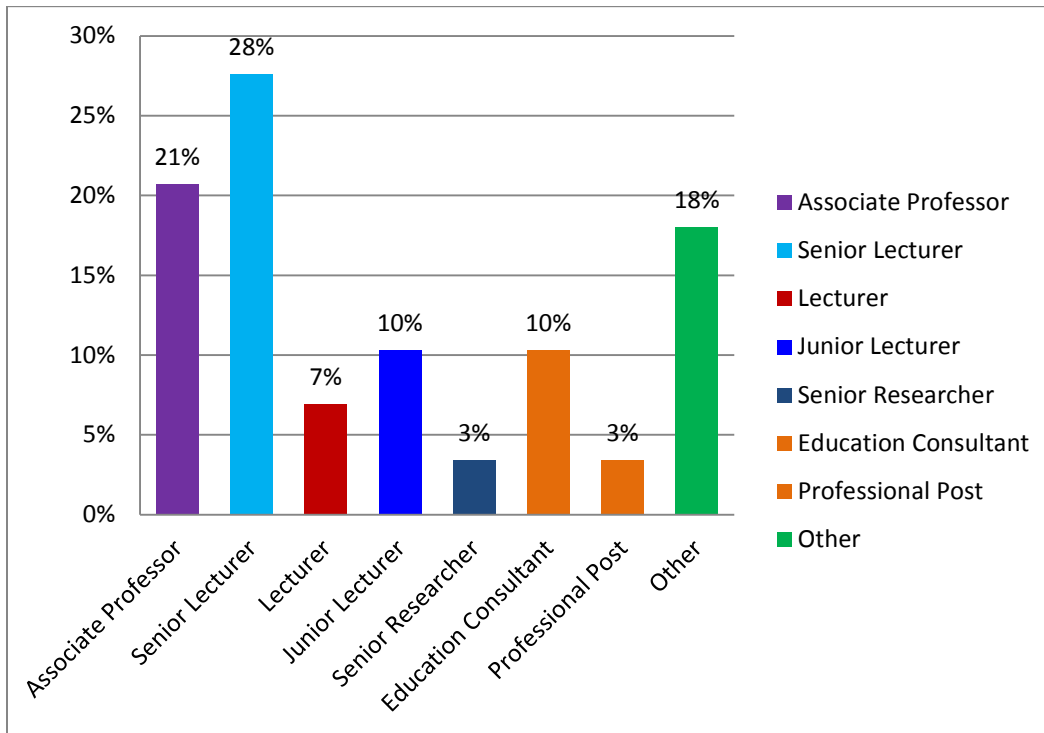
Figure 4.3 Rank

This partnership programme was designed only for the academic staff members, but professional staff members, who formed about 13% of the total participants, showed substantial interest. It was interesting to note that more participants came from those staff members who had been at Unisa for less than 5 years, and have been teaching online or are involved in online teaching for less than two years, as shown in Figure 4.4 and 4.5 and the cross table 4.1 below.
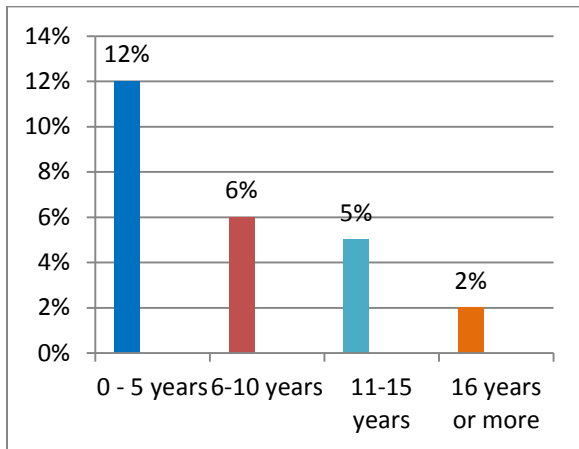
Figure 4.4 Number of years at Unisa
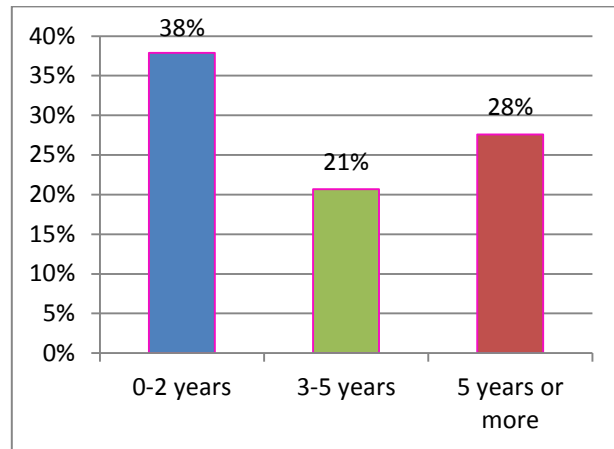
Figure 4.5 Number of years teaching online

Table 4.1 Cross tables – Number of year at Unisa vs number of years teaching online

		Number of years at Unisa?				
		0 – 5 years	6 – 10 years	11 - 15 years	16 years or more	Total
Number of years teaching online??	0 - 2 years	7	3	1	0	11
	3 - 5 years	2	0	3	1	6
	5 years or more	3	3	1	1	8
Total		12	6	5	2	25

Sampling: Survey, interviews and documents

Out of the 50 people invited to participate in the survey, 29 people completed the survey online. 55% of the participants were females, 35% were males and 10% didn't reveal their gender. These ranged between the ages of 24 years to 55+ years, with about 40% coming from the 45-54 age group and about 59% of the participants being black, as depicted in figure 4.1 and 4.2 respectively. The 45-54 age group also indicated that they would most likely to recommend this programme to other colleagues within the university, as shown in the cross table 4.2.

Table 4.2 Cross tables – Recommending the course vs. age group

		Would you recommend this course to other colleagues?		
		Yes	No	Total
Age	25-34	3	1	4
	35-44	5	0	5
	45-54	7	2	9
	55 +	4	0	4
Total		19	3	22

For the interview and document analysis, out of a sample of ten, six people were available for the interview. These were five females, three of which were black, and two white, and only one black male participant. The interviews were conducted over a period of two weeks between three campuses, and transcription took about two weeks. To ensure quality and accuracy, and to save time, transcription was outsourced to a professional transcriber.

After receiving permission from the Ethics Committee of the university, the ICT department was requested to grant access to the researcher to the online posts in discussion forums of the two MEd (ODL) modules between January and December 2014. The posts were each downloaded (copied from the online forum and pasted) into a Word document, saved in the researcher's password-protected desktop, and then printed for coding. While it took about two weeks to get access to the online discussions, the period of downloading the data lasted only a day.

There were no major variations in data collection from the plan as presented in chapter 3, except that the initial plan for the document analysis was to include in the study, the learning journals and students' online discussion forum posts from UMUC LMS known as LEO, short for Learning Experience Online, but unfortunately UMUC policies on student privacy and protection made it impossible for them to release the post for the purpose of this research. However, UNISA granted permission to access the discussion forum posts for the year 2014 between January and November. There was no serious

effect on the quality and continuation of this research, except that we missed an opportunity to conduct a comprehensive comparison of the two instructions based on the same type of data – based on students' discussions. There were no unusual circumstances encountered during the data collection phase.

4.5   DATA ANALYSIS

Tesch as cited in Saldana (2013) said codes should identify with the topic, therefore, a list of pre-set codes derived from the research questions and theory in literature review was used in the progressive process of coding for the interviews, documents and for the open-ended questions in the survey. Emerging codes were then noted down on the memo/codebook and later categorised into major themes for analysis and interpretation, and these are discussed in detail in the next sections of this chapter. Codes were initially identified, and then later grouped together according to their similarities and relationships into categories and themes.

4.6   QUALITATIVE COMPONENT

'Manual' thematic analysis method was used to code and analyse the data collected from the interviews, documents, and some of the open-ended questions in the survey. Saldana's (2013) coding manual for qualitative researchers was primarily used as a guide in the process of coding. According to Saldana (2013:3,14), "A code ranges in magnitude from single word to a full paragraph to an entire page of text". "A theme is an outcome of coding, categorisation or analytical reflection". Saldana (2013:10) further warns that, "Qualitative inquiry often demands meticulous attention to language, and deep reflection on the emergent patterns and meanings of human experience". Tesch as cited in Saldana (2013) clarified that 'codes are identifications of topic, not abbreviations of content', he further explains that 'topic is what is talked or written about, whereas content is the substance of the message'.

Data analysis involves managing a large amount of data with the key goal being to search for commonalities, which lead to categories, otherwise known as codes or themes (Hesse-Biber, 2010). According to Saldana (2014), data analysis is an iterative and on-going process whose major goal is to analytically reduce data by producing

summaries, abstracts, coding and memos. Analysis looks at what the data is saying whereas interpretation looks at what it means (Mills, 2007).

The quantity of codes considered appropriate is an issue among qualitative researchers: various authors prescribe or recommend acceptable or rather workable numbers of codes that one research study can realistically work with – Friese (2012:73) suggests between 120 and 300 codes, Lichtman (2010:194) recommends between 80 to 130 codes, to be reorganised into about 15 to 20 categories and/or subcategories and eventually to be synthesised into about five to seven major themes. However, Creswell (2013:184-185) is content with about 25 to 30 codes to be merged into five to six major concepts, whereas Saldana (2013:24), without giving an exact number of codes, advises/recommends that the "final number of major concepts or themes should be held at a minimum to keep the analysis coherent". In this study, the total numbers of codes were 160 from the interviews and the documents, which were all reduced to about seven categories and eventually three major themes with sub-themes.

According to Saldana (2013:88), descriptive coding 'summarises the basic topic of a passage of qualitative data' in a word or short phrase. Descriptive coding is considered appropriate for virtually all qualitative studies by Saldana (2013) and also appropriate for qualitative research beginners learning how to code data from a variety of data forms, such as interview transcripts, field notes, journals, documents, diaries, audio-visual materials, etc., as was the case in this study, therefore descriptive coding was appropriate to use in this study. As Walcott in Saldana (2013) clearly stated, description is the foundation of qualitative inquiry and its primary goal is to assist the reader to see what the writer/researcher saw and to hear what he/she heard.

4.7   MECHANICS OF CODING (INTERVIEWS AND DOCUMENT ANALYSIS)

Following Saldana's (2013) coding manual for qualitative researchers, the researcher read through the interview transcripts on the computer before printing them in order to familiarise herself with the content and concepts discussed. Once printed, the researcher read through the interview transcripts again before coding. The third session of reading was done using pencils, colour pens and highlighters, underlining keywords,

phrases and paragraphs, noting down the codes. The first list of codes was then constructed. The researcher then read the transcripts again, this time using the first list of codes and pre-set codes as a guide, looking for more emergent codes and making more detailed notes.

Codes were identified and selected by circling, highlighting, and underlining significant words, phrases, paragraphs (quotes or passages) that stood out (Creswell, 2013:205). All six interviews were put together in one document using the same set of questions (Annexure 6), with each of the responses to each question grouped together; this helped with quantifying the qualitative data, and also with looking at consensus or differences among participants on similar issues, the document was created in the format as depicted in table 4.3.

Table 4.3 Example of how interview question were grouped together

Interview questions	Responses	Notes
Question 1	Respondent 1 Respondent 2 Respondent 3 Respondent 4 Respondent 5 Respondent 6	Codes…
Question …(n)	Respondent 1 Respondent 2 Respondent 3 …(n)	Codes…

While the transcripts were used in conjunction with the original audio interviews, printing out the transcripts assisted the researcher in gaining control of the material and confidence to focus. It also allowed for some level of ownership of the work (Creswell, 2013), because someone else did the transcription. The codes were initially written on a memo and later typed; this process of typing also gave the researcher an opportunity to further reflect on the data, bringing more insight into the content and study, and also allowing more time with the analytic memos.

4.8   INTERVIEWS

Six participants were interviewed from a sample of ten people. The interviews were recorded using a voice recorder and later transcribed by a professional transcriber. The interviews lasted between 25 and 35 minutes and participants were interviewed in their offices in their various campuses, Sunnyside and Muckleneuk campuses in Pretoria and Florida campus in Johannesburg. Once the transcriptions were received, they were sent via email to individual participants for further refining and reflection, and to check for accuracy of the representation of their views.

A thematic analysis method of coding was used to analyse the interview data. According to Saldana (2013), the interviewer's questions, utterances, comments and prompts do not merit a code, since they are more functional than substantive and also because the researcher/interviewer is studying the interviewees or participants' perceptions and not his/her own. A codebook was necessary for this study as the study involved coding from different types of sources, for example; interview transcripts and posts from online discussion forums. The codebook is normally useful when coding in research project involves more than one person to reduce duplication and confusion, but in this case it assisted the researcher in saving time and control on the coding process between the two types of data corpus. The codebook was also to make sure that the codes from the interview transcripts and documents do not mix and adversely affect the interpretation of findings.

4.9   DOCUMENT ANALYSIS

Qualitative research methodologists such as Friese (2012), Lofland et al (2006), and others as cited in Saldana (2013), disagree about the amount of the data corpus – the total body of data to be included in the analysis, other authors believe that every recorded fieldwork detail is worthy of consideration, whereas others such as Guest, MacQueen, and Namey (2012), Morse (2007) and others felt that only the salient portions of the corpus related to the research questions merit examination (p16). According to Saldana (2013), it is advisable for novices to qualitative research to code anything and everything that is collected.

Only the group of students that were registered for the academic year 2014 at Unisa studied the two modules within the MEd (ODL) programme – ODL5902 and ODL5904. In this study, the focus was more on the amount of discussions rather than the number of students in the online class. The research planned to conduct a comparative study of the support approaches and the various presences (especially teacher presences) and other elements as posed in the research questions between UNISA and UMUC using the conferences/posts drawn from the online discussion forums within the learning management systems (LMS) of the two universities.

However, the UMUC did not grant permission to access the posts of other students as per the university's student privacy policies and ethical procedures. Therefore, only the two modules (ODL5902 and ODL5904) from the Unisa LMS, myUnisa were studied, as they were relevant to the research questions and also from a developing country. These consisted of an average of 600 posts for each module, about a total of 267 pages when printed.

The posts from the discussion forums were downloaded and copied into a Word document from myUnisa. Using a thematic analysis method of coding, these were then printed and studied, looking specifically for themes arising from the research questions, theories used to guide this study, and emerging codes and themes. A pre-set list of codes derived from the interview data coding was also used to guide coding in this phase of analysis. Codes, categories, and themes that emerged from the interview and documents data are discussed in detail in the next section.

4.10 QUANTITATIVE COMPONENT (SURVEY)

83% of the people who participated in the UNISA-UMUC programme were invited to participate in the survey. An invitation was sent via their email addresses with a link to an online survey, questionnaire attached (Annexure 5). 58% of the invitees completed the survey, and only 14% of the questionnaires were not fully completed, and this was factored in the analysis and interpretation of the findings. A qualified professional who is skilled with LimeSurvey piloted the questionnaire and the online survey was designed.

Question items were derived from the literature as guided by theory and research questions. In the data collection period of about six weeks, weekly reminders were sent to participants to remind them to complete the survey, email invitation and reminder attached (Annexure 7). The reminders were instrumental in getting the participants to complete the questionnaires, because it was observed that after each reminder was sent, there was some activity in the survey, and the number of completed questionnaires would noticeably increase.

The survey responses were then downloaded for the LimeSurvey using Microsoft Excel, and then analysed using the IBM SPSS 23. The questionnaire had 25 items, mostly with closed-ended questions and only two open-ended questions. The open-ended responses were analysed using thematic coding method of analysis, and descriptive statistics was used to analyse the quantitative survey data.

4.11 CODES, CATEGORIES, AND THEMES EMERGING FROM THE QUALITATIVE DATA

The initial number of codes was 153 from the interviews and document analysis, which was all reduced to about seven categories and eventually three major themes and sub-themes. The codes ranged from simple words to a phrase as listed in Table 4.4. Codes and themes derived from the interview data included keywords such as support, empathy, interaction, attitude, loneliness, engage, intensive, to phrases such as 'concrete outcomes', 'enough time', 'continuous assessment', 'sleepless nights', 'learning experience', 'response time', 'presentation skill', and also in full sentences and/or paragraphs.

