

**A conceptual quality framework for online distance education in a
South African higher education context**

by

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I declare that the thesis I submit for the degree Philosophiae Doctor in Computer Integrated Education at the University of Pretoria is my work and has not previously been submitted by me for a degree at this or any other tertiary institution.

The author, whose name appears on this thesis's title page, has obtained the applicable research ethics approval for the research described in this work. The author declares that he has observed the ethical standards required in terms of the University of Pretoria's Code of ethics for researchers and the Policy guidelines for responsible research.



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ABSTRACT

Residential higher education institutions in South Africa have reached their capacity to support full-time, face-to-face students, and the demand for higher education is increasing rapidly. The Council on Higher Education in South Africa acknowledges that the post-schooling systems' capacity and effectiveness should be improved and expanded. Unfortunately, the COVID-19 pandemic exposed many institutions' inability to provide education online. Also, the rapid expansion of higher education is usually associated with compromising the quality of education offered. Subsequently, residential institutions must ensure quality in their online distance education offerings. Therefore, this study investigates how institutions enact the quality elements of online higher distance education. This study followed a qualitative research approach and involved two higher education institutions in South Africa as case studies. The interpretivistic nature of this study allowed the researcher to collect data through semi-structured and focus-group interviews. The study's theoretical framework was essential in analysing the collected data deductively and inductively. The data analysis resulted in a Conceptual Quality Framework that residential higher education institutions in South Africa could use to transition their administrative, teaching and learning processes to an online format. The framework underscores South African residential institutions' intricate challenges in transitioning to online distance education. While South Africa has robust distance education policies, there is a notable gap in awareness and implementation at an institutional level. This discrepancy raises concerns about potential non-compliance, quality variations, and a lack of standardised approaches. Various challenges mark the transition from blended to fully online education, emphasising the need for a comprehensive framework to ensure quality in the online distance format. Issues such as administrative infrastructure complexity, technological integration, and the varying approaches of institutions contribute to the complexity. Overall, a nuanced and adaptive approach is essential for residential institutions navigating the intricate landscape of transitioning administrative, teaching, and learning processes to an online format.

KEY TERMS: Conceptual Quality Framework, Distance Education,
Higher Education, Online Education, Quality Elements

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EDIT DECLARATION

I, WILNA SWART, hereby declare that between November 2020 and May 2023, I performed a professional language edit of the following doctoral thesis:

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The author is clearly a committed and invested doctoral candidate. The quality of the work was outstanding throughout and it was a privilege and a pleasure to edit it. May the future Dr Kruger successfully establish himself in his field and go from strength to strength.



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LIST OF ABBREVIATIONS

CD	Compact Disc
CF	Conceptual Framework
CQF	Conceptual Quality Framework
CHE	Council on Higher Education
CMS	Content Management System
COL	Commonwealth of Learning
COVID	Coronavirus disease
DE	Distance Education
DHET	Department of Higher Education and Training
DVD	Digital Video Disc
EQF	E-Quality Framework
ERE	Emergency remote education
GER	Gross Enrolment Ratio
HE	Higher Education
HEI	Higher Education Institutions
HEMIS	Higher Education Management Information System
ICCASA	Industry Compliance and Certification Authority of South Africa
ICT	Information and Communications Technologies
LMS	Learning Management System
MOOC	Massive open online course
NADEOSA	National Association of Distance Education and Open Learning in South Africa
NDP	National Development Plan
NQC	Nadeosa Quality Criteria
NQF	National Qualifications Framework
NSFAS	National Student Financial Aid Scheme
NWU	North-West University
ODE	Online Distance Education
OER	Open Educational Resources
OHDE	Online higher distance education
QA	Quality Assurance
SAIDE	South African Institute for Distance Education
SCOTVEC	Scottish Vocational Educational Council
SME	Subject matter experts
SMS	Short Message Service
SSA	Sub-Saharan Africa
STSD	Socio-technical systems design
TD	Transactional Distance
TV	Television
UFS	University of the Free State
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNISA	University of South Africa
UP	University of Pretoria

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CHAPTER 1: INTRODUCTION

1.1. INTRODUCTION

In the world we are living today, access to education is essential (Pregowska, Masztalerz, Garlińska, & Osial, 2021). Education is used as a “tool” through which individuals can advance their lives and well-being and adapt to the needs of society productively (Mystakidis, Berki, & Valtanen, 2021). Subsequently, there is a continuous social need to improve the quality of education through all delivery modes (Mystakidis, Berki et al., 2021; Süğümlü, 2021). Unfortunately, very few people are privileged to study at an education institution (Pregowska, Masztalerz et al., 2021). For centuries, education was only accessible in face-to-face teaching and learning environments, which excluded many students (Pregowska, Masztalerz et al., 2021). Consequently, distance education (DE) as a teaching and learning approach emerged to meet the needs of a changing society (Süğümlü, 2021).

Distance education is an educational approach associated with the physical distance between institutions and their students. (Milićević, Denić, Milićević, Arsić, Spasić-Stojković, Petković, Stojanović, Krkic, Milovančević, & Jovanović, 2021). Students and lecturers are geographically separated as they usually reside in different locations (Pregowska, Masztalerz et al., 2021). In residential higher education (HE) in South Africa today, DE is institutionally-based formal education, where students are separated from the institution and, through educational technologies and the internet, are connected to students, lecturers and resources (Prinsloo, 2019).

According to Bates (2022), online and remote learning could be included in the broader concept of DE. Worldwide, DE uses various information and communication technologies (ICTs) to deliver and present content (Alghamdi & Al Dossary, 2021). Furthermore, DE could be offered asynchronously, synchronously or as a mix of both (Moorhouse & Wong, 2022). Asynchronous DE allows students to access and use learning resources and communicate with a lecturer at their convenience (Rehman & Fatima, 2021). Synchronous DE requires students to attend live online lectures or interact with a lecturer or fellow students in real-time (Kohnke & Moorhouse, 2022).

Asynchronous DE is older than synchronous DE since synchronous learning was only introduced with the development of ICTs that could facilitate this approach (Pregowska, Masztalerz et al., 2021). Selecting between synchronous, asynchronous or mixed approaches would be determined by the learning outcomes students must achieve and the course objectives (Puspitasari, 2021).

The technological revolution changed how students could study forever (Pregowska, Masztalerz et al., 2021). DE provides alternative education solutions for people geographically dispersed from institutions, reaches a broader audience, and provides learning opportunities for people who lead busy lives (Briggs, 2013; Pregowska, Masztalerz et al., 2021; Scarpetta & Quintini, 2020). Although digitisation in the past few years has changed people's approaches to working, teaching and learning (Soltanifar, Hughes, & Göcke, 2020), it significantly impacted HE (Appolloni, Colasanti, Fantauzzi, Fiorani, & Frondizi, 2021).

According to Drucker (2012), higher education institutions play an essential role in students' attempts to acquire knowledge with a view to being successful in life. Not only should HE institutions satisfy the needs of enrolled students, but they should also create learning pathways for graduates who wish to grow professionally and academically in their respective careers (Appolloni, Colasanti et al., 2021). Many individuals seek learning opportunities anywhere and anytime without requiring being physically present at institutions (Appolloni, Colasanti et al., 2021). Fortunately, advancements in the internet and the use of various technologies enabled DE offerings across international borders (Süğümlü, 2021).

The COVID-19 emergency during the past two and a half years emphasised the value of DE (Asher, 2021) when many institutions used DE as an emergency remote education (ERE) approach that allowed students and lecturers to continue their teaching and learning activities (Appolloni, Colasanti et al., 2021; Bozkurt, Jung, Xiao, Vladimirschi, Schuwer, Egorov, Lambert, Al-Freih, Pete, & Olcott Jr, 2020; Giacosa, 2020). Now, online institutions are on the rise (Appolloni, Colasanti et al., 2021).

My journey with DE started in 2016 when I was employed by a public higher education institution in South Africa as an instructional designer. I was tasked with digitising the institution's already established DE processes and procedures. My keen interest in the use of technology in education, my exposure to various e-learning projects, and my previous qualifications sparked my curiosity to find ways in which existing processes and procedures could be moved online. This task is daunting as DE in South Africa was primarily conceptualised around established paper-based and face-face teaching and learning systems. Subsequently, my informal and formal journey started with finding online alternatives for these processes and procedures.

1.2. PROBLEM STATEMENT

Over the past decade, HE has seen phenomenal growth across Sub-Saharan Africa (SSA) (Mohee, 2019). Not only has participation in public HE institutions increased, but participation in private HE institutions has also improved (Mohee, 2019). Section 2.3 specifically addresses the need to expand the capacity and effectiveness of HE in South Africa. Subsequently, Daniel, Kanwar and Uvalić-Trumbić (2009) advise HE institutions to be careful not to compromise the quality of education provided when focusing on expanding the capacity of an institution. Masoumi and Lindström (2012) explain that the movement towards achieving accountability in HE and highlighting unsuccessful e-learning projects have amplified concerns regarding the quality of e-learning. Furthermore, using technology in DE in South Africa challenges residential HE institutions to ensure quality education (Mohee, 2019; Nadeosa, 2021).

Researchers such as Appolloni, Colasanti et al. (2021), Masoumi and Lindström (2012), Daniel, Kanwar et al. (2009), and Welch and Reed (2005) agree that quality criteria and quality assurance systems vary remarkably between institutions and between countries worldwide. Aluko, Krull and Mhlanga (2022) argue that in South Africa, consensus must be reached regarding what constitutes quality to ensure that institutions work towards a common purpose and build the desired quality culture.

Unfortunately, in South Africa, quality in DE is further challenged by the following issues:

1.2.1. DISTANCE EDUCATION PROGRAMMES OFFERED BY TRADITIONAL INSTITUTIONS

DE programmes offered by residential institutions are no longer a simple counter solution to the increase in online offerings by online institutions (Appolloni, Colasanti et al., 2021). Traditional HE institutions are lately competing directly with online institutions (Appolloni, Colasanti et al., 2021). Subsequently, HE institutions must review their teaching and learning strategies and approaches and, therefore, adapt and enhance their educational offerings (Ali, 2020). Although South African institutions have been encouraged to expand their online and blended learning offerings (DHET, 2013), before the onset of the COVID-19 pandemic, very few institutions offered programmes students could complete off-campus (Aluko, Krull et al., 2022). Institutions in South Africa have not yet unlocked the full potential of DE and determined the role it should play in the development and expansion of the post-school education sector and, more significantly, in the development of students nationally (Aluko, Krull et al., 2022).

1.2.2. FACULTY MEMBERS' ACCEPTANCE OF ONLINE EDUCATION

Not all faculty members and students at institutions are ready to accept and use new educational technologies for teaching and learning (Aruleba, Jere, & Matarirano, 2022; Du Preez & Le Grange, 2020; Miller, Sellnow, & Strawser, 2021). Digital approaches to education require stakeholders to be equipped with specific skills and knowledge and have confidence in their abilities to use new educational technologies (Appolloni, Colasanti et al., 2021). Unfortunately, in South Africa, these competencies are lacking among many students and staff members (Aruleba, Jere et al., 2022; Du Preez & Le Grange, 2020; Modise & Van den Berg, 2021).

1.2.3. THE COMPLEXITY OF THE DISTANCE EDUCATION APPROACH TO TEACHING AND LEARNING

Distance education is a complex approach to teaching and learning (Pregowska, Masztalerz et al., 2021). Subsequently, institutions must decide how students should access curriculums and resources, how students will be supported, and how students will be assessed validly and reliably (Nadeosa, 2021). Therefore, guidelines that could assist institutions with establishing and improving their online DE offerings are essential for assuring and certifying their products and services in addition to ensuring a positive economic impact on their societies (Masoumi, 2010; Mohee, 2019). In South Africa, the National Association of Distance Education and Open Learning in South Africa (Nadeosa) attempts to provide DE practitioners with guidance relating to designing and delivering DE (Nadeosa, 2021). The Council on Higher Education and Training also provides DE practitioners with good practice guidelines (CHE, 2014). Unfortunately, these guidelines focuses mainly on face-to-face and blended/hybrid teaching and learning approaches.

1.3. RESEARCH RATIONALE

The rationale of this study is twofold: emanating from a South African legislative perspective and acknowledging the myriad of challenges in higher education, especially from the use of technology in teaching and learning.

1.3.1. THE SOUTH AFRICAN PERSPECTIVE

The DHET recognises in the White Paper for Post-School Education and Training (DHET, 2014) that until now, the emphasis on designing and delivering learning programmes, as well as the use of ICT and open learning principles, has primarily centred around traditional face-to-face campus-based programmes, with distance education offerings receiving less attention. However, as digital technology becomes increasingly accessible in South Africa, there is a vision to integrate e-learning into various modes of educational provision (DHET, 2014). In a report regarding the DHET's stance on online education, the DHET acknowledged that most HE institutions in South Africa adopted some or all of the various teaching and learning modalities in

various forms, from paper-based to online (DHET, 2017). Furthermore, when examining online programmes and course offerings, the DHET acknowledges gaps and duplication in the legislative and policy environment. Unfortunately, some of the challenges outlined below have received little attention:

- In order to facilitate the online delivery of programmes and courses, it is necessary to ensure that legislation and policies are appropriately adjusted and in harmony with this mode of education (DHET, 2017).
- Online programmes and courses must comply with the established norms and standards for providing quality education and training within the Post-School Education and Training system. In cases where there are deficiencies in these norms and standards, the DHET should create appropriate guidelines and standards specifically tailored for the online delivery of programmes and courses (DHET, 2017).
- To facilitate and guarantee the quality of online programmes and course offerings, it is essential to align legislation, policies, and funding to support this mode of education (DHET, 2017).
- The accreditation criteria for online programmes and courses should be tailored to address the unique aspects of online education. Exploring the possibility of creating specific and customised accreditation requirements for such offerings is essential. One crucial concern is to ensure that all students, despite their diverse backgrounds and learning environments, have an equivalent learning experience and meet the expected outcomes at the end of the programme (DHET, 2017).
- The South African Qualifications Authority and the three Quality Councils need to determine a framework and system to ensure the quality assurance of online programmes and courses and determine how to oversee the entire process effectively (DHET, 2017).
- The adoption of online learning as an educational method in South Africa should be guided by evidence derived from research. It is essential to establish a knowledge base and foster a research community dedicated to this area of expertise to drive its development and provide support (DHET, 2017).
- The DHET must enhance its expertise in comprehending and implementing open learning, including online qualifications, part-qualifications, programmes, and

course offerings. The department needs to employ dedicated personnel to support the national, regional, and institutional education system, which will be integral to providing teaching and learning support (DHET, 2017).

- Currently, the quality standards for accrediting traditional and distance education programmes in PSET institutions are identical, albeit with distinct norms. Nevertheless, distance education programmes encounter extra challenges in their efforts to improve the quality of their delivery (DHET, 2017).
- The DHET recognises that the quality assurance standards used for traditional programmes may not be entirely suitable for online programme offerings (DHET, 2017).

1.3.2. THE USE OF TECHNOLOGY IN HIGHER EDUCATION TEACHING AND LEARNING

Digitisation presents challenges to higher education institutions (Appolloni, Colasanti et al., 2021). Subsequently, HE institutions need to determine which technologies are feasible to implement. Given the unique context of each institution and their students, institutions need to determine the quantified benefits of their existing technologies and the financial implications of acquiring and using new technologies (Telukdarie & Munsamy, 2019). Since HE institutions are now competing globally (Wolhuter & Jacobs, 2021), these institutions must optimally utilise the potential of new technologies to attain a competitive advantage in digital environments (Appolloni, Colasanti et al., 2021; Zaborova, Glazkova, & Markova, 2017).

Higher education is often the most turbulent domain for internal, external, or time-driven changes (Mystakidis, Berki et al., 2021). Rapid changes such as the coronavirus pandemic required institutions to adapt to a specific mode of teaching and learning (Wolhuter & Jacobs, 2021). Slow changes such as socio-economic challenges, financial crises, or reshaping pedagogical approaches influence an institution's teaching and learning operations (Mystakidis, Berki et al., 2021). Therefore, institutions must develop strategies to address students' growing and differentiated teaching and learning demands (Kaplan & Haenlein, 2016). In addition, most faculties worldwide today incorporate DE e-learning elements into their

curriculums (Milićević, Denić et al., 2021). In South Africa, the need to expand the capacity and effectiveness of the post-schooling system could be regarded as a slow change (cf. 2.3). It is unfortunate that institutions in South Africa have reached their capacity to accommodate full-time, face-to-face students (DHET, 2014). Therefore, an investigation into key quality elements that signify efficient and effective ODE practices could support the expansion of the post-schooling system in South Africa.

Various strengths and weaknesses, as well as opportunities and threats, are associated with online education (Toader, Safta, Titirișcă, & Firtescu, 2021). Whereas DE solutions provide more students with tertiary education opportunities, this mode of education is also associated with poor completion rates, poor quality assurance and inadequate assessment (Appolloni, Colasanti et al., 2021). The assessment of students remains one of the most challenging aspects of DE (Xiong & Suen, 2018).

Higher education institutions must continually review their teaching and learning strategies to ensure affordable and equitable learning opportunities (Jokhan, Sharma, & Singh, 2019). Institutions must adapt to students' needs and provide learning opportunities through various modes of provision to stay competitive (Appolloni, Colasanti et al., 2021). This study investigated, through interviews, how the two participating institutions adapted their administrative, teaching and learning processes to accommodate the needs of online students. It is essential in online education that students, staff, and all departments are aligned with the goals of an institution. Therefore, management and learning processes should continually be reviewed, adapted or redesigned to address new pedagogical, socio-cultural or socio-economic needs (Appolloni, Colasanti et al., 2021; Mystakidis, Berki et al., 2021). For online education to be effective and efficient, short- and long-term educational objectives must be apparent and purposefully implemented (Mystakidis, Berki et al., 2021).

According to Bates (2022), significantly more focus should be placed on the actions taken by residential institutions when they transition to hybrid or online learning. Institutions should determine if they are adhering to best practices or, more ideally, creating inventive, improved teaching techniques that leverage the advantages of both in-person and online learning.

1.4. RESEARCH QUESTIONS

PRIMARY RESEARCH QUESTION:

How could a conceptual quality framework for online distance education support South African residential institutions in transitioning their administrative, teaching and learning processes to an online format?

SECONDARY RESEARCH QUESTIONS:

SQ 1: What are the key quality elements of online distance education?

SQ 2: How do the participants at residential institutions enact the quality elements identified in the theoretical framework?

1.5. RESEARCH PURPOSE

The capacity and effectiveness of the post-schooling system in South Africa should be expanded (Aluko, Krull et al., 2022; Council on Higher Education, 2014; Prinsloo, 2019). Traditional campus-based HE institutions have reached their capacity to support full-time face-to-face students (Glennie & Mays, 2013), and the current demand for tertiary education is exceeding the supply (Badenhorst, 2019; Bezuidenhout, Furtak, & Tankou epse Nukunah, 2019). There is also an increased demand for more flexible learning opportunities that allow students to attend to other life commitments (Gaebel, Zhang, Bunescu, & Stoeber, 2018).

In traditional education modes, government provision of HE cannot improve access to tertiary education on its own (Daniel, Kanwar et al., 2009; Pregowska, Masztalerz et al., 2021). Some campuses cannot accommodate growing student numbers in respect of infrastructure and facilities, and these institutions do not have the financial means for expansion (Badenhorst, 2019; Daniel, Kanwar et al., 2009; Fehlner, 2019).

Although the CHE (2014) indicates that the expansion of distance education in South Africa could be mediated using information and communication technologies (ICT), quality DE provision in South Africa remains a burning issue (Bashitalshaaer, Alhendawi, & Lassoued, 2021; DHET, 2013; Mays, 2017a). The introduction of online education poses many challenges in ensuring that quality teaching and learning are achieved (Nadeosa, 2021). The Nadeosa quality criteria, specifically developed for the South African context, and the Good Practice Guide introduced by the CHE (CHE, 2014) are the only guidelines South African-based practitioners can consult to ensure and enhance the quality of DE (Mays, 2017b). Whereas these guidelines primarily address aspects relating to blended or hybrid modes of provision, they do not deal with many of the quality assurance (QA) elements prevalent in online modes of provision. It is essential to establish QA elements for online modes of provision as enough evidence shows that if designed and implemented well, online education could reach more students and provide for more diverse student needs (Aluko, Krull et al., 2022; Pregowska, Masztalerz et al., 2021).

Therefore, the purpose of this study is aligned with the primary research question presented in section 1.4. In addition, this study aimed to determine the key elements of online DE in HE contexts in South Africa. These elements should effectively guide institutions in designing, evaluating, maintaining and enhancing their online DE practices and offerings. Subsequently, this study conceptualised a quality framework for online higher distance education (OHDE) in South Africa. The conceptual framework (see Chapter 7) contains guidelines for HE institutions offering or planning to offer online DE programmes. The framework is regarded as a conceptual framework since DE experts have not reviewed or accepted it, nor has it been applied by the broader DE community in the South African Higher Education context.

1.6. RESEARCH AIM AND OBJECTIVES

1.6.1. RESEARCH AIM

The conceptualisation of a quality framework containing guidelines for residential institutions offering or planning to offer ODE programmes is the leading research aim. The guidelines should guide institutions in designing, evaluating, maintaining and enhancing their online DE practices and offerings.

1.6.2. RESEARCH OBJECTIVES

The objectives of this study are associated with the research questions that assisted the researcher in realising the research aim. Therefore, the secondary research questions indicated in section 1.4 were essential in determining the following objectives:

- It was important for the researcher to understand how public HE institutions designed online DE programmes in South Africa.
- A literature review determined the key elements of online distance HE. These elements were essential to consider as the study wanted to establish whether and how participating institutions used them in their programme offerings. The elements were presented in section 4.3 as the theoretical framework of this study.
- Participants' responses provided insight into if and how the participating institutions used the elements shown in the theoretical framework. Participants' responses also provided clarity regarding the influence of the theoretical framework elements on the design and development of online DE programmes.

1.7. RESEARCH METHODOLOGY

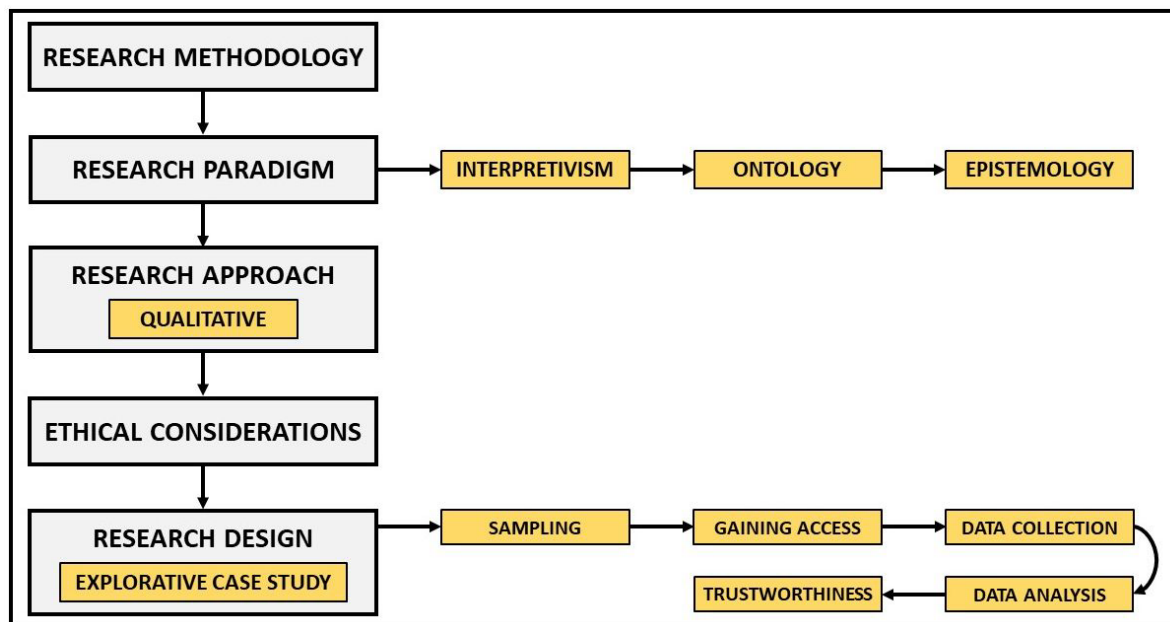


Figure 1.1: Research Methodology

Figure 1.1 illustrates the different perspectives of this study's methodology. Interpretivism as a research paradigm forms the theoretical foundation of this study. Interpretivism allowed the researcher to investigate the phenomenon in the participants' contexts (Creswell & Creswell, 2018). The researcher was able to determine how participants assigned different meanings to the investigated phenomenon (Mack, 2010). Therefore, the researcher could determine the role of the theoretical framework's elements (see section 4.3) in the DE environments of the participants. A qualitative research approach allowed the researcher to discern participants' honest perspectives and experiences (Corbin & Strauss, 2014). This approach also implied that the researcher would employ specific research methods to achieve the purpose of this study. The target population for this study include all higher education providers that have online or blended distance education offerings available (cf 5.5.2.1).

The researcher interviewed participants in their natural settings using semi-structured interviews. The data were analysed inductively and deductively (cf 5.5.5). The research design of this study could be viewed as an extension of the research approach (Creswell & Creswell, 2018). In addition, an exploratory multiple-case study

design allowed the researcher to investigate the online DE practices of various institutions. The theoretical framework of this study played an integral part in the data collection strategy and data analysis process. Therefore, this study's findings showed similar and contrasting results (Yin, 2014) when compared with the theoretical framework. The findings of this study (cf. Chapters 7) indicate how evidence from each institution aligns with or disconnects from the propositions of the theoretical framework. Subsequently, the information gathered from the institutions regarding the different elements of the theoretical framework shed light on these institutions' online DE practices in the South African higher education context.

The ethical considerations of this study are discussed in section 5.7. The researcher implemented various strategies to ensure the trustworthiness of this investigation (cf. 5.8). The researcher also believes this study contributes on a theoretical, methodological and practical level. These contributions are elaborated on in section 8.4.

1.8. THESIS STRUCTURE

The content of each chapter is briefly summarised below:

Chapter 1: Introduction

Chapter 1 provides a general overview of the study. The context of the investigation and the research problem were described. The study was accordingly motivated. In addition, Chapter 1 outlined the purpose and aim of the study and provided an overview of the research questions. The research approach and design were introduced.

Chapter 2: Literature Review - Distance Education in South Africa

Chapter 2 comprises reviews of the literature associated with distance education and the use of ICTs in education and DE. It was essential for the researcher to determine the relationship between DE and online learning as online DE is a developing mode of offering in the South African HE context.

Chapter 3: Literature Review - Quality and Quality Assurance in Online Distance Education

Chapter 3 explores quality and quality assurance perspectives in education, higher education and online education. Additionally, this chapter focuses on the practical application of quality assurance measures, the elements of ODE, and how they relate to quality.

Chapter 4: Theoretical underpinnings

The researcher dedicated this chapter to the study's theoretical framework. The theoretical framework aimed to guide the investigation. In this study, one model and two frameworks were employed to help the researcher explain the significance, nature, relationships, and challenges claimed or foreseen to be related to the phenomena under investigation.

Chapter 5: Research Methodology

Chapter 5 presents and elaborates on the different elements of the methodology, as illustrated in Figure 5.1. The research paradigm and approach were motivated, guiding the research methods applied in this study. The sampling strategy and how the researcher gained entry to the different institutions were explained. The participating institutions were defined, and the data collection methods were described. The researcher elaborated on the data analysis process. Finally, the limitations of this study were indicated, and the ethical considerations were described.

Chapter 6: Results

Chapter 5 presents the analysed data collected from the different institutions. The data in this chapter were categorised according to the various elements of the theoretical framework (cf. section 4.4) and subsequently presented in this manner.

Chapter 7: Findings: A Proposed New Conceptual Quality Framework

The results described in Chapter 6 were integrated with the literature presented throughout this study, highlighting the findings of the investigation. These findings could be regarded as a proposed new Conceptual Quality Framework for Higher DE institutions in South Africa. Furthermore, DE institutions could possibly use the content of this framework as guidelines to design, evaluate, maintain and enhance their online DE practices and offerings.

Chapter 8: Conclusion

Chapter 8 provides an overview of the study. Furthermore, summaries were presented on how the study answered the research questions. The study's key findings were highlighted, and the study's contributions were discussed, along with the limitations of the research. The chapter concluded by providing insight into possible future research in this study area.

1.9. CONCLUDING REMARKS

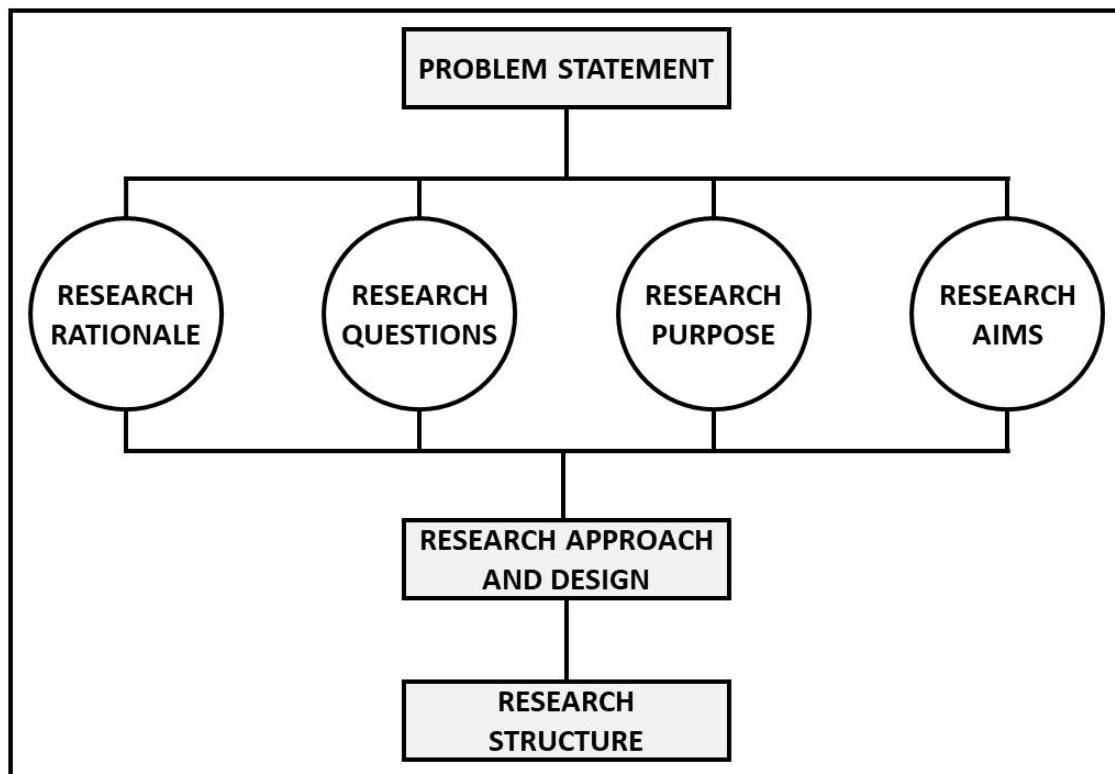


Figure 1.2: Overview of Chapter 1

Figure 1.2 illustrates the elements briefly discussed in Chapter 1, which provides an overview of this study. This chapter provided an introductory perspective of the challenges experienced by online DE as an educational approach and highlighted its benefits. The problem statement elaborated on issues prevalent in DE offerings at HE institutions worldwide and in South Africa. One of the DE issues in South Africa that gives the most cause for concern is the lack of common understanding among institutions on how to plan, implement and evaluate DE practices. Subsequently, since the Council on Higher Education in South Africa argues that the post-schooling sector should expand and as some campuses cannot accommodate more students, institutions should be guided in designing, planning, implementing and evaluating online DE practices and offerings.

The objectives of the study assisted the researcher in achieving the research purpose. The study's aims were closely related to the research questions and, therefore, enabled the researcher to determine how the study's purpose could be achieved. The theoretical framework of this study was an essential component in most aspects of this study. The theoretical framework guided the development of the research questions and provided a roadmap for the study's research approach and design. Two HE institutions with various participants were part of this study, while the collected data were analysed inductively and deductively. The theoretical framework guided the deductive analysis. All the necessary ethical considerations were implemented, the trustworthiness of the investigation was briefly substantiated, and the research contributions were indicated. This chapter concludes with an outline of the chapters that comprise this thesis.

The following chapter, Chapter 2, focuses on the vital role of DE in the higher education environment in South Africa. This chapter also aimed to elaborate on the need for DE to expand in South Africa and the impact of COVID-19 on teaching and learning.

CHAPTER 2: LITERATURE REVIEW

DISTANCE EDUCATION IN SOUTH AFRICA

2.1. INTRODUCTION

Since the early eighteenth century, distance education (DE) has evolved immensely. In 1728, Caleb Phillips started a correspondence course through the United States Postal Service (Ferrari, 2020). Educational broadcasting through radio began in the 1920s when institutions started lecturing on the radio (Pregowska, Masztalerz et al., 2021). In 1963, tape cassettes or compact cassettes enabled users to listen to and repeat a course at any time of the day (Harting & Erthal, 2005). Tape cassettes preserved the affordances of radio and paper handouts (Pregowska, Masztalerz et al., 2021). Video cassettes were introduced in the 1990s, allowing users to see their teachers and any visual aids on display (Alghamdi & Al Dossary, 2021). Floppy disks were introduced in 1969 and revolutionised computer data transport (Triksa, 2010). By the late 1990s, 250 megabytes of data could easily be stored on a 3-inch disk (Triksa, 2010). Floppy disks assisted students in accessing printed material and audio and video recordings at any time and even while on the move (Pregowska, Masztalerz et al., 2021). The development of Compact Disc Read Only Memories (CD-ROMs), also called CDs, addressed the low capacity of floppy disks (Triksa, 2010). CDs provide opportunities for students to interact with multimedia software, play educational games and complete educational computer exercises (Pregowska, Masztalerz et al., 2021). The rise of the internet opened up new possibilities for distance teaching and learning. Students could now access educational materials without a CD (Sharna, 2019). Computers could also connect to transfer data (Pregowska, Masztalerz et al., 2021).

Using information communication technologies (ICTs) in DE adds new dimensions to this educational approach. ICTs are associated with efficient learning, are regarded as practical and provide flexibility to students and educators (Milićević, Denić et al., 2021). Learning systems worldwide attempt to incorporate e-learning tools that could support teaching and learning (Omidire & Aluko, 2022). In HE, online education was

accelerated due to the coronavirus pandemic (Arum & Stevens, 2020). During the COVID-19 pandemic, online education was a lifeline for institutions, enabling them to continue functioning (Omidire & Aluko, 2022; Quintana, 2020). In addition, the pandemic required many institutions to accelerate the implementation and use of educational technologies and the development of infrastructure to support these technologies in providing access to content (Ferri, Grifoni, & Guzzo, 2020).

The discussions presented in this chapter elaborate on the DE landscape in South Africa before the COVID-19 pandemic (cf. 2.2) and also on the need for South Africa to expand DE (cf. 2.3). The chapter concludes with a discussion regarding the impact of the COVID-19 pandemic on HE (cf. 2.4).

2.2. THE DISTANCE EDUCATION LANDSCAPE IN SOUTH AFRICA BEFORE THE 2019 COVID-19 PANDEMIC

Distance education in South Africa could be regarded as an established mode of educational provision in the tertiary and private sectors (Prinsloo, 2019). The University of the Cape of Good Hope, known today as the University of South Africa (UNISA), was founded in 1873 and became the world's first correspondence-based university in 1946 (UNISA, 2022). The first private DE provider in South Africa, Intec College, was established in 1906 (Ngengebule, 2003).

In this section, we briefly examine the evolution of distance provision in the last two decades and explore potential future developments. The discussion is divided into three main periods, with the first two reflecting on the past while the last focuses on future possibilities.

1994 to 2003:

According to Glennie, Mays and Welch (2014), distance education has showcased its potential and challenges throughout South Africa's history. Robben Island stands out as the country's first and perhaps most successful learning centre, particularly during the incarceration of many prominent leaders. However, it is essential to note that this success was not a deliberate institutional decision to provide support for the learners.

Instead, the learners themselves took the initiative, receiving help not from institution-appointed tutors but from dedicated volunteers who acted as intermediaries between the educational institution, the prisoners' families, and the prisoners, ensuring their advancement from one course to the next.

Over the past two decades since the establishment of democracy, significant efforts have been made to enhance the quality of distance education. These endeavours aim not to diminish students' initiative but to alleviate the obstacles they face in their learning journey. By addressing extrinsic barriers, such as delays in receiving materials or assignments, students can focus more on intrinsic challenges, like grasping complex subjects such as calculus or understanding constructivist learning approaches. The government's formal commitment to supporting this learning mode is fundamental to ensuring quality distance education. South Africa has been fortunate in this regard, particularly as the country transitioned into the post-apartheid era (Glennie, Mays et al., 2014).

2004 to 2012

On January 1, 2004, the University of South Africa and Technikon Southern Africa merged to establish the new, all-encompassing University of South Africa, following the recommendations of the National Plan for Higher Education. Subsequently, on January 2 of the same year, the newly formed university integrated Vista University's distance education campus, becoming the sole dedicated, publicly funded distance education institution in South Africa (Prinsloo, 2019). Before the merger in 2004, Unisa had already incorporated two distance education teacher training colleges (SACOL and SACTE) when the decision was made to consolidate all teacher education institutions within universities (Glennie, Mays et al., 2014).

According to Glennie, Mays et al. (2014), South Africa's higher education landscape has significantly changed since the advent of democracy, offering greater access to previously marginalised groups. However, the transformation process is still incomplete, and formidable challenges persist. Although access to education has improved for diverse groups, achieving academic success remains difficult. While course pass rates have increased for both contact and distance students, there are

still disparities between White and African students, although they are gradually diminishing. Overall, graduation and throughput rates are alarmingly low.

Despite efforts to remove learning barriers, South Africa shares a common issue with many other countries. According to research conducted by the CHET (Centre for Higher Education Transformation) using 2007 Community Survey SA Statistics data, approximately 2.8 million young people aged 18 to 24 years were neither employed nor engaged in education and training, coining the term "NEETs" (Not in Employment, Education, or Training). This finding led to the division of the Department of Education into two ministries in 2009: the Department of Basic Education (DBE), responsible for schooling, and the Department of Higher Education and Training (DHET), overseeing post-school education, including Universities, Vocational and Continuing Education and Training, and Skills Development. The establishment of DHET marked the first time specific attention was given to developing and maintaining a post-schooling system that addresses the needs of South Africa.

A significant initiative of DHET was the release of the Green Paper on Post-School Education and Training in 2011, which acknowledges the necessity of creating an integrated and coherent post-school education and training system to address the vulnerabilities of the NEETs group mentioned earlier (DHET, 2011). This group includes individuals with low educational attainment, dropouts before grade 12, and those with less than a grade 9 education.