Table 4.4 Sample of specific codes

A sample of code emanating from the three sets of data			
Blended modules	**Outdated readings**	**Sending out material (six weeks vs. immediate access)**	**support from instructors varied form one instructor to the other**
Time management	jRouter	Helpful (instructors hugely involved)	Attitude of warmth and encouragement

Enough time	Hard work	Students teach each other	Instructors were almost 'absent' in other modules, making it hard to learn in that particular module
Times zones	Sleepless nights	Weekly outcomes (UMUC)	Decision to quit due to nasty experience with an instructor
Concrete outcomes	Work load	Understand how students feel	Peer judgement
Alternative assessment	Group collaborations (everyone keep to help out)	Leverage (on experience)	Assessment strategies (left to other students)
Online dialogue (with students)	Students need time to grasp materials	Different technologies'	Feedback was shallow to a greater extend
Unisa Lecturers' mindset	Not good for students	Learned beyond the classroom	Pass rate was very high
Course/Module Structure	confidence	Group work was a challenge	Resources were stimulating (Komza vs. Clark discussion)
Semester system	Repeating subjects	Unreliable student system	Group discussions were engaging and inspirational
Continuous assessment	enrolments advisors	Often offline (or being maintained)	Discussion management was not properly thought out and poorly managed by the instructor
Support separated from the whole system	Good advice/less modules	Students teach themselves	Instructors prescribed a lot of reading for the weekly discussions and assignments
Empathise	Manageable	Attitude of academics towards online teaching	Programme was not student-paced
Continuous Professional Development (CPD)	Quality of graduates	Engage	Tight time limes
Interaction	Grading system (50% vs. 70%)	Not totally online	Website maintenances stalled progress and personal programme

Loneliness	Culture of teaching	True flavour (of one mode of teaching g)	LMS changed from WebTycho to Desire-2-Learn transition was frustrating
Multimedia integration	Culture of learning	Frustrating	Group collaboration
Computer literacy	Higher pass mark	Different instructors had differed preferences and approaches in posting information on LEO, no standard or uniform practice	Cultural shock
Critical self-evaluation	Lecturers feel threatened		Need for needs analysis and intervention for entry level in the programme
Fast-paced	Learn how to teach	Detailed feedback	Entry requirements
Participating in discussions	built-in support	Gained confidence in writing	Design skills for online programmes
Lecturer-tutor (e-tutor) relationship	due date extension	Presentation skills	Support from instructors varied form one instructor to the other
Exhausting	Section Model	Online experience – hands-on, informative, life changing and interesting	Attitude of warmth and encouragement
Enormous amount of work	Holmberg's empathy theory	No cultural difference problems	Instructors were almost 'absent' in other modules, making it hard to learn in that particular module
Intensive	Appreciated prompt response from UMUC	Response time	Decision to quit due to nasty experience with an instructor
Very tiring	Turnaround time to provide feedback (was reasonable)	Detailed Feedback	Peer judgement
Overwhelming	Pace	Educator presence	Assessment strategies (left to other students)

The same coding process that was used to code and analyse the interview transcripts were used to code and analyse the document data and data emanating from the open-ended questions in the survey. Some of the codes came out strongly in all the types of data, with varying descriptors (Table 4.5); for example, empathy, programme/course

structure, workload, staff training, and technology, which was a sub-theme of programme/course structure.

Table 4.5 Categories (descriptors)

Empathy
Understanding, support, putting myself in the students' shoes, engaging, online readiness, group work, attitude of lecturers/instructors, approach/preferences of lecturers/instructors, loneliness, interaction, helpful instructors, motivation, confidence, intimidated, relaxed, etc.
Programme/Course Structure
Pace, semester system, rubric, assessment (continuous, transparent, integrated), grades, workload, assignment due dates/schedule, discussion forums, group work, facilitation, feedback (detailed, timely), turnaround time, intensive, interaction, concrete outcomes, weekly outcomes/assessments, due date extension, module resources, peer review, student orientation, enrolments advisors, Culture of teaching, Culture of learning, built-in support, LMS, manageable, double job, true flavour, technologies, skills, manipulation, multimedia, course design and management, choices, decision-making, LMS, computer literacy, etc.
Workload
Tiring, hectic, exhausting, frustrating, intensive, pressure, overwhelming, fast-paced, stressful, sleepless nights, challenging, deadlines too close, too much work, too many reading for the weekly discussions, time zones, semester system, out-dated readings, stupid, crazy, tough, daunting, demanding, inconsistencies, etc.
Staff training
Professional development, skill development, computer literacy, online readiness, presentation skills, facilitation, critical self-evaluation, attitude, etc.

Figure 4.6 illustrates the frequency of some of the codes that appeared in the data. Some of the codes were used as descriptors for some categories, for example; course structure was often mentioned in conjunction with time, work load, assessment, feedback, and technology, learning management systems (LMS), individual and group

activities and so on. Empathy was used in conjunction with understanding, support, feedback, assessment, workload, and so on.

Codes such as workload, empathy and course structure may appear less in the illustration below but, when one engaged with the data corpus, it became clear that descriptors were used to define and discuss the learning experiences and perceptions by the participants, as shown in Figure 4.6. Looking at the descriptors and the overall conversations across all types of data, the major concern was workload and the time allocated for the work to be done. Empathy was also mentioned a few times, and more descriptors were used in participants' reflection of their learning experience and perceptions of student support function in distance education and e-learning, as shown in Table 4.5.

The issue of time structure and workload seemed to have impacted on the participants' perception of online programmes, it clearly indicates that online programmes need not be a dumping place for content, but rather a thoroughly thought-through assignment by the institution. While most students were happy with the feedback mechanism and quality, most were also concerned about the amount of work they were required to do, the weekly assignments/tasks, and group work. The issues around group work was more on the synchronicity of the group work required for some tasks, and also it appears that some students were not participating as required in the group tasks, yet they benefited from the grading afforded to the group. Although, the use of peer-review/peer assessment is increasingly becoming accepted practice in online programmes, monitoring group work is something that still needs to be seriously looked at.
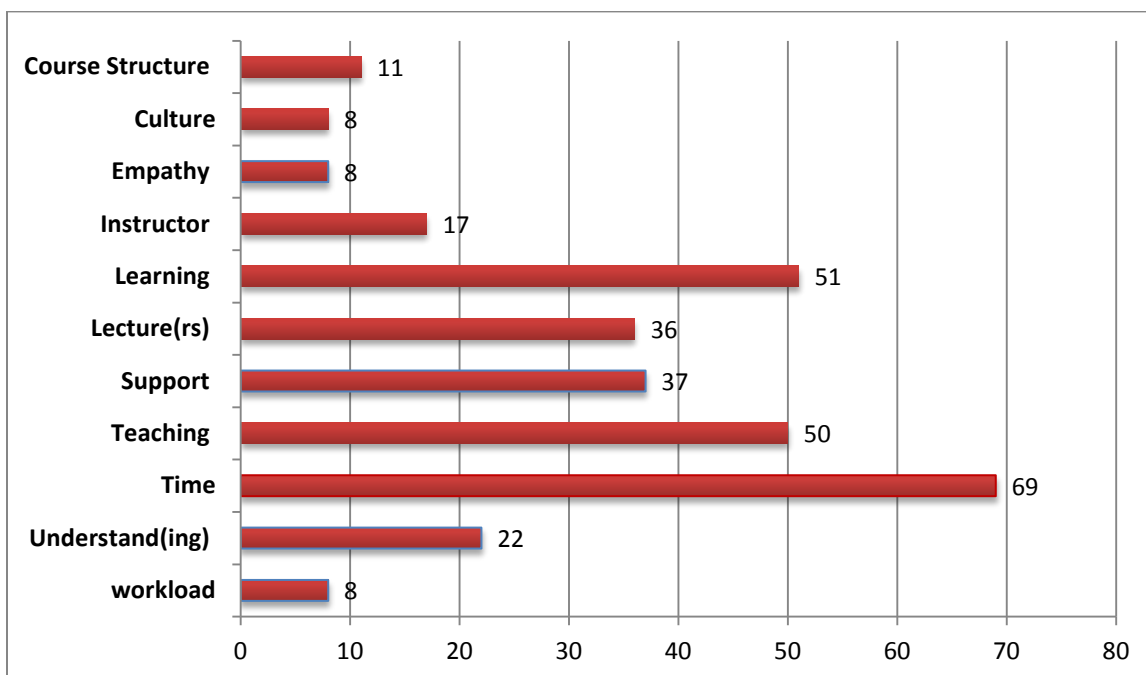
Figure 4.6 Frequency counts of specific codes

Issues about the instructors/educators, their personalities, attitudes, preferences, presentation styles, presence, skills and so on were of serious concern to the participants. When it came to student support, descriptors such as empathy, understanding, putting yourself in the students' shoes, engaging, attitude of lecturers/instructors, interaction, helpful instructors, motivation, confidence, and so on were also evident in the data. These are discussed in detail in the following section.

4.12   RESULTS

Students' responses are presented in summary on data tables, graphs, cross tabulation, and then in a narrative format. This will reveal consistencies and patterns which may explain current perceptions and will later be used as a guide to derive possible recommendations. The results are organised by patterns/themes addressing the research question and/or sub-questions.

When asked why did the participant choose to enrol for the UMUC certificate, 62% indicated it was for personal interest and development, 38% said it was to improve the quality of online teaching in their departments and all the participants rejected the suggestion that their decision to enrol was suggested and/or instructed by their line

managers. The results are discussed in the following section according to the themes and sub-themes.

4.13   THE OVERALL COURSE DESIGN AND STRUCTURE

One of the themes that came out strongly in the data was the issue of course design and structure, codes such as workload, time, assessment strategies, facilitation of learning and instruction, and the overall design and organisation of the online course including the learning management system (LMS) were highlighted by the participants in the study. The importance of pace, assignments' due dates, use of rubrics, turnaround time for feedback, built-in support, assessment strategies were evident in the discussions.

4.13.1   Learning experience of students in ODL and online environments

62% of the respondents indicated that the information was sufficient, whereas only 14% indicated that the information was not enough and another 7% said that there was too much information. One of the participants indicated that if they would not consider enrolling given another chance to enrol for this programme, as it was fast-paced, exhausting and overwhelming, and that they were not properly prepared for the amount of work that was expected of them in the programme; another participant said:

> "I found the overall experience excellent but very tiring, and to be honest if I had to do it again I'm not entirely sure that I would sign up for it if I knew what I know now."

4.13.2   Workload and due dates

The workload was highly criticised by the Unisa staff that enrolled between 2012 and 2014 for the programme under the partnership between UMUC and UNISA. When asked about their learning experience, most of the participants echoed similar concerns,

> "This was daunting on the part of the students, especially considering the fact that the programme was not student paced but had tight timelines designed by UMUC."

"In the beginning, getting used to the time difference, getting materials on time and also because it was a very fast paced programme you needed to be on track and if you got left behind with a day or two you will suffer and the first assignments or 2, I had to write them under pressure because I didn't know how to keep up and I thought I could always do them and so that is when I had to spend sleepless nights meeting the deadlines…"

The following quotes depict the positive perception towards the fast paced structure and a negative perception towards the relaxed non-paced structure:

"I think maybe I should tell you this, the one reason that it takes us longer to complete the UNISA part is because it's not paced like the UMUC now you come from that very organised environment and then you are left to your own devices. You just relax and say ok I'll see it and then time passes you know in a moment, the whole year is gone and you haven't done anything..."

"I came from this highly paced environment, very motivational, encouraging and the standards are high you know, and then you come to the UNISA leg part of it and you know, it was very slow, we were left to our own devices."

While most participants seem unhappy with the pace and structure of the course, some felt that it was useful in ensuring completion, and this was seen in the evaluation of the Unisa modules, in which students claimed that the pace and the relaxed mode of Unisa delivery was disabling them to complete their MEd studies on record.

Among the challenges experienced by the participants was the amount of work that had to be done in a period of a week within the UMUC online programme. Few descriptors that were frequently used for the code '**workload'** include the following:

Tiring, hectic, exhausting, frustrating, intensive, pressure, overwhelming, fast-paced, stressful, sleepless nights, challenging, deadlines too close, too much work, too many reading for the weekly discussions, time zones, semester system, outdated readings, stupid, crazy, tough, daunting, demanding, inconsistencies.

If one looks at the descriptors, the term workload was mentioned more than any term both in the survey, interview and sampled documents. In fact, almost all of the participants mentioned 'workload' when asked to give suggestions to improve the UMUC course. The following quotations were taken from the interview and some of the open-ended questions in the survey:

"The challenge for me was, that I am not used working over weekends."

"It was hugely demanding. I am not surprised some of my colleagues pulled out of the programme as soon as they realised its demands."

"Calculation of workload for the modules could be better. A three credit UMUC module is apparently equivalent to a 12 credit Unisa module, but the workload was much more than 120 notional hours."

"Information about the intensity of the course must be provided and the required investment in terms of time must be made clear before registration."

"Very restrictive with heavy UMUC workload. Higher than the required notional hours prescribed."

"The dropout rate is too high because the course objectives are too ambitious and require more time than is advocated... Difficult instructions which keep changing makes one do work several times more than they could have done if the instructions were decisive."

"The duplication of activities and workload needs to be looked at."

One of the participants suggested that the UMUC should in future design the course so that "Unisa staff should be required to submit assignments fortnightly instead of weekly", considering the workload of academics in their own home institutions.

Between the two sets of data, there was clear consensus that online courses need not be unbearably cumbersome and packed with lots of tasks. In essence, the overall packaging of online courses is what determines what kind of support strategies will be effective for distance students, especially adult learners, who are assumed to have other responsibilities. While the UMUC programme was highly criticised for being 'too hectic', the UNISA part was also highly criticised for being 'too relaxed'. Clearly there is a need to strike a balance on the design of the online delivery programmes or courses, both on the soft and technical part of the design, and factor in the element of support throughout the system.

4.14 FACILITATION AND MANAGEMENT OF TEACHING AND LEARNING

Most of the participants indicated that they highly consider implementing some of the skills and tools they have learnt from the UMUC-UNISA programme. About 62% of the

participants indicated that they will consider implementing 'engaging students, and building online student communities' in their teaching as this positively impacted on their own learning during this programme, shown in Figure 4.7.

56% Indicated that they will include 'lecture streaming – (capturing lectures digitally, and transmitting them live, and/or making them available to students to view online or download as podcasts) as this was more an attractive feature of the course design and structure and also for their online learning experience. They reported that this proved to be effective in their own learning and it was relevant for the use in facilitating learning in an online environment.

The use of technology in teaching and learning (synchronous and/or asynchronous), and inclusion of readily available information resources such as eBooks, journal articles, website links, OERs, and so on was also rated high in terms of facilitating learning in distance and e-learning environments (figure 4.6).
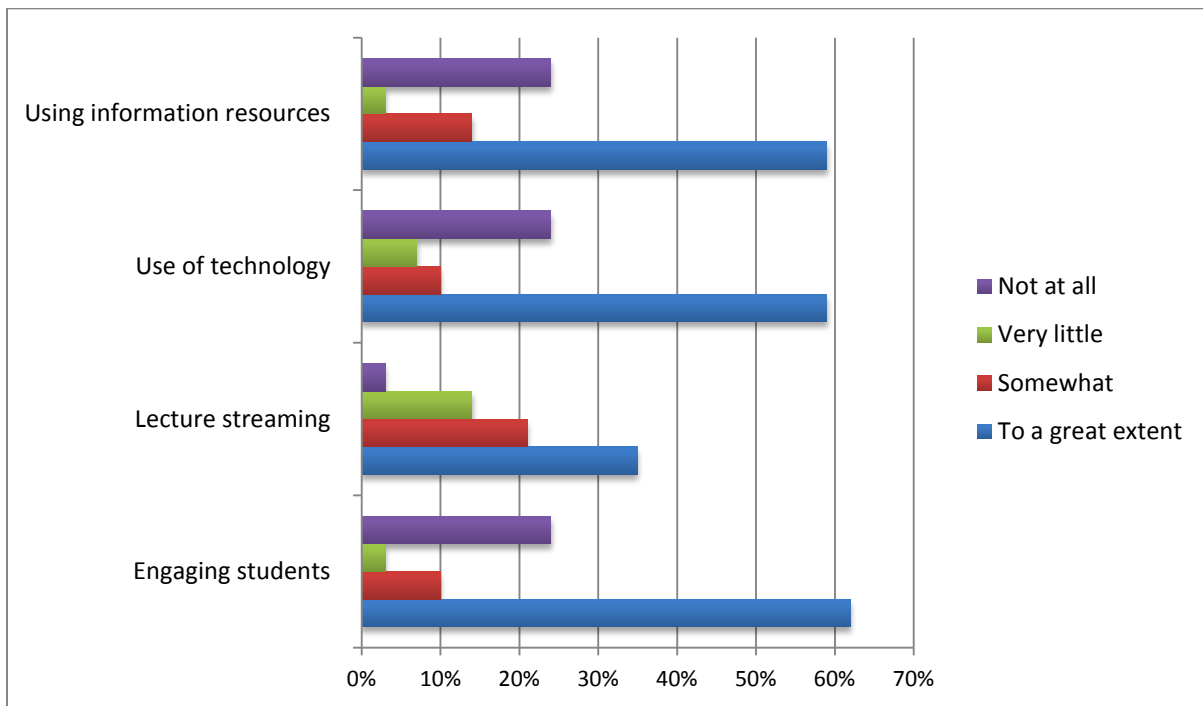

Figure 4.7 Survey item: Which part(s) of the *student support practices* you received from the programme would you consider implementing in your own online teaching, if any?

One of the positive key features was that the UMUC programme allowed students access to a variety of resources to enhance and add to the learning. An average of 73% of the participants indicated that the UMUC programme's major strengths included the following important elements:

- The faculty seems competent, knowledgeable and skilled as instructors.
- Relevancy of the curriculum seems to be appropriate to the current market.
- There was an agreement between the course objectives and curriculum content.
- Objectives were reflected in the exams or other assessments.
- Student support services were available 24 hours a day.
- Online discussions were properly designed and well managed.
- Technology teaching and learning tools used was relevant and appropriate.
- Online self-help tools were user-friendly.

4.15 LEARNING MANAGEMENT SYSTEMS

From the document analysis, while the discussions brought rich dialogues on various topics, it seems that the learning management system, myUnisa, was not performing as well as its counterpart LEO from UMUC. The design of discussion forums was a little inhibitory, thus sometimes causing confusion and/or misunderstanding. However, this did not deter the lecturer and students from using the LMS for enriching dialogues. The following quotations were taken from myUnisa discussion forums:

> "Dear Lecturer, just to let you know that myUnisa has been unstable for the last week; it keeps bombing out and I have lost a longish post which I will try to re-create." (2014-05-15 15:47:42)

> "Dear colleagues, is anyone having problems with the study material PDF failing to load?" (2014-05-02 23:12:00)

> "I just experienced myUnisa surge, bouncing while I was posting something, but luckily I normally draft on MSWord first, so I just copied and pasted on to the discussion forum. Is there any way the discussion threads can be displayed LOGICALLY, like each reply be displayed under the relevant post, the current display is confusing and really not nice, much appreciated!" (2014-05-16 09:30:48)

"Thanks for asking Tony about the thread of the discussions. It is very confusing because I don't work with myUnisa every day so I kept quiet!" (2014-05-16 17:07:23)

When compared to UMUC LMS – LEO, most participants mentioned that it was a bit challenging to find one's way around the LMS at the beginning, but after a few days for some and a few clicks for others, it was easy find information and to manoeuvre around the learning management system (including the home page designs of LEO and myUnisa).

With the UNISA discussion forum, the message threads seemed not to be optimally coherent and aligned to the author and/or topic, for example, the responses to a topic would not follow through under each main topic, responses would be scattered – not forming a logic thread of discussion.

While the design of the myUnisa was a big issue, it seemed not to hamper discussions between academics (who were also students in this case), but it also gave them an opportunity to experience first-hand the challenges of studying and accessing study materials and discussion on myUnisa. One participant shared his/her concern:

"Dear Lecturer, the format of the discussion forum makes it very difficult to respond to a specific student's comment. (I know you did not create it this way - this is a Unisa thing.) Is there not a possibility that we could use the blog-app? Would that not maybe allow for a threaded view of the discussions? And make grading easier to know whether it is an original/created thread or a response to someone else original post?"

Other participants also shared the same experience with their modules and myUnisa discussion forums. However, this is clearly not entirely the issue with the design of myUnisa or the facilitation of discussion forums. It may seem that the difficulty in getting students to participate in online discussion forums cuts deeper than the design of the LMS, as seen in the frustrations shared by some participants:

"Dear All, I agree with XX that the current myUnisa discussion forums are not very effective with my undergraduate students. My personal view is more or less the same as yours - if it is not graded, it is not done. However, forced conversations are not conducive either." (2014-04-30 22:06:06)

"I have tried various ways to encourage participation, such as opening discussions on concepts that seems to be difficult (or vague) in the study guide - no response. Then I tried 'bribing' them by stating that a certain topic is really import for the exam and necessitates a discussion - none of my 250 students responded. (Although, there will be many complaints after the exam...)" (2014-05-02 15:12:23)

And the trouble seemed that the lecturer was also experiencing similar challenges, but had to keep on trying and continue with facilitation, and the response was:

"I have not found any options to change the way that the myUnisa discussion forum orders postings in chronological sequence. I have asked XY for advice. Having worked with WikiEducator for OER, the Sakai-based myUnisa (you will have noted that I have chosen not to use the course outline tools) and Moodle, and currently exploring Canvas for another project, I have to say I am not that keen on most LMS systems, which make everything very "bitty" for my taste. But, it is very nice to have everything available digitally and to be able to communicate asynchronously online allowing for a much more open curriculum with more interaction than print-based correspondence studies." (from Lecturer)

It was clear from the discussion that the lecturer provided students with his email address, and it may seem that not a single assignment was submitted using my Unisa, but all the students submitted their assignments via the lecturer's email address. This was not the case with UMUC, the submission of assignments was embedded in the system, with the capability to record activity log for each students. What this means, is that assignments feedback was done offside (away from the LMS), meaning that the assignment marks had to be submitted to the Assignment Section for manual capturing. The following is a sample of more participants and the lecturer sharing their frustrations with the performance of the Unisa LMS:

"I have been trying to post my contribution without any success since last week Thursday. I experienced a terrible cut-off from myUnisa. I suspect that the discussion is closed." (2014-06-17 13:09:38)

"MyUnisa is being temperamental today and keeps refusing to accept attachments so I will upload the National Institute for the Deaf (NID) document to the *Additional Resources* folder." (From Lecturer) (2014-08-03 09:03:12)

"MyUnisa refused to upload the example module map as an attachment so I will put in under Additional Resources. Regards, Lecturer." (2014-08-11 10:36:08)

While the design of the LMS affects the smooth running of the course, it also affects the work of lecturers, facilitation of teaching and learning. This is the kind of support that not only benefits the students but also the lecturers. It is hypothesised that if the academics do not receive the kind of support they need, they may not function optimally and thus, may also not have much support to offer the students. The next theme discusses the impact of assessment strategies and student support on learning and successful completion of a course.

4.16 THE IMPACT OF ASSESSMENT STRATEGIES AND STUDENT SUPPORT ON LEARNING AND SUCCESSFUL COMPLETION OF A COURSE

The survey covered various questions to solicit information about perceptions and expectations of student support and assessment from the students in distance education and online environment. The tables and figures below indicate the responses from the students.

Most students (72%) reported that there was excellent support throughout the UMUC programme, whereas about 21% disagreed, while only 55% of the participants reported excellent support throughout the UNISA (MEd) programme, with 38% disagreeing with this. 66% Reported that they received the administrative support they needed at all times from both the UMUC and UNISA, and 78% reported to have received some of the academic support they needed from the UMUC, while 62% reported to have received some of the academic support they needed from UNISA.

4.16.1 Students support approaches

From the list of codes and categories (table 4.5), one can clearly see that the support design must be integrated in the whole online programme/course system. The list also clearly reveals the importance or empathy in distance education and e-learning for students in developing countries. When asked to reflect on their learning experience at UMUC, how has the UMUC programme affected their perceptions of online teaching and learning, and affected them as ODL practitioners, some of the terms used to respond to the questions included the following codes, which were categorised under

the term 'empathy', as it speaks to the heart of empathetic student support approach to DE and E-learning students:

Empathy

Understanding, support, putting myself in the students' shoes, engaging, online readiness, group work, attitude of lecturers/instructors, approach/preferences of lecturers/instructors, loneliness, interaction, helpful instructors, motivation, confidence, intimidated, relaxed, etc.

Most of the participants indicated that they are more empathetic in their approach now than before they enrolled for the UMUC programme, they further indicated that they understand their students' predicament of being a distance student better, with one participant saying:

> "…when you design modules you need to understand the situation of the student and you need to find ways of intervening, empathising with their position."

A few participants mentioned the attitudes of lecturers/instructors from the UMUC as disabling and demotivating, but the overall feeling was that most of lecturers/instructors were helpful and understanding. Even though there was a high rate of dissatisfaction with the workload in the programme, it may seem that the support structure and design was integrated into the system, thereby working together for the success of the students and of the programme.

Most participants said they received satisfactory information about the course, whereas only a small percentage reported negatively. However, it is worthy to note the variation in the satisfaction levels in the following topics:

- 48% of the participants reported to have received satisfactory information about the outline of the course, and another 48% reported to have received unsatisfactory information.
- 48% of the participants reported to have received satisfactory information about assessment requirements and another 48% disagreed, while 55% agreed to have received sufficient preparation for assessment and only 41% disagreed.

- 52% of the participant reposted to have received sufficient information about the structure of the subject area and only 41% disagreeing, and 48% said they received enough information about the discussion forums and topics while a close 45% believed that there was not enough information about the discussion forums and topics, and

- 45% of the participants reported to have received satisfactory resources and learning support, while 38% disagreed and 17% neither agreed nor disagreed.

When asked to indicate their level of agreement with the statement, "effective student support practices impacted on your completion or lack of completion of UMUC programme", 69% agreed, 24% disagreed, and 7% neither agreed nor disagreed.

When asking for information or help, 57% of the participants reported to have always approached their instructors, 21% reported to have never approached the instructor for information or help, 24% approached the writing coach regularly and 38% sometimes, and 14% never (figure 4.8 and 4.9). This truly indicates the importance of instructor-student interaction and instructor 'visibility and presence' in distance education and online environment.
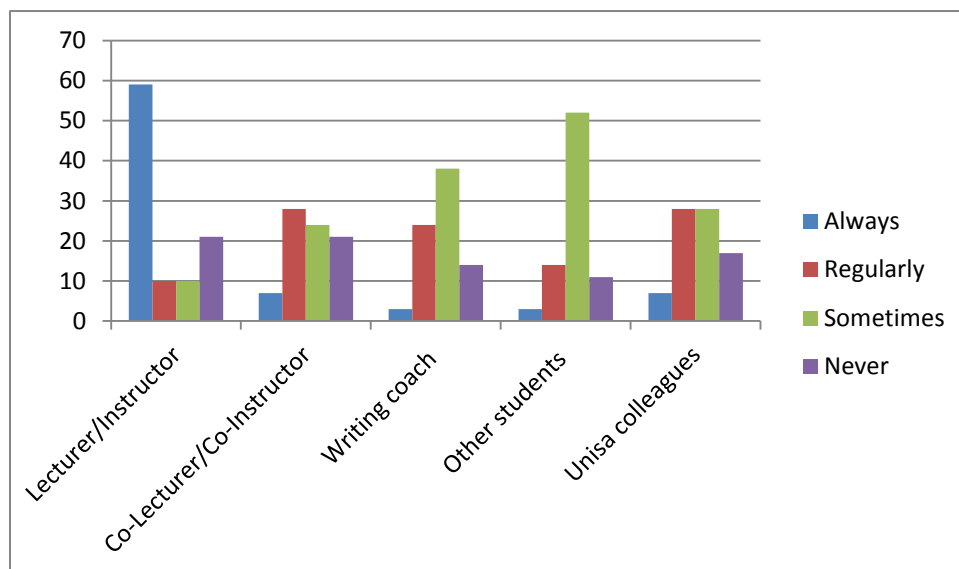

Figure 4.8 Survey item: When problems occur, whom did *you* ask for *information or help*?

3% Reported to have approached their fellow students in the 'class' or study group, 52% approached fellow student only sometimes. Another 7% reported to have approached their fellow Unisa colleagues enrolled in the programme (figure 4.8 and 4.9).
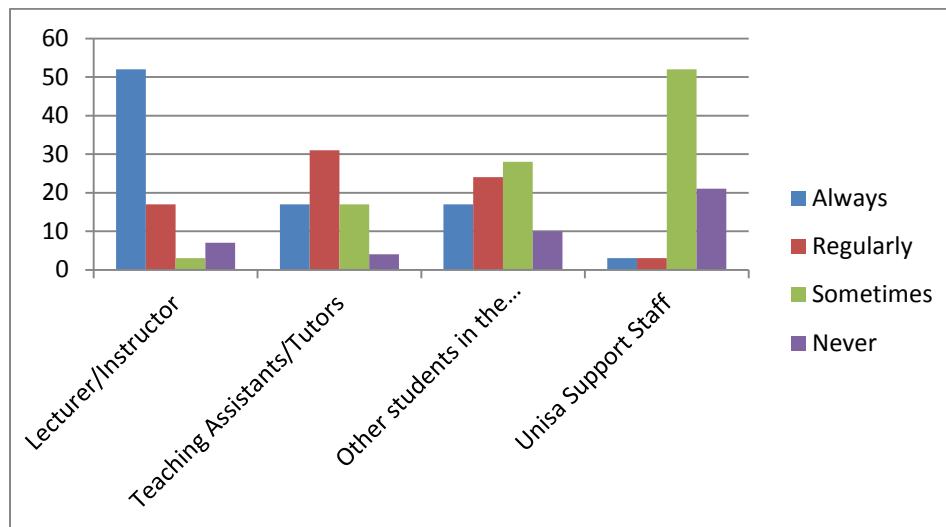

Figure 4.9 Survey item: When problems occur, who do *Unisa students that are enrolled for your module* ask for information or help?

4.16.2   Assessment strategies and feedback

Some features of the online course that received positive appraisal in terms of the course structure and designs, for example, the use of rubrics, feedback approach and mechanism, grading and general assessment strategies.

Most participants believed that the turnaround time for feedback was very good and encouraging, the feedback was reported to have been thorough and detailed, and the use of rubrics and writing coaches were singled out as very helpful and motivating, thus effective in ensuring successful completion of one's online studies.

While there was an outcry on the standard of grading from the UMUC programme, most students indicated that the rubrics assisted and prepared them for what was expected and encouraged them to aim higher. The UMUC grading system is attached, Annexure 8. Some participants compared the grading systems of both institutions and reported that while the one institution's standard was high and stressful, the system forced

students to learn with understanding, whereas the low grading system only let the students learn to pass the modules. Where in one institution, the pass rate was 80% and above, the pass rate in another institution was a mere 50%.

The transparency was most appreciated by the participants, receiving their learning objectives, assessment expectations and rubrics at the beginning of the course/module was considered helpful and effective, as indicated by one participant:

"The one thing that I thought was vastly different was the assessment, which always came with a rubric and it was applied to the latter so you always knew how much you were going to get if you followed the rubric and if you made sure you looked at the rubric before you submit you were most likely to get 90% or above, which is very rare here. I think lecturers still don't know how to use rubrics; there are very few of them who use rubrics and those who use rubrics sometimes don't share the rubrics with the students upfront."

There were no concerns raised regarding the assessment strategies in the Unisa part, except that the grading should be improved on to encourage high performance and excellence in the students mark achievement. The next section deals with instructor personality, subject mastery and technology skills, presence and how these impact on teaching and learning.

4.17 INSTRUCTOR PERSONALITY, SUBJECT MASTERY AND TECHNOLOGY SKILLS, PRESENCE AND THE IMPACT ON TEACHING AND LEARNING

One of the major strengths of the UMUC programme was reported to be the faculty's competency, knowledge and skill. Seventy-five percent (75%) of the participants indicated that the online discussions were properly designed and well managed, while another 76% reported that technology teaching and learning tools used were relevant and appropriate, this is clearly an indication of the important role that instructors play in teaching and learning, whether at a distance or online.

If almost 60% of the students reported to have achieved the learning goals of a programme, as in shown in figure 4.10 below, while there is clearly a sizable room for improvement, one can attribute this to the quality of teaching or facilitation of learning

within that programme. A few participants indicated an interesting factor of facilitation in this programme:

> "I don't think there was much teaching at UMUC to be honest with you, they allowed you to find your way. They facilitated the learning for you and they just gave you guidelines and pointers as to where you should go, what you should look for, there wasn't any teaching in the real sense and then you would come back and share your learning guide. Of course they would say this is what we expected you to go look for."

> "Unisa lecturers also need to facilitate and sit more or less in the background and watch learning unfold without leading the students from the from the front but leading them from behind and trust the students. In the UMUC programme we were never told anything, we were told to find things ourselves and here are the questions, go and read this article and answer these questions."

While other students prefer to be taught by their instructors, others were happy to learn from other students and also to share their own knowledge and display skills using technology tools within the classroom and/or in group projects. Student-to-student interactions are also important in online teaching, as the students may transfer such invisible features or their cultures and information learnt from interacting with various groups, things that the instructor would not have otherwise imparted to the students.

With all the challenges and complaints, a staggering 66% of the participants indicated that they would definitely recommend the programme to other colleagues, whereas only 10% said they wouldn't, and only 24% not responding to this question. This was also visible in the interviews where most participants reported that they believed "all Unisa academics should enrol for this programme", or something similar. However, some of the interview participants believed that they do not really need the MEd (ODL) qualification since most of them were already in their field of specialisations with Doctorate and/or PhD qualifications. See quotations below:

4.17.1   Quotations from the survey

> "The programme provides the necessary knowledge and skills for ODL and online teaching and learning. I recommend that academic staff at UNISA be encouraged to register for the programme."

"This course must be made compulsory to every lecturing staff especially those coming from contact institutions."

"Unisa M.Ed. facilitators must also register for the UMUC leg of the programme."

4.17.2 Quotations from the interviews

"I think every single UNISA lecturer should be forced to take an online course and secondly, it really opened my mind to the possibilities of different ways of teaching what we have been exposed ok contact teaching."

"... maybe some of them have been here 20 years or so and don't even remember any other way of doing it."

"I wish all UNISA staff members can do this course; it is worth doing."