2013 to the present

The DHET manages DE for HE in South Africa. In 2014, this department published the "Policy for the Provision of Distance Education in South African Universities" to ensure that stakeholders could differentiate between traditional face-to-face education and DE (DHET, 2014). This policy also aims to provide a system-wide definition for DE and elaborates on its support of the quality provision of DE, opportunities for access and success, financial matters, evaluation of DE provision, the development of open educational resources (OER) and the integration of information and communication technologies (DHET, 2014).

The White Paper for post-school Education and Training (DHET, 2013) outlines several objectives for the future of post-school education in South Africa, among them are:

- A post-school system that can assist in building a fair, equitable, non-racial, nonsexist and democratic South Africa;
- Expanded access, improved quality and increased diversity of provision;
- A post-school education and training system responsive to the needs of individual citizens, employers in both public and private sectors, and broader societal and developmental objectives (p. xi).

One of the methods employed to achieve the goals mentioned above is to promote the expansion of online and blended learning in all universities, enabling the provision of specialised programmes. It furthermore defines its vision for blended and online learning as follows: “The DHET will also encourage all universities to expand online and blended learning as a way to offer niche programmes, especially at postgraduate level, to those who are unable to attend full-time programmes, either due to their employment status or their geographical distance from a campus” (DHET, 2013, p. 51).

The role of online learning is well-defined and may be somewhat restricted, primarily focusing on offering specialized programmes, particularly at the postgraduate level. In 2014, the DHET published the “Policy for the Provision of Distance Education in South African universities in the context of an integrated post-school system.” To comprehend the reasons behind this Policy, it is essential to highlight that the emergence of the convergence between distance education and face-to-face delivery modes played a significant role (Glennie & Mays, 2013). This convergence was influenced by various factors, including but not limited to technological advancements, perceptions about the cost of distance and online education, and growing competition in the field (Prinsloo, 2019).

Despite the ongoing convergence and overlapping of traditional face-to-face and online distance education, distance education is still perceived as an identifiable subset of educational provision (DHET, 2013). The Policy acknowledges the need for

a significant expansion of the post-school sector, considering that access to ICT is not universally available and its costs are sometimes prohibitive for a considerable portion of the population. Notably, the Policy does not categorize online learning as an indispensable component of distance education provision (DHET, 2013, p. 11), yet it does not rule out the inclusion of online learning in the mix. The Policy does not rule out the possibility of online delivery; instead, it creates room for various options by advocating for the use of an "appropriate combination of different media" (DHET, 2013, p. 11). The Preamble unambiguously expresses the Policy's dedication to the suitable integration of ICT to improve distance education in public and private universities and other post-schooling institutions and to guarantee that every post-schooling student has reasonable access to affordable connectivity.

There are numerous prospects for online distance education and several challenges. These opportunities include the significant potential of online distance education to tackle the vast disparities in post-apartheid South Africa and meet the substantial demand for flexible, affordable, and high-quality education (Prinsloo, 2019). In stark contrast to the promising potential and necessity of utilising online distance education to enhance access to quality educational opportunities, there are apprehensions regarding the consequences of changes in funding policies for public providers, the high cost of digital networks, the students' inadequate readiness for higher and online distance education, and the institutions' insufficient preparedness to offer affordable and targeted student support (Prinsloo, 2019).

Comprehensive online distance education in South Africa is still a developing phenomenon, strongly shaped by the historical context of distance education, recent shifts in the regulatory landscape, and concerns related to access and the affordability of access (Prinsloo, 2019). DE currently contributes to up to 36% of the headcount of students in HE in South Africa (DHET, 2023). In South Africa today, most DE programmes are offline or correspondence-based (Prinsloo, 2019).

According to the Department of Higher Education and Training (2014), in South Africa, a programme could be characterised as DE if it complies with the following criteria:

- Staff-led, face-to-face, campus-based structured learning activities should be equal to or less than:
 - 30% of the stated notional learning hours are in undergraduate courses at National Qualifications Framework (NQF) levels 5 and 6.
 - 25% of the stated notional learning hours are in a course at NQF level 7 and initial post-graduate courses at NQF level 8.

Prinsloo (2019) explains that most DE programmes in South Africa are offline and correspondence based but that online offerings should be expanded as more traditional campus-based institutions design and develop online programmes. As ICT is more widely used in South Africa, programmes shift from campus-based to remote education (CHE, 2014). Figure 2.1 illustrates a range of educational practices. When programmes are designed, the mode of provision is usually determined first. One side of the spectrum is face-to-face provision, which could be regarded as traditional campus-based teaching and learning, whereas the other is labelled as DE. Here teaching and learning activities usually occur off-campus. The middle part of the range is labelled mixed-mode provision. Mixed-mode provision refers to a blend of face-to-face and DE provision.

The Council on Higher Education (2014) further explains that when programmes use more resource-based teaching and learning methodologies that encourage independent learning, combined with educational technologies, programmes move from face-to-face provision towards DE.



Figure 2.1: Spatial or geographic distribution of lecturers and students. (CHE, 2014)

The Council on Higher Education (2014) emphasises that the provision's modes do not necessarily include e-learning methodologies. However, since ICTs are more accessible in South Africa, the CHE deemed it necessary to have an e-learning dimension in conceptualising modes of provision. The different variations of e-learning are illustrated in Figure 2.2. The e-learning dimension indicates which educational practices could be offline or online.

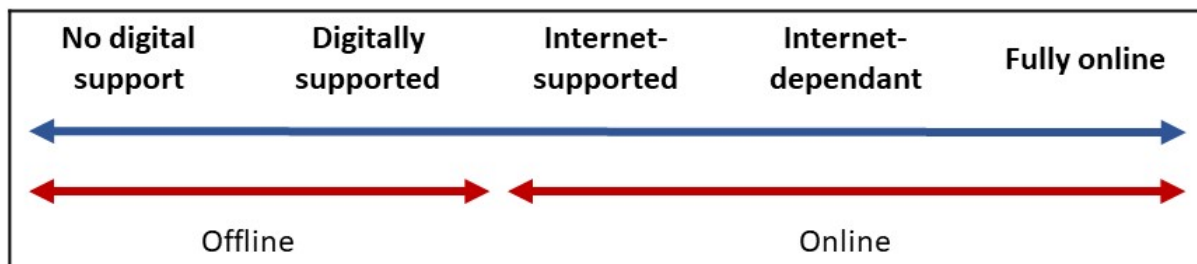


Figure 2.2: Extent of ICT support.
(CHE, 2014)

Since e-learning could be widely applied, the CHE (2014) found it helpful to categorise the different forms of e-learning that could be used in programmes. Table 2.1 illustrates the different e-learning categories conceptualised by the CHE (2014). Table 2.1 shows how communication occurs and how learning materials are distributed in digitally supported, internet-supported, internet-dependent and fully online programmes.

As mentioned in section 1.5, in South Africa, there are limited quality criteria or guidelines available that South African DE practitioners could consult to design, evaluate, maintain and enhance quality ODE offerings (DHET, 2017). Therefore this study will attempt to present a Conceptual Quality Framework which includes key quality elements that institutions could consider to design, evaluate, maintain and enhance ODE offerings. Therefore, the Conceptual Quality Framework attempts to fill this gap in the South African ODE academic literature.

Table 2.1: Different forms of e-learning.

(CHE, 2014)

	Communication	Learning Material
Digitally supported	All communication occurs face-to-face.	Learning is supported offline using CD, DVD or flash drives.
Internet-supported	Online participation is optional. Most communication is face-to-face.	Additional learning materials are available online. This includes learning guides, online resources and reading lists.
Internet-dependent	Online participation is required. Face-to-face communication is also used.	Students must use the internet to interact with content and communicate with staff and students.
Fully online	No physical face-to-face communication. Virtual face-to-face communication takes place.	All interactions with staff and students, including learning material, activities and assessments, occur online. Support services are also integrated online.

2.3. THE NEED TO EXPAND DISTANCE EDUCATION IN SOUTH AFRICA

The development of higher education worldwide is synonymous with “expansion” (Daniel, Kanwar et al., 2009; Ilie, Rose, & Vignoles, 2021). In 1998, there were 89 million students enrolled in tertiary education institutions worldwide. Today, there are over 200 million registered students (Fehlner, 2019). Between 2010 and 2018, the number of students enrolled at universities in South Africa increased by 30.5% (DHET, 2020b). Unfortunately, the growth rate is lower than required to reach the DHET’s goal of a 1.6 million headcount by 2030. In 2016, UNISA, which enrolls the most students in South Africa, also decided to enrol fewer students and focus more on student success (DHET, 2019).

2.3.1. THE EXPANSION GOAL OF THE DHET

The DHET’s goal to achieve a 1.6 million headcount by 2030 primarily drives the intended growth of the post-school education sector (Prinsloo, 2019). Despite expanding HE worldwide (Mohee, 2019), South Africa’s participation rates in tertiary education are lower than in comparable emerging economies such as China, Malaysia, Mexico and Russia (Khuluvhe & Ganyaupfu, 2021). Sub-Saharan Africa has the lowest tertiary, gross enrolment ratio (GER) worldwide (Mohee, 2019).

Unfortunately, Sub-Saharan Africa only has a GER of 9% compared to the global average of 40% (UNESCO, 2022). The DHET wants to achieve a GER of at least 25% by 2030 and indicates that this could be attained if the current enrolment trend is maintained for the next ten years (Khuluvhe, Netshifhefhe, Ganyaupfu, & Negogogo, 2021).

The DHET states that there are not enough institutions providing opportunities for the growing demand in South Africa (DHET, 2014). The DHET also believes that greater social justice would be achieved if all HE institutions promoted equitable access to quality HE (DHET, 2014). Badenhorst (2019) explains that greater access and success in HE could reduce skills shortages, improve unemployment and aid economic growth. Although education will not guarantee economic growth, without education, social and cultural development will be impeded (DHET, 2014). Unfortunately, there are additional challenges, as highlighted by Badenhorst (2019), regarding the expansion of HE in South Africa:

- The South African government cannot allocate sufficient funds to the HE sector to meet its demand.
- Low literacy and mathematics test scores at school level heavily impact the HE sector. The demands of HE are beyond the capabilities of most students. Students drop out frequently and take longer to finish their courses.
- The high unemployment rate in South Africa makes it difficult for unemployed youth to access education opportunities.
- There is a lack of and a mismatch in skills in South Africa. In contrast to the requirement for higher-skilled workers in the modern economy, the nation has an excess of low- and unskilled workers.
- Access to technology and the internet is not equitable, and the adoption of ITCs by institutions is slow. This, coupled with students' poor ICT skills, impedes the abilities of online education.
- Although it is becoming more popular abroad, open HE (i.e., education without formal academic entrance standards) is still less common in South Africa.
- Demand and opportunity for private providers are anticipated to increase during the next ten years.

- Over the next ten years, the rate of changes in skills demand will be projected to grow. How institutions respond to the Fourth Industrial Revolution is essential.
- Over the next ten years, the demand for lifelong learning will increase. Institutions' offerings would need to be adapted to meet this demand.

According to Khuluvhe and Ganyaupfu (2021), South Africa's low performance by international standards necessitates implementing policy measures that could accelerate the expansion of access to HE. The National Development Plan (NDP) argues that South Africa could address the skills shortage in the economy through higher participation rates in tertiary education (Khuluvhe & Ganyaupfu, 2021).

2.3.2. INCREASING ACCESS TO HIGHER EDUCATION

Open and distance learning, specifically e-learning, are now crucial methods for increasing access to HE (Aluko, Krull et al., 2022; Daniel, Kanwar et al., 2009). Tertiary education could be an essential factor that drives economic growth (Fehlner, 2019; IEG, 2017). Technology-mediated education should equip students with advanced innovation and technology skills to participate and succeed in globalised knowledge societies (Aluko, Krull et al., 2022; DHET, 2020a; Fehlner, 2019). Subsequently, tertiary education graduates should be well-equipped efficiently and effectively to address modern society's challenges (Fehlner, 2019). Tertiary education can transform economies, build stable communities and end extreme poverty (IEG, 2017). Although the CHE explains that the expansion of DE in South Africa could be mediated by technology, Mays (2016) warns that this will require conscious programme design choices that institutions might not consider. Ashour (2021) elaborates that institutions must customise their curricula, and their course offerings must be aligned with online education models and theories. The CHE (2014) acknowledges that online learning presents several problems. This includes the lack of contact between lecturers and students and additional financial burdens that students might have to carry. Students might need to travel to centres to attend limited contact sessions, purchase electronic devices and, in some cases, purchase printed material if they prefer such material over digital material (CHE, 2014).

2.4. THE IMPACT OF THE COVID-19 PANDEMIC ON HIGHER EDUCATION

The COVID-19 pandemic and subsequent lockdowns exposed the inadequacy of many HE institutions and lecturers in adjusting to the sudden shift from face-to-face or blended/hybrid methods to 100% online education (Dwivedi, Hughes, Coombs, Constantiou, Duan, Edwards, Gupta, Lal, Misra, & Prashant, 2020; Modise & Van den Berg, 2021). Manzanedo and Manning (2020) explain that although the COVID-19 pandemic affected all aspects of life, HE specifically experienced a paradigm shift regarding teaching and learning. The change accelerated lecturers' professional development in their adoption of technology (Modise & Van den Berg, 2021). In South Africa, HE institutions were committed to ensuring students complete the 2020 academic year despite various challenges (Dipa, 2020). Most institutions continue to provide services through digital environments to ensure that students meet their educational goals (Deslandes & Coutinho, 2020). It was essential for students to pursue their educational goals distantly and in an unhindered, COVID-19-friendly context (Madiope, Mendy, Pool, & Lincoln, 2021).

During the 2020 higher education academic year, Dipa (2020) reported that South African universities were experiencing a "curriculum crunch". This "curriculum crunch" referred to the myriad challenges experienced by students and institutions during remote emergency teaching and learning (Dipa, 2020). From a student perspective, Du Preez and Le Grange (2020) argue that students do not have equal access to online learning technologies or data and connectivity. Furthermore, Du Preez and Le Grange (2020) explain that access to technology does not necessarily mean access to the services presented by a university, which is also referred to as epistemological access. Du Preez and Le Grange (2020) argue that online learning in South Africa should be supported or complemented by additional forms of e-learning, interactive print materials and expository texts. This notion of a blended teaching and learning approach described by Du Preez and Le Grange (2020) is closely aligned with the HyFlex education approach, where face-to-face and online students are addressed in the same classroom (Miller, Sellnow et al., 2021).

During emergency remote teaching and learning interventions employed by institutions, lecturers were overwhelmed with migrating all face-to-face teaching and learning material, assessments and support activities to online environments (Modise & Van den Berg, 2021). Subsequently, training and support were requested from academic staff members. Furthermore, redesigning and developing curricula to fit online education is challenging and time-consuming (Du Preez & Le Grange, 2020). Hodges, Moore, Lockee, Trust and Bond (2020) emphasise that a fully online module's typical planning, preparation and development time is six to nine months before presentation to students.

Unfortunately, in South Africa, a divide still exists between people with the needed technical skills and financial resources that would allow them to work and study online and contribute to knowledge production and those without the means to do this (Du Preez & Le Grange, 2020). Access to affordable internet access remains unevenly distributed in South Africa, and opportunities to attain digital literacy skills are limited (VPUU, 2019). Mbodila (2020) explains that although students might be perceived as digital natives, institutions cannot assume that they have sufficient digital literacy skills to navigate learning management systems to manage their learning.

Distance education and educational technologies have proven to effectively disseminate education, especially during emergency measures taken during the Covid-19 pandemic (Modise & Van den Berg, 2021). Unfortunately, online teaching and learning assume that academic and support staff and students have sufficient technical and pedagogical competencies that will allow them to work online effectively and efficiently (Du Preez & Le Grange, 2020). Furthermore, Modise and Van den Berg (2021) emphasise that to avoid resistance and misunderstanding that could lead to the failure of online learning, all stakeholders involved should be continuously and thoroughly trained, not only academic staff. Unfortunately, these competencies cannot be acquired overnight (Du Preez & Le Grange, 2020).

The study also investigated how the COVID-19 pandemic impacted the participating institutions regarding the elements of the conceptual framework (cf. 6.3). Subsequently, this study provides an in-depth view of how the pandemic impacted the decisions made by institutions about their day-to-day operations, the use of

educational technologies, how this influenced teaching and learning, and how it helped both students and lecturers.

2.5. CONCLUDING REMARKS

The historical evolution of DE in South Africa, from correspondence courses in the eighteenth century to the recent challenges posed by the COVID-19 pandemic, highlights the dynamic nature of educational methodologies. The landscape of DE in South Africa has transformed significantly, with technology playing a pivotal role, especially in recent years. The COVID-19 pandemic acted as a catalyst, accelerating the integration of online education and underscoring the importance of flexibility and adaptability in higher education.

The need to expand DE in South Africa is evident, driven by the goal of achieving a 1.6 million headcount by 2030. However, challenges such as funding constraints, skills shortages, and disparities in technology access must be addressed. The pandemic emphasised the digital divide and the importance of equipping students and educators with the necessary technical and pedagogical competencies for effective online learning.

The study's conceptual quality framework aims to guide institutions in designing, evaluating, maintaining, and enhancing ODE offerings. As South Africa navigates the complexities of expanding access to higher education, integrating DE, especially online learning, emerges as a critical strategy, necessitating a careful balance between technological innovation and socio-economic considerations.

In Chapter 3, the distinctions between various modes of online distance education are explored, offering a comprehensive overview and proposing a nuanced definition. This chapter also emphasises the importance of quality assurance in ODE and explores various measures, frameworks, and practices to ensure the effectiveness and excellence of ODE programmes, particularly in the South African higher education landscape.

CHAPTER 3: LITERATURE REVIEW

QUALITY AND QUALITY ASSURANCE IN ONLINE DISTANCE EDUCATION

In this chapter, we delve into the nuanced landscape of ODE, exploring its various modes of delivery and clarifying the distinctions often blurred by interchangeable terminologies. This chapter aims to provide a comprehensive understanding of ODE, offering a foundation for subsequent discussions on its implementation, challenges, and the evolving role of technology in shaping this educational approach. Furthermore, this chapter delves into the critical realm of quality assurance in ODE. As ODE continues to reshape educational landscapes, the need for effective QA measures becomes paramount. The chapter explores the multifaceted dimensions of QA, examining assurance and enhancement strategies, management systems, and the evolving standards landscape. Understanding how institutions navigate QA in ODE is vital for ensuring educational excellence in a rapidly changing digital era.

3.1. PERSPECTIVES ON VARIOUS MODES OF DELIVERY FOR ONLINE DISTANCE EDUCATION

According to Bates (2022), distance education, online learning, blended learning, flipped learning, hybrid learning and other phrases are sometimes used interchangeably. However, their meanings differ significantly, and this is important to note. With the outbreak of the COVID-19 pandemic, two new formats emerged, namely HyFlex and BlendFlex (Miller, Sellnow et al., 2021). For this study, it is essential to determine where online DE fits into the spectrum of delivery modes.

The absence of words with precise definitions for online learning is disconcerting to authors (Singh & Thurman, 2019). Definitions provide numerous overlapping or separate concepts as synonyms (Singh & Thurman, 2019), clearly indicating that online learning concepts are not well-defined. According to Singh and Thurman (2019), some authors provide specific definitions, and others merely imply a definition. According to Bates (2022), the different modes of delivery can be categorised as follows:

- Classroom teaching with no technology.
- Blended learning. The following examples illustrate different variations of this approach:
 - Technology-enhanced learning where lecturers, for example, use a PowerPoint presentation during a face-to-face lecture.
 - The use of a learning management system allows a lecturer to store learning materials, manage online discussions and allow assessment submissions. Most teaching is still delivered in a face-to-face environment.
 - A flipped classroom approach where students should watch, for example, a video before attending a face-to-face class. The video will support students in classroom discussions and in completing other activities.
 - When a one-year module is, for example, divided into two semesters. One semester is presented online, and the other is face-to-face.
 - Hybrid or flexible learning allows most teaching and learning to take place online. Students would only come to campus for specific face-to-face sessions, for example, to complete laboratory work or practical training.
- Fully online learning:
 - No classroom or on-campus teaching takes place with this approach.
 - A course or programme usually covers the same content, skills and assessments as the face-to-face version.
 - No materials are distributed to students as hard copies.

Allen and Seaman (2004) define online learning as the proportion of online content in a programme or course. Table 3.1 shows that Allen and Seaman (2004) view online learning as a course or programme where most content is presented online. Allen and Seaman (2004) also mention that there are typically no face-to-face interactions involved in online learning.

Table 3.1: Defining online learning (Allen & Seaman, 2004)

% content delivered online	Type of course	Typical description
0%	Traditional	Course with no online technology. Content is delivered in writing or orally.
1% to 29%	Web-facilitated	A course that uses web-based technology to facilitate what is essentially a face-to-face course. Uses a content management system (CMS) or web pages to post the syllabus and assignments.
30% to 79%	Blended/Hybrid	A course that blends online and face-to-face delivery. A substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings.
80%+	Online	A course where most or all the content is delivered online. Typically, no face-to-face meetings.

Singh and Thurman (2019) conducted a systematic literature review to analyse the existing definitions of online learning to improve the understanding of this concept and to determine the key elements needed to define online learning. Based on their analysis, the following essential elements were found in all definitions:

- The use of technology
- A time element. This refers to synchronous or asynchronous communication.

Common themes found in most but not all definitions are:

- Examples of interactivity;
- Physical distance;
- Comparisons to traditional face-to-face learning environments.

According to Bates (2022), fully online learning is another version of DE. Singh and Thurman (2019) report that physical distance is mentioned consistently in online learning definitions, although DE, as a standalone term, is not synonymous with online learning. Simonson, Zvacek and Smaldino (2019) explain that the word “distance” could have various meanings. It might be referring to separation in terms of time and space or even separation of the mind. The term distance education is similarly applied in a wide variety of contexts. Some programmes or courses use print materials, some use educational technologies, and many use both (Simonson, Zvacek et al., 2019).

Dan Coldeway of Dakota State University developed a helpful framework for understanding four ways in which education can be practised (Simonson, Zvacek et al., 2019). Figure 2.4 illustrates the four dimensions of Coldeway's Quadrants, as presented below.

Coldeway's Quadrants	
ST	DT
SP	SP
ST	DT
DP	DP

Figure 3.1: Coldeway's Quadrants.

(Simonson, Zvacek et al., 2019)

The framework illustrated in Figure 3.1 considers two variables, time and place. The different combinations of time and place provide four approaches to education and DE. Simonson, Zvacek et al. (2019) elaborate on Coldeway's Quadrants, as presented below:

ST-SP (same time, same place)

This approach encapsulates traditional education approaches in a face-to-face classroom environment. These environments are usually teacher-centred.

DT-SP (different time, same place)

Different time, same place education refers to learning at a centralised venue such as a learning centre, media centre or computer laboratory. Students can attend the same lesson at different times at the same venue.

ST-DP (same time, different place)

The approach is made possible using telecommunications and other educational technology tools dependent on the internet. Television broadcasting is one example where students could be located at different learning centres and connect to the lecturer's classroom in real-time. Zoom, Google Meet, Microsoft Teams and Blackboard Collaborate are examples of internet-dependant applications that lecturers

could use to simultaneously communicate with students at different locations. This approach is also known as synchronous DE.

DT-DP (different time, different place)

According to Coldeway, this is the purest form of DE. Today this approach relies heavily on the internet and other educational technology tools. Students decide when and where to learn and when to access learning materials. This approach is also referred to as asynchronous DE.

After the extensive research of Singh and Thurman (2019), these authors concluded that it is essential for definitions of online learning to include the following elements:

- Educational technology;
- Teaching in a synchronous environment or an asynchronous environment;
- Examples of interactivity or learning;
- Acknowledgement of the role of physical distance.

Simonson, Zvacek et al. (2019) emphasise that four essential elements characterise DE definitions:

- DE is carried out through institutions.
- There is a geographical separation between students and lecturers.
- Interactive telecommunications connect a learning group and the lecturer.
- Students, educators and instructional resources are combined to form learning communities or groups.

3.2. DEFINING ONLINE DISTANCE EDUCATION FOR THIS STUDY

The information presented in section 3.1 assisted the researcher in mapping the defining elements of online and distance education. Table 3.2 illustrates how online and distance education addresses the elements identified in section 3.1 relevant to each delivery mode.

Table 3.2: Mapping of online and distance education elements.

Element	Online	Distance
Technology	The use of educational technology	Interactive telecommunications connect a learning group and the lecturer.
Physical distance	Acknowledge the role of physical distance	There is a geographical separation between students and lecturers.
Teaching and learning	Include examples of interactivity or learning.	Students, educators and instructional resources are combined to form learning communities or groups.
Approach	Articulate if the teaching is in a synchronous environment or an asynchronous environment.	
Management		DE is carried out through institutions.

This table shows that online and distance education definitions address three similar elements (Technology, Physical distance and Teaching and learning). The synchronous or asynchronous approach to communication mentioned in online definitions is addressed in DE as part of interactive telecommunications. The management element is explicitly mentioned by Simonson, Zvacek et al. (2019) since they argue that if an institution is not managing the learning process, the learning could be non-academic or self-study and fall outside the parameters of DE.

Figure 3.2 represents the possible elements of ODE derived from the criteria mentioned above and could be considered when defining ODE. After evaluating the requirements regarding online learning and DE presented in this section, the definition depicted in Figure 3.2 below is suggested for online DE for this study. This is only one example of how the elements identified in this section could be utilised to create a definition. Additional variations are possible.

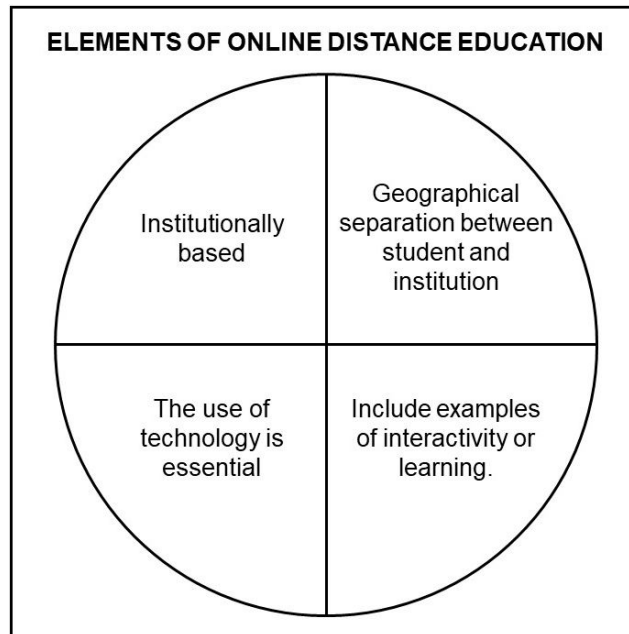


Figure 3.2: The elements of online distance education.

(Adapted from Simonson, Zvacek et al., 2019)

Online distance education is an educational approach formally offered by educational institutions. The approach is characterised by the geographical separation between a student, the institution and its role players and the use of educational technologies and the internet. Students should interact in online learning communities and acquire support using ICTs. Synchronous or asynchronous online learning environments facilitate communication, assessments and access to learning resources.

As graphically depicted in Figure 3.2, this study's new narrative definition of ODE was derived from the literature (Bates, 2022; Simonson, Zvacek et al., 2019; Singh & Thurman, 2019). This example articulates the domain and the elements that define ODE. This definition resonates with the Department of Higher Education and Training's position on online programmes and course offerings (DHET, 2017), although the department does not offer a formal definition or specific parameters for this mode of delivery. Therefore, for this study, when a module/s or part qualifications display the characteristics provided in the definition, it could be accepted that ODE is occurring.

The institutionally based elements of ODE distinguish this approach to education from the one self-study students follow. The institution referred to in the new definition could be traditional or private. Simonson, Zvacek et al. (2019) emphasise that the

accreditation of institutions offering ODE programmes is essential to ensure the credibility of courses, improve their quality and eliminate qualification mills. If there is a proposal to deliver modules or the entire programme through online means, it is expected to face significant internal and external evaluation. However, such proposals often omit the specification of the teaching methods employed. Typically, this is seen as the responsibility of individual faculty members or instructors. Consequently, when institutions transition to online teaching, what essentially changes is the learning environment. As a result, the design of these learning environments becomes critical, and the quality of education is influenced by the effectiveness of the teaching methods and the learning environment (Bates, 2022).

Most students enrolled in ODE programmes would be geographically distanced from the institution (Houlden & Veletsianos, 2019; Simonson, Zvacek et al., 2019; Singh & Thurman, 2019). Subsequently, students and educators may be situated at different locations. The separation of the student and the institution also implies that there could be a time difference between them. Simonson, Smaldino and Zvacek (2015) explain that more experienced online distance educators design their programmes around asynchronous communication. This allows students to communicate and access materials when it is convenient for them (Rehman & Fatima, 2021). Consequently, a transactional distance between the student and the educator may also exist (Moore, 1993). ODE institutions should reduce this separation as much as possible through their teaching and learning strategies (Simonson, Zvacek et al., 2019).

The use of technology is a critical component of ODE (Bates, 2022; Singh & Thurman, 2019). ICTs are necessary to deliver content, enable communication and are essential for teaching, learning and assessment (Simonson, Zvacek et al., 2019; Singh & Thurman, 2019). As indicated in the new definition, the interaction between lecturer and student could be synchronous or asynchronous (Pregowska, Masztalerz et al., 2021). Simonson, Zvacek et al. (2019) elaborate that although the interaction between a lecturer and students and students and their peers is essential, it should not be prioritised over and above the provision of content. Students' interaction with content remains a crucial component of DE (Mays, 2016; Omidire & Aluko, 2022). Nevertheless, interaction should be available, standard and relevant (Simonson, Zvacek et al., 2019). The development of new technologies allows for the delivery of

content and communication and for interaction to occur using smartphones, tablets, laptops and virtual reality (Pregowska, Masztalerz et al., 2021).

According to Singh and Thurman (2019), interactivity could occur between students and lecturers, students and their peers, or between students and technology. This implies that ICTs are essential in facilitating communication and access to learning resources (Lubis, Idrus, & Sarji, 2018; Simonson, Zvacek et al., 2019). Furthermore, according to Simonson, Zvacek et al. (2019), a necessary element of DE is instructional design. Instructional design transfers content into instruction (Simonson, Zvacek et al., 2019). Furthermore, instructional design is essential for the online learning environment since learning resources should be organised to create meaningful learning pathways and experiences (Akcaoglu & Lee, 2016; Czerkawski & Lyman, 2016).

Table 3.3 seeks to identify connections and commonalities between the aspects of ODE described above and the policy guidelines outlined by the DHET (2014). Table 3.3 shows that relationships exist between the policy guidelines and the elements of ODE, meaning that the elements directly or indirectly influence how ODE is structured and implemented.

Table 3.3: Comparing the elements of ODE against the policy guidelines of the DHET (2014).

The elements of ODE	DHET (2014)
Institutionally based	
<ul style="list-style-type: none"> • Institutional elements of ODE set it apart from self-study methods. • Accreditation of institutions offering ODE is vital. • Proposals to offer online modules or programmes undergo rigorous internal and external evaluations. • Transitioning to online education fundamentally alters the learning environment, making the design of these environments crucial for educational quality, driven by effective teaching methods and the learning environment. 	<ul style="list-style-type: none"> • An institution needs to award qualifications, and they need to take responsibility for quality assurance requirements. • Institutions must strategically determine the suitable delivery mode and level of ICT integration based on specific learning requirements and student demographics. • The DHET will offer guidance and collaborate with institutions to create suitable Programme and Qualification Mixes (PQMs) and enrollment planning procedures. These should consider national requirements and an institution's capability to provide these programmes. • Institutions are responsible for establishing a suitable learning environment for students admitted to their programmes. They must also demonstrate that they have taken steps to offer all students a fair opportunity to complete their studies successfully.
Geographical separation	
<ul style="list-style-type: none"> • Most students in ODE programmes are physically separated from the institution, often located in different geographic areas and possibly in different time zones. • Experienced online educators often design their programmes to use asynchronous communication, which allows students to access materials and interact at their convenience. • Institutions should aim to minimise the transactional distance between the student and the institution through effective teaching and learning strategies. 	<ul style="list-style-type: none"> • Distance education offers an opportunity to reach students who cannot participate in traditional full-time contact education due to various reasons such as work commitments, personal circumstances, geographical constraints, or unsatisfactory prior learning experiences. • Distance Education enhances flexibility in program structure, duration, and scheduling, but it is crucial to design programmes tailored to specific purposes and the needs of different target audiences. • The policy states that DE could bridge the transactional distance between the students and educators.
Technology use	
<ul style="list-style-type: none"> • ICTs are fundamental for ODE content delivery, communication, teaching, learning, and assessment. • The interaction between instructors and students can be both synchronous and asynchronous. • Students' interaction with content remains crucial. This interaction should be accessible, standardised, and relevant. • Advancements in technology, including smartphones, tablets, laptops, and virtual reality, have expanded the possibilities for content delivery and communication in ODE. 	<ul style="list-style-type: none"> • There is a significant opportunity to leverage the capabilities of technology to enhance the quality of distance education, especially in terms of enhancing overall student engagement and improving communication and support for remote students. • In the medium to long run, the focus on student support will probably transition from centre-based and in-person approaches to online web-based methods. • It has become necessary for institutions to ensure that their graduates are ready to engage actively in a digital environment. • Teaching and learning interventions using ICT must be carefully planned and implemented.
Interactivity	
<ul style="list-style-type: none"> • Interactivity in education can involve various forms of engagement, such as between students and educators, among peers, or with technology. • ICT is crucial in facilitating this interaction and access to learning materials. • Instructional design is also vital in distance education, as it transforms content into effective instruction, shaping students' learning experiences and pathways. 	<ul style="list-style-type: none"> • The DHET (2014) are not particularly prescriptive regarding interactivity in DE programmes. • The Nadeosa Quality criteria encourage institutions to use active teaching and learning approaches to engage students intellectually and practically and cater to individual needs. • The Nadeosa Quality criteria emphasise that content, teaching, learning, and assessment strategies should be carefully structured to facilitate learning.

3.3. AN INTRODUCTION TO QUALITY

Quality is a primary concern for public services, including higher education, and this matter is growing more intricate as these services are increasingly engaged with the external environment (Jamoliddinovich, 2022). Despite the increasing amount of information available regarding quality and quality in public services, there remains a lack of agreement on the definition of quality and the appropriate methods for its measurement. Quality is a challenging and elusive concept, resulting in diverse and unclear interpretations that cannot be universally agreed upon (Dicker, Garcia, Kelly, & Mulrooney, 2019).

The word "quality" has its origins in the Latin word "quails," which means "of what kind." This fundamental meaning of quality focuses on a product's or service's inherent characteristics (Masoumi, 2010). Numerous diverse interpretations of quality can be discovered in the pursuit of defining this abstract concept. To approach this concept uniformly, various terms like "value", "state", and "superiority" have commonly appeared in dictionaries, books, and articles. Quality is frequently associated with terms like "assurance", "improvement", "growth", and sometimes even "perfection" or meeting specific standards.

Harvey and Green (1993) perceive quality as encompassing excellence (referring to something outstanding and unique), perfection (something perfect or consistent), suitability for the intended purpose (referring to something that meets needs or requirements), value for money (something worth investing), and transformational (signifying something empowering or enriching). While these five distinct perspectives on quality contribute to a multifaceted understanding of quality in ODE, they also pose a challenge in providing a singular and explicit definition of quality, specifically in the context of ODE.

Considering the challenges in defining this concept (Wolhuter & Jacobs, 2021), quality has primarily been regarded as a set of attributes that vary from one service to another and cannot be precisely defined in isolation (Brockerhoff, Huisman, & Laufer, 2015). Politicians, academics, managers, customers, educators, and others have offered various definitions to describe this multi-faceted concept (Dicker, Garcia et al., 2019).

Each definition has been connected to the objectives, principles, experiences, and backgrounds of those proposing them (Masoumi, 2010). This suggests no universally accepted definition or interpretation of quality across different contexts, even though many provided definitions could share strong similarities (Martin, Elg, & Gremyr, 2020). Subsequently, quality encompasses both "subjective" elements (related to expected and perceived quality) and "objective" aspects (related to suitability for a particular purpose or adherence to specifications) (Shewhart, 1931). Both of these aspects must be considered when attempting to define quality. Therefore, quality, as a multidimensional concept, can be seen from various angles depending on the interests of different stakeholders in particular contexts (Dicker, Garcia et al., 2019).

3.4. QUALITY APPROACHES

The diverse quality interpretations have given rise to numerous quality techniques and classifications. These methods were primarily developed in industrial contexts before being used in service industries such as business and education, including higher education, schools, and online learning (Masoumi, 2010). Unlike industrial environments, public services such as education heavily rely on contextualisation and are closely tied to specific circumstances and contexts (Kanwar, 2022).

Introducing a specific service quality model to a situation is a subjective endeavour, as each model defines service quality based on its unique criteria (Rodrigues, Anisa Hussain, Syed Aktharsha, & Nair., 2013). Subsequently, assessing service quality poses challenges because services are often characterised as intangible, diverse, and indivisible (Zhao, Bai, & Hui, 2002). Pollitt (1992) specifically addresses the question regarding who determines what high quality is: Individuals with expertise in delivering the service may have insights. On the other hand, it could be argued that, ultimately, service users are the ones who can determine whether the quality is high or not. If the service aligns with their desires and requirements, it qualifies as a quality service; if it doesn't, it falls short.

The assessment of quality in ODE can vary significantly depending on the perspective of the individual defining it (Latchem, 2016). For instance, students, governments, or institutions investing in ODE may evaluate its quality based on cost-effectiveness. In

contrast, educators are more likely to emphasise excellence and reliability, while researchers might emphasise the transformative potential of ODE (Jung, 2022). Various stakeholders interpret quality differently (Jung & Latchem, 2007). Governments may prioritise the socioeconomic advantages and public transparency associated with ODE (Jung, 2022). In contrast, ODE institutions should aim to ensure quality in multiple facets, including planning, management, course design, development, delivery, learner support, assessment, completion, and graduation rates (Masoumi & Lindström, 2012). Researchers may emphasise the profoundness and breadth of learning and the cultivation of self-directed lifelong learning abilities, considered a significant component of quality assurance in online education (Jung, 2022). Students place greater importance on the quality of well-structured ODE courses and materials, support availability, and logistical arrangements (Daniel, Kanwar et al., 2009). They also value the practicality and relevance of assignments and the clarity of instructions, particularly concerning grading policies and feedback (Ogange, Agak, Okelo, & Kiprotich, 2018; Simonson, Zvacek et al., 2019).

Although quality is generally seen as a goal to be pursued to improve higher education, there is no unanimous agreement that QA is a positive concept (Masoumi, 2010). Seyfried and Pohlenz (2020) contend that the internal and external assessments conducted within a QA system may not always be dependable and accurate when assessing the quality of teaching and learning. Consequently, these assessments may not provide a robust foundation for significant management decisions to improve quality. According to Beerkens (2020), it is argued that most QA policies have not placed sufficient emphasis on student learning. As a result, it remains uncertain whether all the QA initiatives and changes have led to improved learning outcomes for graduates.