It was interesting to see many participants strongly feeling/believing that all Unisa academics can benefit from participating in this programme. Below are some of the possible learning objectives from the UNISA/UMUC partnership programme that the participants reported to have benefited from (figure 4.10).
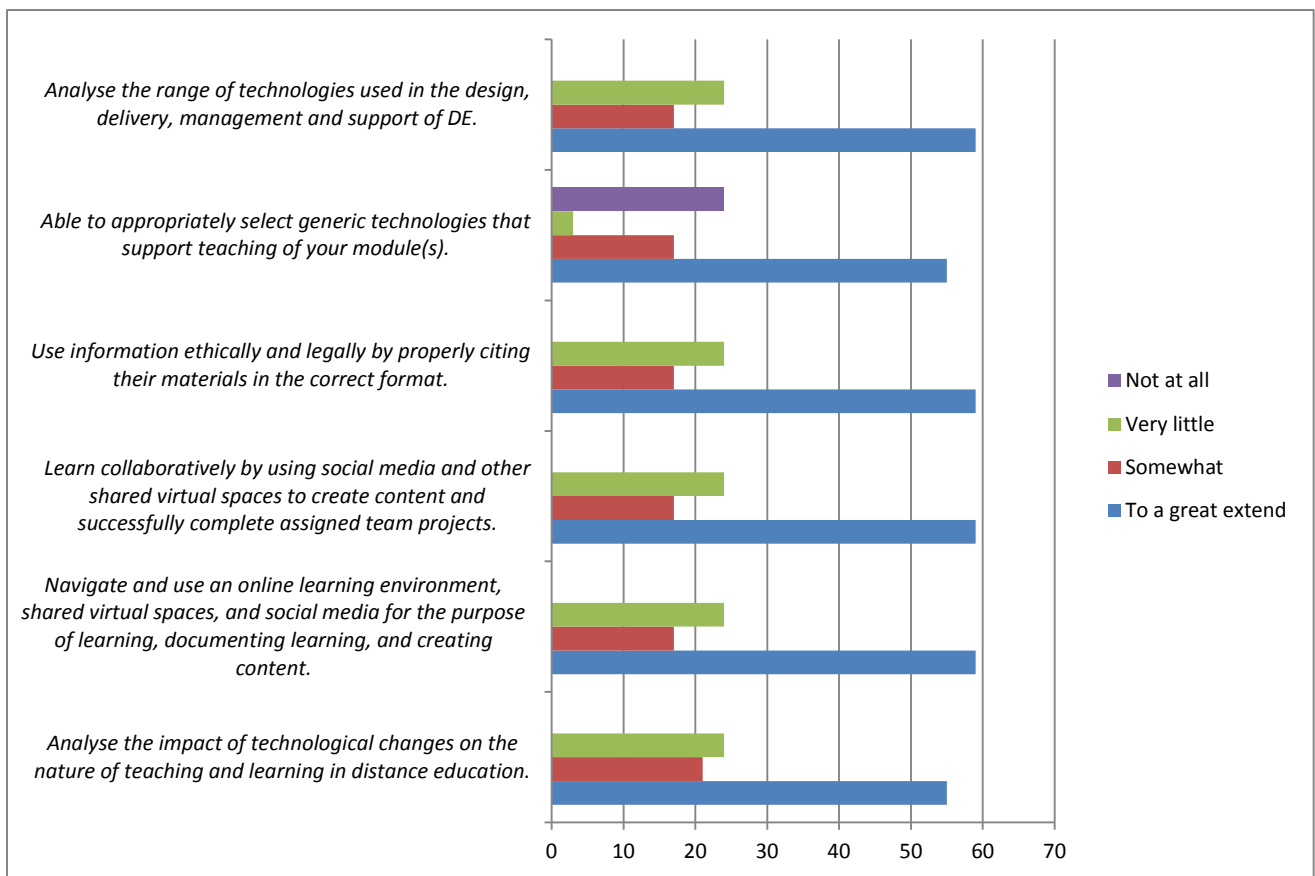

Figure 4.10 Possible learning goals achievable from the UMUC programme.

Beside the many challenges discovered and discussed in this report, it was clear that the robust programme brought some serious learning and personal reflection on each one of the participants. It was also clear that academics need to learn, unlearn and relearn and be equipped with the relevant knowledge and skills in order to remain competent in the workplace and to be effective in their teaching and learning in this ever-changing technological era. Skills such as facilitation of learning, management of online discussions and group work are necessary for the holistic leaning and support of students, to ensure successful completion and reduce the obvious global challenges of student retention.

Mafenya (2011) revealed that most of the students interviewed in his research did not have much confidence about their abilities to use e-learning tools. If this is the case, and you have the lecturers who are not ready or well-prepared for the e-learning mode of teaching as recently introduced at Unisa, an institution may find itself failing. From a managerial viewpoint the participants in Olson, Cohen and Carlson (2000), a research study indicated that a lack of technical support staff, a lack of suitable support materials, hardware and software support can be costly. The next section discusses the evidence of trustworthiness observed in this research study.

4.18   EVIDENCE OF TRUSTWORTHINESS

When dealing with evidence of trustworthiness in a research project, concepts such as credibility, objectivity, reliability, and validity comes to the fore, for example, criticising and questioning the validity, value and quality of each other's ways of research enquiries, from positivists, constructionists, etc. It is always imperative that researchers provide proof or trustworthiness for their work. This section discusses the concepts of trustworthiness of this research project, starting with credibility, transferability, dependability and lastly confirmability.

4.19   CREDIBILITY

Internal validity, which seeks to ensure that their study measures or tests what is actually intended, asks the question how congruent are the findings with reality?

(Merriam, 1998) To promote confidence that they have accurately recorded the phenomena under scrutiny, researchers must "correct operational measures for the concepts being studied" (Yin, 1994) before the first data collection dialogues take place. This may be achieved via consultation of appropriate documents and preliminary (pilot), which was undertaken in this study.

Internal validity also questions the issue of sampling. In this study all the Unisa staff that participated in the UNISA programme were selected to participate because it was a small group. Triangulation was used as a collection and interpretation method. According to Guba (1981) and Brewer and Hunter (1989), the use of different methods in concert compensates for their individual limitations and exploits their respective benefits, wherein supporting data obtained from documents may provide a background to and help explain the attitudes and behaviour of those in the group under scrutiny, as well as to verify particular details that participants have supplied (Shenton, 2003).

Credibility also requires iterative questioning, in which the researcher returns to matters previously raised by an informant and extracts related data through rephrased questions (Shenton, 2003). Piloting, which was done for the survey items, helped in refining of questions, and the fact that the interview transcripts were returned to the participants for further scrutiny, this gave the researcher an opportunity to seek and gain more clarity from participants.

To enable the researcher to refine his or her methods, the research supervisor was used, piloting also formed part of the scrutiny to develop a greater explanation of the research design and strengthen the arguments.

4.20 TRANSFERABILITY

The concept of transferability is concerned with external validity, the extent to which the findings of one study can be applied to other situations. Patten (2004) emphasised that validity is a matter of 'degree' and discussion should focus on how valid a test is, not whether it is valid or not. According to Patten (2004), no test instrument is perfectly valid. According to Wallen and Fraenkel (2001) as cited in Richey and Klein (2007), validity involves the appropriateness, meaningfulness, and usefulness of inferences made by the researcher on the basis of the data collected; that the researcher needs

some kind of assurance that the instrument being used will result in accurate conclusions.

Many scholars believe that an instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed (Patten, 2004; Wallen and Fraenkel, 2001; Polit and Hungler 1993:448). In this study, the questionnaire was designed and tested specifically for this study. A pilot study was conducted and feedback integrated into refining the tool. A few academic staff members who completed the survey, who are experts in their fields and have extensive experience in research also commented on the structure and quality of the items in the questionnaire, it proved to be of good quality, relevant and fit for purpose.

The qualitative research results of this study can be understood within the context of the particular characteristics of the institution (Shenton, 2003). The study was also undertaken in an organisation participating in an international partnership to improve its skill pool and exchange knowledge. The study focused more on the developing context of the institution, and the nature of the institution, which is ODL and e-learning, even though the study focused on a small group of participants, the participants came from various colleges within the university, and the data was collected over a period of three months within the university covering three campuses and the attitude and behaviour studied can be characterised to the institution, however with caution.

4.21   DEPENDABILITY

Patten (2004:71) and Blanton and Jaccard, (2006) argued that validity is more important than reliability because reliable and invalid measures are potentially more dangerous than unreliable measures. However, every research project still needs to address reliability. Reliability relates to the consistency of the data collected (Wallen and Fraenkel, 2001). Dependability scrutinises the issue of reliability meaning, "If the work were repeated, in the same context, with the same methods and with the same participants, similar results would be obtained" Shenton (2003). However, this may prove problematic because of the changing nature of the phenomena scrutinised by qualitative research, as noted by (Fidel, 1993) and Marshall and Rossman (1999).

In the case of this research study, technology is changing all the time, continuously changing the way academics and educators do their work, and often times forcing them to change their attitudes and perceptions towards the changing nature of today's learner and their educational needs. Nonetheless, the question still remains, how reliable is the work and results of this study?

Looking at what was planned and what was done in the field; evaluating the effectiveness of the process of inquiry undertaken, as described and addressed in detail in the methodology section of chapter 3, one can confidently conclude that the work and results of this research project can be trusted and is indeed reliable.

4.22 CONFIRMABILITY

The concept of confirmability is the qualitative investigator's comparable concern to objectivity (Shenton, 2003), here the researcher ensures as far as possible that the work's findings are the result of the experiences and ideas of the participants, rather than his/her characteristics and preferences. Miles and Huberman (1994) consider a key criterion for confirmability as the extent to which the researcher admits his or her own predispositions [65]. Shenton (2003) and Brewer and Hunter (1989), again emphasise the role of triangulation in promoting confirmability, in this context to reduce the effect of investigator bias. As described in chapter 3, triangulation through mix-method approach was used to ensure not only the quality of the research study but also the objectivity that should accompany it.

Summary

Criticism of the kind of mixed mode approach adopted in this study will continue to be made, and it is also vital to admit the undeniable important role this criticism plays in ensuring that research studies such as this are not taken for granted or the quality thereof compromised.

Some of the attitudes and perceptions observed and recorded in this study correlate with the various studies done in the same university by various other researchers which also revealed few similar observations:

- Unisa academics require some training in the use of educational technology tools for teaching in ODL and e-learning environments as discovered in a study by Chetty (2012); Van den Berg, Joffe and Porto (2015); and Holomisa and Dube (2014).

- The high rate of complaints about the workload from the UMUC programme may be warranted, however, it may also be an indication that the Unisa academics are indeed not ready or well prepared for e-learning as was suggested in the study by Ncube, Dube and Ngulube (2014). Part of the problem may be that students are then involved in learning not only the content but also the technology; an analogous situation is when students study in a language that is not their home language.

- MyUnisa is not necessarily user friendly, and may affect the quality teaching of academics and hinder the learning process of the students, also revealed in the study of Ncube, Dube and Ngulube (2014).

- Most of the participants in this study revealed a great desire for the UMUC programme to be made compulsory for all Unisa academics, also revealing the admission of some of the academics that they are aware of the university's lack of skills to teach or learn through e-learning platforms. Therefore, those who went through the experience, tough as it was, believed that all other academics within the university can indeed benefit from the UMUC programme or similar partnerships, also indicated in the study by Van den Berg, Joffe and Porto (2015).

- High quality learner support and meaningful feedback from instructors might help students succeed, that there is an obvious need for efficient student support from both institutions – also for Unisa staff, this was also one of the findings in the research study by Van den Berg, Joffe and Porto (2015).

As a way of validation and quality assuring the research data collection instruments and the process of analysis and interpretation, the supervisor was constantly consulted as collection analysis processes unfolded. The participants that were interviewed were also consulted to check the accuracy of the transcripts and to check if the transcripts captured their true views and perceptions on the topic, also to allow further reflection

from reading their own responses and an opportunity to amend or add to their responses.

Ethical considerations

This study was conducted in accordance with all the necessary requirements of ethical considerations, this was done to recognise and protect the rights of research participants/subjects. The study followed the vigorous ethical clearance process at Unisa from which the ethical clearance and permission to collect data using Unisa students and staff, was granted (Annexure 2 and 3).

4.23 CONCLUSION

The results presented in this report were based on the data collected using a mixed-methods approach, from 60 staff members who participated in the UNISA-UMUC partnership programme. As Shenton (2003) warns, qualitative research results must be understood within the context of the particular characteristics of the institution. The results and interpretation of this study clearly answer the research question and also correlate with other similar studies within the same context as indicated above.

In the next chapter, discussions will be geared towards understanding in what ways the findings confirm, disconfirm, or extend knowledge in the discipline by comparing them with what has been found in the peer-reviewed literature and theory. The limitations to generalisability and/or trustworthiness that arose from execution of this study will also be discussed, and finally the recommendations for further research will be made.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1   INTRODUCTION

In the previous chapter, the results of the empirical study were tabulated and the findings of the study were discussed in detail. In this final chapter of the study, an outline of the conclusions drawn and the resulting recommendations are presented. The limitations encountered in conducting the study are also described and possible avenues for future research are mentioned. The chapter concludes with a summary of the value of this research study.

5.2   SUMMARY OF THE CHAPTER

The purpose of this study is to explore and study how educators' skills, knowledge and experience in e-learning can contribute to the successful achievement of the institution's and students' educational goals and to the design of a quality support system in an ODeL environment in a developing country. The objectives of the study were to:

- Explore how empathetic student support can improve the learning experience, (outcomes) or successful completion of studies for online teaching and learning in distance education and e-learning.
- Explore how educators' proficiency of ICT skills are necessary for the adoption of effective student support practices for online teaching and learning in distance education and e-learning, and;
- Investigate how academics/educators' own personal and individual experiences in e-learning affect their approach to students and student support in distance education and e-learning.

A mixed-method research approach was adopted. The target population was the Unisa academic staff members who enrolled for an e-learning programme with the University of Maryland between the year 2012 and 2014. The researcher used convenience non-

probability sampling. A total of 60 participants, mostly academics were invited to participate in the study, 50 participated in the online survey, and 6 were interviewed. The data-collection instrument was a semi-structured questionnaire and interview questions, which were piloted, and data analysis was done using IBM SPSS Statistics 23 program.

5.3   DISCUSSION OF FINDINGS OF THE STUDY

The first objective of the study, namely to explore how empathetic student support can improve the learning experience, (outcomes) or successful completion of studies for online teaching and learning in higher education, was met as the data revealed information about the respondents' perceptions and understanding towards empathetic support for successful teaching and learning.

5.3.1   Objective 1: Explore how empathetic student support can improve the learning experience, learning outcomes and/or successful completion of studies for online teaching and learning in distance education and e-learning

It is the premise of this study that educators cannot impart to students that which they do not possess, in this study this principle was supported as most of the participants in the study indicated that they now have a better understanding of the predicament faced by the students studying through distance learning and e-learning mode of delivery.

There is an Africa idiom that says, "One need not go through the fire to know that it will burn". However, sometimes, "tasting the medicine" may help those who prepare the "medicine" to continue improving the effectiveness and quality of their products. Hence, most of the participants further stated that the experience of being an online learning student had incredibly affected them as ODL educators, and they accordingly intended to be more empathetic towards their own students.

While it does not mean that the participants were not initially empathetic towards their students, most of the participants however, pointed to the empathetic support they received from the relevant UMUC staff and also indicated that they are now ready to create an empathetic learning environment for their own students at Unisa. Most of the

respondents that were interviewed indicated that they are more empathetic in their approach now than before they enrolled for the UMUC programme.

Instructors(s) were identified as the number one primary source of support for students, and the next was other students and other colleagues for those participants who were working and in the same programme, as in the case of Unisa.

5.3.2 Objective 2: Explore how educators' proficiency of ICT skills are then necessary for the adoption of effective student support practices for online teaching and learning in distance education and e-learning

The premise of this study is that educators cannot impart to students that which they do not possess, it has therefore become necessary for educators within institutions that offer online programmes to familiarize themselves with these environments and to acquire necessary skills before embarking on teaching online. It was found in this study that one of the most important key ingredients in the success of DE and e-learning is the skills of an educator, the basic technical knowledge on how to use technology to learn and to teach using educational technology. It was also found that facilitation skills have a major impact on the student's successful completion of online studies.

Use of technology in teaching and learning (synchronous and/or asynchronous), and inclusion of readily available information resources such as eBooks, journal articles, website links, OERs, and so on was also rated high in terms of facilitating learning in distance and e-learning environments (figure 4.6).

Educators' proficiency of ICT, rated higher than subject mastery, as most participants believed that they learnt more from their peers and other students during discussions and outside the 'classroom' than they learnt directly from the teachers. This could mean that teachers mainly presented the learning objectives and tasks and merely facilitated the discussions and thus, learning. It may be that most new learning comes through structured discussions of authentic artefacts and publications; facilitating this engagement has become the primary role of the online teacher rather than delivering content through, for example, a video lecture.

5.3.3 Objective 3: Investigate how academics/educators' own personal and individual experiences in e-learning affect their approach to students and student support in distance education and e-learning

This study suggests that institutions offer relevant support to their academic staff members will reap the benefits of well-supported students and thus, increased successful completions of studies by their students. Most participants had a better understanding of the support they needed to give to their students simply, because they also received that kind of support from their own instructors in the UNISA/UMUC programme. Institutions need to provide relevant and specific support needed by educators teaching and learning in distance education and e-learning environments.

Educators should continuously equip themselves with the necessary skills to effectively impact on today's learners. In order to deal with the problem of low student retention and high dropout rate, today's educators need to acquire relevant technical skills good enough to provide relevant support to the learners. If the teacher does not possess the necessary technical or pedagogical skills to teach at a distance or online, to accommodate this need, this is obviously to the detriment of the student and the institution. A lack of technical support staff can be costly (Olson, Cohen and Carlson, 2000).

5.4   OTHER RELEVANT KEY FINDINGS

As indicated in the previous chapter, some of the attitudes and perceptions observed and recorded in this study correlate with the various similar studies done in the same university by various researchers which also revealed similar observations, such as the studies by Van den Berg, Joffe and Porto (2015); Ncube, Dube and Ngulube (2014); Chetty (2012); and Holomisa and Dube (2014).

5.4.1   The overall course design and structure

The importance of pace, assignment due dates, use of rubrics, and turnaround time for feedback, built-in support, and appropriate assessment strategies were evident in the discussions. The UMUC programme workload was highly criticised by the Unisa staff

that enrolled for the programme under the partnership between UMUC and UNISA between 2012 and 2014. While most participants seem unhappy with the pace and structure of the course, some felt that it was useful in ensuring completion, and this was seen in the evaluation of the Unisa modules, in which students claimed that the pace and the relaxed mode of Unisa delivery was disabling them to complete their MEd studies on time.

5.4.2   Learning management systems

While the design of the LMS affects the smooth running of the course, it also affects the work of lecturers, facilitation of teaching and learning. The design of discussion forums can be especially inhibitory, thus sometimes causing confusion and/or misunderstanding. Unisa's academics found it difficult to navigate their way around LEO, UMUC's LMS, especially at the beginning of the course, but were later able to manoeuvre around the LMS, while the Unisa discussion forum design was highly criticised in contrast.

The structure and design of the LMS interface will to a certain extent, determine the success of a distance education online programme. According to the data collected, both quantitatively and qualitatively in this study, most participants emphasised the important enabling factor in an online programme of a well-designed and managed discussion forum. A well-designed and managed discussion forum would indeed help effectively facilitating interaction in distance education and e-learning, which is a necessary element to close the gap between learners and teachers.

5.4.3   Assessment strategies and Feedback

The turnaround time for feedback was very good and encouraging, the feedback was reported to have been thorough and detailed, and the use of rubrics and writing coaches by both institutions were singled out as very helpful and motivating, thus effective in ensuring successful completion of one's online studies. Rubrics assist and prepare the students for what is expected of them and encourage them to aim higher. The transparency was most appreciated by the participants, receiving their learning

objectives, assessment expectations and rubrics upfront at the beginning of the course/module was considered helpful and effective.

5.5   LIMITATIONS OF THE STUDY

The results presented in this report were based on the data collected using mix-methods approach, from 50 out of 60 staff members who participated in the UNISA-UMUC partnership programme between 2012 and 2014. As Shenton (2003) warned qualitative research results must be understood within the context of the particular characteristics of the institution, therefore the results of this study must be understood within the context of Unisa staff undertaking professional development through an external institution as well as through an additional internal learning process. The findings are therefore not necessarily generalisable to other contexts, although as noted there is a strong correlation with other related studies in the literature.

Although the study focused on a small group of participants, the participants came from various colleges within the university, and the data collected was from participants dispersed over three campuses within the university. The attitude and perceptions studied may be characterised to the institution, with caution.

However, despite these limitations, the results elicited important information that correlates with other similar studies both within and outside the university that could serve as a basis for further reflection and re-visiting the e-learning skill development strategies for staff to ensure the smooth transition into a fully online operated teaching and learning institution.

5.6   RECOMMENDATIONS

The following recommendations, which form part of the practical implications of practice, are offered for institutions and practitioners in the field of technology education in developing countries:

- Integrate support services in the distance education and e-learning programmes from the beginning to the end of the programme.
- The design of myUnisa LMS may need to be improved to effectively facilitate online teaching and learning, especially the discussion forums, which forms one of the major elements of e-learning.

Recommendations specific to Unisa

- UNISA may need to consider employing a full-time office for supporting those that enrol for the UNISA/UMUC programme and similar initiatives. This office may also require the support from the institution to enable smooth operation.
- Unisa may consider looking at the design and structure of its MEd programme, to harmonise it with the UMUC programme to retain the same morale, motivation and vigour to enable the students to complete both programmes in record time, also to increase output of completed MEd qualification, and thus increasing dialogue and research output in this field within Unisa.
- Further university in-depth studies would help in assessing the readiness of the academic staff members of the university to go online, and relevant skills development plan and support system designed for the academics and their support staff.
- The staff members that complete both parts of the programme need to strategically be co-opted in the research, discussions and projects within the university where the acquired skills can be immediately put to use in the institution.
- A platform should be created in which the staff members who completed the UNISA/UMUC programme can come together and share the information and their experiences to enable further assessment of the continued need of this kind of support and to ensure that their knowledge is put to use for the university's transition to ODeL.

Recommendations for further research

In light of the findings of this study, the researcher makes the following recommendations:

- Research should be undertaken on the use of rubrics as a motivating and support factor for students participating in distance education and e-learning.
- Research should be undertaken into the design and use of discussion forums for different kinds of audiences and programmes since this feature is probably the single greatest affordance of the online environment.

5.7   CONCLUSION

The researcher believes that the mixed-method research approach employed in this study was effective in addressing the aims and objectives. The themes and categories that arose were linked to the overall aim of the study, with a thorough literature study as a control and validating tool for the results.

The recommendations made in this study are intended as a guiding force to those educators who are interested in teaching and learning online, and to the institutions that are planning or implementing plans to offer their qualifications to students online, especially in developing countries. With the obvious blooming of educational technology, its benefits, and the serious problems of low student retention and high dropout, institutions ought to invest in the continuous development of their staff members.

It is hoped that this study will serve to stimulate further dialogue and research for institutions in developing countries and subsequent changes in the issues relating to the support of students studying in distance education and e-learning and those that teach them. As further research and dialogue unfolds, it is hoped that a greater knowledge base will be accumulated, which will ultimately guide practice and enhance learning experience of students studying in distance education and e-learning.

REFERENCES

Adeoye, B.F. & Tomei, L., 2014, *Effects of Information Capitalism and Globalization on Teaching and Learning,* Information Science Reference, USA.

Akyol, Z., Garrison, D. R. & Ozden, M. Y., 2009, *Online and blended communities of inquiry: Exploring the developmental and perceptional differences,* International Review of Research in Open and Distance Learning, 10(6), Retrieved from http://www.irrodl.org.

Alavi, M., 1994, *Computer-mediated collaborative learning: an empirical evaluation, MIS Quarterly*, *18*, 159–174. http://dx.doi.org/10.2307/249763.

Albrecht, D. & Ziderman, A. (1992). *Financing Universities in Developing Countries*. Population and Human Resources Department. Education and Employment Division background paper series; no. PHREE 92/61. Washington, D.C.: The World Bank.
http://documents.worldbank.org/curated/en/1992/08/437243/financing-universities-developing-countries

Allison, P. D., 2000, *Multiple imputation for missing data: A cautionary tale*. Sociological Methods and Research 28: 301-309.

Anagnostopoulos, D., Basmadjian, K.G. & McCrory, R. S., 2005, *The decentered teacher and the construction of space in the virtual classroom,* Teachers College Record, 107(8).

Anderson, T., and Garrison, D. R., 1995, *Transactional issues in distance education: The impact of design in audio teleconferencing*. American Journal of Distance Education*, 9*(2), 27 – 45.

Anderson, T. , 2003, *Modes of interaction in distance education: Recent developments and research questions*. In M. Moore (Ed.) *Handbook of Distance Education*. (p. 129-144). Mahwah, NJ.: Erlbaum.

Anderson, T., 2003, *Getting the mix right again: An updated and theoretical rationale for interaction,* The International Review of Research in Open and Distance Learning**, 4(2). Available from: http://www.irrodl.org/index.php/irrodl/article/view/149/230

Anderson, T. D. & Garrison, D. R., 1998, *Learning in a Networked World: New roles and responsibilities,* In C.C. Gibson (ed.), *Distance Learners in Higher Education: Institutional responses for quality outcomes*, 97-112, Madison, WI.: Atwood Publishing.

Anderson, T., Rourke, L., Garrison, D. R. & Archer, W., 2001, *Assessing teaching presence in computer conferencing context,* Journal of Asynchronous Learning Networks, 5(2), 1-17. Retrieved from http://www.aln.org/publications/jaln/v5n2/pdf/v5n2_anderson.pdf .

Anderson, T. & Dron, J., 2011, *Learning Technology through three generations of technology enhanced distance education pedagogy,* European Journal of Open, Distance and E-Learning, 2011 (2), Retrieved from http://www.eurodl.org/?article=523 .

Andrade, M. A., 2014, *Course-Embedded Student Support for Online English Language Learners. Open Praxis*, vol. 6 issue 1, January–March 2014, pp. 65–73

Annand, D., 2011, *Social Presence within the Community of Inquiry Framework, International Review of Research in Open and Distributed Learning*, Vol 12(5), Available from http://www.irrodl.org/index.php/irrodl/article/view/924/1855.

Arbaugh, J. B. & Hwang, A., 2006, *Does ―teaching presence‖ exist in online MBA courses?* The Internet and Higher Education, 9(1), 9−21.

Aydin, C. H. & Tasci, D., 2005, *Measuring readiness for e-Learning: Reflections from an emerging country.* Educational, Technology & Society, 8(4*),* 244-257, Available from http://www.ifets.info/journals/8_4/22.pdf.

Babbie, E., 2007, Conducting qualitative field research. In *The practice of social research* (11th ed.). U.S.A.: Thomson Wadsworth.

Baijnath, N., 2013, *Change, Discontinuity and Re-architecture at an ODL Mega-university,* University of South Africa.

Baltaci-Goktalay, S. & Ocak, M. A., 2006, *Faculty adoption of online technology in higher education.* The Turkish Online Journal of Educational Technology, *5(4)*, 37-43.

Bannan-Ritland, B., 2002. Computer-Mediated Communication, eLearning, and Interactivity: A Review of the Research. *Quarterly Review of Distance Education*, *3*(2), pp.161-79.

Barbero, M. J., 1987, *De los médios a las mediaciones: Comunicación, cultura e hegemonia.* Barcelona: Editorial Gustavo Frili.

Barron, A. E., Kemker, K., Harmes, C. & Kalaydjian, K., 2003*, Large-scale research study on technology in K-12 schools: Technology integration as it relates to the National Technology Standards*, Journal of Research on Technology in Education, 35, pp.489-507.

Bates, A.W., 1997, *Restructuring the University for Technological Change,* Available: http://bates.cstudies.ubc.ca/carnegie/carnegie.html

Bates, A.W. & Poole, G., 2003, *Effective Teaching with Technology in Higher Education: Foundations for Success* San Francisco: Jossey-Bass - See more at: http://www.tonybates.ca/2008/07/21/effective-teaching-with-technology-in-higher-education-foundations-for-success/#sthash.vzbv7QJF.dpuf

Bernath, U. & Vidal, V., 2007, *The Theories and the Theorists: Why Theory is Important for Research. Distances et savoirs*. (Distances and Knowledge), (3), pp 427–458.

Bertram, D., 2006, *Likert Scales.* Retrieved from http://poincare.matf.bg.ac.rs/~kristina//topic-dane-ikert.pdf CPSC 681 Topic Report, pp.1-10.

Bhattacharya, H., 2008, Research Setting, In Lisa M. Given (ed.), *The Sage Encyclopedia of Qualitative Research Methods,* pp. 788-789, Thousand Oaks, CA: SAGE Publications, Inc. doi: http://dx.doi.org/10.4135/9781412963909.n398

Blanton, H. & Jaccard, J., 2006, *Arbitrary metrics redux,* American Psychologist, 61(1), 62–71.

Blanton, H. & Jaccard, J., 2006, *Tests of multiplicative models in psychology: A case study using the unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept.* Psychological Review, 113, 155–169.

Birochi, R. & Pozzebon, M., 2011, *Theorizing in Distance Education: The critical quest for conceptual foundations.* Journal of Online Learning and Teaching, 7(4). Retrieved from http://jolt.merlot.org/vol7no4/birochi_1211.htm

Boston, W., Diaz, S., Gibson, A., Ice, P., Richardson, J., & Swan, K., 2009, *An exploration of the relationship between indicators of the community of inquiry framework and retention in online programs.* Journal of Asynchronous Learning Networks*, 13*(3), 67–83.

Borotis, S. & Poulymenakou, A., 2004, *E-Learning readiness components: Key issues to consider before adopting e-learning interventions*, In J. Nall & R. Robson

(eds.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, pp.1622-1629, Chesapeake, VA: AACE.

Bornt D., 2011, *Synopsis of Moore's Theory of Transactional Distance,* Retrieved from https://ci484-learning technologies.wikispaces.com/Transactional+Distance+Theory

Boyd-Dimock, V., & McGree, K. M., 1995, Leading change from the classroom: Teachers as leaders. *Issues about Change, 4* (4). Retrieved from http://www.sedl.org/change/issues/issues44.html

Boyd, R. D. & Apps, J. W., 1980, A conceptual model for adult education, In R. D. Boyd & J. W. Apps (eds.), Redefining the discipline of adult education, San Francisco: Jossey-Bass.

Braxton, S. N., 2000, *Empirical Comparison of Technical and Non-Technical Distance Education Courses to Derive a Refined Transactional Distance Theory as the Framework for a Utilization-Focused Evaluation Tool.* Unpublished Dissertation, The George Washington University, Washington.

Brewer, J. & Hunter, A., 1989. *Multimethod research: A Synthesis of styles,* Newbury Park, CA: Sage, DOI: 10.1002/nur.4770140212.

Brindley, J.E., 1995, *Learner and learner services: The key to the future in open distance learning;* in J.M. Roberts & E.M. Keough (eds).

Brindley, J.E., and Paul, R., 2004. The role of learner support in institutional transformation - A case study in the making. In J. E. Brindley, C. Walti, & O. Zawacki-Richter (Eds.), *Learner support in open, distance and online learning environments* Oldenburg: Bibliotheks- und Informationssystem der Universität Oldenburg: 39-50.

Brink, JB & Wood, MJ. 1998. *Advanced designs in nursing research*. 2nd edition. Thousand Oaks: Sage.

Brookfield, S. (1988). Conceptual, methodological and practical ambiguities in self-directed learning. In H. B. Long and Associates (Eds.), *Self-directed learning: Application and theory*. (pp. 11-37). Adult Education Department of the University of Georgia, Athens.

Bruner, J., 1960, *The Process of Education,* Cambridge, Massachusetts, Harvard University Press.

Bruso, J. L., 2001, *"A Comprehensive Orientation to Address Diverse Student Needs."* In C.Dalziel and M. Payne (eds.), *Quality Enhancing Practices in Distance Education: Student Services.* Washington, D.C.: Instructional Telecommunications Council.

Bull, K.S., Kimball, S.L., & Stansberry, S., 1998, *Developing interaction in computer mediated learning. Proceedings of the American Council on Rural Special Education, Charleston, SC, 18*, 210-217

Burgh, G. & Yorshansky, M, 2011, *Communities of inquiry: Politics, power and group dynamics,* Educational Philosophy & Theory*, 43*(5), 436-452. doi:10.1111/j.1469-5812.2007.00389.x

Burns, N. & Grove, S.K., 1993, *The practice of nursing research conduct, critique & utilization* (second edition), Philadelphia: W.B. Saunders.

Burns, R.B., 2000, *Introduction to research methods*, London: Sage.

Candy, P. C., 1991, *Self-Direction for Lifelong Learning.* San Francisco: Jossey-Bass.

Chen, Y. ,2001a, Transactional distance in World Wide Web learning environments. *Innovations in Education and Teaching International, 38*(4), 327-338. http://dx.doi.org/10.1080/14703290110074533

Chen, Y., 2001b, Dimensions of transactional distance in the world wide web learning environment: A factor analysis. *British Journal of Educational Technology, 32*(4), 459-470. http://dx.doi.org/10.1111/1467-8535.00213

Chen, C., Pedersen, S. & Murphy, K. L., 2011, *Learners' perceived information overload in online learning via computer-mediated communication,* Research In Learning Technology, 19(1), 101-116. doi:10.1080/21567069.2011.586678

Chene, A. (1983). The concept of autonomy: A philosophical discussion. *Adult Education Quarterly*, *34*, 38-47.

Chetty, D., 2012, *Challenges and prospects*: ICT-enhanced teaching and learning in the *College of Human Sciences* (UNISA).

Chetty, D., 2014, *(ICT)-Enhanced Teaching and Learning in the College of Human Sciences, University of South Africa*, J Communication, 5(1): 53-62.

Chongwony, 2008, *An investigation of social presence in postsecondary learners enrolled in online learning environment*, Available from http://rave.ohiolink.edu/etdc/view?acc_num=ohiou1199472454

Clark, R. E., 1994, *Media will never influence learning,* Educational Technology Research & Development, 42(2), 21-29. Available from http://www.usq.edu.au/material/unit/resource /clark/media.htm

Cohen, L., L., Manion, & Morrison, K., 2011, *Research Methods in Education*, London: Routledge.

Creswell, J.W. & Plano, Clark, V., 2007, *Designing and Conducting Mixed Methods Research.* Thousand Oaks, CA: Sage.

Creswell, J.W., 2003, *RESEARCH DESIGN: Qualitative, Quantitative, and Mixed Methods Approaches.*

Creswell, J. W., 2008, *Educational research: Planning, conducting and evaluating quantitative and qualitative research*, 3rd edn. Pearson, Upper Saddle River, New Jersey: Merrill/Prentice Hall.

Cresswell, K.M., Bates, D.W. & Sheikh, A., 2013, *Ten key considerations for the successful implementation and adoption of large-scale health information technology*, *Journal of the American Medical Informatics Association : JAMIA*, *20*(e1), 9–13. doi: 10.1136/amiajnl-2013-001684

Crowther, R. A., Kiselev, N. A., Bo¨ttcher, B., Berriman, J. A., Borisova, J. P., Ose, V., and Pumpens, P., 1994, *Three dimensional structure of hepatitis B virus core particles determined by electron cryomicroscopy*, *Cell* 77**,** 943–950.

Demiray, U. & Sharma, R. C., 2009, "*Ethical Practies and Implications in Distance Education: Lesson Learned"*, Chapter XXI, in: Demiray, Ugur and Sharma, Ramesh C. (eds.) Ethical practices and implications in distance learning. Information Science Reference (IGI Global), Hershey PA, USA, pp. 328–332. ISBN 978–1–59904–867–3, 2009, USA

Denzin, N.K., 1989, *The sociological interview*, In The Research Act: A Theoretical Introduction to Sociological Methods, New Jersey: Prentice Hall, 102-120.

Department of Higher Education and Training (DEHT). (2014). *Statistics on Post-School Education and Training in South Africa*: 2012. ISBN: 978-1-77018-711-5

Department of Higher Education and Training, *2013, White paper for post-school education and training:* Building an Expanded, Effective And Integrated Post-School System, Published by Department of Higher Education and Training, Pretoria.