Given the intricate nature of defining quality and quality assurance in ODE, Jung and Latchem (2007, 2012) classify the diverse definitions of quality into five distinct categories:

- Quality as adherence to the established standards for traditional education: In this context, identical criteria and benchmarks are employed to assess the quality of teaching, learning, management, resources, and results in ODE and traditional campus-based educational institutions. Nevertheless, this approach may overlook

the distinctive characteristics of ODE. However, as ODE rapidly evolves into a prominent mode of delivery in traditional education, the distinctions between traditional campus-based education and ODE in higher education may not be as significant as they once were.

- Quality as suitability for the intended purpose: In this context, quality is assessed based on the degree to which ODE programmes or institutions meet their pre-established objectives. However, the challenge lies in the fact that this approach may not adequately consider the conflicting purposes of ODE, as outlined by the different stakeholders mentioned earlier.
- Quality as satisfying the requirements of customers: Adapted from the business sector, this method prioritises ensuring customer contentment. Certain ODE institutions have adopted course satisfaction surveys to gauge the quality of their courses and services. However, a drawback of this approach is its potential inability to cater to the diverse needs of distinct customer segments.
- Quality as an ongoing process of enhancement: In this context, the emphasis is placed on continually enhancing quality, following the sequence of input, implementation, and output, and then returning to input. Institutional research aimed at supporting and enhancing quality in ODE is greatly esteemed. However, the challenge is that quality assurance (QA) research outcomes do not automatically ensure the improvement of actual practices.
- Quality as adherence to standards and regulations at a provincial, national, or international level: In this context, institutions aim to obtain accreditation or approval from provincial, national, or international organisations, often to dispel the perception of ODE as a less prestigious form of education within their communities. Challenges associated with this method include potential clashes with national objectives and substantial reporting obligations throughout the evaluation procedure.

The points mentioned above illustrate that quality in ODE is a matter that is relative, intricate, multifaceted, and tied to cultural contexts, just as quality assurance is (Schindler, Puls-Elvidge, Welzant, & Crawford, 2015; Zuhairi, Raymundo, & Mir, 2020). When it comes to defining quality in ODE, there are differing viewpoints. Some scholars, like Stella and Gnanam (2004), argue that conventional quality concepts

cannot be applied directly to ODE due to its significant structural differences. On the other hand, proponents of this mode of education, including Huertas, Biscan, Ejsing, Kerber, Kozłowska, Ortega, Laur, Risse, Schörg and Seppmann (2018), Jung (2011), and Ossiannilsson, Williams, Camilleri and Brown (2015), contend that while certain universal principles of quality can be relevant to both traditional face-to-face education and ODE, it is essential to recognise the distinct and unique characteristics of ODE. These unique features include technology-driven asynchronous interactions, open admission and distinct learning pathways, and the flexibility inherent in teaching and learning within the online environment.

Recent ODE focuses more on students' self-directed learning, technical skills, and participation in interaction and collaboration than conventional education, making defining and assessing ODE quality challenging (Ferrerias-Garcia, Ribas, Sales-Zaguirre, & Serradell-López, 2021; Jung, 2022). The challenges and diverse perspectives in delineating quality standards for ODE have spurred discussions and the creation of various quality assurance models operating at international, regional, national, and institutional levels. Upon scrutinising the global landscape of QA models implemented in ODE, Ossiannilsson, Williams et al. (2015) observed that each model serves distinct objectives within specific temporal and contextual settings. As a result, they characterise QA in ODE as:

- **Diverse in nature:** The quality assurance model incorporates a wide range of quality indicators and frequently considers elements such as strategy, policies, infrastructure, procedures, outcomes, and other aspects to form a comprehensive perspective on overall quality.
- **Adaptive:** The quality assurance model incorporates adaptability into its structure to accommodate swift technological shifts and evolving social norms.
- **Institutionalised:** The quality assurance model is designed to permeate all levels of the institution and serve as a tool for self-reflection among individual staff members in their daily professional activities.
- **Inclusive:** The quality assurance model aims to strike a harmonious equilibrium among the viewpoints and requirements of diverse stakeholders, encompassing students, staff, businesses, government entities, and the broader society.

- Versatile. The quality assurance model strives to fulfil a tripartite role by cultivating a quality culture within an institution, charting a course for future enhancements, and acting as an emblem of quality for external assessments.

Acknowledging the intricate nature of defining and assessing quality in ODE Kihwelo (2013) contends that the definitions of quality and quality assurance should remain receptive to transformation and development. This openness is essential because information in ODE, the challenges encountered, and the comprehension of these challenges in the ODE context are continually evolving. With this perspective in mind, focusing on diverse models and guidelines for evaluating and assuring quality in ODE becomes crucial.

3.5. QUALITY IN EDUCATION

Like various service sectors, quality and quality assessment concepts have gained paramount importance within educational contexts, focusing on higher education (Shah & Arif, 2021). Nonetheless, quality in education differs from quality in industrial or other service domains because education can be described as a "mode of existence" where the achievements of its outcomes heavily rely on the active engagement of students (Jung, 2022). It is a dynamic process rather than the simple delivery of finalised products.

The emergence of services due to industrialisation has played a role in the emergence of quality initiatives within educational environments (Masoumi, 2010). Like other public services, diverse definitions and understandings of quality, ranging from "Zero Defect" to "Value Added," have been applied in these contexts (Stander, 2016). Within these interpretations, students are viewed as clients of an educational system seeking qualifications and degrees. Nevertheless, the terminology borrowed from the industrial realm, such as "compliance with specifications," "eliminating all flaws," and the idea of "customer satisfaction" in the sense of "the customer is always correct" can appear overly polished and devoid of significance. It can be counterproductive rather than beneficial (Eagle & Brennan, 2007).

Considering education's objectives and inherent characteristics, it becomes evident that quality must be understood as a relative concept and a normative action intimately tied to a particular context. This signifies that quality models and methodologies borrowed from the industrial sector are not applicable in educational environments due to the fundamental distinctiveness of education from other services (Masoumi, 2010). Consequently, utilising industrial and market-based metaphors within educational contexts can harm the educational process (Eagle & Brennan, 2007).

3.6. QUALITY IN HIGHER EDUCATION

Across the globe, there is a growing and urgent societal need for high-quality higher education (Jamoliddinovich, 2022). Higher education has expanded in developed and developing nations to address this demand. However, as higher education has become more prevalent, universities have encountered renewed difficulties and stresses, including a surge in student enrollment and the issue of academic unemployment (Mohee, 2019). This implies a mismatch between the qualifications gained by students and the demands of the labour market (Salas-Velasco, 2021), international competition for students (Cantwell, 2019) and the participation of private finance in higher education (McMahon & Delaney, 2021). Higher education institutions must prove that quality standards are assured and enhanced (Nadeosa, 2021).

As a result, ensuring and enhancing quality has transitioned from a peripheral consideration to becoming the primary focus within higher education (Bashitialshaaer, Alhendawi et al., 2021). Likewise, over the past decade, numerous countries have instituted national or regional frameworks for evaluating and guaranteeing quality in higher education institutions, especially in Western regions (Appolloni, Colasanti et al., 2021).

Consequently, various metaphors have been devised to address the concept of quality in higher education. These include terms like "excellence," "optimal practices," "quality educational initiatives," "standards for instructional design," "criteria for infrastructure," and "standards for teaching and delivery." (Masoumi, 2010). The contention is that establishing a clear-cut definition of 'quality,' mainly when the aim is to use it as an authoritative framework for quality in higher education, presents difficulties (Jung,

2022). As indicated in section 3.2, quality and quality assurance have no single, universally accepted definition. Instead, the definition is subject to stakeholder negotiation (Masoumi, 2010). Similarly, Green (1994) contends that it is essential to outline each significant participant's criteria when assessing quality and consider all these conflicting perspectives.

Quality efforts within higher education can be categorised into two primary phases. Before the 1990s, the initial phase viewed quality primarily as "guaranteeing fundamental standards." In contrast, following the 1990s, the second phase significantly emphasises total quality management (TQM) within educational environments. During this phase, institutions are encouraged to implement structured quality management systems like those employed in businesses instead of relying on conventional loose regulations or indirect forms of control (Mukhopadhyay, 2020).

Total Quality Management is an approach to management aimed at enhancing the overall effectiveness, efficiency, unity, adaptability, and competitiveness of an entire business (Mukhopadhyay, 2020). The argument posits that TQM, functioning as an all-encompassing management framework, introduces and promotes a quality culture. Within this culture, irrespective of their role, assignment, or place in the organisational structure, everyone is responsible for overseeing their contribution to the organisation, which is why it is referred to as "total" (Doherty, 2008).

Because of its broad applicability, TQM can be employed in various situations. Within TQM, particular attention to the customer, a process-centric approach, and ongoing improvement represent the core concepts that can directly impact higher education environments (Masoumi, 2010). Benchmarking, originating in the TQM movement, has developed into a widely utilised technique for evaluating quality within higher education. It has also gained recognition as a legitimate accountability measure in public service sectors (Caeiro, Sandoval Hamón, Martins, & Bayas Aldaz, 2020).

In this model, a unique characteristic of the benchmarking process is learning from others and implementing best practices (Jackson & Lund, 2000). Jackson and Lund (2000) defined benchmarking as examining performance, methodologies, and operations within and across organisations and industries to gather insights for self-

improvement. As a result, benchmarking can be described as a systematic approach to self-improvement that leverages the best practices of others and learning to enhance one's processes and products (Shcherbak, Ganushchak-Yefimenko, Nifatova, Shatska, Radionova, Danko, & Yatsenko, 2022). In this context, it involves comparing the practices and outcomes in one setting with those achieved by specific practices and outcomes within a similar domain.

Various processes bearing different names incorporate components and variations of benchmarking. In higher education, accreditation is the most prevalent of these processes (Caeiro, Sandoval Hamón et al., 2020). These procedures involve external quality assessments that thoroughly examine higher education institutions and programmes to ensure quality assurance. An institution or university's overall operations and practices are evaluated against established benchmarks during accreditations (Kayyali, 2023).

Benchmarking allows an institution to evaluate its performance relative to that of others. It can also highlight effective and less effective practices by comparing them with established best practices and patterns (Shcherbak, Ganushchak-Yefimenko et al., 2022). This process, frequently adopted as a model and objective within the business sector, entails comparing local practices with recognised best practices to identify necessary improvements (Kayyali, 2023). Furthermore, benchmarking is growing in significance as an approach to quality assurance, with universities aiming to showcase their quality by aligning themselves with external standards. External comparisons can bolster assertions regarding attainable benchmarks for quality (Shcherbak, Ganushchak-Yefimenko et al., 2022).

Higher education institutions in South Africa are still grappling with quality issues in online education (Madiope, Mendy et al., 2021). Educators' limited experience working online and the lack of infrastructure to support online teaching and learning are contributing factors (Cicha, Rizun, Rutecka, & Strzelecki, 2021). Mohee (2019) explains that the biggest challenge for Sub-Saharan countries is to manage quality education while investments are directed towards expansion. It is furthermore essential, since the demand for online education is increasing in South Africa, that institutions are guided by quality assurance principles or guidelines that would ensure

best practice when designing, developing and implementing online programmes (Bussmann, Johnson, Oliver, Forsythe, Grandjean, Lebsack, & Luster, 2017). Institutions should avoid using quality assurance measures initially developed for face-to-face teaching for online education (Bussmann, Johnson et al., 2017; Masoumi & Lindström, 2012). The piloting of programmes and reviewing modules based on practitioner feedback are essential processes in the implementation of online programmes to ensure student success (Bussmann, Johnson et al., 2017). When online education is used to enhance economic and social development in a country, poor-quality online programmes would, unfortunately, have little impact on societies (Mohee, 2019).

3.7. QUALITY IN ONLINE EDUCATION

Even though ODE has become increasingly popular, there remains a lingering perception that it offers a lower-quality education than in-person learning (Hodges, Moore et al., 2020). This underscores the importance of implementing more robust measures to ensure that ODE is on par with traditional face-to-face education and that effective quality assurance systems are established as it becomes more prevalent in the education landscape (Jung, 2022).

Quality assurance practices in ODE could be referred to as measures undertaken by an institution to determine benchmarks or criteria for teaching and learning excellence and improving existing standards of teaching and learning (Masoumi & Lindström, 2012; Tadesse, 2016). Aluko, Krull et al. (2022) emphasise that quality assurance practices should enrich students' learning experiences and ensure meaningful learning. Furthermore, quality assurance practices should reflect the effectiveness and efficiency of teaching and learning activities and initiatives within HE institutions (Tadesse, 2016). Quality assurance measures should validate reliable, professional and credible ODE practices for all stakeholders (Aluko, Krull et al., 2022). As a result, quality assurance is essential to the success of higher learning institutions that offer ODE programmes in South Africa.

One of the risks rapid expansion poses for HE institutions is compromising the quality of education (Hodges, Moore et al., 2020; Wolhuter & Jacobs, 2021). In addition, implementing emergency and quick solutions related to online learning, as seen with the COVID-19 pandemic, could lead to skewed views of online education (Du Preez & Le Grange, 2020). Hodges, Moore et al. (2020) and Appolloni, Colasanti et al. (2021) explain that despite data indicating the contrary, there is a perception that online learning is of a poorer quality than face-to-face learning. Therefore, hasty efforts by HE institutions to offer online learning options could suggest that online education is inferior to in-person instruction (Hodges, Moore et al., 2020). To fully utilise the advantages and opportunities of the online format, online education should be carefully designed, developed, and executed (Appolloni, Colasanti et al., 2021). Building quality online programmes requires developing new skills and approaches and a significant commitment of time and effort (Sullivan, Polnick, Nickson, Maninger, & Butler, 2018). Therefore, certain variables exist that South African HE institutions must consider when planning and designing ODE programmes. This includes enrolment size, decentralised support for a widely diverse student body, assessment strategies and how to manage work integrated learning (Nadeosa, 2021).

In many countries, ODE is subjected to rules, regulations, and procedures mandated by national, regional, or even global quality assurance and accreditation bodies in conjunction with various professional and academic institutions (Latchem, 2016). On a national scale, accreditation for an ODE institution or programme is typically awarded following comprehensive internal and external assessments of the institution or programme's quality. This accreditation is conferred by one or multiple national agencies responsible for higher education quality and accreditation. Consequently, the institution is granted recognition or an official license (Jung, 2022). In South Africa, the DHET and CHE fulfil these roles. These regulatory entities have formulated criteria, performance metrics, and protocols to guide higher education institutions through internal and external evaluation procedures and steer ongoing enhancements (Jung, 2022).

Quality assurance scholars believe that the most effective QA systems in HE are grounded in collegial thinking, owned collegially, and implemented to improve existing practices (Mohee, 2019). HE can only significantly impact education if the quality is excellent and meets the needs of the learners and communities (Hidayah & Syahrani, 2022; Mohee, 2019). Superior quality will become visible when institutions exceed their implemented QA benchmarks or criteria (Hidayah & Syahrani, 2022). Evidence of widespread qualitative change after conducting QA is needed (Tadesse, 2016). Quality assurance should ensure that HE institutions carry out their mission by ensuring that particular programmes accomplish legitimate teaching and learning objectives to have a positive social impact and satisfy the demands of students and other stakeholders (Nadeosa, 2021).

Quality assurance should form part of the daily realities of HE institutions (Tadesse, 2016). Subsequently, quality assurance could be used as an effective management tool to ensure that an institution meets the required quality benchmarks or criteria (Tadesse, 2016). Quality assurance mechanisms must promote students' problem-solving and critical thinking skills (Mohee, 2019) and enhance innovativeness that will assist students in solving real-life problems (Aluko, Krull et al., 2022).

3.8. QUALITY MEASURES IN ONLINE EDUCATION

Within the literature addressing the quality of ODE, two predominant trends can be identified: quality assurance and quality enhancement. In essence, various concepts and methodologies for evaluating the quality of online education can be categorised into these overarching approaches: assurance and enhancement. In light of these perspectives, quality can be perceived as an ongoing process for advancement or as a method for guaranteeing and validating a service. Despite the distinctions observed between these approaches, it can be affirmed that the effective implementation of quality assurance fosters quality within educational contexts and conversely (Butcher & Wilson-Strydom, 2013).

3.8.1. QUALITY ASSURANCE

In guaranteeing suitability for a specific purpose, quality assurance evaluates how a course/programme is conducted and delivered against a minimum standard established by the producer, provider, government, or other entities. Consequently, quality assurance does not make any assumptions about the quality of competing products or services (Kayyali, 2023). In simpler terms, quality assurance involves a series of deliberate and process-driven measures aimed at ensuring the quality of a course/programme or at preventing the production or delivery of subpar products or services in the initial stages by prioritising processes and emphasising prevention over corrective actions (Jung, 2022). Online institutions typically implement quality assurance through benchmarking or accreditation (Kayyali, 2023).

3.8.2. QUALITY ENHANCEMENT

Quality enhancement, or improvement, pertains to the ongoing improvement of the quality of e-learning across various aspects, including processes, outputs, and outcomes. It involves a series of procedures through which enhancements are implemented in the aspects of a course or unit that need improvement (Butcher & Wilson-Strydom, 2013). Quality enhancement involves a deliberate transformation process, encompassing elements like teaching and learning, primarily focusing on creating value, improving quality, and executing transformative changes (Williams, 2016). The primary emphasis of quality improvement centres on self-assessment, typically involving continuous self-evaluation that compares the present quality (current state) to the quality it has had in the past or should have in the future (Williams, 2016).

From these perspectives, quality can be seen as an ongoing process aimed at improvement or as a method for ensuring and validating a service. While there are distinctions among these approaches, it can be asserted that the practical application of quality assurance enhances quality in educational environments, and conversely, quality promotes the proper implementation of quality assurance.

3.9. THE APPLICATION OF QUALITY ASSURANCE MEASURES IN ONLINE EDUCATION

According to Jung (2022), when examining quality assurance frameworks at national, regional, and global scales, it becomes evident that globalisation, technological progress, and transnational ODE have universally resulted in adopting comparable quality assurance standards and procedures in ODE. Nevertheless, while numerous ODE institutions share common quality assurance characteristics, they implement quality assurance in distinct manners, influenced partly by their available resources, size, organisational structure, and the quality culture within their institutions (Jung, 2022).

Higher education institutions are increasingly aware of the vital significance of QA in addressing the complexities and requirements of public funding, social responsibility, and the satisfaction of diverse stakeholders (Ngoc, Hieu, & Tien, 2023). Furthermore, the competitiveness of the education they provide underscores this importance. Recognising the value of QA procedures, numerous HE institutions and ODE programmes have instituted QA systems that align with specific QA and accreditation standards. Some have even taken the step of embracing international QA systems (Jung, 2011). Most QA systems are characterised as follows:

3.9.1. QA MANAGEMENT SYSTEMS

Jung and Latchem (2007) identified three QA management systems within ODE institutions and programmes: centralised, collective, and decentralised.

Centralised QA systems are managed by QA centres or senior administrators who oversee the entire QA process. This is common in relatively large-scale ODE institutions. According to Latchem (2016), centralised QA units or specialised QA staff are present in over 70 Commonwealth universities, including dedicated ODE institutions and ODE programmes within traditional universities.

Collective QA systems are typically operated by committees, councils, or boards that assume distinct roles in various aspects or stages of the QA process. For example, in such systems, the quality of ODE programmes and courses may be assessed and approved by a programme committee or programme review team, while learning outcomes are evaluated by an examinations office.

Decentralised QA systems distribute the responsibility for quality assurance among multiple management units. For instance, each administrative office and academic unit ensures quality.

A centralised system may be the most effective when a QA system is first implemented, even though no empirical evidence currently compares the relative effectiveness and efficiency of different QA management systems (Jung, Wong, & Belawati, 2013). On the other hand, once the QA system has been established and a chance has been given for a quality culture to emerge inside the institution, a decentralised or communal QA system may be more successful (Jung, 2022).

3.9.2. QUALITY ASSURANCE FOCUS AREAS

Most institutional QA systems primarily concentrate on input and process factors. These could include planning, administration, curriculum development, teaching and learning, student support, staff support, assessment and technological infrastructure. The underlying assumption is that if an institution is sufficiently resourced and effectively managed in these areas, it will be well-equipped to guarantee the quality of its overall outcomes. Regrettably, this assumption has proven to be inaccurate. Consequently, some QA systems have started incorporating output and outcome factors, including students' academic achievements, the career progression of graduates, and the institution's contributions to community service (Darojat, 2018).

South African institutions follow a national QA framework determined by the CHE. In 2001, the CHE founded the Higher Education Quality Committee (HEQC) to supervise the quality of higher education in South Africa. While the HEQC's responsibilities encompassed aspects like promoting quality, conducting institutional audits, and accrediting programmes, they also involved capacity development and training as

fundamental elements of its agenda. This was part of the broader effort to establish an efficient national quality assurance system (CHE, 2004). The CHE and its HEQC have utilised various quality assurance approaches.

With time, it has become evident that the present-day higher education environment differs considerably from the one in which the CHE and the HEQC were created and how quality assurance is conducted (CHE, 2021). Hence, the CHE could not afford to remain complacent and maintain the status quo, as doing so would have transformed the quality assurance system into a mere bureaucratic procedure with minimal relevance in a dynamic higher education landscape influenced by an even more swiftly evolving macro-environment. In light of this context, the CHE initiated a process to construct a fresh quality assurance framework (QAF) that encompasses and mirrors the dynamics of evolving national, regional, and global higher education systems (CHE, 2021).

The HEQC has sanctioned the implementation of the QAF by the CHE in 2024, as it necessitates the creation of standards for multiple higher education practices to facilitate the QAF's execution (CHE, 2022). According to the QAF, various standards are utilised in higher education. These encompass content standards, standards for teaching and learning, standards for evaluating student performance, and institutional performance standards (CHE, 2021). According to the CHE, standards vary in intent, application, and breadth. These standards serve as guidelines for QA in higher education, which HEIs must consider and comply with across all facets of their operations and in all forms of higher education offerings. Within the framework of QAF implementation, these broad categories of standards have been designated as Higher Education Practice Standards (HEPS). HEPS represent guidelines for precise functional domains in which quality must be upheld. These areas include teaching and learning, assessment, student performance, governance, and student support (CHE, 2022).

According to the CHE (2022), standards will be the foundation for enhancing the sector's capabilities and for the forthcoming Quality Reviews and Accreditation procedures under the QAF. The HEPS will also underpin the design of Institutional Dashboards, which will mirror an institution's performance concerning quality

assurance. This, in turn, will shape the CHE's interactions with an institution within the framework of the QAF.

The QAF recognised the reflexive-generative approach as the method for creating standards within Communities of Practice (CoPs). The HEQC has emphasised the significance of establishing Communities of Practice (CoPs) comprising peer academics and support professionals that are inclusive and genuinely reflective of the consultative and collaborative philosophy the QAF promotes. Crafting CoPs that are representative, consultative, and inclusive will strengthen the sector's acceptance and commitment to the standards being developed.

The QAF also designates teaching and learning as the primary emphasis for its initial implementation phase. Accordingly, the CHE has recognised the necessity of placing student learning and the student experience as the focal points of the Standards Development process. The following overarching or thematic areas of HEPS have been identified, each encompassing three principal cross-cutting themes:

1. Facilitating knowledge and developing new knowledge and practices:
 - Curriculum design
 - Programme development
 - Delivery, management
 - Review and renewal (including assessment, modes of delivery, T&L strategy, teaching quality, CPD, student and lecturer load, and WIL as defined in the HEQSF);
 - Indigenous knowledges
 - Multilingualism
2. Learning environments and experiences:
 - Facilities
 - Infrastructure
 - Laboratories
 - Library
 - Residences and study spaces
 - Connectivity

- Digital infrastructure and support
 - Student support (academic and psychosocial)
 - Administrative and professional support systems and the resourcing thereof
3. Facilitating transitions:
- Access and admission
 - RPL
 - CAT
 - Articulation within and between institutions and sectors
 - Micro-credentialing
 - Joint qualifications
 - National and international collaborative partnerships
 - Tracer studies
 - Graduateness
 - Staff transitions
 - PQM / HEQSF
4. Generating and using data:
- Information management and research (institutional, SOTL and scholarship of QA) to inform decision-making about students.

The following cross-cutting themes will support the thematic areas:

- a) Achieving a sustainable, equitable society and the role of HEIs in that
- b) HEIs as sites of personal, cultural and societal change and transformation
- c) Leadership and management – for and in service of the academic project.

The NADEOSA quality criteria, as explained in Section 4.3.2, also play an essential role in the Distance Education environment in South Africa. It ought to be determined how the NADEOSA quality criteria will respond to the newly developed standards of the QAF after implementation in 2024.

3.9.3. STANDARDS, BEST PRACTICES, AND PERFORMANCE INDICATORS

The terminology of standards, criteria, components, best practices, and performance indicators can be employed inconsistently in various QA frameworks, which is confusing. This thesis defines a QA framework as a system that outlines a set of QA standards comprising best practices or sub-standards within a specific QA focus area. Various institutions utilise best practices to steer and evaluate the quality of their institutions across a range of QA areas or standards (Jung, 2022).

Performance indicators are employed to evaluate the performance of outputs and outcomes, typically relying on quantitative data. According to Jung (2022), typical performance indicators in the context of ODE encompass metrics like course and programme registrations, course and programme completion rates, graduation rates, student satisfaction, staff satisfaction, the economic influence of an institution on its local community, as well as grades attained for individual assignments, final programme grades, participation in discussion boards, initiation of discussion threads, and standardised test scores.

Looking at the examples provided, it becomes apparent that best practices or sub-standards tend to emphasise input and process variables, often using qualitative terms. In contrast, performance indicators are geared toward measuring output and outcome variables, often necessitating quantitative data collection. Although the output/outcome-oriented approach to quality assurance is highly recommended, it is essential to acknowledge the challenges involved in identifying performance indicators for ODE and quantitatively assessing ODE quality (AlGhamdi & AlAnizan, 2018). Equally vital is achieving consensus among stakeholders regarding benchmarks and performance indicators to ensure reliable and valid internal and external evaluations of outputs and outcomes (Jung, 2022).

3.9.4. QUALITY ASSURANCE PROCEDURE

Quality Assurance is essentially a recurring process in which an institution, whether as a single entity or as an aggregation of individual units, engages in self-assessment, undergoes internal evaluation, and pursues external evaluation and, if necessary,

(re)accreditation (Kayyali, 2023). This quality audit process usually follows national QA regulations (Jung, 2022). According to Jung (2022), quality auditing in an institution commences with self-assessment, self-examination, or self-monitoring. The institution gathers and evaluates current data concerning its educational offerings and services and shares the outcomes with its internal stakeholders and the wider community.

Certain institutions engage in ongoing self-assessment, whereas others perform self-examination periodically, typically in anticipation of accreditation by a selected external organisation (Kayyali, 2023). Self-evaluation addresses several questions related to QA areas, such as the following:

1. What measures are implemented concerning each of the QA standards? Why were these measures initiated? Are these measures suitable?
2. How is the efficiency of these measures assessed? What performance metrics are accessible, and are they relevant?
3. What follow-up steps should be implemented based on the review's findings?
4. Is it possible to gauge the level of accomplishments? What are the actual results or outcomes?
5. Is it feasible to enhance the current measures, including those already proving effective?

Jung (2022) explains that to address the questions outlined above, institutions gather and assess information acquired from various sources. This includes data from student surveys, such as those evaluating teaching effectiveness and satisfaction, as well as surveys of graduates. Additionally, interviews with staff and other stakeholders are conducted. Furthermore, data about enrollment, re-enrollment rates, exam pass rates, dropout statistics, and the percentage of graduate students are analysed. All of this data is related to evaluating institutional performance in terms of effectiveness and efficiency.

The purpose of an external review is to verify the self-evaluation reports and other related documents by external review teams made up of independent experts who are carefully selected, having fulfilled specific criteria and training by the national QA agencies. As mentioned in Section 3.9.2, the newly developed QAF by the CHE should

guide institutions in their self-evaluation. For programme accreditation and re-accreditation, the CHE evaluates the following criteria in Table 3.4:

Table 3.4: CHE's criteria linked to programme accreditation and re-accreditation (CHE, 2004).

Criteria Linked to Programme Accreditation	Criteria linked to Re-accreditation of Existing Accredited Programmes
1. Programme design (Criterion 1)	1. Programme coordination (Criterion 10)
2. Student recruitment, admission and selection (Criterion 2)	2. Academic development for student success (Criterion 11)
3. Staffing (Criterion 3 and 4)	3. Teaching and learning interactions (Criterion 12)
4. Teaching and learning strategy (Criterion 5)	4. Student assessment practices (Criterion 13 and 14)
5. Student assessment policies and procedures (Criterion 6)	5. Coordination or work-based learning (Criterion 15)
6. Infrastructure and library resources (Criterion 7)	6. Delivery of postgraduate programmes (Criterion 16)
7. Programme administrative services (Criterion 8)	7. Student retention and throughput rates (Criterion 17)
8. Postgraduate policies, regulations and procedures (Criterion 9)	8. Programme impact (employability, external acknowledgement) and review (Criterion 18 and 19)

Typically, the accreditation process involves a "site visit" carried out by a panel of subject matter and quality assurance specialists. In the course of this site visit, the CHE assesses whether the institution possesses the capability to provide a specific higher education programme for which accreditation is being requested. A report from this site visit is generated, processed, and presented at the Accreditation Committee and HEQC Board meetings. Site visits play a crucial role in quality assurance as they validate the documentation-based evaluation submitted by the institution (CHE, 2016).

Specific individuals contend that quality audits carried out through internal and external reviews lack purpose and become overly bureaucratic. This is primarily due to their tendency to concentrate on input factors, particularly in teaching and research domains. Additionally, it is noted that these audits often rely on data that may not consistently be reliable and valid and frequently do not involve students (Seyfried & Pohlenz, 2020).

On the contrary, some individuals highlight the favourable aspects of QA processes. For instance, Schwegler, Altman and Bunkowski (2014) demonstrate that faculty members who engaged in the Quality Matters peer review process for their institution's online courses found peer reviews beneficial. They felt that these reviews helped them enhance the quality of their courses, acquire new skills in online technology, and gain a better grasp of quality concerns in online education.

3.9.5. QUALITY ASSURANCE GUIDELINES AND STAFF TRAINING

According to Latchem (2016), the creation and application of QA manuals are not widespread in ODE institutions. A standard QA manual typically comprises QA standards, best practices or sub-standards, and performance indicators for crucial QA domains. It also outlines the QA procedures to be adhered to and the necessary resources and measures for enhancing and improving quality. In South Africa, although the CHE provides criteria for programme accreditation, these criteria can not be utilised to ensure continued quality assurance within institutions. Subsequently, the CHE is developing a new quality assurance framework, as elaborated in Section 3.9.2. For higher DE providers in South Africa, NADEOSA has developed QA guidelines which institutions could use to ensure successful programme delivery (cf. 4.2.2 & cf. 4.3.2).

Numerous traditional universities additionally provide faculty training and professional development sessions to enhance their faculty's skills in online and blended education. These sessions are often conducted through a department like the Center for Teaching and Learning or a similar entity (Jung, 2022). As staff development assumes a more prominent role in strategic planning, it becomes crucial that any training sessions attended by staff for development are tailored to meet the organisation's specific needs. These sessions should align with strategic goals, foster positive attitudes and professional values, and yield tangible benefits for the broader academic community (Greere, 2023).

Numerous institutions have established training programmes or sessions to enhance the skills of their staff. Initially, these programmes concentrated on course design and development. However, more recently, the emphasis has shifted towards online

interactions and utilising diverse technologies. This shift ensures managers and staff are thoroughly equipped with QA principles and methods (Jung, Wong et al., 2013).

Quality assurance training can take various forms, encompassing situations where designated quality assurance experts aim to enhance their skills for personal growth or in response to an identified need within their institution or organization. It also extends to instances where current academics or administrators must engage with or support institutional quality assurance processes due to evolving internal demands or external evaluations, such as accreditation or review visits (Greere, 2023).

3.10. THE ELEMENTS OF ONLINE DISTANCE EDUCATION AND HOW THEY RELATE TO QUALITY

This section specifically investigated how the the elements identified in Section 3.2 relate to quality in ODE.

3.10.1. INSTITUTIONALLY BASED PROGRAMMES

According to Picciano (2015), institutions have diverse missions, objectives, student populations, and approaches to online education. Successful institutions in the online education domain have achieved this success by aligning their online programmes closely with their unique missions and goals. They have not attempted to transform their core identities in pursuit of online education. Instead, institutions should establish objectives for online education that harmonise with their broader mission, similar to how they set goals for other activities linked to their mission. Collaboration in the planning process, particularly involving faculty, is imperative.

Despite the significance of technology, infrastructure, instructional design, and standards in the design of online courses, the faculty members instructing these courses have a pivotal role in determining the courses' success and their impact on student learning (Kibaru, 2018). Faculty support has been recognised as a significant measure of high-quality online learning (Martin, Polly, Jokiaho, & May, 2017), and it is also a crucial element for achieving success in online education (Uvalić-Trumbić & Daniel, 2014).

Faculty members play essential roles in all aspects of an online course, as they function as subject matter experts, course designers, course managers, and facilitators, significantly influencing student engagement and success (Martin, Budhrani, Kumar, & Ritzhaupt, 2019). While faculty roles can differ based on institutional structures and academic policies, it is crucial to establish effective systems and support mechanisms to enable them to excel in teaching within online environments that prioritise student-centred and interaction-driven approaches (Beck & Ferdig, 2008).

When an institution shifts to online education or programmes opt to provide online modules, faculty members lead this transformation. They must adapt and rethink what they teach, how they teach, methods for assessing student learning, and how to effectively facilitate this learning within the online environment, necessitating a fundamental change in their approach (Kibaru, 2018). It is widely recognised that creating and effectively instructing an online module demands more time than required for an in-person, on-campus course (Seaman, 2009). The substantial increase in workload associated with online teaching, whether perceived or actual and the insufficient acknowledgement and institutional support for faculty members engaged in online teaching are two significant obstacles to online education (Pedro & Kumar, 2020).

In the past twenty years, numerous studies have investigated the challenges faculty members encounter when teaching online and the necessity for support and professional development to address these issues (Berge, Muilenburg, & Haneghan, 2002; Kebritchi, Lipschuetz, & Santiago, 2017; Lloyd, Byrne, & McCoy, 2012). Faculty members often face challenges related to their technical skills, the pedagogical adjustments required for the shift to the online learning environment, the absence of incentives and resources to offset the substantial time commitment involved in online programme development and teaching, as well as various forms of support for both academic and administrative aspects during the transition to online instruction (Kebritchi, Lipschuetz et al., 2017).

Providing robust support for faculty is of utmost importance for the success of online education within a HEI, particularly for faculty members with limited or no prior experience in online teaching (Englund, Olofsson, & Price, 2017; Masoumi & Lindström, 2012; Simamora, De Fretes, Purba, & Pasaribu, 2020). Faculty development and training are consistently identified as high-priority areas for all HEIs. However, the availability and nature of this training and support can significantly differ across various HEIs and their specific contexts (Legon, Gareett, & Fredericksen, 2019). Various types of institutional support play a role in the success of online instructors. However, there is a notable absence of organised information regarding the instructional services HEIs should offer to guarantee the delivery of high-quality online education (Pedro & Kumar, 2020).

Faculty support can occur in various ways, including assistance with course development, allocation of time and rewards for online teaching engagement, professional development for enhancing online teaching skills, aid with academic procedures like plagiarism prevention and appropriate use of materials, institutional guidance on online education policies, operational assistance, peer support, and even support for students (Almpanis, 2015; Arinto, 2016; Baran & Correia, 2014). Providing online students with support related to administrative and academic procedures, technology accessibility, and occasionally academic advising can substantially decrease the inquiries and issues that faculty members teaching online modules must address, thereby reducing their workload (Din, Haron, & Rashid, 2016; Pedro & Kumar, 2020). These various types of faculty support must be well-coordinated and aligned with an institution's strategic objectives and overall direction (Debattista, 2018).

Research findings emphasise that leadership, the positioning of the institution, and the level of institutional support are all considered crucial for the success of online education, as reported by administrators and faculty (Kibaru, 2018; Pedro & Kumar, 2020). This support enhances faculty satisfaction, a critical aspect of quality in online education (Borup & Stevens, 2016). Faculty satisfaction is recognised as one of the five foundational pillars of quality online education, as outlined by the Online Learning Consortium (OLC, 2023). While individual studies have examined specific aspects of instructional design support or faculty development for online teaching, it is crucial to

comprehensively assess the components that constitute faculty support in an institution striving for high-quality online education (Pedro & Kumar, 2020).

3.10.2. GEOGRAPHICAL SEPARATION BETWEEN THE STUDENT AND THE INSTITUTION

Information communication technologies in DE can deliver “classes” to students in various environments (Abedi & Badragheh, 2011; Houlden & Veletsianos, 2019). Many DE students have busy lives (Andrews & Tynan, 2012; Houlden & Veletsianos, 2019) as they are employed full-time, have family responsibilities, and experience time constraints (Houlden & Veletsianos, 2019; Sarkar, 2012). Convenience and flexibility are key factors that appeal to DE students as their needs are met (Houlden & Veletsianos, 2019; Jaggars, 2014). Popular DE theorist Wedemeyer (2010) believed that educators should use the physical separation between themselves and their students to promote individuality, convenience, and personal accountability (Chin, 2019).

Although ICTs could overcome barriers created by physical distance (Vasudevaiah, 2016), the geographical separation between educators and students could significantly influence students' learning journey and experience. Online education presents pedagogical difficulties, such as the potential for isolation and disconnection, which can result in elevated dropout rates (Sevnarayan, 2022). It could be argued that the restricted face-to-face interaction in ODE could lead to what Michael Moore calls 'transactional distance' (TD). The theory of TD was initially formulated in the 1980s and pertains to the psychological gap between instructors and students (Moore, 1993). The concept of TD brought about a fundamental change in how DE is perceived, emphasising it as a social and communicative divide where possible misunderstandings can arise between educators and students (Swart & MacLeod, 2021).

Transactional distance, as a global theory, has found extensive application in online education research, serving as a framework for studying interaction within online education settings (Sevnarayan, 2022). This interactionist framework denotes the cognitive space that needs to be traversed between educators and students; however,

it represents a potential misunderstanding between the lecturer and the student (Swart & MacLeod, 2021). This distance or gap should be reduced or minimised in an ideal scenario. This theory was initially designed for traditional face-to-face education, but lecturers and students often experience an increased separation in ODE, primarily due to geographical distances. Subsequently, in distance education, transactional distance poses more significant challenges because students often feel more isolated and demotivated, leading to higher dropout rates (Moore, 1993; Swart & MacLeod, 2021).

Moore proposed that stakeholders in distance education should consider three variables that impact transactional distance: structure, dialogue, and autonomy (Moore, 1993). The Council on Higher Education (2014) argues that a "transactional distance" exists in all teaching and learning interactions and is amplified in a DE setting, although temporal and physical separation poses many obstacles in DE contexts.

The three variables proposed by Moore (1993) could be elaborated as follows:

Instructional Dialogue

In a distance education environment, the dialogue between lecturers and students may be slower but more thoughtful (CHE, 2014). ICTs could assist and enhance communication between the role players (Pregowska, Masztalerz et al., 2021). Effective communication can only occur if it forms an essential part of programme design (Rodríguez-Ardura & Meseguer-Artola, 2016). Although the programme design elicits communication, the learning programme should effectively promote and mediate these opportunities (Garrison, 2016).

Programme/Module Structure

The Council on Higher Education (2014) argues that institutions must determine prospective students' expectations, needs and skill levels when designing programmes. Students should easily navigate learning pathways that will enable them to achieve the planned learning outcomes of a programme (Aluko, Krull et al., 2022). Therefore, online learning is not merely providing textual materials or video clips to students (OER Africa, 2022), which was usually the case during the COVID-19

pandemic when institutions reverted to emergency remote teaching practices (Aluko, Krull et al., 2022). The CHE (2014) further argues that it is essential that programme designers determine where students are physically located and what impact this may have on communication and interactivity in the learning environment. Subsequently, the approaches and planning of teaching and learning are vital since designers need to consider how students should best achieve the learning outcomes in a virtual environment (Aluko, Krull et al., 2022).

Student Autonomy

Student autonomy refers to the learning programme's ability to create an environment where the student can be self-supporting in the learning process (COL, 2020). This means that a student can determine their own learning goals and experiences and pursue learning without the guidance of a lecturer, tutor, or fellow student (Hiemstra, 1994). Programme designers should consider the extent or degree of spatial and temporal distance required of students in a programme (CHE, 2014).

According to the Council on Higher Education, the abovementioned challenges could be addressed by incorporating ICT in DE (CHE, 2014). The CHE emphasises that the implementation of ICT should be mindful of students' technology profiles and the physical and financial burden it places on students (CHE, 2014). Therefore, greater emphasis should be placed on the planning and design of programmes (Simonson, Zvacek et al., 2019). The CHE (2014) explains that during the planning of DE programmes, spatial and temporal separation should be pre-assumed, and students' learning experiences should be designed around these assumptions. To aid the planning of the instruction environment, Simonson, Zvacek et al. (2019) argue that the environment should be viewed as a system of relationships between the educator, students, learning resources and technology. Subsequently, decisions regarding the design of the learning environment, content dissemination, and technology use will influence all the role players (Moore, 2016).

Amid the prevailing circumstances of the COVID-19 pandemic, online education has become an unavoidable necessity. Both instructors and students must adjust to this "new normal." To ensure the success of an online module or programme, instructors must proactively establish opportunities and environments that foster student-

instructor interaction, promote dialogue and social engagement, and well-structured learning materials and activities. These measures are crucial for minimizing transactional distance within a module or programme (Sevnarayan, 2022; Swart & MacLeod, 2021).

3.10.3. THE USE OF TECHNOLOGY IN ODE

The significance of e-learning on ODHE is not solely about the transition to online education. Instead, it extends to the capacity to deliver, manage, and sustain e-learning initiatives regardless of location and time, offering flexible learning opportunities that transcend traditional educational boundaries (Moubayed, Injadat, Nassif, Lutfiyya, & Shami, 2018; Themeli & Bougia, 2016). Over the past decade, technologies such as augmented and virtual reality have changed the focus of education. Instead of traditional instructional methods, the emphasis has shifted towards enabling students to harness their creativity and explore their potential.

Iqbal, Mangina and Campbell (2021) investigate emerging technologies like touchless hand interaction and intelligent agents within the context of teaching and learning. Notably, touchless hand interaction promotes self-directed learning, a crucial requirement in DE institutions that empowers students to act rather than consume information through reading, listening, or watching resources. This advanced technology provides fresh avenues for creating more profound learning opportunities and enhancing interaction and involvement (Iqbal, Mangina et al., 2021).

Research in both developed and developing nations has indicated the existence of delays, uncertainties, and concerns regarding the adoption of eLearning technologies (Mokina & Khoronko, 2020; Tijisma, Hilverda, Scheffelaar, Alders, Schoonmade, Blignaut, & Zweekhorst, 2020; Vanve, Gaikwad, & Shelar, 2016). However, for a glimpse into the effectiveness of distance education, Chinese students have suggested that a combination of pre-recorded videos and live courses or streaming, coupled with enhanced online interaction, could help mitigate the effects of unreliable connectivity and enhance student participation (Sun, Tang, & Zuo, 2020). Additionally, as highlighted by Wu, Bakirova and Trifonov (2021), the utilisation of visualisation in e-learning has seen increased prominence since the beginning of the pandemic. This

trend enables both students and educators to gain insights into content that may have been less accessible in the past.

Distance education institutions frequently adopt a blended teaching and learning model, incorporating synchronous and asynchronous sessions. It is worth noting that students tend to favour synchronous streaming over asynchronous methods (McClure & Williams, 2021). Nevertheless, some argue that asynchronous learning offers students greater autonomy and flexibility in how they progress through their studies (Hodges, Moore et al., 2020).

Gather is a real-time video conferencing platform that allows students to navigate a custom-designed environment. Users can enter private rooms and collaborate with shared documents and files within this space. According to McClure and Williams (2021), students at a research-intensive university in the United Kingdom favoured Gather over Microsoft Teams. This preference stemmed from Gather's capacity to facilitate informal communication effectively, which is crucial for enabling students to manage their learning pace independently. Guiding students through different e-learning technologies and methods can encourage interaction and communication between instructors and students, potentially aiding in mitigating transactional distance.

3.10.4. LEARNING AND INTERACTIVITY

The literature indicates that DE tends to operate in a decentralised manner within the department where it is implemented (Nsamba, 2019; Xiao, 2018; Zawada, 2019). Tony Bates describes the "Lone Ranger" approach as a situation where a lecturer or student operates independently without the support of others (Daniel, 2012). This approach, arguably, does not result in DE's long-term viability and consistent quality.

Selvaras (2020) researched and discovered that most distance students in Sri Lanka had access to technology via mobile phones and were familiar with blended learning, which combines online and traditional learning methods. The research revealed that while these learners preferred distance education, they did not like learning in isolation. Consequently, they opted to incorporate social media and mobile

applications as components of blended learning. Distance students seem receptive to online learning when social media is integrated.

Faculty members are crucial in providing online education within a module's virtual space. In distance education, the absence of in-person cues presents several challenges for online instructors. Therefore, students engaged in distance education highly appreciate the online presence of their instructors and the interaction between instructors and students (Kgabo, 2021; Kyei-Blankson, Ntuli, & Donnelly, 2019; Themeli & Bougia, 2016). Based on Garrison's Community of Inquiry (CoI) framework, Coker (2018) indicates that specific online instructors still struggle with the challenges it presents. Some lecturers maintain a traditional teaching approach in their interactions with students, while others exhibit "emotional presence" and adopt an online pedagogy that considers their students' emotional experiences. Sevnarayan (2022) suggests that in educational systems like DE, lecturers can decrease the TD between them and students by consistently demonstrating their presence in both the online and emotional aspects of teaching.

Houlden and Veletsianos (2019) explain that online learning is a perfect mode of education provision for adult learners who must attend to other life commitments. The asynchronous interaction possibilities that online learning provides are becoming increasingly popular (Tareen & Haand, 2020). Time-independent access, increased peer engagement chances, support for diverse learning styles, and prevention of unfavourable online classroom behaviour are all made possible through asynchronous communication (Tareen & Haand, 2020).

The sudden move by institutions to incorporate online learning approaches may have intensified educators' prevailing perceptions of online learning. The primary cause is that curricula were not adequately planned and created to utilise the advantages of online learning fully (Hodges, Moore et al., 2020). Effective instructional planning and design are crucial elements that will ensure effective online learning (Hodges, Moore et al., 2020). The quality of teaching and learning will be influenced by the design process and consideration of various design considerations (Branch & Dousay, 2015; Hodges, Moore et al., 2020; Mayer, 2019). During emergency remote teaching,

unfortunately, thorough online learning planning might be lacking (Hodges, Moore et al., 2020).

3.11. CONCLUDING REMARKS

This chapter navigated the intricate landscape of ODE, shedding light on the diverse delivery modes and the definitional challenges that persist in the academic discourse. A comprehensive understanding of the nuanced elements comprising ODE was attained. The proposed definition and framework presented herein amalgamate institutional, geographical, technological, and interactive facets, contributing a robust perspective for delineating ODE. As South Africa grapples with the evolving educational approach, the elucidation provided in this chapter serves as a foundational resource. By aligning these insights with the policy guidelines of the DHET, it becomes evident that a symbiotic relationship exists, reinforcing the imperative for strategic integration of technology, pedagogy, and institutional commitment. This groundwork establishes conceptual clarity and sets the stage for subsequent chapters, delving deeper into the dynamics and challenges of implementing online distance education in the South African context.

This chapter also delved into the critical domain of quality assurance in ODE, emphasising its paramount importance in ensuring parity with traditional face-to-face learning. The discussion unfolds by exploring the existing perceptions and challenges associated with ODE, accentuating the need for robust quality measures. The distinction between quality assurance and enhancement is examined, offering a comprehensive view of the multifaceted approaches to ensuring excellence in online education. Furthermore, the chapter provides valuable insights into the application of quality assurance measures, delineating the evolving landscape at national, regional, and global scales. As outlined by the CHE, the forthcoming Quality Assurance Framework in South Africa emerges as a pivotal development, underlining the sector's commitment to adaptability and continuous improvement. The delineation of quality assurance management systems and the identified focus areas collectively contribute to a nuanced understanding of the multifaceted dimensions of ensuring and enhancing the quality of ODE. Chapter 4 outlines the methodology applied to this study to conduct this investigation.

CHAPTER 4: THEORETICAL UNDERPINNINGS

4.1. INTRODUCTION

According to Kivunja (2018), many students pursuing a Master's degree or a PhD find it challenging to distinguish between the theory, theoretical framework, and conceptual framework of a proposed research topic. Luciani (2015), in turn, explains that published research usually fails to present a theoretical and conceptual framework thoroughly. In addition, Luciani (2015) explains that although these concepts commonly occur in research textbooks, they are explained minimally or found as terms in the glossary of these books. Some authors use these terms interchangeably, and others add specific meanings to the terminology (Fain, 2017; Green, 2014; Kivunja, 2018; Parahoo, 2014; Varpio, Paradis, Uijtdehaage, & Young, 2020). Researchers, therefore, interpret the concepts differently. Consequently, the concepts are used interchangeably in this research report (Green, 2014; Varpio, Paradis et al., 2020). This chapter clarifies these concepts and elaborates on their value in this study.

4.2. THE APPLICATION OF FRAMEWORKS AND A MODEL IN THIS STUDY

According to Jung (2022), a theoretical framework serves as a framework that encapsulates concepts and theories derived from existing tested and published knowledge. This knowledge is synthesised to provide a theoretical foundation for data analysis and interpreting the meaning inherent in research data. Swanson and Chermack (2013) explain that a theoretical framework serves as the structure capable of upholding or supporting a theory in a research study. Subsequently, a theoretical framework contains interrelated organised statements attempting to make sense of a specific phenomenon (Fain, 2017). A framework also contains an abstract account of the connections between ideas that aid in comprehending a phenomenon (Varpio, Paradis et al., 2020). Varpio, Paradis et al. (2020) emphasise that the concepts, in theory, are usually logically related. Preliminary data could also support theories derived from a vast body of research analysed deductively or inductively (Kivunja, 2018).

Section 2.9 explains that in the global landscape of ODE, the impact of globalisation, technological advancements, and transnational education is evident in the widespread adoption of similar QA standards and procedures. Jung (2022) observes that while common characteristics exist among various ODE institutions, the implementation of QA varies, influenced by factors such as resources, size, organisational structure, and institutional quality culture. Higher education institutions acknowledge the crucial role of QA in addressing funding complexities, social responsibilities, and diverse stakeholder satisfaction. Many institutions, driven by the competitiveness of education, have established QA systems aligned with accreditation standards, with some even embracing international QA frameworks (Jung, 2011; Ngoc, Hieu et al., 2023).

Although institutions, along with national, regional, and global entities, aim to guarantee quality in ODE through the creation of suitable QA criteria and accreditation models, there remains a demand for more well-rounded, efficient, and adaptable QA frameworks and guidelines that can accommodate the dynamic nature of the ODE landscape (Jung, 2022). Jung (2010) proposes an ecological QA framework tailored to these dynamics. This framework underscores the interconnected transactions among elements, including providers, learners, cultures, and policies. It highlights the systemic integration of these elements, emphasising their equal roles in preserving the overall balance within a QA system.

The ecological QA perspective contends that institutions ought to construct a QA system that caters to all stakeholders, contrasting with the prevailing provider-centric QA approach that predominantly considers providers' perspectives while overlooking the inter-relational and dynamic aspects of the QA system (Jung, 2022). It emphasises the necessity of establishing a QA system that is globally oriented yet locally adaptive, acknowledging the sociocultural diversity inherent in QA concepts and practices.

Despite possessing robust technological infrastructure and generating positive reports for external QA assessments, numerous institutions exhibit deficiencies in consistently and regularly implementing QA standards and guidelines across areas such as course design, material development, assessment methods, and support for students and staff (Jung, 2022). Addressing these shortcomings requires a shift from the current

control-oriented framework to a culture-oriented framework, where QA activities are seamlessly integrated into institutions' institutional culture and daily practices.

Subsequently, for this study, one model and two frameworks were used, which enabled the researcher to elucidate the significance, nature, connections, and difficulties alleged or anticipated to be related to the development of a conceptual QA framework for ODE in a South African higher education context (Kivunja, 2018). The use of the model and two frameworks could be explained as follows:

4.2.1. E-QUALITY FRAMEWORK

Masoumi and Lindström (2012) developed a structured set of factors and benchmarks that virtual or online institutions could use to enhance and assure quality provision. This e-quality framework was developed after worldwide calls that the quality of e-learning provision should be investigated (Masoumi & Lindström, 2012). The researcher selected to use the EQF for this study since the framework informs this research study through a comprehensive set of benchmarks and guidelines that could be considered for online education. Section 4.3.1 discusses the framework in greater detail.

4.2.2. NADEOSA QUALITY CRITERIA FOR DISTANCE EDUCATION IN SOUTH AFRICA

The Nadeosa quality criteria aim to provide a set of guidelines to HE institutions in South Africa that they could use to ensure successful programme delivery through DE (Welch & Reed, 2005). The first version of the Nadeosa quality criteria was published in 2005 after the Department of Education, through its Directorate of Distance Education, Media, and Technological Services, in 1996 took the initiative to improve the quality of DE in South Africa (Welch & Reed, 2005). A revised version of the quality criteria was published in 2021 in response to the impact of new educational technologies on DE programmes in South Africa (Nadeosa, 2021). Furthermore, Nadeosa (2021) explains that there are many ways in which technology can be used to support DE. Subsequently, institutions must determine how students should access curriculums and additional resources; how students could be supported through their

learning journey; how students will be assessed and how institutions will manage work-integrated learning (Nadeosa, 2021). The Nadeosa quality criteria mainly apply to programmes that follow a blended or hybrid teaching and learning approach. The quality criteria are discussed in greater detail in section 4.3.2.

4.2.3. A DESIGN RESEARCH MODEL FOR KNOWLEDGE BUILDING

The design research model for knowledge building was initially developed by Owen (2007) to describe and illustrate that knowledge is acquired through action. According to Owen (2007), knowledge is used to produce works, and works are evaluated to build knowledge in any field of discipline. Furthermore, knowledge use and building are guided by structured activities that drive these processes (Owen, 2007). The structured activities that guided the researcher as regards knowledge use and knowledge building, or data collection and analysis, are elements identified in the equality framework (EQF) developed by Masoumi and Lindström (2012) and the quality criteria developed by Nadeosa (2021). Subsequently, the design research model for knowledge building provides a framework wherein the elements identified from the EQF (Masoumi & Lindström, 2012) and the Nadeosa quality criteria (2021) could be structured, analysed and evaluated. Section 4.3.3 further elaborates on this process.

4.3. THE THEORETICAL FRAMEWORK FOR THIS STUDY

A theoretical framework can be regarded as a collection of theories or one theory that underpins the researcher's thoughts about a topic (Fain, 2017; Kivunja, 2018). This theory or theories would also guide the planning and implementation of the research (Swanson & Chermack, 2013). Subsequently, a theoretical framework provides a theoretical coat-hanger for data analysis and interpretation of results (Varpio, Paradis et al., 2020). In addition, the framework should include all the concepts and definitions relevant to the researcher's study (Grant & Osanloo, 2014). The theoretical framework assisted the researcher in creating a "data mining" lens that used knowledge derived from existing research to make sense of the data collected in this study (Kivunja, 2018).

Furthermore, situating the research results within this study's theoretical framework added rigour to the findings of this study (Kivunja, 2018). Lovitts (2005) argues that the theories within a theoretical framework should be appropriate, logically interpreted, well-understood, and aligned with the research questions. The theoretical framework could, therefore, be regarded as the structure that could support the theories applied in this study (Swanson & Chermack, 2013).

The theoretical framework of this study consists of two frameworks and one model, as indicated in section 4.2. The design research model for knowledge building (Owen, 2007) provides the structure of the theoretical framework. The content of the theoretical framework consists of quality assurance elements adapted from the Nadeosa quality criteria (Nadeosa, 2021) and the EQF (Masoumi & Lindström, 2012). The identified elements were combined through logical connections and related to this study (Grant & Osanloo, 2014; Kivunja, 2018). The theoretical framework as a whole, but more specifically, the adapted elements of the framework, guided the following processes (Kivunja, 2018):

- Examination of the elements of the theoretical framework (cf. 4.4);
- Data collection (cf. 5.5);
- Data analysis (cf. 5.5);
- Interpreting the results (cf. Chapter 6);
- Discussion of results (cf. Chapter 7); and
- Recommendations and conclusions (cf. Chapter 8).

The outcome of this study resulted in a proposed EQF for HE institutions (HEIs) offering online programmes (see Chapter 7). Institutions could use the framework to design, evaluate, maintain, and enhance quality ODE provision. The following sections elaborate on the framework's rationale and the adapted elements in greater detail.

4.3.1. E-QUALITY FRAMEWORK

The e-quality framework, developed by Masoumi and Lindström (2012), is a framework that can serve as a foundation for establishing the essential criteria that HE institutions must meet to ensure their sustainability when delivering an online

programme or module. The framework was developed partly in reaction to the pressure on developing nations to become more globally competitive and the failure of HE e-learning programmes, which contributed to concerns about the quality of e-learning. (Masoumi & Lindström, 2012). Masoumi and Lindström (2012) also attempt to answer some of the shortcomings of contemporary quality models through the e-quality framework.

In addition, Masoumi and Lindström (2012) mention that many institutions worldwide use quality assurance models, frameworks, and guidelines developed explicitly for face-to-face education to evaluate OE. This poses some challenges when assessing the quality of OE. Furthermore, Masoumi and Lindström (2012) argue that the success of online education cannot be guaranteed by "excellent" instruction design and "good" education practice alone. Therefore, methodologies that identify quality must be developed to address the quality of online learning.

Online learning should be seen as a new method of teaching and learning, even if specific quality assurance components may overlap between different delivery modes. (Masoumi & Lindström, 2012). Enhancing and assuring quality is critical to the success of e-learning (Masoumi & Lindström, 2012). Institutions should be held accountable for the quality of their service (Masoumi & Lindström, 2012).

Masoumi and Lindström (2012) explain that many contemporary e-quality models lack theoretical grounding. If an e-quality model cannot guide excellent teaching and learning practice and improve student success, then the model's aim is compromised (Masoumi & Lindström, 2012). When developing a model for e-quality, it is imperative to guard against using a set of benchmarks not grounded on a theoretical premise (Masoumi & Lindström, 2012). Some quality assurance models are built on specific cultural norms and values. Using models developed in a Western cultural background could be challenging when their applicability to other cultures is reviewed (Fresen & Boyd, 2005). Models such as the Sloan Consortium quality framework and the quality standards for online learning, developed by (Butcher & Wilson-Strydom, 2013), would be challenging to use in their original form in African contexts. Therefore, a QF should consider cultural and cultural-pedagogical constructs applicable to the audience relevant to the investigation (Masoumi & Lindström, 2012).

The holistic nature of educational processes should be emphasised when developing an e-quality model (Masoumi & Lindström, 2012). This is noticeable when investigating the benchmarks of Masoumi and Lindström (2012) EQF. A “one size fits all” product that fails to address problems holistically is a symptom of mass production (Masoumi & Lindström, 2012). Ultimately, this approach fails to recognise and address students' individual needs and uncharacteristic problems in educational processes. Masoumi and Lindström (2012) argue that following a systemic approach when developing a framework could solve this challenge.

The framework developed by Masoumi and Lindström (2012), as shown in Figure 4.1, is the product of an extensive investigation of academic literature and practical knowledge of the quality of e-learning in HE. The analysis and synthesis of the research Masoumi and Lindström (2012) conducted resulted in the EQF. This framework was reviewed by researchers, teachers and other stakeholders from Gothenburg University and several Iranian virtual institutions (Masoumi & Lindström, 2012). Masoumi and Lindström (2012) emphasise that the validity and usability of their framework are compromised if their benchmarks are not frequently and regularly updated. This in itself allowed the current research study to investigate how these benchmarks could fit into the South African Online Higher Distance Education (OHDE) environment and determine the importance of these benchmarks.

Masoumi and Lindström (2012) explain that the e-quality work they had surveyed to develop their framework did not include any socio-cultural aspects. Therefore, elements such as student collaboration and community of practice are deliberately included, discussed and considered in their own framework. This framework Masoumi and Lindström (2012) created consists of three levels. As many as 113 benchmarks are categorised into 7 main factors or building blocks and 29 sub-factors.

These researchers (Masoumi and Lindström (2012) mention that although each benchmark is categorised under a specific factor, they could nevertheless be relevant in other factors. Furthermore, it is essential to remember that this framework's educational components form a systemic whole. This means that all the building blocks are equally important and sometimes interrelated.

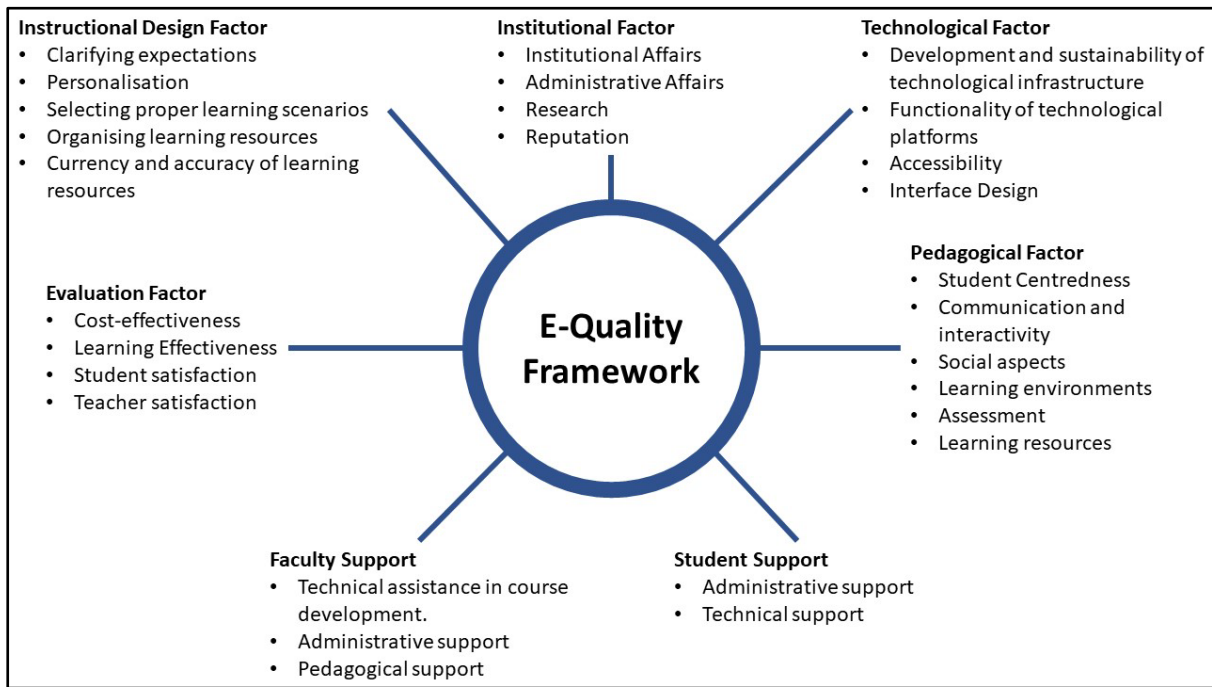


Figure 4.1: E-quality framework.

(Adapted from Masoumi & Lindström, 2012)

4.3.2. NADEOSA QUALITY CRITERIA

Section 4.2.2 indicates that there are two versions of the Nadeosa quality criteria. This section elaborated on the aim of each version and highlighted the importance of the elements presented in the quality criteria.

4.3.2.1. VERSION 1

The first version of the quality assurance (QA) criteria asks whether or not the quality assurance of DE and face-to-face education should be considered separately (Welch & Reed, 2005). At the time, it was believed that DE concerns should, wherever feasible, be included in the QA standards for all delivery methods. Furthermore, Welch and Reed (2005) stated that the QA standards for DE and the general standards for all educational programmes have much in common. When the study was conducted, there was no need to expand the criteria unnecessarily. Welch and Reed (2005) furthermore state that although specific criteria coincide, this does not imply that there is no difference between face-to-face and distance learning. As distance education plays a distinct role today, it is necessary to emphasise the requirements for

successful delivery to enable institutions to fulfil their roles successfully (Welch & Reed, 2005).

Welch and Reed (2005) explain that criteria can only be valid if they are correctly interpreted and used. In addition, quality cannot be regarded as set in stone and develops as educational practices and thinking evolve. Many face-to-face providers intentionally or unintentionally apply DE approaches to teaching and learning (Welch & Reed, 2005). It is unfortunate that some suppliers lack knowledge of or are reluctant to create the mechanisms required to offer distance learning efficiently. Consequently, many face-to-face providers need assistance with providing programmes using DE methods (Welch & Reed, 2005). Therefore, it appears that QA criteria for DE programmes would assist institutional auditors and programme evaluators with sufficient guidelines when face-to-face providers offer DE programmes.

The criteria's components should, moreover, be modified when new interpretations of the criteria emerge from research, assessments, novel viewpoints, and technological advancements (Welch & Reed, 2005). Providing detailed criteria does not mean that all practitioners would necessarily implement the criteria similarly. Therefore, strategies are needed to guide institutions in interpreting the criteria (Welch & Reed, 2005). In recent years, technology use in education has significantly impacted DE worldwide (Welch & Reed, 2005). Subsequently, all indications are that the development and improvement of the criteria need to be ongoing and informed by the latest technological developments.

The first version of the Nadeosa quality criteria was not only based on DE provision in South Africa at the time but also included international experience (Welch & Reed, 2005). The role of the Nadeosa quality criteria is not to prescribe minimum criteria but rather to encourage continuous quality improvement. Institutions should be able to evaluate themselves and determine their quality improvement plan through internal QA processes.

The Nadeosa quality criteria consist of 13 criteria with 212 individual elements. The format used for the standards/criteria is an adaptation of the quality criteria used by the Scottish Vocational Educational Council (SCOTVEC). The criteria are as follows:

- Policy and planning;
- Learners;
- Programme development;
- Course design;
- Course materials;
- Assessment;
- Learner support;
- Human resource strategy;
- Management and administration;
- Collaboration;
- Quality assurance;
- Marketing;
- Results.

Below each of the headings, each of the criteria is broadly explained. Following after the explanations are the criteria-related elements that serve as guidelines to institutions. The reader can explore the individual criteria for further information if greater specifics are needed after reading the 13 criteria, which give an overview of what high-quality DE entails.

4.3.2.2. VERSION 2

The revised version of the Nadeosa quality criteria (2021) aims to acknowledge and emphasise the role of educational technologies in DE. This version retained the 13 main criteria of the first version. Nadeosa (2021) explains that when institutions use educational technologies in their programmes, the mode of delivery and its implications should be transparent.



Figure 4.2: Mode of provision.

(CHE, 2014)

Figure 4.2 illustrates the mode of different provisions on a continuum from face-to-face (F2F) to education at a distance. The off-campus provision of DE assumes that no F2F interaction takes place. Nadeosa (2021) explains that institutions' blended learning approaches blur the lines between F2F and DE. Educational technologies enable independent, resource-based learning, with some DE programmes incorporating F2F interaction. The Nadeosa quality criteria (2021) are mainly concerned with programmes that fall to the right-hand side of the continuum, namely mixed-mode and DE programmes.

Nadeosa (2021) emphasises that it is often difficult to determine how institutions designed their programmes, considering the needs of remote DE students. Therefore, when programmes are reviewed, it is essential to consider the following elements as lenses through which reviews could occur:

- How curriculum resources are designed and shared;
- How assessment will take place;
- How students will be supported; and
- How staff members are prepared and supported.

When institutions are considering the development of programmes that contain online components, it is essential to evaluate students' demographical and technological profiles, the type of technology considered, and whether students have access to the required devices and the internet (Nadeosa, 2021). Institutions should also determine when using technology would assist all stakeholders in reaching the intended outcomes of the programme and what impact it would have on staff and students (Nadeosa, 2021). Therefore, it is essential for the purpose of learning to drive the use of technology and not vice versa. Subsequently, the Nadeosa quality criteria (2021) are guidelines for good practice of DE provision.

4.3.3. DESIGN RESEARCH MODEL FOR KNOWLEDGE BUILDING

The design research model for knowledge building (Owen, 2007) sits at the centre of the theoretical framework. This model's use is twofold. After the researcher explored the reframed elements of the theoretical framework (cf. 4.4), the researcher used the

elements to investigate the practices of the institutions (cf. Chapter 6). This process created new knowledge regarding ODE through these investigations at the participating institutions. The new knowledge was applied to develop a proposed Conceptual Quality Framework for online higher DE in South Africa (cf. Chapter 7).

Owen (2007) argues that knowledge is generated and accumulated through action in any field or discipline. Knowledge about phenomena is typically used to create solutions, and their evaluation is used to build knowledge (Owen, 2007). Owen explains that the knowledge-building process is cyclical and structured. Knowledge is used to produce works and evaluated to build understanding.

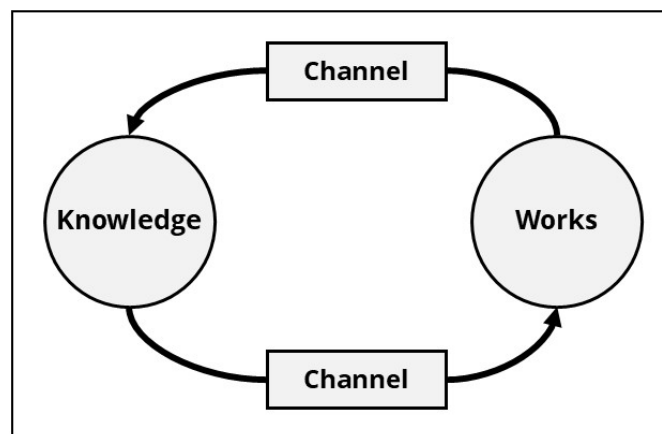


Figure 4.3: Foundations: Knowledge building and knowledge using.
(Adapted from Owen, 2007)

Figure 4.3 shows that channels control knowledge building and knowledge use. According to Owen (2007), these channels can be described as the conventions and rules of a discipline's systems. Subsequently, these channels direct the processes associated with producing and evaluating knowledge and works. These channels exhibit the values, principles, and measures of a mature discipline. It is possible that these channels borrowed or emulated elements found in channels in different fields. Nevertheless, these channels developed and evolved into self-contained units true to the nature of their discipline.

Owen (2007) explains that Figure 4.3 could be extended to become a model that fits the dual nature of actions. In Figure 4.4, this is done by combining two paradigms that could form the foundation for knowledge construction.

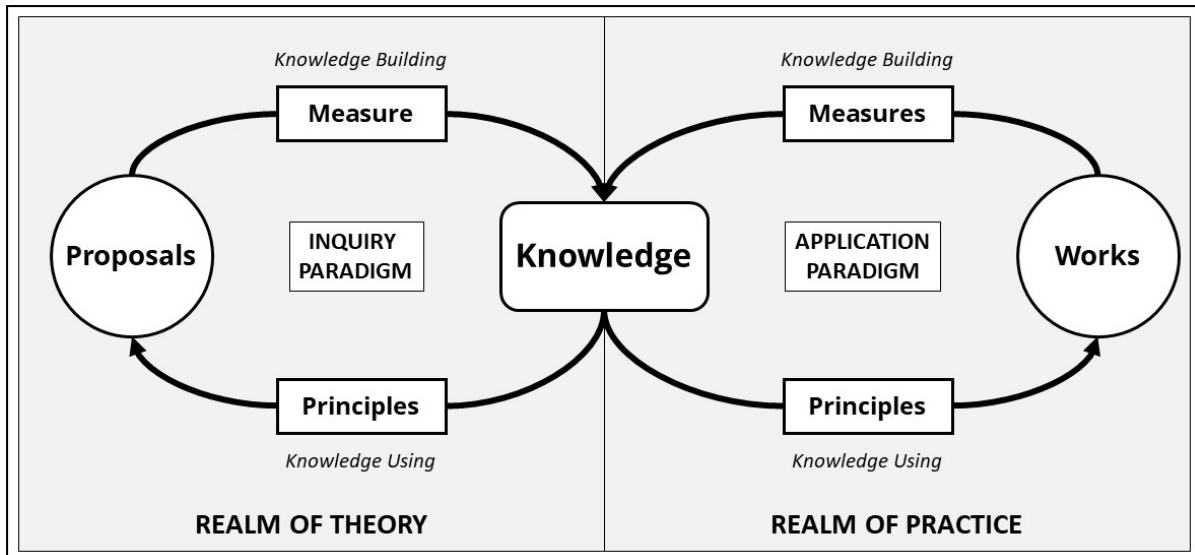


Figure 4.4: An illustration of the dual nature of actions.

(Adapted from Owen, 2007)

The dual nature of actions model consists of two realms, namely theory and practice. Within the realm of theory, an enquiry paradigm is used to build knowledge. Within the realm of practice, an application paradigm is used to produce works. In the realm of theory, existing knowledge is used, through the application of principles, to create proposals. These proposals are tested through measures that acknowledge or reject conclusions. This, as a consequence, leads to knowledge building (Owen, 2007). Within the realm of practice, existing knowledge, through the application of principles, is used to create works. These works are measured using criteria to determine whether they could be worthy additions to the current body of knowledge (Owen, 2007).

Owen (2007) furthermore explains that profound foundational expressions support knowledge building and its use in any field. According to Owen (2007), these expressions could be regarded as needs, goals, values, and measures (Figure 3.5), which direct all fundamental and operational procedures within a discipline. Expressions also lead to the development of the elements or qualities that a discipline exemplifies. Owen (2007) emphasises that these expressions should be examined to determine the differences among disciplines.

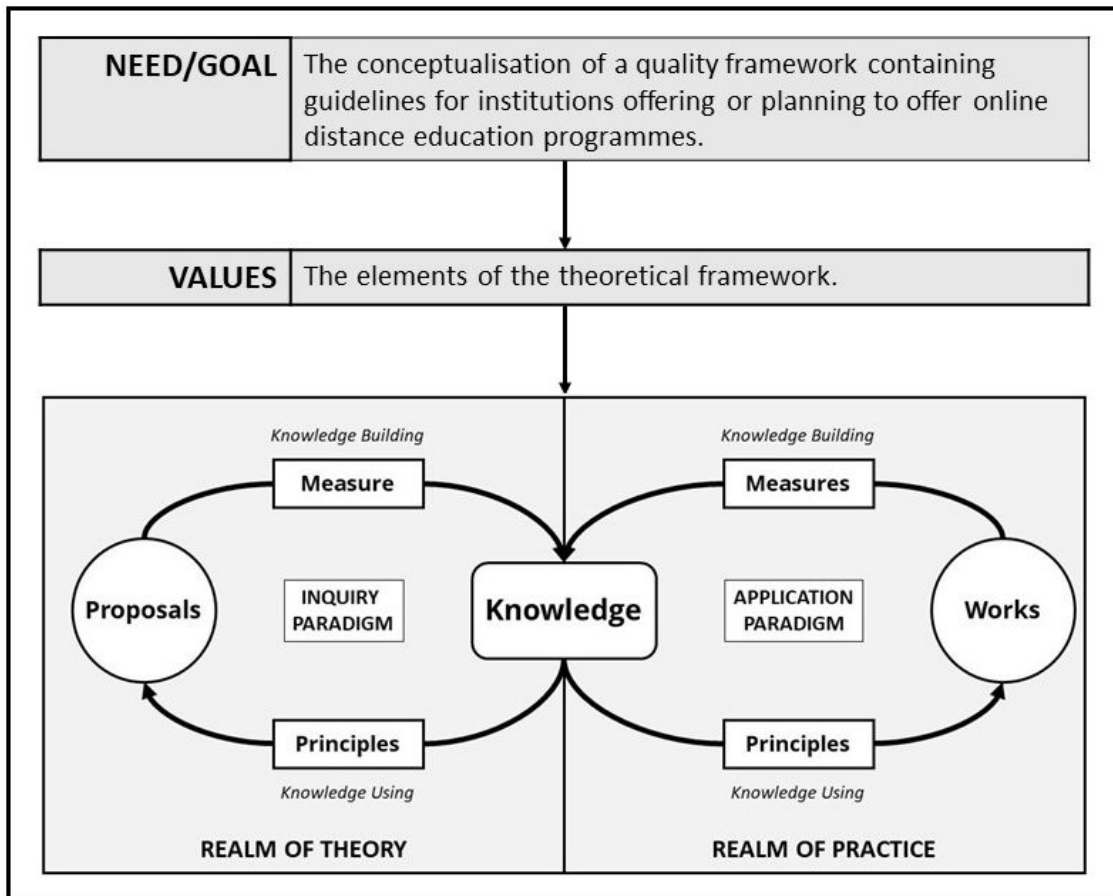


Figure 4.5: Foundations of a discipline.
 (Adapted from Owen, 2007)

Figure 4.5 shows that a field evolves typically from identified needs or goals. For the purpose of this study, the need to conduct the research aligns with the research objective and aims elaborated on in section 1.6. Figure 4.5 moreover shows that values emerge from a need or goal and that these values could be regarded as the qualities necessary to fulfil the need or goal. The elements of the theoretical framework under investigation in this study could be considered the values associated with ODE. Owen (2007) explains that needs and values usually exist on an abstract and theoretical level and should provide a foundation for operationalising the identified values. The “measure” indicated in Figure 4.5 is concerned with interpreting the values as measures that should guide the creation of instruments to manage knowledge-building and use processes. This study represented this process in the realm of theory through literature reviews and in the realm of practice through the data collection and analysis processes. The outcome was the development of a Conceptual Quality Framework that HE institutions in South Africa could use to design, evaluate, maintain, and enhance the provision of quality ODE.