Department of Higher Education and Training 2014, *White Paper for Post-School Education and Training:* Building An Expanded, Effective And Integrated Post-School System. ISBN: 978-1-77018-713-9

Department of Higher Education and Training 2014, *Policy for the provision of distance education in South African universities in the context of an integrated post-school system.* Government Notice. Available from www.gpwonline.co.za

Depover, C., Orivel, F., 2012, *Developing countries in the e-learning era* (Vol. 96). Paris: UNESCO IIPE.

Devlin, D., 2014, *Theory of Interaction and Communication.*

Dewey, J., 1933*, How we think.* Boston: D.C. Heath.

Dewey, J., 1938, *Experience and education*, New York: Collier Books.

Dewey, J., 1938, *Experience and education,* New York: Simon & Schuster. - See more at: https://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/Key-Theories-of-Lev-Vygosky-and-John-Dewey-Implications-for-Academic-Advising-Theory.aspx#sthash.Nn7IbaxP.dpuf

Dewey, J. & Bentley, A. F., 1949, *Knowing and the Known*, Boston: Beacon Press.

De Vos, A.S. (ed), 2001, *Research at grass roots: for the social sciences and human services professions*, 2nd ed. Pretoria: Van Schaik.

De Vos, A.S.; Strydom, H.; Fouché, C.B. and Delport, C.S.L., 2011, *Research at Grass Roots: For the Social Sciences and Human Service Professions:* 4th edition*.* Pretoria: Van Schaik Publishers

Dillon, C.L., Gunawardena, C.N. and Parker, R., 1992. Learner support: The critical link in distance education. *Distance Education*, *13*(1), pp.29-45.

Dodds, A. E., Lawrence, J. A., & Guiton, P., 1984, University students' perceptions of influences on external study. *Distance Education*, *5*(2), 174–185.

Doig, B. & Groves, S., 2011, *Japanese lesson study: Teacher professional development through communities of inquiry*, Mathematics Teacher Education and Development, *13*(1), 77-93. Retrieved from http://www.merga.net.au

Duranton, H., & Mason, A., 2011, Supporting students online: A case study of the MA in Translation at Bristol University. Bristol: School of Modern Languages.

Dwyer, D., Ringstaff, C. & Sandholtz, J., 1991, *Changes in teacher's beliefs and practices in technology-rich classroom, educational leadership,* 48 (8), 45-52.

Eastmond, D.V. 1995. Alone but together: Adult distance study through computer conferencing. Cresskill, NJ: Hampton.

Eastmond, D.V. 1998, *Adult Learners and Internet-Based Distance Education, In Adult Learning and The Internet*, edited by B. Cahoon, 33-41, New directions for adult and continuing education, 78. San Francisco: Jossey-Bass.

Education, Vilnius, 2005, Vol. 4 (2), pp 215–252 https://en.wikipedia.org/wiki/Edutech

Ellis, R.A., Ginns, P. & Piggott, L., 2009, *E-learning in higher education: Some key aspects and their relationship to approaches to study*, Higher Education Research & Development, 28(3). 303-318. Doi: 10.1080/07294360902839909

Empathy Library, 2014, *What is empathy?* Available from http://empathylibrary.com/what-is-empathy

Farha, N. W., 2009, *An exploratory study into the efficacy of learning objects*, The Journal of Educators Online, 6(2), 1-32.

Fidel, R., 1993, *Qualitative methods in information retrieval research*, Library and Information Science Research, 15(3), 219-247, Available from http://faculty.washington.edu/fidelr/RayaPubs/QualitativeMethodsinInformationR etrievalResearch.pdf.

Floyd, D., & Casey-Powell, D. (2004, Winter). *New roles for student support services in distance learning.* New Directions for Community Colleges, *Vol. 128*, 55-64. Retrieved from: http://faculty.ed.uiuc.edu/abenson/472cc/W4articles/ floyd_chap7.pdf

Fouche, C.B. & Delport, C.L., 2002, *Introduction to the research process* (77-92), In De Vos, A.S. (Ed.), *Research at grass roots: for the social sciences and human services professions*, 2nd edn. Pretoria: Van Schaik.

Friese, S., 2012, Qualitative Data Analysis with ATLAS.ti, SAGE Publications Ltd; Edn. 1.

Garrison, D. R., 1998, *Understanding distance education: A framework for the future,* London: Routledge.

Garrison, D. R., 2009*, Communities of inquiry in online learning: Social, teaching and cognitive presence*, In C. Howard et al. (eds.), Encyclopedia of distance and online learning [E-reader version] (2nd edn. pp. 352-355). Hershey, PA: IGI Global.

Garrison, D. R., Anderson, T. & Archer, W., 2000, *Critical inquiry in a text-based environment: Computer conferencing in higher education*, The Internet and Higher Education, 2 (2-3), 87-105. Retrieved from http://communitiesofinquiry.com/sites/communityofinquiry.com /files/Critical_Inquiry_model.pdf

Garrison, D.R., Anderson, T. & Archer, W., 2000, *Critical inquiry in a text-based environment: Computer conferencing in higher education*, The Internet and Higher Education, 2(2-3), 87-105.

Garrison, D.R., Anderson, T. & Archer, W., 2001, *Critical thinking, cognitive presence, and computer conferencing in distance education*. American Journal of Distance Education, 15(1), 7-23.

Garrison, D.R. & Arbaugh, J.B., 2007, *Researching the community of Inquiry Framework: Review, Issues, and Future Directions*, The Internet and Higher Education, 10(3), 157-172.

Garrison, D. R., & Shale, D., 1987, *Mapping the boundaries of distance education: Problems in defining the field*. The American Journal of Distance Education, 1(1), 7-13.

Garrison, D. R. & Vaughan, N., 2008, *Blended Learning in Higher Education*, San Francisco: Jossey-Bass.

Garrison, D. R., 2009, "*Communities of inquiry in online learning: Social, teaching and cognitive presence"*. In C. Howard et al. (Eds.), *Encyclopedia of distance and online learning* [E-reader version] (2nd ed., pp. 352-355). Hershey, PA: IGI Global.

Giossos, Y., Koutsouba, M., Lionarakis, A. & Skavantzos, K., 2009, *Reconsidering Moore's transactional distance theory*, The European Journal of Open, Distance and E-Learning, 2, Retrieved from http://www.eurodl.org/?article=374

Given, L. M., (ed.), 2008, *The Sage Encyclopedia of Qualitative Research Methods*. Sage: Thousand Oaks, CA, 2. 697-698.

Gokool-Ramdoo, S., 2008, *Beyond the Theoretical Impasse: Extending the applications of Transactional Distance Theory*, The International Review of Research in Open and Distance Learning, *9* (3). Retrieved from http://www.irrodl.org/index.php/irrodl /article/view/541/1148

Government Notice, 7 July 2014, *Policy for the provision of distance education in South African universities in the context of an integrated post school system*, Department of Higher Education and Training. No. 37811,

Government Gazette 26 November 2013, Contents, Act No. 4 of 2013: *Protection of Personal Information Act*, 2013, Accessible from www.justice.gov.za/legislation/acts/2013-004.pdf

Government Gazette 19 February 2015, *Contents, Minimum Requirements for Teacher Education Qualifications*, 2011, Available on http://www.che.ac.za /media_and_publications/documents-interest/joint-dhet-che-communiqu-implementation-new-policy-teacher

Govindsamy, T. 2002. Successful implementation of e-learning: pedagogical considerations. *Internet and Higher Education,* 4:287-299

Guba, E.G., 1981, *Criteria for Assessing the Trustworthiness of naturalistic inquiries*. Educational Communication and Technology, Vol. 29, No. 2, pp. 75-91, Available on http://www.jstor.org/stable/30219811

Guba, E. G., & Lincoln, Y. S., 1981, *Effective evaluation*. San Francisco, CA: Jossey-Bass Publishers.

Guest, G., MacQueen, K. M. & Namey, E.E., 2012, *Applied Thematic Analysis,* SAGE Publications, Inc.

Gunawardena, C. N., & McIsaac, M. S., 2004, *"Distance education".* In D. H. Jonnassen (Ed.), Handbook of research for educational communications and technology (2nd ed., pp. 355-431). Mahwah, NJ: Erlbaum.

Hesse-Biber, S., 2010, Analyzing Qualitative Data: With or without software, Available from http://www.bumc.bu.edu/crro/files/2010/07/Hesse-Bieber-4-10.pdf

Holmberg, B., 2004, September, The empathy approach to distance education, [Lecture video]. Available from http://marconi.umuc.edu/ramgen/GSMT/omde/2004holmberg.rm. Transcript:http://polaris.umuc.edu/mts/MDE/Holmberg-transcript.cod

Holmberg, B., 2006, *The Peters-Moore-Holmberg theory debate,* Retrieved from http://www.eden-online.org/system/files/Borje_Holmberg.pdf

Holmberg B., Schuemer R. & Obermeier A., 1982, *Zur Effizienz des gelenkten didaktischen Gespräches* (with a summary in English). Hagen: FernUniveität, ZIFF.

Holomisa, T. & Dube, L., 2014, *Reflections on the Readiness of the University of South Africa Eastern Cape Region for the Deployment of E-Learning*, Mediterranean Journal of Social Sciences. 5(14), 290-297. Doi:10.5901/mjss.2014.v5n14p290

Holomisa, Thunyelwa, Dube & Luyanda. *Reflections on the Readiness of the University of South Africa Eastern Cape Region for the Deployment of E-Learning*. Mediterranean Journal of Social Sciences, [S.l.], v. 5, n. 14, p. 290, Jul. 2014. ISSN 2039-2117. Available at: http://www.mcser.org/journal/index.php/mjss/article/view/3155

Hudalla, J., 2005, *Transforming My Curriculum, Transforming My Classroom: Paulo Freire, James Banks, and Social Justice in a Middle School Classroom*, Available from http://www.edchange.org/multicultural/papers/hudalla.pdf.

Ice, P. (2010). The future of learning technologies. In D. R. Garrison, & M. Cleveland-Innes, (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 137–164). New York: Routledge.

Immerwahr, J., Johnson, J., and Gasbarra, P. (2008), *The Iron Triangle: College Presidents Talk about Costs, Access, and Quality*. The National Center for Public Policy and Higher Education and Public Agenda

Isaacs, S., 2007, ICT in education in South Africa, June 2007, *Survey of ICT and Education in Africa: South Africa Country Report.*

Jabareen, Y., 2009, *Building a conceptual framework: Philosophy, definitions, and procedure*. International Journal of Qualitative Methods, 8(4), pp 49-62.

Jacklin, A., & Le Riche, P., 2009, *Reconceptualising student support: from 'support' to 'supportive'*, Studies in Higher Education, 34:7, 735-749, DOI:10.1080/03075070802666807

Jacquinot-Delaunay, G.,1998, *O que é um educomunicador?* University of São Paulo. São Paulo, Brazil.

Jefferies, P., Grodzinsky, F., & Griffin, J., 2003, *Advantages and problems in using information communication technology to support the teaching of a multi-institutional computer ethics course.* Journal of Educational Media*, 28*(2/3), 191-202.

Jereb, E. & Šmitek, B., 2006, *Applying Multimedia Instruction in E-Learning*, Innovations in Education and Teaching International, v43 n1 p15-27.

John, V., 2013, Dropout rate points to lack of support. Available on http://mg.co.za/article/2013-05-17-dropout-rate-points-to-lack-of-support

Johnston, V., & Simpson, O., 2006, *Retentioneering higher education in the UK: Attitudinal barriers to addressing student retention in universities.* Widening Participation and Lifelong Learning*, 8*(3).

Jones, C.A., 2001, *Teach Support: Preparing teachers to use technology*, Principal Leadership, 1(9), 35-39.

Jones, A., 2004, *A Review of the Research Literature on Barriers to the Uptake of ICT by Teachers*, British Educational Communications and Technology Agency, Available from http://www.becta.org.uk.

Jones, R 2008, 'Widening Participation - Student retention and success', Research Synthesis for the Higher Education Academy: http://www.heacademy. ac.uk/observatory/themes/widening-participation/observatory/summary/detail/ student_retention_and_success

Karmakar, C.K. & Wahid, C.M., 2009, *Recommendations for Bangladesh towards e-learning readiness*, Department of Computer Science, Shah Jalal University of Science and Technology, Available from http://www.codewitz.net/papers/MMT_97-102_Karmakar_Wahid%20.pdf

Kaur, K. & Abas, ZW. 2004. An assessment of e-learning readiness at the Open University Malaysia. Proceedings of the International Conference of e-learning. University of Quebec at Montreal, Canada, 22-23 June 2004.

Kearsley, G., 2000, *Online education: Learning and teaching in cyberspace,* Belmont, CA: Wadsworth/Thomson Learning

Kelly, P. & Mills, R., 2007, T*he ethical dimensions learner support.* Open Learning*,* 22(2):149-147. New York: Routledge.

Khan, A.W., 2012, *Continuing Professional Development (CPD); What should we do?* Bangladesh Journal of Medical Education, vol.1 (1), pp. 37-44.

Kigotho, W., 2013, *Demand drives growth of open learning in East Africa.* University World News Africa Edition Issue 114.

Kirkwood, A. & Price, L., 2006, *Adaptation for a Changing Environment: Developing learning and teaching with information and communication technologies*, The International Review of Research In Open And Distance Learning, *7*(2), 1-14. Available from http://www.irrodl.org/index.php/irrodl/article/view/294/624

Knowles, M., 1970, *The Modern Practice of Adult Education*, New York: Association Press.

Konayuma, G. S., 2012, *A Critical Discourse Analysis of e-Learning Policies in Education and Training in Zambia.* [Presented at 5th eLearning Africa Conference, Mulungushi International Conference Centre, Lusaka, Zambia, 2011]

Kozma, R.B., 2003, Technology and classroom practices: An international study. *Journal of Research on Technology in Education,* 36(1), 1-5. Available from http://www.springerlink.com/ (ez1c1o45dc12ng554050akef)/app/home/ contribution.asp?referrer=parent&backto=issue, 2, 12; journal, 6, 50; linking publication results, 1:119965, 1

Krauss, F., & Ally, M. (2005). A study of the design and evaluation of a learning object and implications for content development. *Interdisciplinary Journal of Knowledge and Learning Objects, 1,* 1-22. Retrieved August 4, 2005 from http://ijklo.org/Volume1/v1p001-022Krauss.pdf

Kupczynski, L., Ice, P., Weisenmayer, R., & McCluskey, F. (2010). Student perceptions of the relationship between indicators of teaching presence and success in online courses. *Journal of Interactive Online Learning, 9*(1), 23–43.

Kurilovas, E., 2005, "Several aspects of technical and pedagogical evaluation of virtual learning environments". *Informatics in Education*, Vilnius, 2005, Vol. 4 (2), pp 215–252 https://en.wikipedia.org/wiki/Edutech

Lane, A., 2014, *Placing Students at the Heart of the Iron Triangle and the Interaction Equivalence Theorem Models.* Journal of Interactive Media in Education, 2014(2): 5, pp. 1-8, DOI: http://dx.doi.org/10.5334/jime.ac

Lave, J. & Wenger, E., 1991, *Situated learning. Legitimate peripheral participation*, Cambridge: Cambridge University Press

Leacock, T. L., & Nesbit, J. C., 2007, *A Framework for Evaluating the Quality of Multimedia Learning Resources.* Educational Technology & Society, *10*(2), 44-59.

Learning Architecture Online (nd). *New directions for distance education and the design studio.* Available from http://home.comcast.net/~abstover/learning_arch/learning_arch_05.html

Lee, J., Cho, H., Gay, G., Davidson, B. & Ingraffea, A., 2003, *Technology acceptance and social networking in distance learning*, Educational Technology & Society, *6(2),* 50–61.

Lentell, H., 2003, *The importance of the Tutor on Open and Distance Learning; a chapter in: Rethinking Learner Support in Distance Education, Change and continuity in an international context*, London: Tait A. & Mills R. Routledge Falmer (Eds).

Levine J.H., 1996, *Introduction to data analysis: the rules of evidence*, Macintosh HD: DAXII (6)

Levy, S., 2003, *Six Factors to Consider when Planning Online Distance Learning Programs in Higher Education*, Online Journal of Distance Learning Administration, 6 (1), Available from http://www.westga.edu/~distance/ojdla/spring61/levy61.htm

Levine, J.H. & Roos, T.B., 2002, *What Is Data Analysis?* (ed). Introduction to data analysis: the rules of evidence. Macintosh HD: DA: DA XI: Volume I:006 Intro (What is the wealth?).

Lichtman, M., 2009, Qualitative Research in Education: A User's Guide. Sage Publications, Inc.; 2nd edn.

Ligon, G., 2013, *Data quality,* Accessed from http://www1.pgcps.org/dataquality/home.htm

Lofland, J., Snow, D., Anderson, L. & Lofland, L.H., 2006, *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis,* Canada: Thomson Wadsworth.

Lowell, N. O. 2004, *An investigation of factors contributing to perceived transactional distance in an online setting.* Published doctoral dissertation, University of Northern Colorado.

Lynch, D., 2002, *Professors should embrace technology in courses.* Chronicle of Higher Educatio*n.* p. B15.

Maree, Kobus (ed.). 2007. *First Steps in Research.* Pretoria: Van Schaik

Marks, R. B., Sibley, S. D.,&Arbaugh, J. B. (2005).Astructural equation model of predictors for effective online learning. *Journal of Management Education, 29*, 531–563.

Marshall, C.G. & Rossman B., 1999, *Designing qualitative research*, 3rd edn. London: Sage Publications.