4.4. ELEMENTS OF THE THEORETICAL FRAMEWORK

The elements described in this section could be regarded as the concepts and definitions relevant to this study (Grant & Osanloo, 2014). Furthermore, the elements provide the academic foundation and the structure for the data collected and analysed during this research (Kivunja, 2018). Subsequently, the elements of the theoretical framework guided the researcher to search for specific information in the collected data, make connections between elements, and discuss the results in light of existing frameworks (Kivunja, 2018).

According to Kivunja (2018), it is doubtful that any existing theories will be able to explain the significance of the findings of this study without modification. Most theories are generalisations, not content- or topic-specific (Kivunja, 2018). Therefore, reframing the two frameworks applied in the theoretical framework was necessary. Both frameworks presented in this chapter contain elements applicable to ODE in South Africa. The content of some of the elements of the two frameworks is similar, unique, unrelated, or relevant to this study. Subsequently, it was essential to determine one set of elements that represented the analytical structure of this study (Kivunja, 2018). The elements should, therefore, have been able to answer the research questions and address the problem statement.

Section 4.3.1 explains that the EQF was developed as an instrument that HE institutions could use to enhance and assure quality in virtual (online) institutions. The Nadeosa quality criteria provide quality assurance guidelines to HE institutions in South Africa that offer blended or hybrid DE programmes. The researcher subsequently merged the elements of the two frameworks to create one set of elements that could assist the researcher with analysing the data collected in this study.

Table 4.1: Relationship between the Nadeosa quality criteria and the e-quality framework.

THE RELATIONSHIP BETWEEN THE NADEOSA QUALITY CRITERIA AND THE E-QUALITY FRAMEWORK	
E-quality framework elements	Nadeosa quality criteria
1. Institutional element	<ul style="list-style-type: none"> • Policy and planning • Management and administration
2. Technological element	<ul style="list-style-type: none"> • Programme development
3. Instructional Design element	<ul style="list-style-type: none"> • Programme development • Course design • Materials development
4. Pedagogical element	<ul style="list-style-type: none"> • Programme development • Course design • Materials development • Assessment
5. Student Support	<ul style="list-style-type: none"> • Student information • Student support
5. Faculty Support	<ul style="list-style-type: none"> • Human resource strategy
7. Evaluation element	<ul style="list-style-type: none"> • Quality assurance • Results / Provider outcomes
<i>Quality criteria not addressed by the e-quality framework</i>	<ul style="list-style-type: none"> • Collaborative relationships • Information dissemination

Table 4.1 shows how the EQF elements relate to the Nadeosa quality criteria. Table 4.1 shows that the policy and planning aspects and management and administration addressed by the Nadeosa quality criteria (NQC) are considered institutional elements in the EQF. Student information and support in the NQC are incorporated into the Student Support aspects of the EQF. The EQF does not necessarily address programme development as a standalone component, therefore, the elements of programme development occur in Technological Elements, Instructional Design Elements and Pedagogical Elements. Instructional Design Elements and Pedagogical Elements address course design and materials development of the NQC. Pedagogical Elements in the EQF address all matters related to assessment. Evaluation elements in the EQF address quality assurance aspects and results or provider outcomes. The EQF does not address elements of collaborative relationships and information dissemination. In this study, only the evaluation element of the theoretical framework was discussed in the theoretical framework review. The cost-effectiveness, learning-effectiveness, student satisfaction and teachers' satisfaction sub-elements, which form part of the evaluation element, do not fit in with the scope of this study. These elements

would ideally be utilised to determine an institution's overall performance. This study did not aim to measure institutional performance.

For this study's theoretical framework, the headings of the elements and sub-elements as outlined by the e-quality framework are retained. Although the elements are systematically and logically presented by Masoumi and Lindström (2012), the main focus of the equality framework was to enhance and ensure quality in online institutions, which aligns with the purpose of this study (cf. 1.5). Furthermore, the e-quality framework is developed based on extensive research on e-learning and HE quality. Various researchers and stakeholders also reviewed the e-quality framework, which supports the validity and use of the framework in this study. While Table 4.1 shows the relationship between the EQF and the Nadeosa Quality criteria, the sub-elements of the theoretical framework are indicated in Table 4.2.

Table 4.2: Elements and sub-elements of the theoretical framework

Elements	Sub-Elements
1. Institutional	<ul style="list-style-type: none"> • Institutional Affairs • Research • Administrative Affairs • Reputation
2. Technological	<ul style="list-style-type: none"> • Development and sustainability of technological infrastructure • Functionality of technological platforms • Accessibility • Reusability • Interface design
3. Instructional Design	<ul style="list-style-type: none"> • Clarifying expectations • Personalisation • Organising learning resources • Selecting proper learning scenarios • Currency and accuracy of learning resources
4. Pedagogical	<ul style="list-style-type: none"> • Student-centeredness • Communication and interactivity • Social aspects • Learning environments • Assessment • Learning resources
5. Student Support	<ul style="list-style-type: none"> • Administrative support • Technical support
6. Faculty Support	<ul style="list-style-type: none"> • Technical assistance in course development • Administrative support • Pedagogical support
7. Evaluation	<ul style="list-style-type: none"> • Cost-effectiveness • Learning effectiveness • Student satisfaction • Teacher satisfaction

The elements and sub-elements in Table 4.2 are derived from the e-quality framework, as shown in Figure 4.1. Masoumi and Lindström (2012) emphasise that the validity and usability of the e-quality framework are subject to continual review. As a result, the framework must be reviewed periodically to reflect the significance of current research and practices. Therefore, the researcher conducted a literature review (cf. 4.6) to determine what existing literature suggests about the elements of the theoretical framework and how they relate to ODE. The content of the elements and sub-elements, which includes concepts, assumptions, assertions and predictions regarding ODE, assisted the researcher in analysing the collected data and explaining the results of this study.

4.5. THE APPLICATION OF THE THEORETICAL FRAMEWORK

This study aims to determine the quality elements of ODE practices and offerings in a HE context in South Africa. The elements should effectively guide institutions in designing, evaluating, maintaining and enhancing their online DE practices and offerings. The elements of ODE in a South African context were realised, commencing with a literature study regarding ODE, quality and quality assurance (Chapter 3).

Chapter 3 navigates the multifaceted realm of ODE, providing an understanding of its diverse delivery modes and the associated definitional challenges. The proposed definition, encompassing institutional, geographical, technological, and interactive elements, offers a perspective for conceptualising ODE. It aligns with DHET policy guidelines and underscores the symbiotic relationship between technology, pedagogy, and institutional commitment. The exploration of quality assurance in ODE emphasises its pivotal role and aligns with the evolving educational landscape in South Africa, setting the stage for the theoretical underpinnings outlined in this chapter.

Figure 4.6 illustrates how the Design Model for Knowledge Building guided the application of the theoretical framework. Figure 4.6 shows how knowledge, principles, measures, proposals and works were applied and created in this study. Furthermore, Figure 4.6 attempts to illustrate how the study moved from an inquiry paradigm to an application paradigm by showing how the collected data in this study influenced the outcome of the investigation.

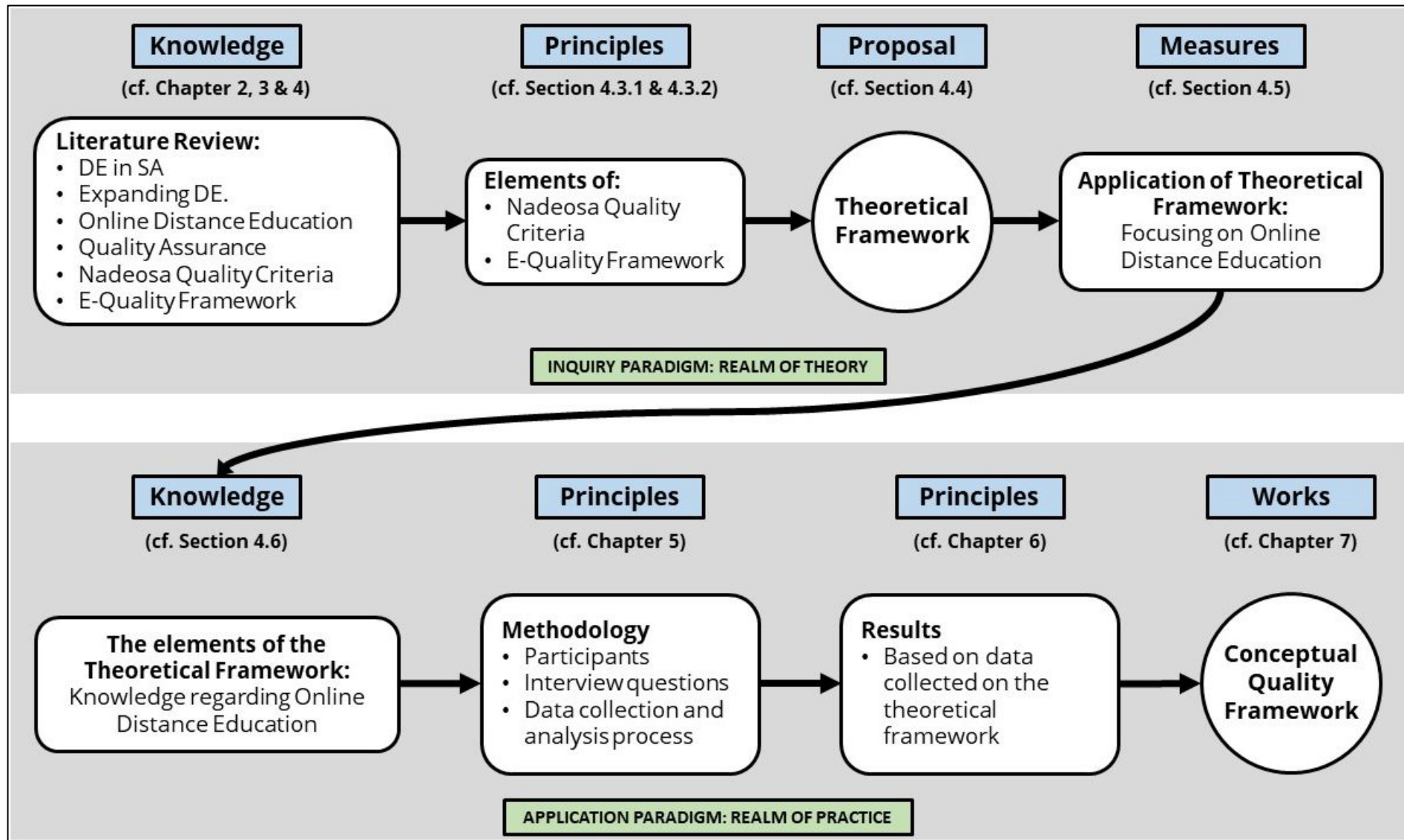


Figure 4.6: Application of the theoretical framework in this study.

4.5.1. MOVING FROM A REALM OF THEORY TO A REALM OF PRACTICE

Figure 4.6 shows how this study moved from an inquiry paradigm, where literature was consulted to improve the understanding of ODE practices in South Africa and worldwide, to an application paradigm, where the collected data assisted the development of the Conceptual Quality Framework.

4.5.1.1. THE REALM OF THEORY

The initial knowledge attained in this study was through the literature review conducted in Chapter 3. The principles in the inquiry paradigm consist of the elements of the Nadeosa quality criteria and the e-quality framework (cf. 4.3). Section 4.3 elaborates on the importance of the theoretical framework. The elements applicable to ODE were extracted from these frameworks to create a theoretical framework as a proposal that should be investigated to determine its applicability in current ODE practices and offerings. Section 4.4 elaborates on the rationale for selecting and using the elements, and Table 4.2 indicates the elements. Subsequently, the elements of the theoretical framework were theoretically investigated through a literature study to determine how the elements are defined and used in terms of ODE (cf. 4.6).

4.5.1.2. THE REALM OF PRACTICE

In the application paradigm, the investigation of the practice of ODE is essential. The new knowledge gained from the literature investigation of the theoretical framework assisted the researcher in determining interview questions that guided the data collection and analysis processes (cf. 5.5). As explained in section 4.3, the theoretical framework assisted the researcher in creating a “lens” through which the collected data could be analysed and interpreted. The interpretation of the data resulted in a Conceptual Quality Framework that higher education institutions in South Africa could use to design, evaluate, maintain and enhance their ODE programmes.

Unfortunately, this study did not complete the application paradigm process, as Owen (2007) intended. Subsequently, the Conceptual Quality Framework was not measured by criteria to determine its suitability in various ODE environments. The Conceptual

Quality Framework nevertheless contains guidelines institutions could consult to design, evaluate, maintain and enhance ODE practices and offerings.

The aim of Table 4.3 is to indicate the various relationships between the theoretical framework and essential sections in this study. The relationship between the theoretical framework elements and the frameworks from where they emerged is indicated in the inquiry paradigm. Furthermore, the table shows where this study's theoretical framework review occurred. The relationship between the theoretical framework, the 2019 results, the 2022 results and the Conceptual Quality Framework are shown in the application paradigm.

Table 4.3: The application of the theoretical framework elements in this study.

Inquiry paradigm			Application paradigm	
Elements	Principles	Knowledge	Principles	Works
Theoretical framework elements	Frameworks	Theoretical framework review	Results	Conceptual Quality Framework
Institutional element	Masoumi and Lindström (2012, pp. 29-30) Nadeosa (2021, pp. 4-5, 27-30)	Cf. 4.6.1	Cf. 6.3.1	Cf. 7.3
Technological element	Masoumi and Lindström (2012, pp. 30-31) Nadeosa (2021, pp. 8-11)	Cf. 4.6.2	Cf. 6.3.2	Cf. 7.4
Instructional Design element	Masoumi and Lindström (2012, p. 31) Nadeosa (2021, pp. 8-18)	Cf. 4.6.3	Cf. 6.3.3	Cf. 7.5
Pedagogical element	Masoumi and Lindström (2012, pp. 31-33) Nadeosa (2021, pp. 12-21)	Cf. 4.6.4	Cf. 6.3.3	Cf. 7.5
Student Support	Masoumi and Lindström (2012, p. 33) Nadeosa (2021, pp. 6-7, 21-24)	Cf. 4.6.5	Cf. 6.3.4	Cf. 7.6
Faculty Support	Masoumi and Lindström (2012, pp. 33-34) Nadeosa (2021, pp. 24-26)	Cf. 4.6.6	Cf. 6.3.5	Cf. 7.7
Evaluation	Masoumi and Lindström (2012, p. 34) Nadeosa (2021, pp. 32-34, 36-37)	Cf. 4.6.7	Not addressed	Not addressed

4.5.1.3. SITUATING THE THEORETICAL FRAMEWORK WITHIN THE DIFFUSION OF INNOVATION THEORY

The Diffusion of Innovation Theory, proposed by Rogers (2003), is a seminal framework that delves into how new ideas, technologies, products, or practices are spread and adopted within a social system. This theory could serve as a comprehensive lens to understand how innovations are embraced by various individuals, groups, and communities over time.

According to Rogers (2003), the perceived attributes of innovation are crucial in determining whether a society would adopt an innovation. These attributes are Relative Advantage, Compatibility, Complexity, Trialability, and Observability. These attributes contribute to 49 to 87 per cent of the variance in the adoption rate.

Combining the theoretical framework of this study with the attributes of innovation from Rogers' Diffusion of Innovation Theory provides a comprehensive perspective on the adoption of online distance education in higher education. This synthesis allows for a nuanced analysis of how the attributes of the innovation align with the quality dimensions proposed by the theoretical framework, influencing its diffusion process. Here is how these frameworks can be applied together:

Relative Advantage

Online distance education offers a relative advantage over traditional methods due to its flexibility and accessibility. This advantage aligns with this study's theoretical framework, emphasising pedagogical quality, ensuring engaging content, interactive learning experiences, and effective assessment strategies. Research has shown that the perceived superiority of online education's pedagogical quality positively influences adoption (Allen & Seaman, 2017).

Compatibility

Compatibility between online distance education and the existing higher education system is crucial. Integration with current curricula and academic practices enhances adoption. The theoretical framework's focus on ease of use is reinforced here, as user-

friendly design enhances the compatibility of online education with the higher education ecosystem (Masoumi & Lindström, 2012).

Complexity

Managing the complexity of online distance education involves providing comprehensive student support services, addressing technical challenges, and guiding learners through the digital environment (Masoumi & Lindström, 2012). Simplifying complexity and providing robust support systems align with Rogers' attribute of reducing perceived complexity (Rogers, 2003).

Trialability

Allowing educators and students to trial online courses before full implementation enhances the innovation's trialability. The trialability of online distance education can be promoted through pilot programmes or course previews, allowing educators and students to experience the innovation firsthand (Bussmann, Johnson et al., 2017).

Observability

Making the outcomes of online distance education observable to stakeholders can foster adoption. This could be done by showcasing success stories and positive learning outcomes. Emphasising flexible learning pathways, personalised experiences, and customization options enhances the innovation's visibility and attractiveness (Rogers, 2003).

By integrating the attributes of innovation from Rogers' Diffusion of Innovation Theory with the theoretical framework, higher education institutions can strategically plan the adoption of online distance education, ensuring alignment with quality dimensions and enhancing its integration into the academic landscape. This approach provides a comprehensive perspective on how the elements of online distance education align with quality dimensions, influencing its adoption.

Rogers (2003) characterised the process of making innovation decisions as an endeavour focused on gathering and processing information. The individual's drive is to minimise uncertainties regarding the pros and cons of the innovation. According to

Rogers (2003), this process of innovation decision-making comprises five sequential steps: (1) acquiring knowledge, (2) influencing through persuasion, (3) reaching a verdict, (4) carrying out the plan, and (5) validating the decision. These stages usually unfold in a chronological sequence. In the context of ODE in HE, this progression could be described as follows:

Knowledge

In this initial stage, educators and administrators become aware of online distance education as an innovative approach to learning. This could include introducing faculty members and students to ODE, its benefits, and potential challenges in online distance education. Institutions might conduct workshops, seminars, and awareness campaigns to disseminate information about online education's features, delivery modes, and technology requirements. Faculty members are also exposed to success stories and case studies showcasing the positive impact of online distance education on student engagement and flexibility (Rogers, 2003).

Persuasion

During this phase, academic institutions emphasise the advantages of online distance education. Research studies and reports demonstrate how online courses can accommodate diverse learning styles and provide access to education for geographically dispersed learners. Faculty members are persuaded by data showing improved learning outcomes and higher student satisfaction in online courses (Allen & Seaman, 2020)

Decision

Higher education institutions evaluate the feasibility of incorporating online distance education into their curricula. The decision to adopt or reject the innovation is made during this phase. Factors such as faculty readiness and expertise, technological infrastructure, institutional support and student preferences would be weighed before adopting online learning platforms. Decision-makers review case studies from peer institutions that successfully implemented online programmes, helping them make informed choices (Dziuban, Graham, Moskal, Norberg, & Sicilia, 2018).

Implementation

This step involves the actual integration of the innovation into the system. Institutions must design and develop online courses, train faculty members in online pedagogy, and establish technical support systems. Institutions that adopt online distance education begin developing and delivering online courses. Faculty members receive training on effective online pedagogical strategies, course design, and technology utilization. Robust technical support systems are established to assist students and instructors throughout the online learning experience (Bates, 2022).

Confirmation

During this final stage, the innovation's success is evaluated, and its continued use is reinforced based on student performance, feedback, and engagement. Higher education institutions would gather feedback from faculty, students, and stakeholders to assess the effectiveness of online distance education. Adjustments and improvements might be made based on this feedback to enhance the quality of the learning experience (Jaggars & Xu, 2016).

Situating this study's theoretical framework within the context of Rogers' Diffusion of Innovation Theory allows the researcher to explore the intricate dynamics that underlie the diffusion process, facilitating a deeper understanding of how innovations permeate through different segments of the participating institutions. By aligning a specific theoretical framework with Rogers' model, the researcher can shed light on the factors influencing the adoption of ODE, the roles played by various actors, and the stages of diffusion, ultimately enriching our comprehension of how ODE gained traction and became integrated into institutions.

Section 4.6 explicitly investigates what current literature states about the elements of the theoretical framework and their application in ODE environments. The information attained in this investigation assisted the researcher in investigating the practices and offerings of participating institutions by determining whether the data provided by the institutions aligned with the information attained from the review of the theoretical framework.

4.6. THEORETICAL FRAMEWORK REVIEW

The following section reviews what academic literature asserts about the elements and sub-elements of the theoretical framework. This section aims to indicate how the elements and sub-elements are applied in OHDE.

4.6.1. INSTITUTIONAL ELEMENT

Sub-elements:

- Institutional Affairs
- Administrative Affairs
- Research
- Reputation

WHAT THE FRAMEWORKS INTEND WITH THIS ELEMENT

Masoumi and Lindström (2012) emphasise that establishing visions and goals for online learning within an institution is of key importance for its successful implementation. Subsequently, institutions should be explicit about their goals and objectives (Nadeosa, 2021). Institutional decision-making should be based on national and international priorities, regulatory frameworks, and quality demands (Nadeosa, 2021). Masoumi and Lindström (2012) explain that institutions are distinguished by their ability to take advantage of their existing resources to manage and organise OE. Institutions should manage information and communication effectively, and administrative systems and processes should support the vision and objectives of the institution (Nadeosa, 2021).

WHAT THE LITERATURE ASSERTS ABOUT THIS ELEMENT

4.6.1.1. INSTITUTIONAL AFFAIRS

Establishing visions and goals will guide online learning (Kirkwood & Price, 2016). Lecturers, students, and administrative personnel should understand why OE is valuable and meaningful and what the institution wants to achieve through this approach to education (Mystakidis, Berki et al., 2021). Price, Casanova and Orwell (2016) explain that ambiguities about the rationale, approach and infrastructure support for online learning could impede the adoption of this learning approach. This

is seen, for example, where the module design and assessment policies do not align (Xiong & Suen, 2018). Therefore, institutions should develop sustainable practices to incorporate online learning into their current offerings (Appolloni, Colasanti et al., 2021; Price, Casanova et al., 2016). Price, Casanova et al. (2016) further explain that the buy-in from staff is crucial for successful implementation. Every staff member will have an opinion about online learning as an effective teaching and learning approach. This will consequently significantly affect their willingness to adopt this approach (Englund, Olofsson et al., 2017).

Hemsley-Brown, Melewar, Nguyen and Wilson (2016) posit that competition among universities pressures institutions to articulate and develop their brand. In addition, institutions are now competing globally, and unlocking the potential educational technologies present is essential (Appolloni, Colasanti et al., 2021; Wolhuter & Jacobs, 2021). Hemsley-Brown, Melewar et al. (2016) furthermore emphasise that every institution has a unique profile with different facets that require multiple strategies. Moreover, online learning requires intensive and strategic planning, which largely influences the organisational identity (Hodges, Moore et al., 2020; Marshall, 2006).

4.6.1.2. ADMINISTRATIVE AFFAIRS

Online learning quality depends on excellent administrative processes and support, which should be considered a prerequisite for establishing and maintaining high-quality OE (Mays & Aluko, 2019; Nadeosa, 2021). Mays and Aluko (2019) emphasise that academic literature is relatively silent on the importance of administration in online programmes. High-quality administrative support is essential for students to complete their studies successfully (Mays & Aluko, 2019). Mays and Aluko (2019) refer to administrative staff members as the cornerstone of successful DE provision.

When institutions implement a new mode of delivery without considering all the factors and implications of this mode of delivery, they will struggle to administer the management and adjustments of policies, processes, people and places (Mays & Aluko, 2019). This could result in low-quality or unsustainable provision. Nevertheless, the Online Learning Consortium has developed a quality scorecard instrument for managing online programmes (OLC, 2023). This instrument could assist an institution

in evaluating its student services offering by identifying gaps in existing services. In addition, this tool could provide solutions for improving existing services. After reviewing this tool, it became evident that providing a comprehensive set of support services to online students is crucial. These services should mirror the services offered to face-to-face students (OLC, 2023). When institutions consider providing programmes using a new mode of delivery, they should consider how all existing administrative processes could support the new mode of delivery. This could entail adapting or removing existing processes and adding new ones (Mays & Aluko, 2019).

4.6.1.3. RESEARCH

This sub-element is concerned with the impact of research-based activities on the practices of ODE institutions or programmes. According to Lockman and Schirmer (2020), when applying contemporary interpretations of research-based and evidence-based practices, where "research-based" signifies approaches substantiated by research, and "evidence-based" implies approaches validated by high-quality experimental research, their investigation revealed numerous promising practices. However, relatively few can be categorised as research-based or evidence-based.

Lockman and Schirmer (2020) explain that most strategies displaying potential effectiveness in the online setting align with those recognised as effective in traditional face-to-face classrooms. These strategies encompass using various teaching methods and educational materials to cater to diverse student learning requirements, maintaining a solid instructor presence, ensuring high-quality interaction between faculty and students, offering academic support beyond the class, and fostering a sense of unity and trust within the virtual classroom. In the online environment, distinct elements include user-friendly technology tools, guidance in online instruction, possibilities for real-time class sessions, and social media integration. Similar to face-to-face learning, a more substantial engagement with course content correlates with improved course grades and higher satisfaction levels.

Online education is poised for ongoing growth, potentially at an accelerating pace. With this being the anticipated trajectory, more research must be undertaken to examine the effectiveness, efficiency, and enhancement of online teaching and

learning. Future research should emphasise conducting comprehensive analyses of online instructional practices, the systematic implementation of these practices, and identifying the most effective methods for designing and delivering online programmes (Sun & Chen, 2016).

4.6.1.4. REPUTATION

Prospective students usually evaluate an institution based on its reputation since they lack sufficient information and experience about its service quality (Su, Swanson, Chinchanchokchai, Hsu, & Chen, 2016). Reputation and trust are significant when making pre-purchase evaluations (Heffernan, Wilkins, & Butt, 2018). In general, the quality of an institution is associated with its reputation (Shahijan, Rezaei, & Amin, 2016). Masoumi and Lindström (2012) present that a good reputation is crucial for sustainability. Implementing the institution's mission, the quality of research activities, and community services influences the success of OE (Masoumi & Lindström, 2012; Mystakidis, Berki et al., 2021).

4.6.1.5. IN SUMMARY

The E-Quality Framework emphasises the importance of establishing visions and goals for ODE and using existing resources effectively to manage and organise ODE. The framework also highlights the importance of effectively managing information and communication and aligning administrative systems with the institution's ODE vision. The quality criteria advocate explicitly articulating institutional goals and objectives related to DE, considering national and international priorities, regulatory frameworks, and quality demands. The criteria also recognise the importance of high-quality administrative processes and support for successful ODE provision. The literature assertions on the ODE sub-elements reinforce the significance of clear visions and goals to guide ODE, ensuring understanding and buy-in from stakeholders. The need for sustainable practices incorporating ODE into existing offerings and aligning module design and assessment policies is also crucial. The importance of administrative support and services in facilitating student success is essential.

4.6.2. TECHNOLOGICAL ELEMENTS

Sub-elements:

- Development and sustainability of technological infrastructure
 - Functionality of technological platforms
 - Accessibility
 - Reusability
 - Interface design
-

WHAT THE FRAMEWORKS INTEND WITH THIS ELEMENT

This factor focuses on the technological infrastructure of an institution. Masoumi and Lindström (2012) regard this factor as the backbone of the e-learning component in an institution. According to Masoumi and Lindström (2012), the efficiency of technological features is characterised by their availability, reliability, functionality, usability and integration. Furthermore, the use of technology in programmes should be aligned with the needs of students (Nadeosa, 2021). The use of educational technologies should not create additional barriers to learning but promote access and should be responsive to changing environments (Nadeosa, 2021). This factor is ever-changing, and institutions must keep track of new trends (Masoumi & Lindström, 2012). This factor includes the use of learning management systems and authoring tools.

WHAT THE LITERATURE ASSERTS ABOUT THIS ELEMENT

4.6.2.1. DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE

Farid, Ahmad, Alam, Akbar and Chang (2018) emphasise four major role players in the online HE environment. This includes students, lecturers, the institution and administrators. Quality requirements regarding technology use in education vary among these stakeholders (Farid, Ahmad et al., 2018). Consequently, different researchers have developed differentiated quality criteria that suit various stakeholders' needs (Jung, 2022). Incorporating online education in higher education plays a significant role in an institution's pedagogical approach (Kituyi & Tusubira, 2013). Mosa, Mahrin and Ibrahrahim (2016) argue that all HEIs should assess their online learning readiness. Failure to adopt online education systems means the people

involved were not mentally or physically prepared for an online education experience or action (Borotis & Poulymenakou, 2004). Furthermore, institutions should consider every variable that could affect how an online education system is implemented. An assessment of readiness for online education should be conducted (Dziuban, Graham et al., 2018). Farid, Ahmad et al. (2018) emphasise that the online education sector can only thrive where an efficient quality process that can assess the components of online education is in place.

4.6.2.2. FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS

The functionality and reliability of technology are essential for successful e-learning delivery. This includes but is not limited to the use of learning management systems (LMS) and content management systems (CMS) (Masoumi & Lindström, 2012). Furthermore, Masoumi and Lindström (2012) acknowledge that the technology used for learning depends on various elements that should work together to ensure the successful use of the technology. Ouadoud, Chkouri, Nejjari and El Kadiri (2016) emphasise that the pedagogical use of technological tools should be justified and address the needs of the students. If technology is used to manage the transactional distance between students and facilitators, institutions should ensure that the technology does not create a barrier to learning (Ouadoud, Chkouri et al., 2016). Djouab and Bari (2016) explain that if the appropriate individuals receive the appropriate training at the appropriate time and at a reasonable cost, e-learning may be successful. Therefore, institutions should frequently evaluate their offerings against good quality technology-related standards (Djouab & Bari, 2016). The continuous development and implementation of quality standards should become standard practice in institutions (Djouab & Bari, 2016).

4.6.2.3. ACCESSIBILITY

The term “accessibility” refers to the accessibility of learning resources irrespective of any constraints students may experience. These include physical, technological and other limitations. Kumar and Owston (2016) explain that many studies on e-learning accessibility focus on the experiences of students with disabilities since matters relating to accessibility are usually associated with these students. Kumar and Owston

(2016) further elaborate that the accessibility of e-learning is probably only considered when a student with a disability is enrolled in a course. E-learning accessibility is unfortunately not considered in respect of all students when online learning environments are designed (Kumar & Owston, 2016). In addition, Khan, Egbue, Palkie and Madden (2017) believe that the accessibility of learning resources influences learning strategies such as active learning. Since the elements of learning strategies are integrated into course material (Khan, Egbue et al., 2017), it could be assumed that students' inability to access learning resources will harm their learning.

4.6.2.4. REUSABILITY

Masoumi and Lindström (2012) explain that learning resources that could be reused and modified should contribute to more significant economic gains for institutions. Furthermore, these resources should increase the efficiency of e-learning at an institution. The ability of institutions to store and retrieve resources effectively ensures the future reusability of resources, modules or learning artefacts (Masoumi & Lindström, 2012).

The reusability of educational learning resources is mainly associated with open educational resources (OER) (Bhatt & Bunkar, 2018). It is unclear if Masoumi and Lindström (2012) are referring to OERs or just the simple reuse of learning resources from one year to another or from one module to another. Therefore, the researcher assumed that the reuse of learning resources refers to institutional resources that should be transferable, adaptable, and reusable from year to year.

4.6.2.5. INTERFACE DESIGN

Designing online interaction on e-learning platforms is essential in e-learning environments (Hodges, Moore et al., 2020; Puspitasari, 2021). It has been found that this is one of the most neglected design elements of online learning (Masoumi and Lindström (2012). Simple interface designs will allow stakeholders to spend more time and cognitive resources on the platform's content than on navigation (Firat, Sakar, & Yurdakul, 2016).

Users of an e-learning platform should first be competent in using technology (Omidire & Aluko, 2022). Kamaruddin and Sulaiman (2018), therefore, emphasise that interface design is integral to teaching and learning. Designers need to understand the needs of their audience to create web interfaces that can support and enhance self-directed learning (Firat, Sakar et al., 2016; Kamaruddin & Sulaiman, 2018). The following elements, according to Firat, Sakar et al. (2016) and Masoumi and Lindström (2012), should be considered when designing e-learning interfaces:

- Students should be able to track their performance.
- Self-directed learning should be promoted.
- Students should be able to communicate with their peers and lecturers.
- The environment should be user-friendly.
- There should be predictable learning pathways.
- Information should be “chunked” to assist with effective learning.

4.6.2.6. IN SUMMARY

The E-Quality Framework regards technological infrastructure as the backbone of online education and emphasises efficiency through availability, reliability, functionality, usability, and integration. The framework furthermore mentions the importance of using learning management systems and authoring tools to support ODE. The quality criteria focus on technology use in DE, aligning with students' needs and promoting access without creating additional barriers to learning. It also highlights the need for institutions to keep track of new technological trends. Overlaps between the frameworks and literature include their shared focus on the importance of technology functionality and reliability, the alignment of technology with students' needs, and the recognition of interface design as a critical element for successful ODE. Additionally, all sources acknowledge the ever-changing nature of technological infrastructure and the need for institutions to assess their readiness for e-learning. However, the literature assertions provide more specific insights into factors such as accessibility, reusability of resources, and user interface design, which are not as explicitly discussed in the other frameworks.

4.6.3. INSTRUCTIONAL DESIGN ELEMENTS

Sub-elements:

- Clarifying expectations
- Personalisation
- Selecting proper learning scenarios
- Currency and accuracy of learning resources
- Organising learning resources

WHAT THE FRAMEWORKS INTEND WITH THIS ELEMENT

Instructional design is an iterative process in which pedagogy, technology, and learning resources should be implemented effectively to reach the aim of a programme (Masoumi & Lindström, 2012; Nadeosa, 2021). The programmes' content should acknowledge students' context and support students in achieving learning outcomes (Nadeosa, 2021). The constructive alignment of all learning components is essential for creating a successful teaching and learning environment (Masoumi & Lindström, 2012). This ensures quality in e-learning.

WHAT THE LITERATURE ASSERTS ABOUT THIS ELEMENT

4.6.3.1. CLARIFYING EXPECTATIONS

Learning outcomes and objectives form the foundation for proper curriculum design and planning (Nadeosa, 2021). Learning outcomes should guide the design and development of learning content, its associated activities, assessments and the selection of educational technologies (Simonson, Zvacek et al., 2019). Students should be able to achieve learning outcomes by using technology-based activities and assessments (Simonson, Zvacek et al., 2019).

4.6.3.2. PERSONALISATION

According to Masoumi and Lindström (2012), a student's needs, goals, knowledge, and interests determine how a learning environment should be customized. However, Melzer (2019) believes that small class sizes and face-to-face instruction are required for personalisation by a teacher.

Implementing a personalised e-learning approach offers the advantage of providing learners with more valuable feedback. This benefits all participants in the learning process. With this approach, students no longer need to wait for real-time evaluation from the lecturer but can track their progress using technology (Faucon, Olsen, Haklev, & Dillenbourg, 2020).

One of the critical reasons why personalised e-learning has not been widely embraced is the considerable effort it demands for customising content for individual students (Mikić, Ilić, Kopanja, & Vesin, 2022). Generating content that caters to the general student population is notably more straightforward. On this premise, discussions around engagement and effectiveness are frequently raised when addressing the primary obstacles in incorporating personalisation into e-learning environments (Mangaroska, Vesin, Kostakos, Brusilovsky, & Giannakos, 2021).

One of the significant issues is that most educational institutions face limitations concerning technology choices, financial resources, and other constraints (Mikić, Ilić et al., 2022). All the information in the existing literature indicates that personalisation can result in enhanced student performance. Nevertheless, the precise manner and the degree to which this improvement occurs are still subject to debate (Mikić, Ilić et al., 2022).

Learning processes are shifting away from the teacher and becoming the student's responsibility (Empson, 2013). This is evident in student-centred, self-regulated learning environments where informal, flipped classroom and workplace learning occur (Tsai, Shen, & Fan, 2013). Therefore, only the students themselves can indeed regulate their learning. Zimmerman (1989) explains that students can control their learning with specific skills. This covers their self-regulated learning techniques, a self-efficacy judgment of their performance abilities, and dedication to their academic objectives.

User-configured sets of interchangeable social media should be the main emphasis of personalization in online learning. This encompasses social networks, blogs, wikis, media sharing, podcasts, and bookmarking (Melzer, 2019). Owing to the ubiquitous nature of these tools, the teacher should still play an active role in scaffolding them for

students (Melzer, 2019). Although we can assume that students, who are digital natives, already have sufficient digital literacy skills, we cannot assume that students will know how to use these skills for learning (Melzer, 2019).

4.6.3.3. SELECTING PROPER LEARNING SCENARIOS

Learning scenarios are usually associated with experiential learning approaches (Bates, 2022). These approaches could include problem-based learning, case-based learning and enquiry-based learning. Varman, Cliff, Jones, Hammersley, Zhang, Charlton and Kelly (2021) explain that experiential learning is the process where students create meaning from experience. Thanks to their active participation, students may apply their theoretical knowledge to challenging practical, real-world situations within and outside the classroom (Bates, 2022). Students are also encouraged to reflect on their experiences (Varman, Cliff et al., 2021). It is essential to consider the aim of a course, the content and the audience when designing learning scenarios for teaching and learning (Masoumi & Lindström, 2012; Nadeosa, 2021). The design of learning scenarios should be guided by an understanding of how students learn (Masoumi & Lindström, 2012).

The Council on Higher Education (2014) explains that learning activities could be grouped into three possible categories. The first category is activities that focus on building comprehension. The second category focuses on building critical thinking, and the third focuses on activities that develop skills (CHE, 2014). The three sets of activities depend on each other to create a particular competence. Therefore, each activity should have a purpose. These activities should therefore equip students to reach the intended learning outcomes set for a module and programme (CHE, 2014). This could include a range of activities in a programme to enable students to acquire the knowledge, skills and values associated with the programme's outcomes (CHE, 2014).

4.6.3.4. CURRENCY AND ACCURACY OF LEARNING RESOURCES

Since external entities like accreditation agencies or state or provincial governments decide what subjects a programme should include, many instructors have little control over the curriculum's content (Bates, 2022). Much time is spent at departmental and programme meetings to select the type of content for a module and programme. Subsequently, limiting the content will limit the programme's cost and the material's scope and range (Bates, 2022).

Inaccurate and low-quality online information and the general quality of web content are ongoing problems in the online environment (Mohammadi, Abrizah, & Nazari, 2017). The rapid growth and accessibility of the internet and the availability of information challenge educators to select the most appropriate and reliable content for teaching and learning (Bates, 2022). Educators must evaluate online resources to determine their accuracy and prevalence. The quality assessment of online resources is crucial in providing students with appropriate and helpful guidance (Mohammadi, Abrizah et al., 2017).

Mohammadi, Abrizah et al. (2017) report that several researchers have developed information quality assessment frameworks. There are two major approaches: checklists and critical thinking skills. The checklist approach is similar to what librarians use to evaluate printed materials. Indicators used with this approach include accuracy, authority, objectivity, currency and coverage (Rieh & Danielson, 2007). The checklist approach provides students with quality assurance questions regarding a resource. This assists students in determining whether the resource meets the required quality criteria (Mohammadi, Abrizah et al., 2017). The critical thinking skills approach "...involves users' conscious cognitive effort to critically assess arguments in a text" (Mohammadi, Abrizah et al., 2017, p. 101). The users must use their critical thinking skills to evaluate information if they believe the content is "...authoritative, relevant and able to process the information in a message." (Mohammadi, Abrizah et al., 2017, p. 101). Questions or statements are used to enhance critical thinking, through which the evaluation of online content is supported.

4.6.3.5. ORGANISING LEARNING RESOURCES

Educators must develop strategies to allow students to manage the vast content available in their field of study (Bates, 2022; Masoumi & Lindström, 2012). Developing skills through knowledge management, problem-solving, and decision-making is one way of assisting students in managing content (Bates, 2022). It was unfortunate that during the COVID-19 pandemic, DE was used as an unplanned method to compensate for the loss of time, and in the process, content and assessment were not thoroughly planned and designed (Mncube, Mutongoza, & Olawale, 2021).

When planning online teaching and learning, goals for teaching content must be evident, and lecturers should, therefore, not take content for granted (Bates, 2022). One fundamental element of online teaching is that the instructor or educator must consider the course outcomes (Simonson, Zvacek et al., 2019). This will determine how the students should be prepared to reach the learning outcomes. In addition, online learning environments should contain sufficient activities to keep students engaged (Cranfield, Tick, Venter, Blignaut, & Renaud, 2021). Bates (2022) suggests that content provided in a systematic, sequential manner benefits beginner students. As these students become more knowledgeable and experienced in their field of study, they will develop approaches to selecting, ordering and interpreting content (Bates, 2022). Because specific content must be learnt correctly, students require some structure to their learning materials (Simonson, Zvacek et al., 2019). Without organisation, content devolves into a mess of unconnected topics. (Bates, 2022). Before mastering a content domain, students cannot determine what is necessary. (Bates, 2022). Lecturers should organise the progression and relationships between various parts of topics (Bates, 2022; Simonson, Zvacek et al., 2019). This includes the following:

- The selection and sequencing of content;
- Developing a particular focus or approach to specific content areas;
- Helping students with the analysis, interpretation or application of content; and
- Integrating and relating different content areas.

The Council on Higher Education explains that one of the critical elements of DE provision is the development of resources that will support autonomous and collaborative learning (CHE, 2014). The CHE further explains that an educator should consider resources available for reuse. Depending on the copyright license of the material, a teacher could do the following (CHE, 2014):

- Adopt something that already exists; or
- Adapt something that already exists; or
- Create something because nothing that exists is suitable.

Educators will probably adapt existing resources as open educational resources become more applicable in HE (CHE, 2014).

4.6.3.6. IN SUMMARY

The E-Quality Framework emphasises constructive alignment of all learning components for a successful teaching and learning environment in ODE. The framework regards instructional design as an iterative process to reach the program's aim, with technology integration to support quality e-learning. The quality criteria highlight the importance of acknowledging students' context and ensuring content supports the achievement of learning outcomes. It emphasises instructional design as an essential component for successful DE delivery by effectively aligning pedagogy, technology, and learning resources. Overlaps between the frameworks and literature include their shared focus on instructional design, alignment with learning outcomes, and the importance of using technology to support effective teaching and learning in DE. The literature assertions provide more specific insights into elements like personalisation, selection of learning scenarios, currency and accuracy of learning resources, and organisation of learning materials, which are not as explicitly discussed in the other frameworks.

4.6.4. PEDAGOGICAL ELEMENTS

Sub-elements:

- Student-centeredness
- Communication and interactivity
- Social aspects
- Learning environments
- Assessment
- Learning resources

WHAT THE FRAMEWORK INTEND WITH THIS ELEMENT

This element explores how teaching and learning take place in online environments. In this regard, institutions must consider the context of students (Nadeosa, 2021). More specifically, this element investigates how resources are creatively and constructively employed in teaching and learning (Masoumi & Lindström, 2012). Content, teaching and learning approaches and assessments must align with the outcomes of a programme (Nadeosa, 2021). The teaching and learning processes, including communication, collaboration, and interaction, should engage students regularly and meaningfully (Masoumi & Lindström, 2012; Nadeosa, 2021). Assessments should be valid, reliable, fair, and well-managed and adhere to the requirements of statutory and regulatory bodies and stakeholders (Nadeosa, 2021).

WHAT THE LITERATURE ASSERTS ABOUT THIS ELEMENT

4.6.4.1. STUDENT-CENTEREDNESS

Lee and Kim (2018) argue that active learning approaches could enhance deep and meaningful learning. These approaches should be student-centred and promote collaborative interaction (Condelli, Wrigley, & Yoon, 2008). Students should be encouraged to participate actively in their learning process through the design of online learning environments enabling this (Masoumi & Lindström, 2012). Students can understand their learning by discussing it with their peers (Serin, 2018). Traditional, teacher-focused approaches should be avoided. Meaningful learning could occur if students built relationships between what they already know and new information

(Serin, 2018). This will also increase intrinsic motivation and higher achievement (Serin, 2018). Educators should design online learning environments in which students can apply real-life experiences in their learning activities (Masoumi & Lindström, 2012). The practical implementation of such an online environment could assist students in taking responsibility for their learning (Collins & O'Brien, 2011), help them to set goals, develop ideas and engage in constructive discourse (Serin, 2018).

4.6.4.2. COMMUNICATION AND INTERACTIVITY

In online communities, interaction results in engagement, sociability, the ability of the group to keep together, collaboration, and longevity (Rafaeli & Sudweeks, 1997). According to Kent, Laslo and Rafaeli (2016), interactivity is vital in online learning. Students would learn meaningfully if they were “active” learners (Bates, 2022). The interactive elements of content, resources and communication systems ensure that students feel part of an educational environment (Rodríguez-Ardura & Meseguer-Artola, 2016). Furthermore, interactivity in online learning plays an essential role in student satisfaction and student persistence (Zahid & Basir, 2021).

Students' willingness to continue using online learning depends on several factors. First, students want to feel part of a community where they can engage with resources and where the online community is mediated by a lecturer (Baleghi-Zadeh, Ayub, Mahmud, & Daud, 2017; Rodríguez-Ardura & Meseguer-Artola, 2016). Students also need guidance to explore different learning pathways (Masoumi & Lindström, 2012). Consequently, socio-constructivist learning activities, community-building among students, and facilitator assistance should all be considered throughout the design and development of online environments (Rodríguez-Ardura & Meseguer-Artola, 2016)., Therefore, when developing online learning activities, the design and evaluation of this element are essential to consider (Masoumi & Lindström, 2012).

According to Bates (2022), educators must select the most appropriate interaction mix in technologically rich learning environments. This means there should be a proper balance in interaction between student and content, educator and peers. This balance is influenced by the epistemological approach of the educator, time constraints and learning outcomes (Bates, 2022). Kent, Laslo et al. (2016) explain that in practice,

interactivity is rarely evaluated in learning management systems. More attention should also be given to interactivity in assessment (Kent, Laslo et al., 2016).

4.6.4.3. SOCIAL ASPECTS

Social presence and support are crucial for online learning success (Masoumi & Lindström, 2012; Nadeosa, 2021). Berry (2017) emphasises that it is regrettable that online students do not get sufficient assistance. As a consequence, students might feel more disconnected from online learning environments, especially if a lecturer is not present in the online learning environment (Conklin & Dikkers, 2021). Therefore, lecturers should carefully plan how to create collaboration opportunities for students and ensure that students develop a sense of belonging (Berry, 2017; Conklin & Dikkers, 2021; Din, Haron et al., 2016; Masoumi & Lindström, 2012). Students' sense of belonging is further enhanced by forming productive relationships with peers and instructors (Berry, 2017; Kreijns, Xu, & Weidlich, 2021; Masoumi & Lindström, 2012). Students will share richer and more complex information in a shared environment if they trust their peers (Masoumi & Lindström, 2012; Yanson & Johnson, 2016). Furthermore, mutual trust in online learning environments should improve peer support (Kreijns, Xu et al., 2021; Yanson & Johnson, 2016).

Collaboration in online environments assumes that students participate actively in their learning process and seek to construct knowledge (Raspopovic, Cvetanovic, Medan, & Ljubojevic, 2017). Collaboration in online environments could be achieved using specific tools, which usually form part of a learning management system (Raspopovic, Cvetanovic et al., 2017). Social media could be another communication tool since students spend an enormous amount of time on social media (Junco, 2012; Kreijns, Xu et al., 2021). Although social media could enhance students' learning experience, its application in a learning environment should be carefully planned (McLoughlin & Lee, 2010). It is a familiar space for students to communicate, but lecturers should determine how pedagogical principles could be applied to this method of communication (Kreijns, Xu et al., 2021; Raspopovic, Cvetanovic et al., 2017).

Socialisation in online environments could be regarded as a hidden but essential element when evaluating the success of online learning (Masoumi & Lindström, 2012).

This environment should enhance problem-solving, collaboration and communication among students and lecturers (Yanson & Johnson, 2016). Students' sense of belonging in an online learning environment could have academic, social and emotional benefits (Berry, 2017). The outcome of online social interaction should focus on in-depth and increased learning (Yanson & Johnson, 2016). Akcaoglu and Lee (2016) also report that social interaction is positively linked to learning outcomes.

4.6.4.4. LEARNING ENVIRONMENTS

Students' attitude toward their online learning environment influences their achievement in a course (Costley & Lange, 2016). Therefore, instructional designers and teachers should be cognizant of how the online learning environment is designed (Akcaoglu & Lee, 2016; Czerkawski & Lyman, 2016). Although a student's learning experience in an online environment could be significantly affected by their attitude (Czerkawski & Lyman, 2016), the facilitator shapes students' perspective of the online environment (Costley & Lange, 2016). Research Swan (2001) conducted shows that student-teacher interaction led to higher levels of perceived learning. Face-to-face and online learning environments still have similar goals, creating and stimulating interactive learning environments (Czerkawski & Lyman, 2016). Online learning environments should furthermore enhance student accountability and interdependence (Akcaoglu & Lee, 2016; Archambault, Leary, & Rice, 2022). Students should feel connected and trust each other (Archambault, Leary et al., 2022).

4.6.4.5. ASSESSMENT

Universities in South Africa, in particular, have come under fire for their assessment processes, which place a strong emphasis on summative assessment (Wolhuter & Jacobs, 2021). This form of assessment could easily tend to address only lower-order learning objectives (according to Bloom's Taxonomy), which does not align with international developments in assessment worldwide (Wolhuter & Jacobs, 2021). During the COVID-19 pandemic, traditional HEIs unexpectedly had to move their assessment practices online (Cranfield, Tick et al., 2021; Wolhuter & Jacobs, 2021). Moving assessments online is often a coping mechanism for institutions in unusual situations (Mncube, Mutongoza et al., 2021; Weeden & Cornwell, 2020).

Moving assessments online in such a short time posed myriad challenges (Eaton, 2020). Many institutions did not have the infrastructure or resources to move their teaching and learning online (Dill, Fischer, McMurtrie, & Supiano, 2020). Students did not have access to computers or internet facilities, which made teaching practical subjects, including music and art, challenging (Mncube, Mutongoza et al., 2021). In addition, many faculty members did not adapt their assessments to the online environment (Eaton, 2020). This was evident from the better student results in the face-to-face version than the poorer results of the online version of the assessment (Eaton, 2020). Lecturers who never taught online had little time to determine how online assessments should differ from face-to-face assessments (Eaton, 2020).

Issues such as plagiarism, identification, accessibility, and security put pressure on the assessment process (Eaton, 2020; Masoumi & Lindström, 2012). Students usually also engage in opportunities to share assessment material, which includes exam questions and answers (Blum, 2016; Rogerson & Basanta, 2016). It is, therefore, always essential to determine the impact of assessment approaches. These approaches should be pedagogically justified, fair and flexible (Masoumi & Lindström, 2012). They could impact the nature, effectiveness, and importance of learning activities (Masoumi & Lindström, 2012). The academic freedom, authority and autonomy that lecturers have to design assessments based on their subject expertise and assessment choices at the same time opened up opportunities for student misconduct, which is unfortunate (Eaton, 2020).

Assessments give the student a sense of direction (Akhter & Ali, 2016), while in some cases, the assessment presents the only communication channel between the student and the teacher (Akhter & Ali, 2016). Therefore, formative assessment opportunities could enhance interactivity between lecturers and students (Ogange, Agak et al., 2018). Online assessment could be applied in many forms (Masoumi & Lindström, 2012). One of the online tools that could improve online assessment is asynchronous online discussions. Vonderwell, Liang and Alderman (2007) report that asynchronous online discussions enhance student autonomy. Complex cognitive processes could be stimulated in these forums, and student interactivity could be promoted (Ogange, Agak et al., 2018).

Frequent assessments are a guideline in students' learning process (Simonson, Smaldino, Albright, & Zvacek, 2014). It is essential for constructive feedback to form part of assessments (Simonson, Zvacek et al., 2019). Constructive feedback could improve students' results, but it could also encourage and motivate students (Ogange, Agak et al., 2018). Constructive feedback should inform students about their progress and where they could improve (Simonson, Smaldino et al., 2014). Assessments, in general, should focus on improving students' skills and critical thinking (Masoumi & Lindström, 2012).

Formative assessment opportunities assist teachers in their daily decision-making (Ogange, Agak et al., 2018). Simonson, Smaldino et al. (2014) agree with this and emphasise that assessments help teachers determine students' needs. Assessments will also assist the teachers in assessing the effectiveness of their instruction. McLaughlin and Yan (2017) report that formative assessment could improve students' achievements. Ogange, Agak et al. (2018) explain that formative assessment in online learning presents three possible main benefits if students and lecturers comply with these requirements: students should complete an assessment at their convenience (in a specific time frame); more than one attempt at the assignments should be allowed; and students should receive feedback promptly. The main goal of formative assessment activities should be to keep students accountable for their learning (Simonson, Zvacek et al., 2019). Furthermore, students should be motivated to complete online activities and must realise that these activities will ensure that they stay on track as regards their learning goals (Simonson, Smaldino et al., 2014).

Assessment policies should form the foundation of assessment approaches. This will ensure the validity and reliability of assessments, including the monitoring and amendment of assessment practices and dealing with plagiarism (Masoumi & Lindström, 2012). Planning assessment practices is therefore essential in online education (Rashid & Yadav, 2020). In addition, assessment and examination approaches should be reviewed to comply with online teaching and learning pedagogy (Mncube, Mutongoza et al., 2021). The movement by institutions to use more formative assessment approaches owing to the COVID-19 pandemic was an experiment on which institutions could capitalise and permanently benefit in the long run (Wolhuter & Jacobs, 2021). The most significant obstacle may be colleagues who

refuse to change their assessment practices to ones that are better suited to online learning and those individuals who continue to adhere to the notion that students are the only people accountable for upholding academic integrity (Eaton, 2020).

4.6.4.6. LEARNING RESOURCES

Masoumi and Lindström (2012) explain that students should access and effectively use appropriate learning resources to succeed academically. Hodgkinson-Williams (2018) emphasises that access to learning resources in the Global South is still expensive in the present day. Furthermore, institutions should develop students' information literacy and research skills before using resources to improve their academic skills (Masoumi & Lindström, 2012). In tuition-free institutions, students still need to bear the cost of textbooks. In the case of online learning, the learning resources might be free, but students need to purchase a device to access the resources and the internet (Hodgkinson-Williams, 2018). Therefore, international institutions have increased their support for OER. Organisations like UNESCO and the Commonwealth of Learning (1988) argue that some of the academic challenges the Global South faces could be addressed by OERs (Hodgkinson-Williams, 2018). OERs have the potential to lower education costs, increase teaching and learning quality, and increase access to education (Allen & Seaman, 2016). Allen and Seaman (2016) further report that academics believe OERs could reduce the time required to design and develop new courses.

Lau, Lam, Kam, Nkhoma, Richardson and Thomas (2018) explain that textbooks have become unpopular among Generation Y students. These students' fast-paced lives demand that information should be transferred in bite-sized learning portions that they can access through mobile devices (Omer, 2015). Masoumi and Lindström (2012) emphasise that resources in online education should be easily accessible, and students should be able to download the resources to use them offline.

Many textbooks in the Global South are sourced from the United States and are very expensive (Hodgkinson-Williams, 2018). Furthermore, since the internet is a vast landscape containing countless learning resources, the role of textbooks in online learning must be evaluated (Lau, Lam et al., 2018). Lau, Lam et al. (2018) also report

that textbook authors who provide additional electronic learning material are unsure how these resources should be utilised for online education. When institutions decide to use OERs, careful attention should be devoted to their use. Cultural practices should be embedded in OERs for students to relate to them (Hodgkinson-Williams, 2018). Furthermore, proper infrastructures should be created that support OER uptake, use and reuse (Mays, 2017b).

4.6.4.7. IN SUMMARY

The frameworks and literature emphasise the importance of aligning teaching, learning, and assessment with a programme's outcomes. They recognise the significance of engaging students through meaningful communication, interaction, and collaboration in online environments. They also acknowledge the importance of students' context and support in the design of online learning experiences. The E-Quality framework focuses on the creative and constructive use of resources in teaching and learning, while Nadeosa Quality Criteria emphasise context and alignment. The literature assertions provide more detailed insights into student-centeredness, communication, interactivity, social aspects, learning environments, assessment, and learning resources.

4.6.5. STUDENT SUPPORT

Sub-elements:

- Administrative Support
 - Technical Support
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WHAT THE FRAMEWORKS INTEND WITH THIS ELEMENT

Many online students might not access traditional support services provided by face-to-face institutions. Therefore, additional online support services should be provided to online students to ensure access and success (Masoumi & Lindström, 2012; Nadeosa, 2021). Students are inclined to assess a programme's quality through the support they receive (Masoumi & Lindström, 2012).

Therefore, institutions must pre-empt possible areas of support students in online programmes might require (Nadeosa, 2021). Institutions should be careful to make assumptions about students' ICT literacy and administrative and social support (Masoumi & Lindström, 2012). Instead, institutions should create the necessary support structures that could assist students with developing in an online environment. Information and management systems could assist institutions with tracking students' performance, identifying at-risk and inactive students, and determining completion and throughput rates (Nadeosa, 2021).

WHAT THE LITERATURE ASSERTS ABOUT THIS ELEMENT

4.6.5.1. ADMINISTRATIVE SUPPORT

Debattista (2018) emphasises that an institution focusing on online learning should have a clear vision and strategy. This should provide direction to all support staff members. Administration departments in online education environments should be efficient, practical and economically functional (Masoumi & Lindström, 2012). Policies and procedures should be further developed to sustain and evaluate service delivery quality (Bergeron & Fornero, 2018). These strategies will ensure that students have the necessary resources and support to succeed in their studies (Bergeron & Fornero, 2018). How support staff manage students is essential to consider. Online students also want to feel that they are part of an institution, and how staff members

communicate with students could determine their sense of belonging (Din, Haron et al., 2016).

Online students are usually working adults who are very busy (Aversa & MacCall, 2013). Online courses are generally developed to accommodate the diverse needs of DE students. The curriculum schedule for these students would be unlike a residential student's schedule (Bergeron & Fornero, 2018). Therefore, students should know how to access administrative support services. This will assist them with overcoming simple barriers to learning (Debattista, 2018). The student's best interests should always be considered (Bergeron & Fornero, 2018). The questions and complaints directed at the administrative support services department should be addressed accurately and within a reasonable time frame (Masoumi & Lindström, 2012). Administration departments should also investigate how best to provide counselling and advisory services to online students (Masoumi & Lindström, 2012). Excellent administrative support to students could create favourable marketing opportunities that could lead to improved enrolments and could contribute to retaining enrolled students (Din, Haron et al., 2016).

4.6.5.2. TECHNICAL SUPPORT

Din, Haron et al. (2016) and Masoumi and Lindström (2012) emphasise that technical support is a critical component of self-directed learning. Technical support is required when promoting active learning in online environments. Students become discouraged when they have technical difficulties and cannot continue learning effectively (Hiemstra, 2013). Therefore, students should receive timely and effective technical assistance (Gay, 2016). Institutions should be able to offer technical support just in time, just enough, or when it is needed. (Masoumi & Lindström, 2012).

Establishing teams that focus only on technical and administrative support enquiries is important (Din, Haron et al., 2016). Implementing a high-quality helpdesk with qualified staff who could support students throughout a programme should benefit institutions. (Masoumi & Lindström, 2012). Institutions should be transparent and communicate to students the extent of the support provided. This will reduce lecturers' time spent assisting students with technical issues and increase the time spent on

teaching and learning (Alfadly, 2013; Motaghian, Hassanzadeh, & Moghadam, 2013). Institutions should further remember that students' ICT competency could have an impact on learning (Din, Haron et al., 2016). Therefore, institutions should consider presenting computer competency online training for students (Masoumi & Lindström, 2012). This will assist students in using an institution's online learning platforms to access learning materials, engage with students and staff, and access e-libraries (Din, Haron et al., 2016). Ultimately, students who lack basic technological skills will not participate in online learning environments (Borup & Stevens, 2016). Institutional policies should, therefore, support online students to ensure quality teaching and learning (Gay, 2016).

4.6.5.3. IN SUMMARY

The E-Quality Framework emphasises the need for additional online support services to ensure access and success for online students. It furthermore stresses that a programme's quality is assessed by the support students receive. The framework urges institutions not to make assumptions about students' ICT literacy and administrative and social support but to create necessary support structures for online students. The quality criteria advocates for preemptively identifying possible areas of support that DE students may require. The criteria also highlight the significance of information and management systems to track student performance and identify at-risk and inactive students.

The frameworks and literature acknowledge the importance of providing support services to online students. They emphasise the need for timely and effective support to address students' challenges and ensure access and success in online education. The E-Quality Framework and literature focus on creating support structures and counselling services, whereas the Nadeosa Quality Criteria highlight the importance of information and management systems for tracking student performance. The literature assertions provide more specific insights into administrative and technical support, whereas the frameworks offer a broader perspective on support services.

4.6.6. FACULTY SUPPORT

Sub-elements:

- Administrative support
- Technical assistance in course development
- Pedagogical support

WHAT THE FRAMEWORKS INTEND WITH THIS ELEMENT

The design, development and facilitation of online learning environments could become a complex process for lecturers teaching online (Masoumi & Lindström, 2012). Lecturers, therefore, need continued support. Subsequently, the institution should provide professional technological and pedagogical support to lecturers teaching online (Nadeosa, 2021).

WHAT THE LITERATURE ASSERTS ABOUT THIS ELEMENT

4.6.6.1. ADMINISTRATIVE SUPPORT

The academic literature seems quiet about administrative support for lecturers in online learning environments. Lecturers' motivations have been found to be influenced by workload and copyright issues (Masoumi & Lindström, 2012). The management of institutions should develop online learning policies focusing on staff support. In addition, policies, which must be operational, should drive managements' support and appreciation of online learning, which is essential for successful implementation (Moakofhi, Leteane, Phiri, Pholele, & Sebalatheng, 2017). Appropriate procedures should guide the implementation of workload and intellectual property rights (Masoumi & Lindström, 2012). Governments in developing countries must play a role in this regard as they lack policies for online education, which should set benchmarks for HE institutions (Naresh & Reddy, 2015). Online learning policies should equip institutions to create plans for rationalising online learning activities (Moakofhi, Leteane et al., 2017).

4.6.6.2. TECHNICAL ASSISTANCE IN COURSE DEVELOPMENT

Equipping traditional face-to-face lecturers with technological skills will not make them good online teachers or facilitators (Omidire & Aluko, 2022). Lecturers should be well-trained and know how to integrate educational tools into various teaching and learning environments (Omidire & Aluko, 2022). Online teaching and learning should be viewed as a new pedagogical approach, although it appears that, unfortunately, lecturers do not understand what is required to incorporate online technologies into teaching and learning practices (Arinto, 2016). Many lecturers, for example, during the COVID-19 pandemic, needed to teach in online environments without any former experience (Omidire & Aluko, 2022). Lecturers should not only accommodate physical technology in the teaching and learning space but instead anticipate how the whole teaching and learning process will be influenced by technology and plan for this (Hodges, Moore et al., 2020). Lecturers and faculty members often find this pedagogical change challenging (Arinto, 2016).

Institutions should provide lecturers transitioning from a traditional teaching approach to an online one with technical and professional development opportunities (Englund, Olofsson et al., 2017; Masoumi & Lindström, 2012; Simamora, De Fretes et al., 2020). In addition, lecturers should be taught how to design, develop, implement, and manage online courses (Hodges, Moore et al., 2020). The premise of programme design, development and delivery should be grounded in established online learning policies, procedures and quality standards (Masoumi & Lindström, 2012). Technical and pedagogical hands-on assistance should be available to lecturers throughout all the aforementioned processes (Masoumi & Lindström, 2012).

Siemens (2008) explains that the educator needs another educator in an online environment, as lecturers cannot work in isolation. What Siemens (2008) means by this is that the many different elements of online learning could easily overwhelm a lecturer. Therefore, lecturers need guidance regarding teaching and learning in this environment (Simamora, De Fretes et al., 2020). Lecturers and instructional designers should work closely together as both parties contribute different skills (Outlaw & Rice, 2015). The lecturer is the subject matter expert, and the instructional designer is trained to use research and best practice guidelines to ensure effective pedagogical

transformation (Outlaw & Rice, 2015). The relationship between the lecturer and instructional designer is significant in ensuring the quality development of an online course (Simamora, De Fretes et al., 2020).

Online learning development is not a straightforward process. Faculties should prepare lecturers for the challenges that online learning could impose (Arinto, 2016). McNeal Jr (2015) explains three conditions that an institution should implement to ensure adequate delivery of online courses: an institutional culture, which should support technological advancement; a culture that should help with teaching innovation; and a culture that should focus on teaching excellence. This is important since online learning increases institutions' visibility and accountability of teaching practices (Bates, 2022).

4.6.6.3. PEDAGOGICAL SUPPORT

Masoumi and Lindström (2012) emphasise that e-learning should be an educational approach, not a teaching strategy. Therefore, lecturers will need continuous professional development to update their pedagogical and technological skills (Modise & Van den Berg, 2021). According to Schmidt, Tschida and Hodge (2016), most lecturers teach as they were taught. Observation is integral to developing a lecturer's teaching skills (Kugel, 1993). Teachers' conceptions of teaching and learning also play an essential role in their development (Englund, Olofsson et al., 2017). Lecturers who usually teach in face-to-face classrooms and who must unexpectedly teach in online environments may find teaching conditions challenging (Schmidt, Tschida et al., 2016).

The development of online programmes involves different processes and procedures than traditional courses. Therefore, staff would need training in developing e-learning material specifically for online learning (Mays, 2016). Teaching online does not mean that face-to-face classes can be presented by simply transferring them online (Schmidt, Hodge, & Tschida, 2013). Specific teaching skills and competencies are associated with online teaching (Aruleba, Jere et al., 2022; Omidire & Aluko, 2022). Faculties cannot expect traditional, face-to-face lecturers to teach effectively in online environments without guidance about designing and delivering online courses (Mays,

2016; Schmidt, Tschida et al., 2016; Simamora, De Fretes et al., 2020). In addition, staff need training on using an institution's e-learning platform (Simamora, De Fretes et al., 2020).

Faculty staff unfamiliar with online learning fear this delivery mode and fear failing at this approach (Kolowich, 2012; Omidire & Aluko, 2022). It has emerged that faculty members' acceptance of online learning is wanting (Allen & Seaman, 2015). Furthermore, Betts and Heaston (2014) argue that staff members with limited distance education experience could have a negative effect on distance education. Factors influencing the attitude of these lecturers include quality, time, technology, and support.

Lecturers require professional development to improve their use of educational technologies (Englund, Olofsson et al., 2017; Modise & Van den Berg, 2021). It appears that lecturers lack a model or benchmark for online teaching since many have little or no experience in online education (Schmidt, Tschida et al., 2016). Therefore, the professional development of lecturers could address some of the fears and uncertainties, Betts and Heaston (2014) noted. Although Schmidt, Tschida et al. (2016) point out that the specific elements of professional development are unclear, lecturers should nevertheless develop practical online teaching skills (Horvitz, Beach, Anderson, & Xia, 2015; Modise & Van den Berg, 2021). Professional development could improve educators' perceptions of online teaching as their ability improves (Martin, Budhrani, & Wang, 2019). The lack of support for staff and students could result in the complete failure of an online course (Masoumi & Lindström, 2012; Omidire & Aluko, 2022).

Englund, Olofsson et al. (2017) emphasise that professional development opportunities should be provided to young and upcoming academics since these academics would most probably teach in online environments. The aim of professional development should be to equip lecturers with the knowledge and skills they need to teach effectively in online settings (Gosselin, Northcote, Reynaud, Kilgour, Anderson, & Boddey, 2016). Development opportunities should be authentic and show lecturers how their skills could be integrated into teaching and learning environments (Gosselin, Northcote et al., 2016). Furthermore, professional development should take into

consideration lecturers' changing roles in HE (Baran, Correia, & Thompson, 2011; Masoumi & Lindström, 2012).

4.6.6.4. IN SUMMARY

The frameworks and literature assertions agree on the need for technological support to help lecturers integrate educational tools and manage online courses effectively.

The sources emphasise the importance of continuous professional development to equip lecturers with the necessary skills and knowledge for successful online teaching.

The frameworks provide general guidance on the need for support for online lecturers, while the literature provides more specific insights and practical recommendations for administrative, technical, and pedagogical support. The literature delves deeper into the challenges lecturers face in online learning and discusses the need for institutional policies, collaboration with instructional designers, and overcoming faculty members' apprehensions about online teaching. In contrast, the frameworks mainly address the broader importance of support without specific implementation strategies.

4.6.7. EVALUATION ELEMENT

Sub-elements:

- Cost-effectiveness
 - Learning effectiveness
 - Student satisfaction
 - Teacher satisfaction
-

WHAT THE FRAMEWORKS INTEND WITH THIS ELEMENT

Any educational institution must determine if students and teachers are satisfied with its products and service offerings (Masoumi & Lindström, 2012; Nadeosa, 2021). Therefore, an evaluation framework informed by policy and practice should guide evaluation practices (Nadeosa, 2021). Evaluations should focus on the different components of the online environment that could influence student and lecturer satisfaction (Nadeosa, 2021). In addition, these evaluations could uncover inconsistencies impacting the institution's efficiency and effectiveness in delivering online programmes (Masoumi & Lindström, 2012). The problem areas in each element should be identified and measured against the initial outcomes determined for each component (Nadeosa, 2021). Furthermore, the institution's goals should be achieved in cost-efficient ways that have a positive impact for the benefit of students, society and other stakeholders (Nadeosa, 2021).

WHAT THE LITERATURE ASSERTS ABOUT THIS ELEMENT

4.6.7.1. COST-EFFECTIVENESS

An essential distinction exists between cost efficiency and cost-effectiveness (Meyer, 2013). Cost efficiency could be regarded as providing education at a reduced cost or providing greater access to teaching at the exact cost (Meyer, 2013). Cost-effectiveness focuses on providing better quality education at the same or lower cost (Meyer, 2013). Casement (2013) believes online learning is still more expensive than face-to-face learning as the cost of hardware, software, and staff development is high. The savings that may accrue in the online environment come from not remunerating expensive professors who conduct face-to-face sessions in contact environments (Casement, 2013; Maloney, Nicklen, Rivers, Foo, Ooi, Reeves, Walsh, & Ilic, 2015).

Meyer (2006) emphasises four essential principles for achieving productivity through e-learning:

- Replacing expensive labour with technology. E-learning components might be added to modules and programmes that individuals do not always manage.
- Substituting expensive personnel for more affordable personnel.
- Improving technology instead of acquiring more capital.
- Investing in instructional design support for online programme development.

State funding for public universities is decreasing, resulting in constrained budgets (Bezuidenhout, Furtak et al., 2019; Burger, 2021). Furthermore, institutions are held more accountable, and students are demanding more services (Meyer, 2013). Therefore, Meyer (2013) suggests that institutions should invest in staff development to improve their instructional design skills. This could have a significant impact on improving the cost-effectiveness and productivity of online learning. The cost-effectiveness of online learning should enhance learning environments while ensuring that the institution operates financially viably (Masoumi & Lindström, 2012). Institutions' assessment of budgetary constraints and logistical boundaries within a limited timeframe could enable them to forecast costs and determine the institution's systemic strengths and weaknesses (Masoumi & Lindström, 2012). Moreover, institutions must earn a return on their investment and provide excellent student service. In addition, institutions should continuously seek methods to reduce students' costs (Masoumi & Lindström, 2012).

4.6.7.2. LEARNING EFFECTIVENESS

Institutions should continually evaluate if a programme and its modules are achieving their initial aims (Masoumi & Lindström, 2012). Karunaratne and Byungura (2017) argue that although online learning has been successfully implemented at some universities, the success of and student performance in online courses are questionable. This concern is brought about by universities' measuring learning effectiveness differently and not using a uniform benchmark for learning effectiveness (Karunaratne & Byungura, 2017). Some universities evaluate students' grades, and others measure learning effectiveness by considering students' perceptions

(Karunaratne & Byungura, 2017; Sun, Abdourazakou, & Norman, 2017). Most studies focus on traditional contact-based students, and very few use log data and access patterns to determine learning effectiveness (Karunaratne & Byungura, 2017). This indicates that learning analytics could be used more effectively when determining learning effectiveness (Karunaratne & Byungura, 2017).

The use of learning analytics becomes relevant when instructors employ a range of learning methodologies and tools to promote effective online learning (Ogange, Agak et al., 2018). This includes formative assessment and feedback (Hwang, Chu, Yin, & Lin, 2008). Therefore, learning activities should be assessed regularly to determine their ability to adequately equip students to reach a programme's learning outcomes (Masoumi & Lindström, 2012). Institutions should evaluate how a programme will prepare students for attaining the knowledge and competence to work in a specific field (Masoumi & Lindström, 2012). Effective learning is also associated with designing practical online activities, which could facilitate and direct cognitive and social processes (Moradi, Liu, Luchies, Patterson, & Darban, 2018). Online interaction is crucial in determining learning effectiveness (Sun, Abdourazakou et al., 2017). Learning effectiveness could be enhanced when instructors engage students in online activities (Ogange, Agak et al., 2018; Sun, Abdourazakou et al., 2017). This engagement would therefore include more significant interaction between students and teachers (Moradi, Liu et al., 2018). The online presence of students and teachers should enhance the learning environment, culminating in improved and effective learning (Sun, Abdourazakou et al., 2017). One way of achieving a more significant online presence is to engage students in online formative assessment activities (Ogange, Agak et al., 2018).

According to Moradi, Liu et al. (2018), one of the main factors influencing learning effectiveness in online learning is students' degree of control over the content and its dissemination. One of the main reasons students enrol in distance education courses is the freedom they provide students to move through the content in their own time and at their individual pace (Moradi, Liu et al., 2018). Lecturers are responsible for employing effective instructional strategies to achieve learning-centeredness in the online environment and improve student engagement (Ogange, Agak et al., 2018). However, institutions should be conscious that effective learning is context-dependent

(Comer, Lenaghan, & Sengupta, 2015). Furthermore, learning effectiveness could be based on how students perceive the content of a module (Ganesh, Paswan, & Sun, 2015) and the feedback provided by lecturers, peers and an e-learning system (Ogange, Agak et al., 2018). Students' motivation, the online classroom climate, teaching methods, and the course difficulty could also play important roles in learning effectiveness (Comer, Lenaghan et al., 2015).

4.6.7.3. STUDENT SATISFACTION

Student satisfaction is crucial to quality online learning (Horzum, 2017). Costley and Lange (2016) emphasise that successful e-learning implementation depends on student satisfaction. Institutions must remember that their service offerings are directly affected by student satisfaction (Horzum, 2017). Therefore, online students should not be excluded from specific service offerings traditionally offered at face-to-face institutions. This includes quality academic support, library services, instruction quality, course materials, and student support services (Horzum, 2017). Satisfied students will be more motivated and are more likely to complete their studies (Costley & Lange, 2016).

Retaining students in online learning environments and attaining student satisfaction present challenges (Sahawneh & Benuto, 2018). The lack of social presence, a feeling of isolation, and a lack of engagement with the instructor and other students are a few causes. Sahawneh and Benuto (2018) further argue that a better understanding between online lecturers and online students is needed. The feedback and perceptions of students, the most crucial role players in the online environment, are critical for a positive outcome (Masoumi & Lindström, 2012). These factors will assist in the practical design of online courses. Institutions should use the feedback collected from students as a quality measure. Consequently, students' feedback should be reliable and provide valuable insight into the effectiveness and quality of online learning practices (Masoumi & Lindström, 2012). Institutions should act on students' feedback and view it as an indicator for improvement.

Yilmaz (2017) argues that e-learning readiness is a determining factor in ensuring student satisfaction. Factors such as students' experiences in online learning, access

to off-campus support, access to learning resources and motivation to use the internet could influence online learning effectiveness (Hao, 2016b). Grabau (2015) emphasises that online students need a specific set of intrapersonal skills to complete online modules successfully. This includes self-efficacy and self-regulation, good communication and time management skills. Borup and Stevens (2016) highlight that students cannot participate in online courses if they are not equipped with technological skills. Distance education institutions have to assist students in developing these skills (Hao, 2016a). This will help students to become self-directed learners, which is essential for DE. Yilmaz (2017) and Hao (2016a) suggest that online courses should incorporate skills prerequisites. This may ensure that students can actively participate in learning activities and achieve their learning goals (Yilmaz, 2017).

Horzum (2017) emphasises that online social presence is a crucial element influencing students' online learning experience. Social presence has a positive impact on learners' satisfaction and achievement (Horzum, 2017). Effective online social presence can only be achieved if the instructional design to facilitate interaction is thoroughly planned and implemented (Costley & Lange, 2016). The proper instructional design could positively affect students' perceived learning and satisfaction (Costley & Lange, 2016).

Students and teachers ultimately have specific responsibilities in the online teaching and learning environment that affect student satisfaction. Students need to take responsibility for their learning. They need to embrace the opportunities and skills associated with online learning to reach their learning goals (Yilmaz, 2017). Therefore e-learning readiness would be essential in ensuring student satisfaction and motivation (Yilmaz, 2017). Students should also be satisfied with their teachers (Costley & Lange, 2016). The lecturer's teaching design, the organisation of the online environment, and the instructor's presence are determining factors that influence student satisfaction (Costley & Lange, 2016). Student feedback, moreover, plays an integral part in student satisfaction. Students, in turn, expect timely teacher responses (Costley & Lange, 2016). Sahawneh and Benuto (2018) emphasise that student satisfaction, retention, and success increase when lecturers show their students care and offer intellectual stimulation.