Mason, T., Pegues, J., Taylor, C. & Gresdo, D., 2011, Bullying in the Higher Education Classroom: Face-to-face and online, In M. Koehler & P. Mishra (eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2011* (pp. 508-512). Chesapeake, VA: AACE. Retrieved from http://www.editlib.org/p/36319

Massy, W.F. & Zemsky, R., 1995, *Using Information Technology to Enhance Academic Productivity*, Available from https://net.educause.edu/ir/library/html/nli0004.html

Mbwesa, J.K., 2014, *Transactional Distance as a Predictor of Perceived Learner Satisfaction in Distance Learning Courses*: A Case Study of Bachelor of Education Arts Program, University of Nairobi, Kenya. Journal of Education and Training Studies, 2(2). doi:10.11114/jets.v2i2.291

McLendon, E. and Cronk, P. 1999. Rethinking Academic Management Practices: A case of meeting new challenges in online delivery. *Online Journal of Distance Learning Administration.* 2(1). Retrieved from http:www.westga.edu/~distance/mclendon21.html)

McNamara, E., 1994, *Sex, suicide and the Harvard psychiatrist*, New York: Pocket Books.

McMillan, J. H., & Schumacher, S., 2001, *Research in Education. A Conceptual Introduction,* (5th ed.). New York: Longman.

Merriam, S.B., 1998, *Qualitative research and case study applications in education*, Jossey-Bass, San Francisco.

Merriam, S.B., 2009, *Qualitative research: A guide to design and implementation*, San Francisco: John Wiley and Sons.

Meyer, K.A., 2004, *Evaluating online discussions: Four different frames of analysis.* Journal of Asynchronous Learning Networks 8, no. 2: 101–14.

Mezirow, J., 1981. A critical theory of adult learning and education. *Adult education quarterly*, *32*(1), pp.3-24.

Mezirow, J., 1985, *A critical theory of self-directed learning.* New Directions for Adult and Continuing Education, *1985*(25), pp.17-30.

Miles, M.B. & Huberman, A.M., 1994, Qualitative Data Analysis (2nd edition). Thousand Oaks, CA: Sage Publications.

Mills, G. E., 200, *Action Research: A Guide for the Teacher Researcher* (3rd edn.), Upper Saddle River, New Jersey: Pearson Education, Inc.

Modise, M.P., 2014, *Perceptions of the effectiveness of internet marketing strategies for new students in an ODL institution*, [Master's Paper]. University of South Africa.

Moore, M.G., 1989, Editorial: *Three types of interaction*, American Journal of Distance Education, 3:2, 1-7, DOI: 10.1080/08923648909526659.

Moore, M., 1993, Theory of Transactional Distance, in D. Keegan (ed.). *Theoretical Principles of Distance Education* (pp. 22–38). London: Routledge.

Moore, M.G., 1989, *Three types of interaction*, [Editorial]. The American Journal of Distance Education 3 (2), 2-6.

Moore, M.G., 1991, *Distance education theory*. [Editorial]. The American Journal of Distance Education, 5(3). *add page range*

Moore, M.G., 2007, *The handbook of distance education,* (2nd edn). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Moore, M. G., 2007, The theory of transactional distance. In M. G. Moore (ed.), *Handbook of distance education* (pp. 89-105). Mahwah, NJ: Lawrence Erlbaum Associates.

Moore, M.G., & Kearsley, G., 1996, *Distance Education: A systems view.* Belmont, CA: Wadsworth.

Moore, M.G., & Kearsley, G., 2005, *Distance education: A systems view*, New York: Thomson Wordsworth.

Moore, M.G., & Kearsley, G., 2012, *Distance education: A systems view of online learning*, USA: Wadsworth-Cengage Learning.

Morse, J. M., 2007, Qualitative researchers don't count, *Qualitative Health Research*, *17*(3), 287. Doi: 10.1177/1049732306297322

NADEOSA. 2005, *Learner Support Quality Criteria*. Retrieved from http://www.oerafrica.org/supporting-distance-learners/learner-support

Ncube, S., Dube, L., & Ngulube, P., 2014, *E-Learning readiness among academic staff in the Department of Information Science at the University of South Africa*, Mediterranean Journal of Social Sciences. DOI: 10.5901/mjss.2014.v5n16p357

Ncube, S.; Dube, L., & Ngulube, P., E-Learning Readiness among Academic Staff in the Department of Information Science at the University of South Africa. Mediterranean Journal of Social Sciences, [S.l.], v. 5, n. 16, p. 357, Jul. 2014. ISSN 2039-2117. Available at: http://www.mcser.org/journal/index.php/mjss/article/view/3316

Ngengebule, A.T., Molatlhegi, M.M., Tshaka, N.N. & Mamadisa, S., 2007, *Tutorial Services, Discussion Classes and Work integrated Learning (TSDL): Tutor handbook.* Unisa Press. South Africa.

Nipper, S., 1989, Third generation distance learning and computer conferencing, in A. Kaye & R. Mason. (eds.). *Mindweave, Communication, Computers and Distance Education* (pp. 63–73). Oxford: Pergamon.

Open University, 2013, *Facts and figures*, Retrieved from http://www.open.ac.uk/about/main/the-ou-explained/facts-and-figures

Palloff, R.M. & Pratt, K., 1999, *Building learning communities in cyberspace: effective strategies for the online classroom*, Jossey-Bass, San Francisco

Palloff, R. M. & Pratt, K., 2001, *Lessons from the cyberspace classroom: The realities of online teaching*, San Francisco, CA: Jossey-Bass.

Palloff, R. M. & Pratt, K.P., 2005, *Online learning communities revisited*, Paper presented at the 21st Annual Conference on Distance Teaching and Learning, Madison, WI.

Parker, M. (2009, Nov. 5th). Identifying at risk online students. *Academic Impressions.* Retrieved from: http://www.academicimpressions.com/news/identifying-risk-online-students

Parker, A., 1999, Interactivity in Distance Education: The critical conversation, *The Journal of Educational Telecommunications.8,* 15 – 30.

Parker, R.E., Bianchi, A. & Cheah, T.Y., 2008, Perceptions of instructional technology: Factors on influence and anticipated consequences, *Educational Technology & Society*, 11(2), 274-293.

Patten, M.L., 2004, *Understanding research methods*, (4th ed.), Glendale, California: Pyrczak Publishing.

Paul, R.H., 1998, "*Open universities - the test of all models* ", In K. Harry, et al (eds.) Distance Education: New Perspectives, London: Routledge.

Peters, O., 2001, *Learning and teaching in distance education: Analysis and interpretations from an international perspective*. Routledge. London and New York.

Peters, O., 1983, *"Distance teaching and industrial production: A comparative interpretation in outline*". In D. Seward, D. Keegan, & B. Holmberg (Eds.), *Distance education: International perspectives* (pp. 95–113). New York: Routledge.

Piaget, J., 1971, *Insights and illusions of philosophy*, New York: Meridian Books

Poleyseugenio, 2014, *Writing thesis chapters 1-3 guidelines*, Accessed on http://www.slideshare.net/poleyseugenio/writing-thesis

Polit, D.F. & Hungler, B.P., 1993*, Nursing research: Principles and methods*, 3rd edition. Philadelphia: Lippincott.

Punch, K.F., 2009, Introduction to Research Methods in Education, SAGE Publications Ltd. London. pp 287–303 [chapter]

Rashid, N., & Rashid, M.,2011, Issues and problems in distance education. *Turkish Online Journal of Distance Education, 12*(4).

Reigle, R.R., 2007, *The Online Bully in Higher Education,* Retrieved from http://www.eric.ed.gov/PDFS/ED495686.pdf

Richey, R.C. & Klein, J.D., 2007, *Design and development research,* New Jersey, USA: Lawrence Erlbaum Associates, Inc.

Richey, R.C. & Klein, J.D., 2014, *Design and Development Research: Methods, Strategies, and Issues*, Rouledge, New York.

Roberts, D., 2006, *Governance in Higher Education in South Africa: A transformation and development perspective*. Paper presented at The Fourth Pan-Commonwealth Forum on Open Learning (PCF4). Retrieved from http://pcf4.dec.uwi.edu/viewabstract.php?id=74

Robson, C., 1993, *Real world research: a resource for social scientists and practitioner researchers*, Blakewell, Cambridge, USA, ISBN 0631176896

Rogers, D., 2000, *A paradigm shift: Technology integration for higher education in the new millennium*, Educational Technology Review, Spring/Summer 19-33.

Rogers, E.M., 1995, Diffusion of innovations (4th ed.). New York: The Free Press.

Rogers, E.M., 2003, *Diffusion of innovations* (5th ed.). New York: Free Press.

Rossi, P.H., Wright, J.D. & Anderson, A.B., 1989, (ed.), *Handbook of Survey Research, New York: Academic Press*

Rumble, G., 1997. *The Costs and Economics of Open and Distance Learning*, London: Kogan

Salomon, G., 1981, Communication and Education. Beverly Hills , CA : Sage.

Saldana, J., 2013, The Coding Manual for Qualitative Researchers (2nd edn), SAGE Publications Ltd. London.

Sangrà, A., Vlachopoulos, D. & Cabrera, N., 2012, Building an inclusive definition of e-learning: An approach to the conceptual framework, *The International Review of Research in Open and Distance Learning, 13*(2), 145-159. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/1161

SAIDE,1995, Open learning and distance education in South Africa. Report of an International Commission, January - April, 1994.

SAIDE, 2014, PHEA-ETI Strategic Objectives. Available from http://www.saide.org.za/phea

Schneider, S.M. and Foot, K.A., 2005, Web sphere analysis: An approach to studying online action. *Virtual methods: Issues in social research on the Internet*, pp.157-170.

Shea, P. & Bidjerano, T., 2009, Community of inquiry as a theoretical framework to foster "epistemic engagement" and "cognitive presence" in online education, Computers and Education, 52(3), 543−553.

Shearer, R.L., 2009, Transactional distance and dialogue: An exploratory study to refine the theoretical construct of dialogue in online learning, [Dissertation]. Available from https://etda.libraries.psu.edu/paper/10196/5490.

Shelly, B.G., Gunter, G.A. & Gunter, R.E., 2010, Teachers Discovering Computers: Integrating Technology in a Connected World, 6th Edition. United States of America.

Seng, S.H., 1997, *Using Mediated Learning Experiences To Enhance Children's Thinking.* [Conference Papers]. Retrieved from http://files.eric.ed.gov/fulltext/ ED406052.pdf.

Sewart, D., 1992, Student Support Systems, in Distance Education for the Twenty-First Century: Selected papers from the 16th World Conference of the International Council for Distance Education. Thailand.

Sewart D., Keegan D. and Holmberg B., (eds), *Distance education, International perspectives*, Beckenham: Croom Helm, 1983.

Shenton, A.K., 2003, *Strategies for ensuring trustworthiness in qualitative research projects*, Education for Information, 22, 63–75

Shenton, A.K., 2004, *Strategies for ensuring trustworthiness in qualitative research projects*, Education for Information 22 63–75.

Shin, N., and Kim, J., 1999, An exploration of learner progress and drop-out in Korea National Open University. *Distance Education, 20*(1), 81 – 95.

Simonson, M., Smaldino, S., Albright, M. & Zvacek, S., 2012, *Teaching and Learning at a Distance: Foundations of distance education* (5th ed.). Boston, MA: Pearson.

Simpson, O., 2000, *Supporting Students in Open and Distance Learning.* London: Kogan Page.

Simpson, O., 2013, *Student retention in distance education: are we failing our students?*, Open Learning: The Journal of Open, Distance and e-Learning, 28:2, 105-119, DOI:10.1080/02680513.2013.847363

Simpson, O., 2008, *'Motivating learners in open and distance learning: do we need a new theory of learner support?'*,Open Learning: The Journal of Open and Distance Learning,23:3,159 — 170 To link to this Article: DOI: 10.1080/02680510802419979

Simpson, C. and Gibbs, G. (2004). I*mproving student progress and retention through tutor interventions: evidence from large scale experiments at the Open University (UK).* Paper delivered at the 21st ICDE World Conference on Open and Distance Education: Hong Kong.

South African Institute for Distance Education (SAIDE), 2014, Learner Support. Available from http://www.saide.org.za/learner-support

Street, H., 2010, *Factors Influencing a Learner's Decision to Drop-Out or Persist in Higher Education Distance Learning. Online Journal of Distance Learning Administration, 13*(4). Retrieved from http://www.westga.edu/~distance/ojdla/winter134/street134.html

Strijbos, J.W., Martens, R.L., Jochems, W.M. and Broers, N.J., 2004, The effect of functional roles on group efficiency using multilevel modeling and content analysis to investigate computer-supported collaboration in small groups. *Small Group Research*, *35*(2), pp.195-229.

Strijbos, J.W., Martens, R.L. and Jochems, W.M., 2004, Designing for interaction: Six steps to designing computer-supported group-based learning. *Computers & Education*, *42*(4), pp.403-424.

Sugar, W., Crawley, F. & Fine, B., 2004, Examining teachers' decisions to adopt new technology, *Educational Technology and Society*, 7 (4), 201-213.

Swan, K., 2010, Post-industrial distance education. In R. Garrison & M. Cleveland-Innes (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 108–134). New York: Routledge.

Swan, K., Garrison, D. R. & Richardson, J.C., 2009, A constructivist approach to online learning: The community of inquiry framework, In C. R. Payne (Ed.), *Information*

technology and constructivism in higher education: Progressive learning frameworks (pp. 43-57). Hershey, PA: IGI Global.

Sweet, R., 1993, *Perspectives on distance education series: Student support services: Towards more responsive systems - Report on a Symposium on Student Support Services in Distance Education,* Delhi, Vancouver, Canada: Commonwealth of Learning.

Tait, A., 2000, *Planning Student Support for Open and Distance Learning*, Open Learning*, 15*(3), 287–299.

Tait, A., 2003, *Reflections on Student Support in Open and Distance Learning*, International Review of Research in Open and Distance Learning, 4(1). Retrieved from http://www.irrodl.org/index.php/irrodl/issue/view/15

Tait, A., 2004, *Management of Services to Students*, In Jane E. Brindley, Christine Walti & Olaf Zawacki-Richter, (Ed.), Learner Support in Open, Distance and Online Learning Environments. Oldenburg: BIS-Verlag der.

Taite, S.M., 2012, *A comparison of online communities of inquiry. Electronic Theses, Treaties and Dissertation.* Paper 5221. *Available form http://diginole.lib.fsu.edu/etd*

Tait, A., 2014, On Institutional Models and Concepts of Student Support Services; The Case of the Open University UK, in J. E. Brindley, C. Walti & O. Zawacki-Richter (Eds.). *Learner Support in Open, Distance and Online learning Environments* (pp. 283–293). Oldenburg, Germany:BIS-Verlag der Carl von Ossietzky Universität.

Tait, A., 2014, From Place to Virtual Space: Reconfiguring Student Support for Distance and E-Learning in the Digital Age, Open Praxis, vol. 6 issue 1, pp. 5–16

Taite, S.M., 2012, *A comparison of online communities of inquiry, Electronic Theses, Treaties and Dissertation.* Paper 5221. *Available form http://diginole.lib.fsu.edu/etd*

Tesch, R., 1990, Qualitative research: Analysis types and software tools. New York:

Falmer.

The Commonwealth of Learning 2005, *Researching tutoring and learner support.* PREST 2005

Thurmond, V. A., Wambach, K., Connors, H. R. & Frey, B. B., 2002, *Evaluation of student satisfaction: Determining the impact of a Web-based environment by controlling for student characteristics,* The American Journal of Distance Education, 16, 169-189. http://dx.doi.org/10.1207/S15389286AJDE1603_4

Thweatt, K. S., & McCroskey, J.C., 1996, *Teacher non-immediacy and misbehavior: Unintentional negative communication*, Communication & search reports*,* 13, 198-204.

Unisa Open and Distance Learning Policy, 2008, Available from http://www.unisa.ac.za/default.asp?Cmd=ViewContent&ContentID=23215

UNISA, 2003, *Tutor Skills Development*, Department of Student Support, UNISA (2003). Procedures Manual

UNISA, 2014, *Going the distance in a digital age*, Available from http://www.unisa.ac.za/news/index.php/2014/10/going-the-distance-in-a-digital-age/

Unisa Directorate: *Instructional Support and Services* (DISS 2012), Who are the tutors in the tutorial programme? Available from http://www.unisa.ac.za/default.asp?Cmd=ViewContent&ContentID=19279

Unisa., 2014, About Unisa. http://www.unisa.ac.za/default.asp? Cmd= View Content&ContentID=3

Unisa's strategic plan., 2015, Retrieved from http://www.unisa.ac.za/cmsys/staff/strategic_planning/docs/unisa _2015_strategicplan_nov_final.pdf

Unisa Tuition Policy retrieved from http://www.unisa.ac.za/cmsys/staff/contents/departments/tuition_policies/docs/Tuition%20Policy%20-%20rev%20appr%20-%20Council%20-%2005.04.2013.pdf

Unisa Tutor model retrieved from http://www.unisa.ac.za/cmsys/staff/contents/departments/tutservices/docs/UNISA_Tutor_Model.pdf

Vagia W M .2006. *Likert-type scale response anchors*. Clemson International Institute for Tourism and Research Development, Department of Parks, Recreation and Tourism Management. Clemson University

Valcke, M. 2002. *Cognitive load: Updating the theory*? Learning and Instruction 12: 147–54.

Van den Berg, G., Joffe, M., & Porto, S., 2015, *The role of an international partnership in developing academic capacity in open distance learning.* Paper presented at the ICDE 2015 world conference. Sun City, South Africa

Van Zyl, D & Barnes, D., 2012, *An institutional profile of Unisa: Unisa facts & figures.* Department of Institutional Statistics & Analysis.

Vygotsky, L. S., 1978, *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press

Wallen, N.E. & Fraenkel, J.R., 2001, *Educational research: A guide to the process* (2nd ed.), Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Weller, M. & Anderson, T., 2013, *Digital Resilience in Higher Education*, European Journal of Open, Distance and E Learning, 2013(1), Retrieved from http://www.eurodl.org/?article=559

West, G.B., 1999, *Teaching and Technology in Higher Education: Changes and challenges*, Adult Learning, 10(4), pp. 1-8.

White paper for post-school education and training: *Building an expanded, effective and integrated post-school system.* Retrieved from http://www.unisa.ac.za/news/wp-content/uploads/2014/10/White-Paper-for-post-school-education-and-training.pdf

Woods, R. H. & Baker, J. D., 2004, *Interaction and immediacy in online learning*, International Review of Research in Open and Distance Learning, *5(2),* Available at: http://www.irrodl.org/index.php/irrodl/article/view/186/801

Yeasmin, S. & Rahman K.R., 2012, *'Triangulation' Research Method as the Tool of Social Science Research*, BUP JOURNAL, 1 (1), Available from http://www.bup.edu.bd/journal/154-163.pdf

Yin, R. K., 1994, *Case study research: Design and methods* (2nd edn.), Newbury Park, CA: Sage Publications.

Zhang, A., 2003, Transactional Distance in Web-based College Learning Environments: Toward Measurement and Theory Construction. Unpublished Dissertation, Virginia Commonwealth University, Richmond.

Zhang, S., & Fulford, C. P, 1994, Are interaction time and psychological interactivity the same thing in the distance learning television classroom? Education Technology, 34(6), 58-64.

ANNEXURES

ANNEXURE1: LEARNING OBJECT REVIEW INSTRUMENT (LORI) MANUAL

Learning Object Review Instrument (LORI)
Version 1.5

Scoring Sheet

Learning Object _____   Reviewer _____

General Remarks						

Low ⟶ High

	1	2	3	4	5		NA
1. Content Quality: Veracity, accuracy, balanced presentation of ideas, and appropriate level of detail	1	2	3	4	5		NA
2. Learning Goal Alignment: Alignment among learning goals, activities, assessments, and learner characteristics	1	2	3	4	5		NA
3. Feedback and Adaptation: Adaptive content or feedback driven by differential learner input or learner modeling	1	2	3	4	5		NA
4. Motivation: Ability to motivate and interest an identified population of learners	1	2	3	4	5		NA
5. Presentation Design: Design of visual and auditory information for enhanced learning and efficient mental processing	1	2	3	4	5		NA
6. Interaction Usability: Ease of navigation, predictability of the user interface, and quality of the interface help features	1	2	3	4	5		NA
7. Accessibility: Design of controls and presentation formats to accommodate disabled and mobile learners	1	2	3	4	5		NA
8. Reusability: Ability to use in varying learning contexts and with learners from differing backgrounds	1	2	3	4	5		NA
9. Standards Compliance: Adherence to international standards and specifications	1	2	3	4	5		NA

ANNEXURE 4: INFORMATION LETTER AND CONSENT FORM

The study is aimed at understanding your personal reflection and experience about the student support services in distance education and e-learning environments in a developing country. Faced with the influx of emerging technologies, educators must continuously equip themselves with the necessary skills to effectively impact on today's learners. The study argues that academics cannot impart or transfer to learners what they do not have or know, and it gives recommendations on striving towards an effective empathetic student support system in distance education and e-learning.

Participation in this study is voluntary. It will involve an interview of approximately **10 minutes** in length to take place in a mutually agreed upon location. You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher.

With your permission, the interview will be tape-recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Some personal data from you such as your age, race, and educational background will be collected. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained for five years in locked office at the University of South Africa. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at 012 428 2290 or 079 4890018 or by e-mail at modismp@unisa.ac.za. You can also contact my supervisor, Dr Tony Mays at 082 371 9215 or e-mail tonym@saide.org.za.

I would like to assure you that this study has been reviewed and received ethics clearance through the relevant Research Ethics Review Committees of the University**.** However, the final decision about participation is yours.

I hope that the results of my study will be of benefit to those academics and students of Unisa involved in ODL and E-learning, as well as to the broader research community.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Sincerely,

Ms. Mpho-entle Puleng Modise

Researcher

Department of Curriculum and Instructional Studies

University of South Africa

CONSENT FORM

I have read the information presented in the information letter about a study being conducted by Ms Mpho-entle Modise of the Department of Curriculum and Instructional Studies at the University of South Africa. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be tape recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the dissertation and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project had been reviewed by, and received ethics clearance through, the Research Ethics Review Committees of the University of South Africa.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.
____ YES ___ NO

I agree to have my interview tape recorded. ____ YES ___ NO

I agree to the use of anonymous quotations in any thesis or publication that comes of this research. ____ YES ___ NO

Participant's Name (please print) _____
Participant's Signature _____ Date _____
Researcher's Signature _____ Date _____
Researcher's Title _____ Department _____

ANNEXURE 5: QUESTIONNAIRE

UNISA-UMUC PROGRAM PARTICIPANTS' PERSPECTIVES ON ONLINE STUDENT SUPPORT SERVICES

Dear Colleagues/Fellow student,

Thank you for participating in this survey, the aim of this research project is to find out how you experienced the student support services during the UMUC programme. Full ethical clearance has been granted by the Unisa Senate Research and Innovation and Higher Degrees Committee (SRIHC) to continue with the research.

The **benefits** of the research to you as an academic are that it will provide you with **an opportunity to give your opinion** with regard to the design of student support systems in the face of e-learning approaches to teaching and learning and how you are experiencing or have experienced the University of Maryland University College (UMUC) programme.

The survey should take about 10 minutes of your time. Please note, participation is voluntary and your response will be kept strictly confidential and anonymous. It would be appreciated if you complete the survey before **16h00 on Thursday 03 September 2015**.

Please be assured of total anonymity, as a lime survey is used to protect the identity of all participants. Should you encounter any problems when completing the survey, feel free to e-mail me on: modismp@unisa.ac.za or phone me on (012) 429

2290   (012) 429 2290 FREE   or 079 489 0018   079 489 0018 FREE . I will also gladly provide the ethical clearance certificate or any other information required on request.

The success of the project depends on your participation; therefore I appreciate your time and effort greatly!

Thank you for taking the time to read this information sheet and for participating in this study. Click on the **next** button at the bottom of this page to commence your response.

Please complete all questions as fully as possible.

Ms Mpho-entle Modise

SECTION A: GENERAL INFORMATION

Gender

- ● Female

- ● Male [   ]

Age
Choose one of the following answers

- ● 25-34
- ● 35-44
- ● 45-54
- ● 55 +

Number of years at Unisa?
Choose one of the following answers

- ● 0 - 5 years
- ● 6 - 10 years
- ● 11 - 15 years
- ● 16 years or more

Number of years teaching online?
Choose one of the following answers

- ● 0 - 2 years
- ● 3 - 5 years
- ● 5 years or more

Please indicate your rank
Choose one of the following answers

- ● Professor
- ● Associate Professor
- ● Senior Lecturer
- ● Lecturer
- ● Junior Lecturer
- ● Academic Assistant
- ● Other: [   ]

[   ]

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Have you completed your UMUC certificate programme?

- ● Yes
- ● No

SECTION B: PERSONAL REFLECTION AND EXPERIENCE OF SUPPORT SERVICES

Why did you choose to enroll for the UMUC certificate?
Check any that apply

| 4 |

- ☐ Personal interest and development [   ]
- ☐ Improve the quality of online teaching in your department [   ]
- ☐ Suggested/instructed by my line manager [   ]
- ☐ Other: [   ] [   ]

How did you experience the Unisa-UMUC orientation/information session?
Choose one of the following answers

- ● The information was not enough.
- ● There was too much information.
- ● The information was sufficient.

[   ]

Did you receive satisfactory information about the following topics?

	Strongly agree	Agree	Neither	Disagree	Strongly disagree
Outline of the course [ ]	●	●	●	●	●
Assessment requirements [ ]	●	●	●	●	●
Assessment preparation [ ]	●	●	●	●	●
Structure of the subject area [ ]	●	●	●	●	●
Discussion Forums [ ]	●	●	●	●	●
Resources and learning support [ ]	●	●	●	●	●

How would you describe the academic and administrative support you received from UMUC during your studies?

	Strongly Agree	Agree	Neither	Disagree	Strongly disagree
Excellent support throughout the programme thus far.	●	●	●	●	●
It varies (in some classes it is very good and in others not as much).	●	●	●	●	●
I received the administrative support I needed at all times.	●	●	●	●	●
I received the academic support I needed.	●	●	●	●	●
I did not receive the support I needed.	●	●	●	●	●

How would you describe the academic and administrative support you received from Unisa during your studies?

	Strongly agree	Agree	Neither	Disagree	Strongly disagree
Excellent support throughout the programme thus far.	●	●	●	●	●
It varies (in some classes it is very good and in others not as much).	●	●	●	●	●
I received the administrative support I needed at all times.	●	●	●	●	●
I received the academic support I needed.	●	●	●	●	●
I did not receive the support I needed.	●	●	●	●	●

Please indicate your level of agreement with the statement:

	Strongly agree	Agree	Neither	Disagree	Strongly disagree
Effective student support practices impacted on your completion of this programme.					

When problems occur, whom did *you* ask for *information or help*?

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	Always	Regularly	Sometimes	Never
Lecturer/Instructor	●	●	●	●
Co-Lecturer/Co-Instructor	●	●	●	●
Writing coach	●	●	●	●
Other students in the 'class' or study group	●	●	●	●
Unisa colleagues enrolled in the programme	●			

When problems occur, who do *Unisa students that are enrolled for your module* ask for information or help?

	Always	Regularly	Sometimes	Never
Lecturer/Instructor	●	●	●	●
Teaching Assistants/Tutors	●	●	●	●
Other students in the 'class'	●	●	●	●
Unisa Support Staff	●	●	●	●

Which part(s) of the *student support practices* you received from the programme would you consider implementing in your own online teaching, if any?

	To a great extent	Somewhat	Very little	Not at all	No answer
Engaging students, and building online student communities.	●	●	●	●	●
Lecture streaming – capturing lectures digitally, and transmitting them live, and/or make them available to students to view online or download as podcasts.	●	●	●	●	●
Use of technology in teaching and learning (synchronous and/or asynchronous).	●	●	●	●	●
Include readily available information resources (e.g. eBooks, journal articles, website links, OERs, etc.)	●	●	●	●	●

SECTION C: UNISA/UMUC CERTIFICATE PROGRAMME

Please indicate your level of agreement with the statement:

	Strongly disagree	Disagree	Neither	Agree	Strongly agree

There are differences between teaching methods at UMUC and at UNISA? ● ● ● ● ●

What were the UMUC programme's major strengths?

	Strongly agree	Agree	Nither	Disagree	Strongly disagree
The faculty seems competent, knowledgeable and skilled as instructors.	●	●	●	●	●
Relevancy of the curriculum seems to be appropriate to the current market.	●	●	●	●	●
There was an agreement between the course objectives and curriculum content.	●	●	●	●	●
Objectives were reflected in the exams or other assessments.	●	●	●	●	●
Student support services were available 24 hours a day.	●	●	●	●	●
Online discussions were properly designed and well managed.	●	●	●	●	●
Technology teaching and learning tools used was relevant and appropriate.	●	●	●	●	●
Online self-help tools were user-friendly.	●	●	●	●	●

What were the UMUC programme's major weaknesses?

	Strongly agree	Agree	Neither	Disagree	Strongly disagree
The faculty seems incompetent and unskilled as instructors.	●	●	●	●	●
There was little or no agreement between the course objectives and curriculum content.	●	●	●	●	●
Grading and assessment system were not properly aligned to learning outcomes.	●	●	●	●	●
Limited student support services.	●	●	●	●	●
Online discussions were not user-friendly.	●	●	●	●	●
Online self-help tools were not user-friendly.	●	●	●	●	●

What suggestions do you have to improve the UMUC or MEd in ODL course?

Answer

Please indicate your level of agreement with the statement:

	Strongly agree	Agree	Neither	Disagree	Strongly disagree
The UMUC style of teaching will help improve your approach to teaching online courses at Unisa.	●	●	●	●	●

3

Below are the possible learning objectives from the UNISA/UMUC partnership programme. Based on your own experience, to what extend did the programme achieve these goals for you?

	To a great extent	Somewhat	Very little	Not at all
I can analyse the impact of technological changes on the nature of teaching and learning in distance education.	●	●	●	●
I can navigate and use an online learning environment, shared virtual spaces, and social media for the purpose of learning, documenting learning, and creating content.	●	●	●	●
I can learn collaboratively by using social media and other shared virtual spaces to create content and successfully complete assigned team projects.	●	●	●	●
I can use information ethically and legally by properly citing their materials in the correct format.	●	●	●	●
I am able to appropriately select generic technologies that support teaching of your module(s).	●	●	●	●
I can analyze the range of technologies used in the design, delivery, management and support of DE.	●	●	●	●

Have you registered for the UNISA MEd in ODL yet?

- ● Yes
- ● No

Would you recommend this course to other colleagues?

- ● Yes
- ● No

Please feel free to make any additional comment on the course not addressed in the above questions.

Answer

Thank you!

Your survey responses have been recorded.

ANNEXURE 6: INTERVIEW SCHEDULE (QUESTIONS)

Title of study: Towards an effective and empathetic student support system in an open and distance education and e-learning environment: a case study from a developing country context

Researcher: MP Modise
Email: modismp@unisa.ac.za
Institution: University of South Africa

1. Are you involved in any of Unisa's *online* modules? Indicate at what capacity, (primary lecturer, secondary lecturer, academic/admin support, curriculum designer, etc.)

2. Tell me about your learning experience at UMUC. (For example, student support approaches, challenges, learning management systems, cultural differences, etc.)

3. In your opinion, how does the teaching at UMUC differ from teaching at Unisa?

4. How has the UMUC programme affected your perceptions of online teaching and learning?

5. Which theoretical knowledge you gained at UMUC would you consider most valuable, why?

6. What specific skills has the programme equipped you with, which are you using in your current work? Please provide examples.

7. Based on your experiences, what skills do you think are necessary for supporting students learning in an ODeL institution?

8. Do you think your experience at UMUC has affected you as an ODL practitioner? Please explain in what way.

9. What do you think was the biggest challenges and opportunities of studying at UMUC?

10. What do you regard as the biggest challenges of teaching at UNISA?

ANNEXURE 7: EMAIL INVITATION & REMINDER

1st EMAIL INVITE

From: Modise, Mpho-Entle
Sent: 13 August 2015 01:14 PM
To: Modise, Mpho-Entle
Subject: UNISA-UMUC Survey

Dear Colleagues/Fellow student,

My name is Mpho-entle Modise from the department of Curriculum and Instructional Studies. I would like to invite you to participate in my Masters research study entitled *'Towards an effective and empathetic student support system in an open and distance education and e-learning environment: a case study from a developing country context'*. This survey is aimed at understanding your personal reflection and experience about the student support services in distance education and e-learning environments in a developing country.

The survey should take about 10 minutes of your time. Please note, participation is voluntary and your response will be kept strictly confidential and anonymous. It would be appreciated if you complete the survey before **Thursday, 03 September 2015, 16h00**. Please click the UNISA-UMUC survey link below to proceed to the survey:

UNISA-UMUC survey

Thanking you in advance for your contribution.

Kind regards,

Mpho-entle Puleng Modise

Department of Curriculum and Instructional Studies
AJH Building 6-70
Tel: 012 429 2290 | **Fax:** 0866 337 916

Email: modismp@unisa.ac.za

EMAIL REMINDER

Dear Colleagues/Fellow student,

Recognizing your busy schedule, I'm sending you this note as a reminder to kindly complete the survey. It would be appreciated if you could complete the survey before **Thursday, 03 September 2015, 16h00**. Please click the link below to proceed to the survey: [UNISA-UMUC survey](#)

Kind regards,

Mpho-entle Modise

ANNEXURE 8: UMUC GRADING SYSTEM

UMUC Academic Policies (extract)

The Graduate School's Academic Policies (GS)

GRADING GUIDELINES

According to The Graduate School's grading policy, the following marks are used:

A (90-100) = Excellent
B (80-89) = Good
C (70-79) = Below standards
F (69 or below) = Failure
FN = Failure for nonattendance
G = Grade pending
P = Passing
S = Satisfactory
U = Unsatisfactory
I = Incomplete
AU = Audit
W = Withdrew

The grade of "B" represents the benchmark for The Graduate School. It indicates that the student has demonstrated competency in the subject matter of the course, e.g., has fulfilled all course requirements on time, has a clear grasp of the full range of course materials and concepts, and is able to present and apply these materials and concepts in clear, well-reasoned, well-organized, and grammatically correct responses, whether written or oral.

Only students who fully meet this standard and, in addition, demonstrate exceptional comprehension and application of the course subject matter earn a grade of "A."

Students who do not meet the benchmark standard of competency fall within the "C" range or lower. They, in effect, have not met graduate level standards. Where this failure is substantial, they can earn an "F." The "FN" grade means a failure in the course because the student has ceased to attend and participate in course assignments and activities but has not officially withdrawn.

ACADEMIC STANDARDS

Graduate students are expected to maintain a 3.0 or higher grade point average (GPA) at all times, with no grade of F. An assessment of academic standing is made of each student at the end of every semester. Each student's GPA is computed for all UMUC graduate-level graded coursework to make a determination of academic standing as described in the policy.