4.6.7.4. TEACHER SATISFACTION

Teacher satisfaction could be regarded as a belief or positive feeling that a system could satisfy the needs of a lecturer (Yeh & Lin, 2015). Teacher satisfaction could also be regarded as the difference between a lecturer's expectations of the functionality of a system and its actual functionality (Tsai, Yen, Huang, & Huang, 2007). Harrati, Bouchrika, Tari and Ladjailia (2016) explain that the usability of e-learning educational software products could either increase or decrease its acceptance by academic personnel. The usability of a system is influenced by its ease of use (Kruger, 2016). Lecturers' perceived usefulness and ease of use of online education could have an impact on the quality of online education (Masoumi & Lindström, 2012). Subsequently, perceived usefulness and ease of use could influence quality teaching and learning (Borup & Stevens, 2016). A system should be able to achieve specific outcomes with effectiveness and efficiency. This supports teacher satisfaction (Harrati, Bouchrika et al., 2016).

Institutional policies regarding online education should support lecturer satisfaction (Tena, Almenara, & Osuna, 2016). These policies should support lecturer flexibility, communication, community, success, and support (Borup & Stevens, 2016). These elements are the primary influencers of lecturer satisfaction. Lecturers are satisfied if they are provided with flexibility in teaching, which means they should be able to select what they teach, how to teach, when, and where (Borup & Stevens, 2016).

Lecturers are central to quality learning (Borup & Stevens, 2016). Therefore, lecturers should be motivated in their use of educational technology. Opportunities to grow professionally could increase lecturers' satisfaction (Borup & Stevens, 2016). Lecturers could also experience pleasure when students react positively to their actions (Velasquez, Graham, & Osguthorpe, 2013). Lecturer satisfaction is furthermore related to the final grades of students. A sense of personal achievement could also increase lecturer satisfaction (Borup & Stevens, 2016). Efficient education-based learning systems will create positive lecturer experiences (Harrati, Bouchrika et al., 2016). Regular feedback should be collected from lecturers regarding their expectations of online learning (Masoumi & Lindström, 2012).

4.6.7.5. IN SUMMARY

The E-Quality Framework emphasises the importance of evaluating online learning environments to uncover inconsistencies and ensure the institution's efficiency and effectiveness in delivering online programmes. The framework acknowledges the significance of achieving institutional goals cost-efficiently that positively impact students, society, and stakeholders. The quality criteria advocate for evaluation practices informed by policy and practice, focusing on different components of the online environment influencing student and lecturer satisfaction. The criteria also call for the identification of problem areas and measurement against initial outcomes for each component, ensuring that the institution's goals are achieved. The frameworks and literature assertions recognise the importance of evaluating online learning environments and considering cost-effectiveness, learning effectiveness, student satisfaction, and teacher satisfaction. They agree on the significance of achieving institutional goals efficiently and providing support and development opportunities to enhance effectiveness and satisfaction.

4.7. ADDRESSING THE SECONDARY RESEARCH QUESTIONS

The following section addresses some key findings from chapters 2, 3 and 4:

The historical trajectory of DE in South Africa, from eighteenth-century correspondence courses to contemporary challenges posed by COVID-19, underscores the dynamic evolution of DE in South Africa. Recent transformations, accentuated by the pandemic, emphasise technology's pivotal role and the imperative for adaptability in HE. Intending to reach 1.6 million students by 2030, expanding DE in South Africa faces hurdles like funding constraints and technology disparities. The conceptual quality framework presented in Chapter 7 could serve as a guide amid these complexities, highlighting the need for a nuanced balance between technological innovation and socio-economic considerations as South Africa aims to expand higher education access through online learning. Some of the key findings are as follows:

- Contact-based higher education institutions have reached their capacity to support full-time students (Glennie & Mays, 2013). There is also an increased demand for more flexible learning opportunities that allow students to attend to other life commitments (Gaebel, Zhang et al., 2018).
- Most institutions in South Africa adopted a mixed or blended mode of provision to teaching and learning (cf. 2.2).
- Defining online DE as a mode of delivery (cf. 3.2).
- Defining the elements of online DE (cf. 3.10).
- When expanding an institution's capacity, HE institutions must be careful not to sacrifice the quality of education (cf. 3.8).

Furthermore, Chapter 3 broadly indicated some crucial elements for successful online DE provision. Chapter 4 very specifically elaborated on elements critical to online DE provision. The theoretical framework elements formed this study's values or characteristics. The researcher reviewed the elements theoretically before they were reviewed during this study's data collection and analysis processes. Based on the review of these elements and novel data collected during this study, the proposed Conceptual Quality Framework was developed (Chapter 7) to guide quality in online distance higher education in South Africa. Some of the main findings from the chapters mentioned here include the following:

- Most higher education institutions view online learning as an income tool (Tareen & Haand, 2020).
- The flexible nature of online distance education should accommodate the diverse needs of distance education students (Houlden & Veletsianos, 2019).
- Asynchronous communication is increasingly becoming popular and a preferred choice for communication among academics (Tareen & Haand, 2020).
- Geographically dispersed students can access Higher Education through online education (Houlden & Veletsianos, 2019).
- Geographical distance rather than physical distance between a student and an institution should define distance education (Simonson, Zvacek et al., 2019).
- The COVID-19 pandemic showed institutions the necessity for online distance education (Dhawan, 2020).

- Unfortunately, the COVID-19 pandemic also exploited institutions' under-preparedness for using the affordances of online education effectively (Hodges, Moore et al., 2020).
- A detailed outline and explanation of the key elements of online education used to create the theoretical framework for this study are presented (cf. 4.3).

4.8. CONCLUDING REMARKS

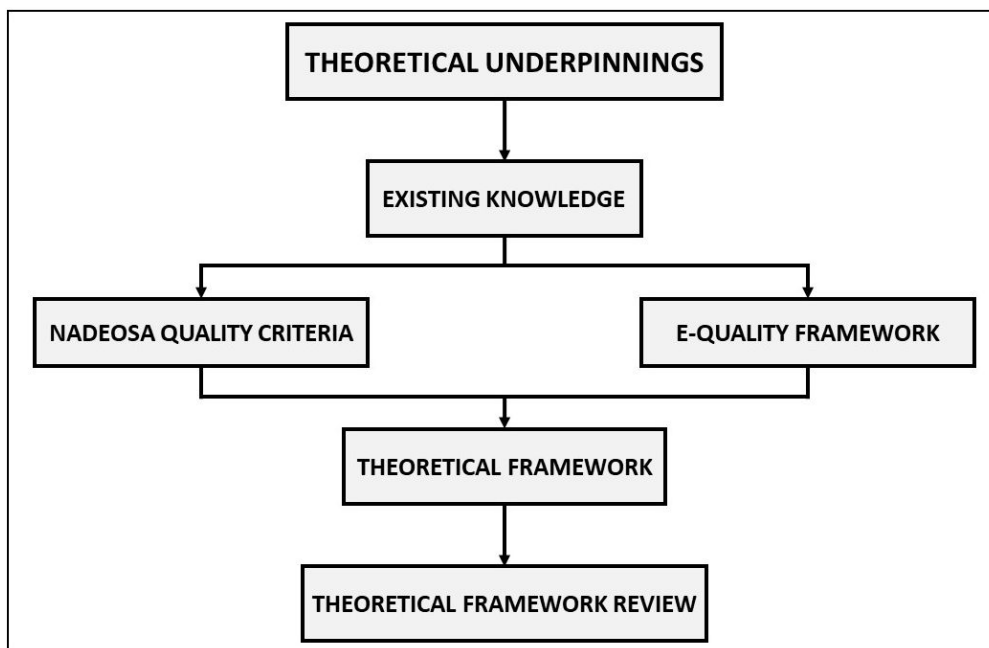


Figure 4.7: Overview of Chapter 3.

This chapter aimed to develop and introduce a theoretical framework that could act as a guideline or blueprint to direct and guide this investigation. Subsequently, this study was underpinned by the reviewed literature presented in Chapters 2 and 3 and the two frameworks and one model discussed in this chapter. The literature reviews informed the use of the Nadeosa quality criteria (Nadeosa, 2021) and the e-quality framework (Masoumi & Lindström, 2012) for this study. In these frameworks, the researcher identified elements that could be used for creating a “lens” through which the collected data could be analysed and interpreted. The researcher conducted the literature review to determine what existing literature suggested about the elements of the theoretical framework and how they related to ODE, on which the researcher elaborated in this chapter. Chapter 4 outlines the methodology applied to this study to conduct this investigation.

CHAPTER 5: RESEARCH METHODOLOGY

5.1. INTRODUCTION

According to Nieuwenhuis (2018a), the methodology of a study may be regarded as the bridge between the researcher's worldview of a phenomenon and the methods employed to investigate the research questions. The methodology of a study can also be seen as a strategy, plan or design that should assist the researcher in achieving the outcomes of an investigation (Sefotho & Plessis, 2018). The methodology includes elements such as a research paradigm, research approach, research design and procedures undertaken in an investigation, including data collection and analysis (Kivunja & Kuyini, 2017a; Nieuwenhuis, 2018a). Kivunja and Kuyini (2017) further explain that the methodology articulates the logic and flow of these systematic processes.

According to Wahyuni (2012), there is a distinct difference between method and methodology. A methodology could be regarded as a domain or map that guides an investigation to enable reaching its purpose, while methods refer to a set of steps necessary for conducting the investigation (Cohen, Manion, & Morrison, 2018; Nieuwenhuis, 2018a). Subsequently, the methodology of a study is regarded as a strategic but adaptable guide taking shape within a particular research paradigm (Nieuwenhuis, 2018a; Wahyuni, 2012).

In the sections below, the methodology of this chapter is elaborated on. Section 5.3 discusses interpretivism, which was used as this study's paradigm, and the ontology, epistemology and axiology associated with interpretivism. The qualitative research approach employed for this study is discussed in section 5.4. Section 5.5 explains how an exploratory case study design assisted the researcher in conducting the research. In addition, this section includes how sampling was conducted, which data collection instruments were used and the data collection and analysis process. This chapter concludes by indicating this investigation's limitations and ethical considerations.

5.2. METHODOLOGY

Figure 5.1 illustrates the different perspectives of this investigation’s methodology. This study’s paradigm (see section 5.3), grounded in interpretivism, provides insight into the researcher’s worldview. This view determined how the researcher approached the study (Kivunja & Kuyini, 2017a). In addition, the researcher adhered to a qualitative approach (see section 5.4) for this study. This approach determined how the researcher would investigate the phenomenon (Creswell & Creswell, 2018). Creswell and Creswell (2018) explain that a research design is a specific enquiry within a particular approach that should guide the data collection and analysis processes and subsequently assist with reporting the findings. The researcher used an explorative case study as the research design. An exploratory study that addressed the when, how, and why questions were best suited to this study since there is limited information on ODE provision in South Africa (Yin, 2014). The researcher collected data through interviews. The collected data were analysed inductively and deductively using predetermined themes emanating from the theoretical framework of this study.

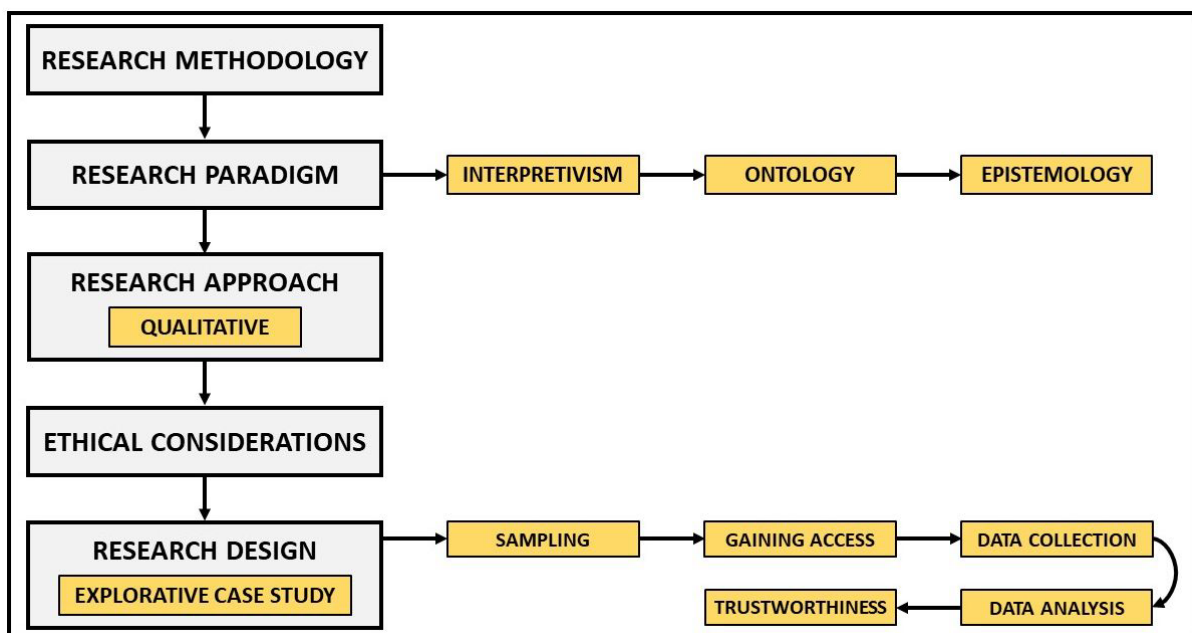


Figure 5.1: Methodology of this study.

5.3. RESEARCH PARADIGM

The word “paradigm” originates from the Greek language and refers to a pattern (Kivunja & Kuyini, 2017). The American philosopher Thomas Kuhn coined the term paradigm in 1962 after visiting the Centre for Advanced Studies in the Behavioural Sciences for a year between a year, from 1958 to 1959. Here, he experienced that social scientists disagree profoundly about the nature of legitimate scientific problems and methods. In his quest to discover the source of these differences, he referred to the different roles in scientific research as paradigms. These paradigms are well-known scientific innovations that provide a community of practitioners with short-term models of problems and solutions. (Kuhn, 1963).

The word paradigm, in educational research, describes a researcher’s worldview (Kivunja & Kuyini, 2017a; Willis & Jost, 2007). This worldview could include perspectives, thinking, shared beliefs or a school of thought that influences a researcher’s thinking and how a researcher works with research data. Dai and Chen (2013) argue that a worldview dominates thinking, feeling, and doing in a field of study. A worldview or paradigm could dominate to such an extent that it could become a norm that researchers cannot easily ignore (Kuhn, 1963).

There is consensus among authors that a paradigm consists of four main components. These components are epistemology, ontology, axiology, and methodology (Dai & Chen, 2013; Kivunja & Kuyini, 2017a; Scotland, 2012; Taylor & Medina, 2013; Wahyuni, 2012; Yilmaz, 2013). Epistemology originated from the Greek word *episteme*, which means knowledge. Therefore, epistemology describes how we know the truth (Kivunja & Kuyini, 2017). Taylor and Medina (2013) explain that these descriptions include the standards we use to justify the descriptions. Scotland (2012) describes epistemology as assumptions that focus on creating, acquiring, and communicating knowledge.

According to Scotland (2012), ontology focuses on researchers' perceptions of the way things are and how they work. Parmenides, a Greek philosopher, is regarded as the founder of ontology (Kahn, 1969). One of Parmenides's poems, *The Way of Truth*, is the first known “example of a deductive system applied to physical reality” (Romero,

2012). Kivunja and Kuyini (2017) explain that the ontology of a paradigm is a philosophical study that enables a researcher to categorise the elements that constitute the nature of reality or existence. This “reality” is subjective to a researcher’s interpretation thereof. Therefore, multiple realities could exist (Yilmaz, 2013).

Axiology stems from two Greek words: *axios* (worth) and *logos* (reason). According to Hart (1971), the term axiology was first applied by Paul Lapie and E. von Hartmann. Hart (1971) explains that axiological investigations have been present since man’s first preoccupation with the nature of values. Creswell (2007) argues that qualitative researchers cannot form an objective perspective on a research study. Furthermore, Creswell (2007) explains that researchers have a set of assumptions that will influence a researcher’s perspective. This is known as the axiology of the study or the axiological premise that characterises a study. Therefore, axiology refers to ethical issues in conducting research (Kivunja & Kuyini, 2017b). The researcher should subsequently actively report on his values and biases towards the study (Creswell, 2007). More specifically, the researcher should consider the importance of participants, data, and the audience to whom feedback is to be given (Kivunja & Kuyini, 2017b). The researcher should attempt to avoid or minimise the risk of harm, discomfort or inconvenience to participants in a study. Threats could include damages of the following nature: physical, psychological, social, economic, legal and devaluation of personal worth (National Health and Medical Research Council, Australian Research Council, & Universities Australia, 2007).

5.3.1. INTERPRETIVISM AS A RESEARCH PARADIGM

Interpretivism, a qualitative approach, assumes that truth is socially constructed (Alharahsheh & Pius, 2020). According to Hussain, Elyas and Nasseef (2013), the interpretive paradigm has several designations. Moreover, the interpretive paradigm could also refer to the humanistic, constructivist, naturalistic and anti-positivist paradigms (Creswell & Creswell, 2018; Mack, 2010; Scotland, 2012). Creswell and Creswell (2018) explain that social constructivists seek to understand phenomena in their living and working environments. For this study, the researcher wanted to determine the key quality elements of ODE and how these elements are enacted by the participants of this study working in HE institutions in South Africa (see sections

1.4 and 1.5). Scotland (2012) supports this view and emphasises the role of the individual or researcher within a research setting. The interpretive paradigm or constructivism allows the researcher to construct meaning from a specific phenomenon (Mack, 2010). Subsequently, this paradigm was deemed suitable for the current study because it enabled the researcher to investigate people's interactions with ODE and consider its historical and cultural contexts in the South African HE context. (Creswell & Creswell, 2018). Myers and Avison (1997) posit that people assign different meanings to different phenomena, as highlighted in Chapter 6. Therefore, through interpretivism, the researcher attempted to understand the phenomenon's complexity and determine how participants viewed the phenomenon (Myers & Avison, 1997).

The scholar Mack (2010) explains that interpretivism is influenced by hermeneutics and phenomenology. The aim of hermeneutics is to study a text's meaning and interpretation (Mack, 2010). When examining social phenomena, phenomenology considers people's varying subjective interpretations and experiences of the world. (Ernest, 1994). Therefore this meaning-making process could be regarded as the foundation of interpretivism (Ernest, 1994).

The primary goal of this study was to investigate how participants constructed their meanings of ODE in the South African HE environment (Kaplan & Maxwell, 2005). This approach aligns with the belief of interpretivism, namely that research should be observed from the inside through participants' experiences (Mack, 2010). The purpose of this study was to comprehend, clarify, and demystify the social reality of ODE as regarded by various people (Cohen, Manion, & Morrisen, 2007, p. 19). The researcher sought to understand rather than to explain. Creswell and Creswell (2018) caution that a researcher's philosophical ideas influence their research approach. Subsequently, the researcher's worldview affected how the research was conducted. The researcher did not establish dependent and independent variables (Klein & Myers, 1999). As a result, the researcher did not draw unbiased conclusions about the phenomenon. Subsequently, the researcher interpreted the phenomenon from the perspective of the participants (Mack, 2010; Taylor, 1976).

A meaningful human phenomenon was explored from the perspective of practical human involvement for this study. Therefore, interpretivism acted as the general philosophical position. This paradigm's philosophical stances aided in understanding how people interact with one another and make practical decisions in daily life (Williams, South, Yanchar, Wilson, & Allen, 2011).

According to Van der Walt (2020), more profound issues are connected with an interpretivism–constructivism approach to research. One of these considerations is pre-theoretical (pre-scientific) issues that the paradigm user should consider. They are discussed briefly below:

- *The purpose of interpretation:* This study aimed to derive meaning from collected data, as indicated in Chapter 7. (Barrett, 2009). The interpretation of the data collected during this investigation provides insight into the researchers' understanding of the investigation's complex nature (Aldridge, 2018).
- *Interpretation as a research procedure:* When using interpretivism as a research method, the researcher might look at signs and symbols to interpret the data (Barrett, 2009). The researcher listened to many voices (participants'). Therefore the researcher had to be a scribe, analyst, and interpreter. The researcher's views, background, and experience influence the study (Creswell & Creswell, 2018). The research participants also influence the study (Thanh & Thanh, 2015). The researcher created his unique interpretation by analysing the data collected through this study (see Chapter 6). Subsequently, each reader of this thesis should develop unique interpretations of this study (Barrett, 2009).
- *The status of facts:* There are two views regarding the status of facts. According to Caputo (2018), there are no uninterpreted facts about the matter. Other interpretivists argue that "...facts do exist, but one must be conscious of the deeper issues behind a statement that is regarded as a fact" (Van der Walt, 2020, p. 62). Nevertheless, both viewpoints agree that people are different and they experience and judge differently (Van der Walt, 2020). Thanh and Thanh (2015) explain that even a researcher's mood, age, health, and context influence their

research perception. Hence, researchers could draw different conclusions from the same data (Jensen, 2020).

- *Interpretation “all the way up and all the way down”*: Van Huyssteen (2006, p. 46) explains that interpretivism “goes all the way down and all the way back, whether we are moving in the domain of science, morality, art or religion”. Van der Walt (2020) explains that interpretivism involves a two-way process. Interpretation “all the way up” refers to the point where the researcher can use their understanding of the collected data to construct a new picture or story of the investigated phenomenon. This story or picture is represented in the Conceptual Quality Framework presented in Chapter 7. Interpretivism “all the way down” refers to the researcher's final position regarding the study's findings. The researcher's “last standstill” is influenced by the researcher's worldview. Section 8.3 provides more information regarding how this investigation answered the research questions.
- *Some interpretations are better than others – or are they?* Caputo (2018) argues that what we accept as facts that influence our scientific work matters greatly. Therefore, it is essential to substantiate facts, explain how they were determined and illustrate the process of discovering them (Van der Walt, 2020). Therefore, researchers need to understand the interpretative process associated with a set of facts, which determines its factual status. A lack of insight into the interpretative process of the emergence of a group of facts would incapacitate researchers, preventing them from attaching meaning to these facts (Van der Walt, 2020). Van der Walt (2020) further explains that the facts we encounter in scholarship result from interpretations by the discoverers or formulators of these facts. Caputo (2018, p. 5) argues that “disinterested interpretations are nowhere to be found in scholarship”. The facts associated with this study are highlighted explicitly through the literature review (see Chapters 2 and 3) and the theoretical framework review (see section 4.6).
- *The status of the theoretical constructions resulting from interpretivism*: Van der Walt (2020) explains that at some point in the “upward” interpretative process, a researcher might deem it necessary to use their interpretations to create a new

theoretical construct. An example of such a construct is a theoretical framework that enriches a literature study or an empirical investigation. A new construct aims to illuminate a phenomenon related to the research problem (Elbanna, Eid, & Kamel, 2015). Barrett (2009), in turn, asks whether theoretical construction is a thing, something concrete or an abstraction. Subsequently, researchers must determine if theoretical constructions “out there” could be discovered through interpretivism. Or does interpretivism entail applying a framework to data to make sense of the information? Van der Walt and Fowler (2006) argue that there are two types of constructivism: individualist and social constructivism. Individual constructivism concerns individuals creating a model to give meaning to experiences. Social constructivism relates to a group of people drafting a framework to provide a sense of reality. Van der Walt and Fowler (2006) further explain that individualist constructivism could lead to social anarchism if applied consistently. On the other hand, social constructivism could only provide knowledge and learning to the group using the construct in a free society. The contribution of this study, the Conceptual Quality Framework presented in Chapter 7, can be regarded as the theoretical construct that assisted the researcher in making sense of ODE in the South African HE environment.

5.3.2. ONTOLOGY

Ontology could be defined as the nature of reality (Hudson & Ozanne, 1988) and attempts to determine the heart of the existence of a phenomenon (Alharahsheh & Pius, 2020). Mack (2010) explains this concept by stating that ontology is a researcher’s understanding of reality and being. Mack (2010) further emphasises that ontology is the foundation of a researcher's theoretical framework. Blaikie (as cited in Grix, 2018, p. 53) defines ontology as the study of “...claims and assumptions that are made about the nature of social reality, claims about what exists, what it looks like, what units make it up and how these units interact with each other”.

According to Gruber (1995) (as cited in Wohlgenannt, Weichselbraun, Scharl, & Sabou, 2012, p. 243), “Ontologies are formal conceptualisations of application domains...”. Thus, the ontology for this study served as a logical and methodological

description of all the many objects and variables in the theoretical framework regarding ODE in HE environments. Following the definition of the objects and variables and the collection of information through interviews and document analysis, the researcher used the data collection procedure to derive new information or examine the coherence of pre-existing theoretical frameworks (Jurisica, Mylopoulos, & Yu, 2004).

Being impartial regarding the investigation's findings is challenging from the researcher's perspective. The reviewers of this study should consider that the researcher's and participants' realities were different when evaluating the findings. Mack (2010) emphasises that people interpret events differently. Therefore, multiple perspectives of a phenomenon could exist. The variables in this study were not predictable, which had unforeseen outcomes. In this case, some elements of the theoretical framework did not apply to the current study. The usefulness of the theoretical framework in the research settings and the involvement of the research participants were critical factors in the success of this study. Furthermore, the outcome of this study is subjective as the researcher created the theoretical framework that applied and purposefully selected the research participants. The results of this study only apply to the theoretical framework employed and to the time the data were collected (Saunders, Lewis, & Thornhill, 2019). Van der Walt (2020) explains that things look different to various perceivers and the same perceiver at different times and in different situations. Hence no apparent perception can be assumed to be an absolute representation of how something is. Based on the data gathered at a specific moment, it would be reasonable to say that the findings of this investigation only apply to the theoretical framework employed in this study. It is also of great significance to keep in mind that the researcher's ontological presuppositions influenced his epistemological presumptions, which influenced the study's methodology. Subsequently, the data collection methods used for this study were influenced by the paradigm, ontology and epistemology (Mack, 2010).

5.3.3. EPISTEMOLOGY

For this study, epistemology could be viewed as the theory of knowledge described by Crotty (2020). Hirschheim (1985) explains that epistemology defines how we know what we know. Epistemology concerns the “nature and forms of knowledge, how it can be acquired and how it can be communicated to human beings.” (Cohen, Manion et al., 2007, p. 7). Epistemology also provides insight into whether knowledge is valid (Hirschheim, 1985). According to Crotty (2020), a study's methodology and epistemology are influenced by the study's theoretical perspective. This study's literature review (Chapters 2 and 3) and theoretical framework review (Section 4.6) provided a good overview of how the researcher acquired knowledge about the investigated phenomenon (Mack, 2010).

As indicated in Chapters 1,2 and 3, Legemaate, Grol, Huisman, Oolbekkink–Marchand and Nieuwenhuis (2022) explain that enhancing a quality culture in HE is challenging since there is an imbalance between responsibility and improving quality. In socio-technical systems design (STSD), a great deal of research has been conducted about encouraging employees to accept responsibility for the quality of their work and to promote continual improvement (Legemaate, Grol et al., 2022). This theoretical viewpoint, introduced by Trist and Bamforth (1951), attempts to provide a systematic approach to institutional design and work processes that promote institutional advances and ideal working conditions. Ultimately, this strategy could achieve an institution's strategic objectives while coping with a constantly shifting environment (De Sitter, Den Hertog, & Dankbaarl, 1997; Molleman & Broekhuis, 2001).

Institutions have two interdependent systems: technical and social (Wang, Solan, & Ghods, 2010). The social system comprises individuals and tasks, whereas the technical system comprises tools and procedures (Ketchum & Trist, 1992). The STSD theory argues that it is seen as more desirable to optimise the social and technical aspects of the workplace jointly than to improve one system at the expense of the other (Wang, Solan et al., 2010).

Legemaate, Grol et al. (2022), similar to Masoumi and Lindström (2012), argue that a holistic approach is required for improving a quality culture in HE. As elaborated on in section 4.4, the theoretical framework elements represent several technical and social systems (Wang, Solan et al., 2010). Therefore, optimising only one of the elements of the theoretical framework would necessarily be at the expense of other elements (Wang, Solan et al., 2010). Subsequently, an element of the theoretical framework as a standalone component will be unable to maintain and enhance the quality of ODE. Therefore, institutions should consider optimising all elements simultaneously, even if the optimisation does not occur at total capacity, as these theoretical framework elements are interdependent (Legemaate, Grol et al., 2022). Institutions would be able to evaluate, maintain and enhance quality in ODE if they view the elements of the theoretical framework as a holistic system where all the elements are equally important. ODE could subsequently be regarded as a socio-technical system in which humans and their associated tasks, technology, systems and procedures should work in unison effectively and efficiently to ensure the provision of quality education.

To achieve quality provision in ODE, institutions must coordinate people and culture (the social aspects) with the structure and systems (the technical elements). This process should be facilitated at an institutional level by leadership, which focuses on encouraging and supporting transformation and productive cooperation.

The aforementioned knowledge claims must be supported by evidence to be accepted by society as the truth (Hirschheim, 1985; Siegel, 2005). Researchers find it difficult to have objective viewpoints as language and culture influence their perspectives (Hirschheim, 1985). The epistemology should illustrate how the researcher aims to uncover knowledge to make sense of the phenomenon (Alharahsheh & Pius, 2020). Searching for understanding or evidence involves using tools, techniques and approaches acceptable for a specific field of study (Hirschheim, 1985). Therefore, the theoretical and proposed conceptual quality frameworks illustrate how the researcher understood this study's reality. The frameworks demonstrate how the researcher distinguished between applicable and irrelevant information and viewed the phenomenon (Alharahsheh & Pius, 2020). Although this study showed how individuals interpreted the investigated

phenomenon, the study also showed how the researcher analysed different researchers' interpretations of concepts, theories, and guidelines (Bryman, 2016; Cohen, Manion et al., 2007).

The new knowledge produced by this study is not unailing but conditional and subject to society's acceptance at a specific time and place (Hirschheim, 1985). The researcher believes that the knowledge produced by this study is not illogical and would, over the years, stand the test of time (Hirschheim, 1985). Nevertheless, future information about similar topics could change the status quo of the knowledge claims in this study (Hirschheim, 1985).

5.4. QUALITATIVE RESEARCH APPROACH

According to Creswell and Creswell (2018), investigating and understanding the significance of individuals or groups involved in a social or human phenomenon is done through qualitative research. Subsequently, the researcher studied the phenomenon in its natural setting (Eyisi, 2016; Kaplan & Maxwell, 2005). Emerging questions and processes, data gathered from participants in their natural environments, inductive data processing, and the interpretation of findings are often characteristics of the qualitative approach to research (Creswell & Creswell, 2018).

Mason (2018) attempts to answer the conundrum of whether a researcher needs to design a qualitative research project. Mason (2018) argues that designing qualitative research is necessary and possible. However, Mason (2018) also warns that a researcher should be careful to envision the design of a study as a single document that provides a blueprint for research. Exploratory qualitative research is fluid, adaptable, data-driven, and context-sensitive (Mason, 2018). Therefore, developing an advanced blueprint for qualitative research would be challenging.

There are several advantages to using qualitative approaches and methods. A qualitative approach produces detailed and rich descriptions of participants' feelings, opinions, and experiences, as shown in Chapter 6 (Denzin, 2001). This study aimed to understand the context and processes associated with ODE at two public higher education institutions. Therefore, a qualitative approach alone was sufficient to

conduct the research (Ritchie, Lewis, Nicholls, & Ormston, 2013). Denzin and Lincoln (2002) explain that qualitative research typically considers a wide range of epistemological stances, research methodologies, and interpretative strategies to understand a phenomenon. Subsequently, from an epistemological perspective, each institution's context, culture, and values have an impact on the understanding and evaluation of the processes and procedures at these institutions (McNamara, 2001).

Interpretivism, the research paradigm used in this study, tries to comprehend individuals' voices, meanings, and associated events (Klein & Myers, 1999). Therefore, the source of knowledge in this study is the meaning that people give to the processes and procedures associated with their institution's ODE practices and offerings (Richardson, 2012). Furthermore, a qualitative approach allows researchers to discover participants' honest perspectives and experiences of a phenomenon (Corbin & Strauss, 2014). The researcher, therefore, has the opportunity to determine how the context of the participants influences the phenomenon.

Maxwell (2012) explains that a qualitative research design could easily be adapted, specifically when employing an interactive approach. The data analysis techniques utilised in a qualitative approach equip a researcher to analyse data thoroughly and appropriately (Rahman, 2020). Therefore, participants could, with greater freedom, participate in and contribute to the process (Flick, 2015). Participants have the freedom to determine what is relevant to them and could provide accurate descriptions of the phenomenon in its context (Rahman, 2020). Therefore, the researcher can make sense of a complex phenomenon (Rahman, 2020). For this study, the researcher had to determine which key online education elements were used by public HE institutions in South Africa and investigate how these elements were used in their ODE practices and offerings. The researcher decided that the best approach to investigating this phenomenon was a qualitative, multiple exploratory case study approach. It was important for the researcher to capture the different dynamics of online education at both institutions since their approaches to DE are complex (Rahman, 2020).

5.5. RESEARCH DESIGN

According to Creswell and Creswell (2018), a research design is an enquiry within a specific research approach. The research design is what aims to guide procedures in a research study (Creswell & Creswell, 2018). Therefore, the research design guided the data collection and analysis process as well as writing the report on the findings of the study.

This section focuses explicitly on multiple case studies as a research design, how the sample for this investigation was determined, how access to the participating institutions was attained, the data collection instruments used during the investigation, and how the data would be collected and analysed.

5.5.1. CASE STUDY DESIGN

Wahyuni (2012, p. 72) explains that a research design that "...facilitates a deep investigation of a real-life phenomenon in its natural context is a case study". A case study design is appropriate when the boundaries between the phenomena and its setting are not well defined (Nieuwenhuis, 2018b; Yin, 2014). The goal of a case study is to provide a thorough description of a case (Wahyuni, 2012). The term "case study" is usually used for qualitative research (Ritchie, Lewis et al., 2013).

Nieuwenhuis (2018b) explains that case studies could be classified into various types. For this research, a multiple exploratory case study approach was applicable. The researcher wanted to explore two cases in which their interventions regarding ODE had no clear, single set of outcomes (Nieuwenhuis, 2018b). The exploratory case study design aimed to extend the researcher's understanding of ODE in South Africa (Ogawa & Malen, 1991). An exploratory case study design could also be considered a perfect fit for this study since ODE in South Africa has not yet been the subject of extensive empirical examination (Ogawa & Malen, 1991; Prinsloo, 2019).

5.5.1.1. SINGLE VS MULTIPLE CASE STUDIES

Yin (2014) asserts that it is preferable to do a single case study when a researcher wishes to investigate, for instance, one individual or a group of individuals. Using a single case study, the researcher can explore new theoretical relationships and challenge old ones. A single case study with embedded units can be created, according to Yin (2014), if the researcher wishes to be able to investigate the case using data analysis, inside-case analyses, between-case analyses, and cross-case analyses.

In contrast to choosing a single case study, Yin (2014) notes that when a researcher decides to do a multiple case study, they can analyse the data inside and across each case. A further distinction between a single case study and a multiple case study is that the researcher examines various cases to identify commonalities and contrasts (Baxter & Jack, 2008). Although data were collected from different institutions, this study did not aim to compare case data (Rule & John, 2011). As a result, the researcher aimed to impart crucial impacts from the literature's contrasts and similarities (Vannoni, 2015). Subsequently, a multiple case study was required since this study involved numerous distinct cases (Stake, 1995).

Baxter and Jack (2008) claim that the evidence produced by multiple case studies is solid and trustworthy. According to Yin (2014), several case studies can be utilised to predict similar findings in studies or contrasting results for anticipated reasons. Multiple case studies provide a deeper exploration of theoretical development and research issues (Gustafsson, 2017). Multiple case studies also produce more compelling suggestions (Chapter 6) when the proposals are more deeply rooted in various factual data, as shown in Chapters 2 and 3 (Eisenhardt & Graebner, 2007).

By implication, multiple case studies may be costly and time-consuming (Baxter & Jack, 2008). The researcher only had one opportunity to visit each institution. According to Dyer and Wilkins (1991), single case studies are preferable when the researcher wishes to develop a high-quality theory since they generate more and better theories. In addition, Dyer and Wilkins (1991) also clarify that a single case study helps the researcher better comprehend the topic under study. Gerring (2004) asserts

that a scientific article's confidence in its representativeness increases with the number of case studies it contains but decreases with the times the researcher observes the cases.

5.5.1.2. THE UNITS OF ANALYSIS

The purpose of a study is what establishes the units of analysis and how it is interpretable. The analysis units are associated with determining a gap in the body of literature, coming up with an intriguing issue and creating a research design (Maxwell, 2012). More precisely, a requirement for knowledge will inevitably result from a research purpose. This knowledge can be discovered among certain people. In the cases associated with this investigation, these people were involved with DE processes and procedures at their particular institutions (Grünbaum, 2007). Particular individuals were selected precisely due to their possession of information that could offer valuable perspectives on the current issue, aiding in identifying suitable units of analysis. (Grünbaum, 2007). Therefore, individuals or their actions are defined as the units of analysis. The variety of knowledge that the researcher can obtain from key participants serves as units of analysis (Grünbaum, 2007).

In addition, the information obtained will be directly related to the research procedure and, by extension, the study's purpose on a concrete level. Following data gathering, data analysis attempted to support knowledge transformation. The search for matching patterns and explanations was abstract and closely related to or even intertwined with the units of analysis (Miles, Huberman, & Saldana, 2014; Yin, 2014).

5.5.1.3. CASES

Two public higher education institutions agreed to participate in this study. Institution A offers online and blended DE programmes. Institution B offers blended DE programmes with a strong online focus. Subsequently, this study investigated participants' knowledge, attitudes, and feelings about ODE in South Africa. A multiple exploratory case study design allowed the researcher to expand his understanding of this topic and draw on various perspectives (Ritchie, Lewis et al., 2013; Wahyuni, 2012).

Yin (2014) explains that each case in a study should serve a specific purpose. Therefore, it is essential to articulate the cases in this study (Rule & John, 2011). The cases concern the practices of public higher distance education providers in South Africa. More specifically, the researcher was interested in exploring how the theoretical framework elements were applied practically in these unique educational settings.

5.5.1.4. THE APPLICATION OF THE THEORETICAL FRAMEWORK

The theoretical framework of this study played an essential role in guiding the researcher during the investigation of the specific elements in both cases. The theoretical framework guided the development of interview questions and served as a lens through which the data collected in this study were analysed and interpreted (Kivunja, 2018). Yin (2011) prioritises a theory-first approach to a case study, which this study also employed. Yin (2011) argues that case study research benefits from developing a theoretical framework to guide data collection and analysis. In essence, the researcher constructed a “preliminary theory” related to the topic of the study (Rule & John, 2015).

According to Rule and John (2015), this theory-first approach has limitations. Although this approach supports a robust research design and provides clear direction for data collection and analysis processes, it could suppress unanticipated findings, sources of surprise and challenges within the case (Rule & John, 2015). On the contrary, Thomas (2010) explains that case studies could produce superior knowledge or phronesis through abduction. Thomas (2010) further explains that this approach to case study research shows the complex and frail nature of possible generalisations about human interrelationships.

The propositions outlined in the theoretical framework would be supported if the investigation results confirmed these suggestions (Yin, 2014). Furthermore, the conclusions derived from both institutions should improve the credibility of the results. The context of each institution differs somewhat. Therefore, if common findings could still be obtained from each institution, the generalisability of the results could be enhanced (Yin, 2014). Although qualitative research results cannot produce statistical generalisations, Yin (2011) explains that a researcher could derive analytical

inferences from case studies.

It is essential to mention that the researcher actively constructed this study (Bassey, 1999). The researcher was involved in imagining the cases and inventing the study (Rule & John, 2011). The phenomenon of this study did not exist as cases to be discovered. The researcher actively formulated the phenomenon into cases (Rule & John, 2011). In so doing, the researcher determined the shape of the study (Rule & John, 2011). Therefore, the researcher made certain methodological decisions. The researcher had to decide which methods would be used to collect data. These data collection methods included interviews and document analysis. The researcher also had to determine how the case would be established as a “bounded system” (Rule & John, 2011). Subsequently, the boundaries of the case were clearly defined.

The theoretical framework assisted in determining the focus of this study. The theoretical framework ensured that the focus of the investigation remained on the phenomenon. As guidelines for investigating the phenomenon, the units of analysis guided the researcher in not making unfounded claims about the cases (Rule & John, 2011). The researcher also determined the focus area of the cases and, in deciding this, also constructed the cases. Therefore, these case studies included the essential focus areas, perspectives, and participants, while excluding others.

5.5.2. SAMPLING

According to Creswell and Creswell (2018), sampling represents determining the study's sample size, which implies collecting data through semi-structured interviews and establishing a protocol for recording information, in doing so, defining the boundaries of the study. Moser and Korstjens (2018, p. 10) say that “a sampling plan is a formal plan specifying a sampling method, a sample size, and procedure for recruiting participants”. As a non-probability technique, purposive sampling was used to determine how the researcher collected data (Etikan, Musa, & Alkassim, 2016).

5.5.2.1. INSTITUTIONS

During the initial planning stages of this study, the researcher aimed to include five public higher education institutions in the study based on their unique approaches to DE in South Africa. These institutions enrol the most DE students in South Africa and, therefore, could represent the population for this study. Unfortunately, one of the institutions declined the request to participate, and two institutions did not respond to the researcher's requests. Therefore, only two institutions participated in this study. Since only two of the five institutions agreed to participate, it was essential for the researcher to collect rich and in-depth data from partaking participants.

5.5.2.1.1. INSTITUTION A

This campus was originally established in 1980. One of the main focuses of the campus is to provide further education and training and higher education opportunities to students who would have been unable to complete higher education before. This campus also offers programmes to more than 6,000 DE students. Distance education students cannot study on campus for various reasons, including geographical dispersity, financial constraints or the necessity to complete a qualification part-time while working full-time. This campus is one of the fastest-growing campuses of the institution since the educational needs of DE students are rapidly expanding. Online educational technology and broadcasting tools deliver the institution's DE programmes.

5.5.2.1.2. INSTITUTION B

This institution established its DE initiatives in 2002. It took the institution four years to roll out the plans for its initiatives. Their approach was to establish initiatives within the institution's overall structures, processes, and policies but to develop dedicated systems, processes, and policies for DE, if this was impossible. The institution's programmes seek to better the qualifications of working teachers by addressing their need for professional development, particularly in rural regions. All related activities and business processes are coordinated from this unit in the institution, which serves as a coordination hub. The institutions (A and B) view themselves as national leaders

in teaching innovation and education research. According to Institution B, their programmes are recognised internationally. This institution has approximately 3,500 students enrolled in various DE programmes. Although the institution started offering limited programmes in a purely online mode of delivery, most programmes use a blended/hybrid approach to teaching and learning.

5.5.2.2. PARTICIPANTS

Participants in this study were purposively sampled (Moser & Korstjens, 2018). According to Etikan, Musa et al. (2016), no minimum requirement exists for participation in this non-random technique. The researcher wanted to interview participants from both institutions who could provide sufficient data on each element of the theoretical framework. Therefore, the research questions guided the selection of participants in the sample (Wahyuni, 2012). The researcher subsequently identified participants from each institution who the researcher believed would be able to address the questions based on the elements of the theoretical framework (Cohen, Manion et al., 2018).

Since the participants are thought to have extensive knowledge of the elements of the theoretical framework, purposeful sampling is undertaken. Owing to their professional role, skills, and experience in their respective fields, these individuals should have an in-depth understanding of the theoretical framework's elements (Ball, 2012). A non-probable purposeful sample is essential in this situation since there is little use in selecting a random sample when most of the random sample may be substantially uninformed about some topics and unable to remark on areas of interest to the researcher (Cohen, Manion et al., 2018).

The researcher concluded that this study's participants were knowledgeable about the investigated phenomenon (Moser & Korstjens, 2018). The participants could articulate and reflect on their practices and communicate at length with the researcher (Moser & Korstjens, 2018). The sampling plan of this study could be regarded as appropriate and successful since the participants provided sufficient information for fully understanding the phenomenon under investigation (Moser & Korstjens, 2018). Online learning in DE could be regarded as a new research area still in its infancy (Prinsloo,

2019). Therefore, the outcome of a study will indicate whether more research on the topic is needed (Etikan, Musa et al., 2016).

Table 5.1 summarises the participants used in this study. This table indicates each participant's role, the pseudonym assigned to each participant, and the participant's affiliation. Table 5.1 also shows which participants addressed the theoretical framework's elements.

Table 5.1: Participants used in this study.

Theoretical framework elements (TF elements)											
1		2		3		4		5		6	
Institutional		Technological		Instructional Design		Pedagogical		Student Support		Faculty Support	
Participants				Pseudonym	Institution	TF elements					
						1	2	3	4	5	6
1.	Curriculum Development Expert			CDE-A	A			✓	✓		
2.	Head of Enrolments			HOE-A	A	✓					
3.	Head of Short Learning Programmes			HOSLP-A	A	✓	✓			✓	
4.	Head of Support Services and Operations			HODSO-A	A	✓					
5.	Head of the Department for Formal Programmes			HOD-A	A	✓		✓	✓	✓	✓
6.	Instructional Design Director			IDD-A	A	✓	✓	✓	✓	✓	
7.	Instructional Designer			ID-A	A			✓	✓		
8.	Quality Assurer			QA-A	A	✓	✓	✓	✓	✓	
9.	Tutor Support Person			TSP-A	A	✓		✓	✓	✓	
10.	Lecturer A			LECT(A)-B	B	✓	✓	✓	✓	✓	✓
11.	Lecturer B			LECT(B)-B	B	✓		✓	✓	✓	✓
12.	Lecturer C			LECT(C)-B	B			✓	✓		
13.	Lecturer D			LECT(D)-B	B			✓	✓	✓	
14.	Lecturer E			LECT(E)-B	B			✓	✓		
15.	Lecturer F			LECT(F)-B	B			✓	✓	✓	
16.	Lecturer G			LECT(G)-B	B			✓	✓		
17.	Lecturer H			LECT(H)-B	B			✓	✓	✓	
18.	Distance Education Manager			MAN-B	B	✓	✓	✓	✓	✓	✓
19.	Quality Assurer			QA-B	B	✓	✓	✓	✓	✓	✓
20.	Tutor Focus Group			TFG-B	B			✓	✓		
Number of participants who addressed each TF element						11	6	20	20	12	5

5.5.3. GAINING ACCESS

Wahyuni (2012) rightfully states that gaining approval from institutions to participate in a case study research project is challenging. Before the researcher could commence data collection, ethical clearance was obtained from the Ethics Committee of the University of Pretoria (UP). After applying for and being granted ethical approval by the UP (see Appendix A), the researcher contacted different stakeholders at different institutions to enquire if they were interested in participating in this study. The researcher emailed and phoned various people at these institutions. Unfortunately, two institutions did not respond to the researcher's requests, and another declined the researcher's request. The institutions that agreed to participate in the study provided permission at an institutional level. The researcher obtained permission through a formal letter sent to each institution (see Appendix B). Consent from individual participants was still required at this stage. Wahyuni (2012) explains that email requests containing an official letter are often unsuccessful. This was the case in this study. The researcher assumed that some institutions did not want to share sensitive information, a factor which made institutions hesitant to participate in this study. After receiving permission to proceed with the interviews, the researcher asked the institutional representative to reach out to possible participants and gauge their interest in participating. The institutional representative hereafter asked permission from the possible participants to share their email addresses with the researcher. Participants who indicated their interest in participating in this study were sent an email containing an explanation of the importance of the research and formally and officially asked them to confirm their participation. The researcher confirmed the date and location of the interviews in a follow-up communication. Individuals from the two participating institutions were very accommodating towards the researcher. The researcher never felt that too much effort was needed to arrange the interviews. Subsequently, 23 individuals participated in the discussions and proved to be rich and sufficient data sources.

5.5.4. DATA COLLECTION INSTRUMENT

When adopting a qualitative approach, conventional data-collecting methods include semi-structured interviews (Cohen, Manion et al., 2018). The researcher interacted with the participants directly during the data collection, such as when the researcher conducted the interviews. The data collected are subjective but nevertheless detailed (Cohen, Manion et al., 2018).

Parker (2003) suggests that communication with experts working at an institution's coalface is essential for understanding the phenomenon better. Therefore, semi-structured interviews were conducted. The purpose of the interviews was to collect rich data that could be analysed against the elements of the theoretical framework.

5.5.4.1. INTERVIEWS

The fundamental purpose of an interview is to enable the respondents to express their opinions, experiences, and stories about certain social phenomena, which the interviewer observes (Nieuwenhuis, 2018b; Wahyuni, 2012, p. 73). For this study, in-depth interviews are an appropriate data collection method for case study research (Wahyuni, 2012). In this regard, complex questions cannot be answered briefly by participants. Another reason the interviews are the primary data collection method for this study is the epistemological stance of the researcher (Joubert, 2021). Using interviews as a research tool was motivated by a desire to comprehend other people's life experiences and the significance they assign to them (Coleman, 2012; Nieuwenhuis, 2018b). The researcher anticipated that most questions posed to the participants would need to be clarified or explained in greater detail (Wahyuni, 2012). This assisted the researcher in gaining a deeper understanding of the phenomenon. The participants willingly shared their knowledge of the phenomenon through conversations during the interviews (Boeije, 2009). The data analysis resulted in a new Conceptual Quality Framework that higher education institutions in South Africa could use to design, evaluate, maintain and enhance their online DE offerings. The interview procedures, including designing the interview questions, developing the interview guides, and the interview process, are discussed below.

5.5.4.1.1. DESIGNING INTERVIEW QUESTIONS

The interview questions presented in Table 5.2 aimed to corroborate all information contained in the theoretical framework (Nieuwenhuis, 2018b). Semi-structured interview questions were used to facilitate the discussions between the researcher and the interviewees. Saunders, Lewis et al. (2019) explain that this non-standardised interview is a “hybrid” interview that allows flexibility during the interview process. Cohen, Manion et al. (2018) emphasise that the aim of a study should be translated into the interview questions that comprise the body of the interview schedule. Therefore, the interview questions were essential in assisting the researcher with answering the research questions presented in section 1.4. The main research question for this study is: How could a conceptual quality framework for online distance education support South African residential institutions in transitioning their administrative, teaching and learning processes to an online format? The interview questions reflected what the researcher was attempting to find out (Cohen, Manion et al., 2018). Tuckman and Harper (2012) emphasise that before constructing research questions, it is essential for a researcher to specify the variables of a study by name. The variables are the factors that the researcher wants to measure. The variables for this study relate to the elements of the theoretical framework. This is elaborated on in section 5.3.2, the ontology of this study. Subsequently, the interview questions were developed to address each theoretical framework element.

Before conducting the interviews, the researcher asked a DE expert to review the interview questions (Wahyuni, 2012). The researcher changed some expressions and words to make the questions clearer. The researcher slightly adapted the structure of the main questions. This improved the flow of the discussions during the interviews. The predetermined themes and questions guided the interview conversations but allowed interviewees to talk openly about any topic raised during the discussion (Joubert, 2021). Where possible, the researcher probed the participants for further information or responses (Cohen, Manion et al., 2018). The interview questions were also submitted as part of the researcher’s ethics clearance application, which was approved by the University of Pretoria. The ethics clearance certificate can be viewed on page iii.

Table 5.2: Interview questions.

Interview question	Theoretical framework element	Rationale for question
1. What role do the institution's visions and goals play in ensuring the sustainability of online learning?	Institutional	Successful online learning deployment within an institution depends on establishing visions and goals (cf. 3.6.1).
2. How do procedures and standards assist in this institution's quality assurance of online learning?	Institutional	Systems and processes should help the institution achieve its goals (cf. 3.6.1).
3. What learning management system does the institution use?	Technological	Programmes' technology usage should be aligned with students' needs (cf. 3.6.2).
4. Describe the functionality of the system in terms of the following aspects: <ul style="list-style-type: none"> • Development and sustainability of the system; • Accessibility; • Reusability; • Interface design. 	Technological	The usefulness, usability, integration, functioning, and availability of technological tools contribute to their efficiency. The use of educational technology should not introduce new obstacles to learning but should instead encourage access and be flexible to changing circumstances (cf. 3.6.2).
5. Is there any other equipment, technique or application a student should acquire to participate in an online programme? If so, why are these requirements necessary to complete the programme?	Technological	
6. How are pedagogy, technology and learning resources constructively aligned to ensure the quality of e-learning?	Instructional Design	An effective teaching and learning environment requires the constructive alignment of all learning components (cf. 3.6.3).
7. How are learning scenarios and resources creatively and constructively employed in the programme?	Pedagogical	Students should be consistently and meaningfully engaged in teaching and learning processes, including communication, collaboration, and interaction (cf. 3.6.4).
8. Explain how students are supported in the following ways: <ul style="list-style-type: none"> • Academically • Administratively • Technically 	Student Support	Institutions should provide the necessary infrastructure to support students in an online environment (cf. 3.6.5).
9. Explain how faculty members are supported in the following ways: <ul style="list-style-type: none"> • Technically • Administratively • Pedagogically 	Faculty Support	The design, development and facilitation of online learning environments are complex. Subsequently, institutions should provide lecturers with continued professional, technological and pedagogical support (cf. 3.6.6).

5.5.4.1.2. THE INTERVIEW PROCESS

After ethical clearance was granted to the researcher by the University of Pretoria, the interviews could be conducted. After the participating institutions provided permission to conduct interviews, the researcher started scheduling the interviews. The researcher spent a few days at each institution. These interviews were conducted face-to-face.

Before the researcher commenced with an interview, the researcher introduced himself. Afterwards, the researcher explained the purpose, aim and objectives of the research and the research questions (Kvale & Brinkmann, 2009). The researcher also informed the participants about the steps that would be taken to ensure their confidentiality and anonymity (Joubert, 2021). The duration of the interview was disclosed to the participants. Before using a tape recorder to record the interviews, the researcher obtained consent from the participants (Nieuwenhuis, 2018b). A consent form (Appendix C) was also provided to the participants, and it covered topics that included willing and voluntary involvement, arrangements for withdrawal from the research at any time, confidentiality, and anonymity (Cohen, Manion et al., 2018). Once the participants had signed the consent forms, the researcher commenced with the interviews.

The interview schedule guided the conversation between the researcher and participants. Therefore, the discussion emerged from the questions. Each interview lasted about one hour. After the interview, the researcher performed a quick debriefing involving the main points discussed during the interview. The researcher captured the review of the main topics in memos (Nieuwenhuis, 2018b; Wahyuni, 2012). At this stage, the participants could ask questions, comment, or add information not discussed during the interview (Cohen, Manion et al., 2018). The participants who decided to change or add information only did so to clarify specific issues or ensure that the names of people, institutions or locations would be anonymised. Thereafter the interviews were transcribed verbatim. The researcher reflected on his notes in conjunction with perusing the transcriptions to identify possible gaps in the discussions (Nieuwenhuis, 2018b). The data analysis showed no gaps, which may have required follow-up interviews.

The researcher attempted to take into consideration the professional responsibilities of the participants when the appointments for the interviews were scheduled. The researcher did not want the discussions to interfere with participants' daily job-related responsibilities. Therefore, most of the interviews did not last more than an hour. The interviews also consequently took place at a convenient location suggested by the participant, most of the time at participants' offices.

Interviews had to be individually scheduled and in person, which is time-consuming (Joubert, 2021). Sometimes, participants did not want to elaborate on some aspects of the discussions. Therefore, the possibility existed that some information provided by the participants was not truthful. Although the researcher planned only to ask questions to the participants regarding their fields of expertise, some conversations tended to overlap with various other research questions. One could argue that the interviews might have limited the findings of this study to some degree.

The researcher, in general, believes that the collected data were reliable and that most participants replied honestly. The researcher did not experience any irremediable issues during the interviews. The participants were at ease and willing to discuss the interview questions openly. The rapport established between the researcher and the participants ensured that the interviews were conducted in a trusted environment that allowed participants to have frank discussions (Cohen, Manion et al., 2018).

5.5.5. DATA ANALYSIS

This study is interpretative because it assumes that social creations, including language, awareness, shared meanings, records, instruments, and other artefacts, are how we learn about reality (Klein & Myers, 1999). As mentioned in section 5.3.1, instead of establishing dependent and independent variables in advance, the researcher focused on how complex the process of sense-making by people was as the interviews played out (Kaplan & Maxwell, 2005). The purpose of this study was to interpret the phenomenon by using the participants' interpretations of the various theoretical and conceptual framework components. Therefore, this study specifically aimed to understand the context in which ODE programmes in a South

African context operated and how the ODE influenced the context and vice versa (Walsham, 1993).

The cases mentioned in section 5.5.1.3 were investigated through interpretive field studies. Klein and Myers (1999) explain that since interpretative research has gained popularity, critics, editors and academics have questioned the best ways to perform and evaluate this type of fieldwork. Subsequently, Klein and Myers (1999) developed a set of principles that could be regarded as a methodology for conducting and evaluating interpretative field studies.

The fundamental tenet of hermeneutics is the hermeneutic circle. This meta-principle serves as the foundation of all interpretative work of a hermeneutic type, upon which the six principles presented in Table 5.3 below are built (Klein & Myers, 1999). According to the hermeneutic circle, our understanding of a complex whole is derived from assumptions about the meaning of its constituent pieces and how they relate to one another (Klein & Myers, 1999). For this study, the preconceived notions (i.e. pre-understandings) of the study held by the researcher and the participants comprise the components. The whole is therefore comprised of the shared meanings that come from the interactions between the researcher and participants (Gadamer, 1976). Participants tend to create their ideas regarding a concept by interacting with the researcher and vice versa. Subsequently, a rich totality of shared meanings arises after several cycles of the hermeneutic circle are applied. Table 4.4 shows how the principles of the hermeneutic circle were applied to this study (Klein & Myers, 1999):

Table 5.3: The Hermeneutic Circle.

<p>1. The Fundamental Principle of the Hermeneutic Circle</p> <p>Application of the other six principles to the analysis of the field research data should be guided by this concept. The researcher will learn about specific aspects of the case using each of the following six principles, none of which is particularly exhaustive when taken individually. Each of the principles might help the researcher gain knowledge of or better understand a critical part of the case, enhancing their understanding of the study. As the understanding of the parts deepens, they also aid in identifying the relevance of the whole (Gadamer, 1976).</p>
<p>2. The Principle of Contextualization</p> <p>For the target audience to understand how the current situation under examination came to be, critical reflection on the social and historical context of the research setting was necessary.</p> <p>Application to this study:</p> <p>Both institutions under investigation already used online learning as a mode of delivery. This study was not concerned with how online learning came about but rather how the institutions were successfully and meaningfully using online learning. The data collected during interviews shed light on the background of each research setting and subsequently created a rationale for how online learning was being used at each institution. The interview questions presented in Table 5.2 contributed to the narrative of contextualisation.</p>
<p>3. The Principle of Interaction Between the Researchers and the Subjects</p> <p>This principle calls for critical analysis of the social construction of the study materials (or data) through interaction between the researchers and participants.</p> <p>Application to this study:</p> <p>The researcher acknowledged that building an interpretation of the event took time. The researcher made an effort to establish trust with the individuals, which helped the researcher to comprehend the situations in which ODE was employed. The participants were seen as analysts and interpreters. The participants were also seen as analysts because their shifting perspectives influenced their actions. Participants were seen as interpreters because their perspectives were affected by consultants, vendors, and other parties interacting with them.</p>
<p>4. The Principle of Abstraction and Generalization</p> <p>It is necessary to relate the idiographic specifics that the data interpretation has revealed by using principles one and two to theoretical, all-encompassing notions that define the characteristics of human thinking and social behaviour.</p> <p>Application to this study:</p> <p>Theory played an essential role in this interpretive study. The theoretical framework presented in section 4.3 played an essential role in creating relationships between data collected during this study and the researcher's worldview, encapsulated by the theoretical framework. The theoretical framework of this study also assisted the researcher in creating suggestions presented by the Conceptual Quality Framework presented in Chapter 7. This study specifically contributed to the development of concepts, the drawing of implications and the contribution of rich insight (Walsham, 1995).</p>

5. The Principle of Dialogical Reasoning

According to this principle, the researcher must confront the findings that come to light during the research process with the preconceptions that informed the initial study plan.

Application to this study:

The researcher acknowledges that the methodology used in this study, illustrated in Figure 5.1 and specifically the theoretical framework presented in section 4.3, determined the lens through which this study was investigated. The results presented in Chapter 6 influenced the outcome of this study significantly. Table 7.1 shows how most of the elements in the original theoretical framework were adapted to accommodate the results obtained during this investigation. In addition, the results culminated in the Conceptual Quality Framework that explicitly addressed ODE in the South African context. This framework is presented in Chapter 7.

6. The Principle of Multiple Interpretations

The notion of many interpretations calls for the researcher to look for and record several points of view, together with their justifications, to understand how the social environment impacts the activities being investigated.

Application to this study:

Table 5.1 indicates the participants used in this study. Table 5.1 also indicates which element/s of the theoretical framework each participant addressed. Since interviews were conducted, one-on-one participants had the opportunity to reflect on their practices honestly. Subsequently, multiple viewpoints from both institutions and various participants were recorded. The results of this study presented in Chapter 6 show these differences. These viewpoints shaped the researcher's thinking about the phenomenon and influenced the Conceptual Quality Framework presented in Chapter 7.

7. The Principle of Suspicion

This principle requires awareness of potential biases and deliberate distortions in the participant narratives.

Application to this study:

Some participants may have preconceived notions about the research phenomenon. Correlations and disassociations were created between the theoretical framework and interviews. The participants' perceptions and relationships with different stakeholder groups might have caused these experiences. The theoretical framework helped the researcher to distinguish between accurate beliefs, acceptable consent, merited trust, and correctly directed attention.

The method of data analysis is described in the sections that follow, starting with the transcriptions of the interviews and ending with the data analysis tools utilised after transcriptions had been skimmed, read, and interpreted (Bowen, 2009). These sections would justify the steps or procedures used within this study's broader focus and its theoretical underpinnings.

5.5.6. THE INTERVIEW TRANSCRIPTIONS

The data analysis process commenced with transcription of the interview recordings. For this study, the researcher decided that the data analysis process was best supported by the transcriptions supplemented by notes (Patton, 2002). McLellan, MacQueen and Neidig (2003) explain that the researcher must decide which elements of an interview should be transcribed. Textual data would, unfortunately, never show an interview's intricacies. Emerson, Fretz and Shaw (2011) explain that a transcript is not a true reflection of the conversation between the researcher and participant. According to Psathas and Anderson (1990), a transcription indicates a critical analysis of the choice of words and actions. Joubert (2021) explains that this is clear when examining what information should be included in transcripts and what should be left out, such as body language, the setting where the interview is taking place, tone, pauses, overlaps, and word order. Therefore, the detail included in transcriptions depends on the analyst's focus (Wetherell, Taylor, & Yates, 2001).

Some of the transcriptions of the interviews were completed by a third party, although the researcher did some himself. A third party was entrusted with this task since the researcher had insufficient time to complete the transcriptions himself. The researcher instructed the third party to include the following detail in each transcription:

- The recording number;
- The date; and
- A verbatim account of the conversation between the researcher and the participant.

The recording number and date assisted the researcher with keeping a proper record of the interviews. For reference, a complete record of all participants, interviews, interview dates, recordings, and transcriptions was preserved. The transcriptions did not include the contextual details of the discussions. The researcher believes that the substance of the transcriptions was unaffected by the environment. In addition, excluded from the analysis were data on intonation, pauses, overlaps, and word order as well as body language and pauses. Since the relationship between the researcher and the participant was not the main focus of the study, the researcher selected to follow this course of action. Instead, the researcher concentrated on how well the interviewee understood the questions. Therefore, the meaning participants made through words was regarded as more important (Joubert, 2021). The exclusions of the details also assisted the researcher with improving the readability of the transcriptions and supporting the analysis process.

5.5.7. THE ANALYSIS PROCESS

When analysing the data, the researcher used both deductive and inductive methods. The theoretical framework served as an organising framework for the deductive method as it contained themes for the coding process (Azungah, 2018; Miles, Huberman et al., 2014). This list, also known as the start list, was used in the analysis process to anticipate specific critical ideas that might emerge from the data (Azungah, 2018). On the other hand, the inductive technique includes relying only on participant experiences as the basis for analysis. Figure 5.2 illustrates the sequential data analysis approach followed in this study.

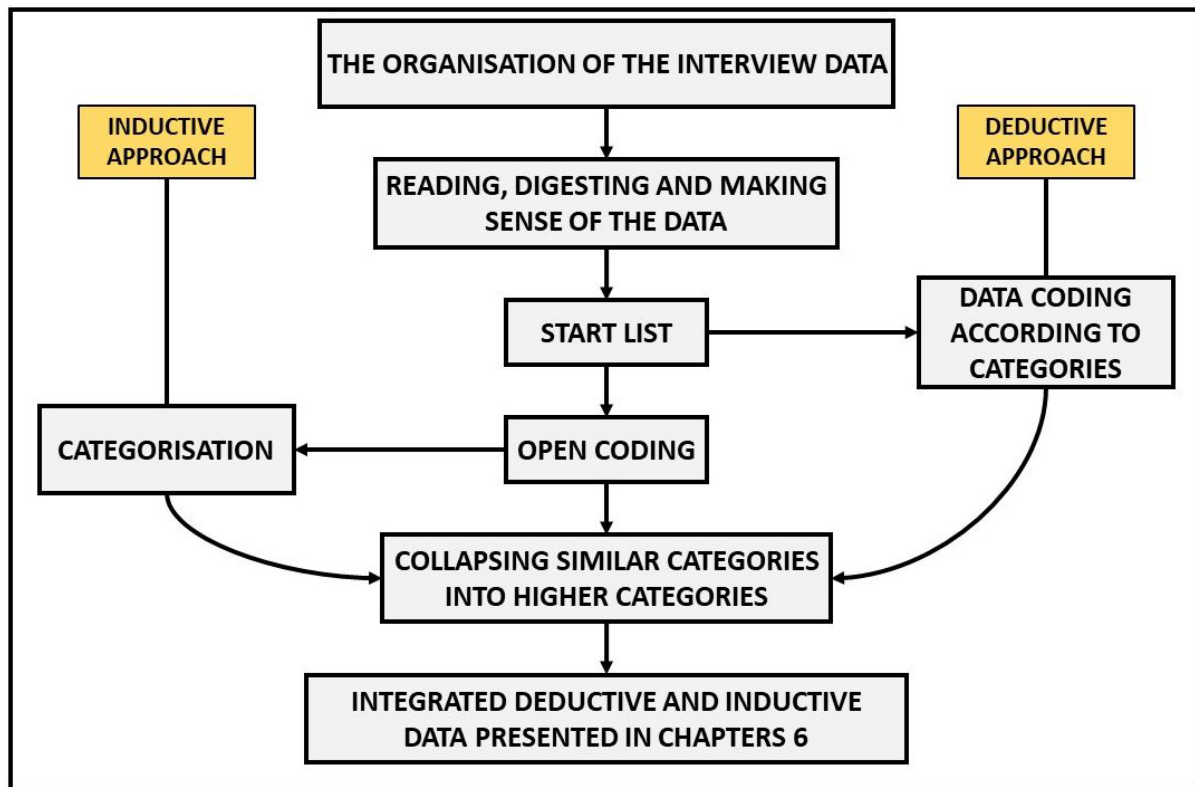


Figure 5.2: Sequential approach to data analysis.
 (Adapted from Azungah, 2018).

The data analysis process started with organising both interview data. Initially, the researcher thoroughly read through all the data to understand the phenomenon better (Morse, 1999). The researcher was open-minded and reflexive while following the participants' narratives (Azungah, 2018). The researcher began identifying essential concepts and themes after reading the transcripts multiple times while utilising the research questions as lenses (Azungah, 2018; Braun & Clarke, 2006).

The thematic analysis involved analysing data to find, examine, and report recurring themes (Braun & Clarke, 2006). It is a technique for summarising data, but it also includes interpretation when choosing codes and creating themes (Kiger & Varpio, 2020). Thematic analysis may highlight the social, cultural, and structural circumstances that shape individual experiences in different interpretative orientations. Interactions between the researcher and study participants facilitate knowledge creation and show socially created meanings (Braun & Clarke, 2006).

The researcher created themes using thematic analysis to reframe, reinterpret, or link data pieces (Kiger & Varpio, 2020). While the researcher had to create organisational and categorization labels to characterise the data, theme analysis also involved the interpretation and transformation of the processes (Kiger & Varpio, 2020). Braun and Clarke (2006) explain that a theme is a predictable repeated answer or interpretation of the facts that support the research questions. Finding themes that shed light on the issues relating to the study was crucial to the researcher (Braun & Clarke, 2006). This required a higher level of data interpretation and integration (Nowell, Norris, White, & Moules, 2017).

Researchers can employ an inductive or a deductive approach to theme identification (Braun & Clarke, 2006). A deductive approach finds topics of interest by using an existing theory, framework or another researcher-driven emphasis (Varpio, Paradis et al., 2020). This approach is useful for focusing on a specific feature of the data or a particular result that may be best clarified or understood in the context of an already established theory or framework (Braun & Clarke, 2006). An inductive approach derives themes from the researcher's data (Varpio, Paradis et al., 2020). Because of the data-driven nature of these themes, they might not represent the questions posed to participants exactly (for instance, where participants wandered off-topic), nor might they be indicative of the researcher's interests in or convictions of the issue (Kiger & Varpio, 2020). As a result, an inductive method usually offers a more thorough study of the entire body of data (Kiger & Varpio, 2020).

5.5.7.1. DEDUCTIVE ANALYSIS

Before using an inductive strategy, the researcher followed a deductive approach, basing analysis on previously developed theory. For the purpose of this study, the pre-existing theory related to the theoretical framework of this study (Gale, Heath, Cameron, Rashid, & Redwood, 2013). A theme's significance relies on whether it captures an essential aspect of the research (Braun & Clarke, 2006). The researcher, after conducting a study to comprehend the data completely, produced a start list comprising a priori categories. This study's categories were the elements of the theoretical framework (section 3.4). The primary goal of the start list was to

find a few crucial data elements that addressed the research questions directly (Azungah, 2018). As a result, data clusters were created through deductive analysis of the data.

The deductive approach uses the research objectives, questions, and interview questions to help generate initial codes from existing ODE literature or what is known about ODE (Azungah, 2018). According to the extant literature, the deductive method assumes that specific important ideas will emerge from the data (Bradley, Curry, & Devers, 2007; Thomas, 2006). Subsequently, the data were coded into themes using the start list (Thomas, 2006).

5.5.7.2. INDUCTIVE ANALYSIS

The phrase "inductive analysis" refers to techniques that largely depend on accurate raw data readings to identify concepts and patterns (Thomas, 2006). It requires careful reading of the data line by line and tagging texts or passages as notions about the research questions develop (Bradley, Curry et al., 2007; Curry, Nembhard, & Bradley, 2009). The researcher engaged in a recursive process that involved alternating between data analysis and the literature to capture the most theoretically applicable and empirically supported parts (Neeley & Dumas, 2016).

After deductive analysis produced clusters of data, subsequent inductive analysis was carried out by carefully examining the data to ensure that all crucial components of the data were recorded and to acquire a comprehensive knowledge of what was being stated (Charmaz, 2014). The research questions were the lenses through which essential ideas and topics were identified. By adopting the inductive method, themes may be extracted from the raw data without the risk of a researcher imposing a predetermined conclusion (Bradley, Curry et al., 2007; Braun & Clarke, 2006). Clustering was used to find, clarify, and decrease overlapping groups (Burnard, Gill, Stewart, Treasure, & Chadwick, 2008).

In order to produce descriptive codes, the researcher triangulated data from interviews to combine data that indicated similar meanings to higher-level nodes (Neeley & Dumas, 2016). Although the researcher's questions have an impact on

the results, the conclusions are drawn from examining the actual data rather than assumptions made beforehand (Thomas, 2006).

The results of this study reflect the true essence of the information collected from each institution. According to Ritchie, Lewis et al. (2013), there are three requirements to retaining the essence of the original material presented as the results of this study. Therefore, the researcher followed these requirements as follows:

- The researcher retained essential terms, phrases and expressions the participants' used in their language as much as possible.
- The interpretation of information had not yet commenced at this stage, therefore, the researcher could revisit the information when interpreting the data.
- Some information seemed irrelevant in the early stages of the data analysis process. Its inclusion in the findings of the study was not immediately apparent although the researcher nevertheless did not dismiss the information. In the latter stages of the analysis process, its value became more pronounced when the researcher interpreted the data.

5.5.7.3. DATA ANALYSIS STEPS

Braun and Clarke (2006) thematic analysis is chosen for this qualitative study because it provides a structured yet flexible approach that aligns well with the interpretative nature of this research inquiry. The method of analysis consists of six steps. It is important to note that the process indicated below is recursive rather than linear. This allowed the researcher to return to earlier steps as new data or themes merited further investigation. The researcher did not use computer software that supported the analysis process.

5.5.7.3.1. BECOMING ACQUAINTED WITH THE DATA

The researcher studied and reread the data and transcripts in a Microsoft Word document while also drafting quick notes in Microsoft Word (Alhojailan, 2012). At this point in the immersion process, the researcher became familiar with the data.

5.5.7.3.2. ESTABLISHING FIRST-ORDER THEMES

The researcher meaningfully and methodically organised the data. Critical aspects of the data were identified using first-order labels (Alhojailan, 2012). All the labels and data extracts were compiled once each data item had been coded (Finlay, 2021). The deductive analysis approach, as illustrated in Figure 5.2, was initially used in the analysis process to cluster similar data. Subsequently, the researcher labelled the data into themes according to the starting list (cf. Table 4.2). These themes are regarded as first-order themes (Azungah, 2018). The starting list or first-order themes for this study were the sub-elements of the theoretical framework. In Table 5.4, an extract from the data analysis process shows how deductive analysis was conducted. Table 5.4 illustrates how the answers given to the researcher based on the question were grouped under the Instructional Design and Pedagogical theme. According to the theoretical framework, pedagogy, technology and learning resources were addressed in the discussions relating to the Instructional Design and Pedagogy elements. Therefore, it was straightforward to include the answers thus acquired in this theme (cf. 4.4).

Table 5.4: Extract of deductive analysis

Question		
How are pedagogy, technology and learning resources constructively aligned to ensure the quality of e-learning?		
Responses	Theme (T) / Label (L)	
IDD-A		
No resources stipulate that online learning is only conducted online	Organizing learning resources	T
	Learning resources	T
Medical students should learn how to remove an appendix. How would I (the lecturer) know that the student can remove the appendix successfully? I am going to watch the student doing it. When will I allow the student to proceed with the procedure? When he understands the theory of removing an appendix. The practice and testing of removing the appendix should take place face-to-face. This cannot be done online. Maybe you could build a simulation that will allow the student to practice the procedure before attempting it	Selecting proper learning scenarios	T
	Assessment	T
CDE-A		
The students should apply what they have learned in practice and reflect on their experiences. Students should also provide evidence of their interventions, and the assessor will provide feedback to the student. Therefore, we do not have to redesign the assignments every year. (p. 13)	Communication and interactivity	T
	Selecting proper learning scenarios	T
MAN-B		
Assist lecturers in approaching their modules with a renewed vision. Lecturers should identify what the critical information is that students should master. Put this into your technology platform. Give the students enough tools to work through the content and master it. When you facilitate your class, focus on what students have learned during their learning journey and what it could mean to them in the future.	Currency and accuracy of learning resources	T
	Organizing learning resources	T
If you look at the progression from Confucius through to Dewey, Piaget, and Vygotsky, there is a growing realisation that the teacher's role must change. So, the learner's role must change, and it must be more problem-based.	Clarifying expectations	T
	Student-centeredness	T
LECT (A)-B		
The problem from the student's perspective and students from contact is two-fold. The one is a lot of them tell me that the learning management activities are a repetition of what they have done before, and the other thing is you always sit with the problem of technology.	Organizing learning resources	T
	Learning environments	T

5.5.7.3.3. FINDING ADDITIONAL THEMES

During this stage, the researcher combined the labels and data to define the data patterns. After gathering information about each theme, the researcher began to arrange the categories of meaning with care (Finlay, 2021). The data had to be divided into smaller chunks or themes using the retrieved phrases as a starting point. These sections or themes refer to the sentences in paragraphs. The initial data themes were formed this way (Alhojailan, 2012). The researcher reread the entire text to compare, contrast, and look for missing details not included in the first level of the topics (Ryan & Bernard, 2003).

As illustrated in Figure 5.2, the inductive data analysis approach followed the deductive approach. The research questions were the lenses through which essential ideas and topics were found. After the data were clustered according to the theoretical framework starting list or themes, the researcher read the data line by line. The researcher tagged text passages as critical features as they addressed the research questions. The researcher worked through all the data until a point of saturation was reached. That was when all the relevant texts had been labelled. The researcher confirmed that all critical information about the data was labelled. Table 4.6 illustrates how the inductive analysis was conducted.

Table 5.5: Extract of deductive and inductive analysis.

Question		
How are pedagogy, technology and learning resources constructively aligned to ensure the quality of e-learning?		
Responses	Theme (T) / Label (L)	
IDD-A		
Medical students should learn how to remove an appendix. How would I (the lecturer) know that the student can remove the appendix successfully? I am going to watch the student doing it. When will I allow the student to proceed with the procedure? When he understands the theory of removing an appendix. The practice and testing of removing the appendix should take place face-to-face. This cannot be done online. Maybe you could build a simulation to allow the student to practice the procedure before attempting it.	Selecting proper learning scenarios	T
	Assessment	T
	Assessment	L
	Content	L
	Learning resource	L
	Simulation	L
CDE-A		
The students should apply what they have learned in practice and reflect on their experiences. Students should also provide evidence of their interventions, and the assessor will provide feedback to the student. Therefore, we do not have to redesign the assignments every year. (p. 13)	Communication and interactivity	T
	Selecting proper learning scenarios	T
	Assessment	L
	Application of learning	L
	Evidence of learning	L
MAN-B		
Assist lecturers in approaching their modules with a renewed vision. Lecturers should identify what the critical information is that students should master. Put this into your technology platform. Give the students enough tools to work through the content and master it. When you facilitate your class, focus on what students have learned during their learning journey and what it could mean to them in the future.	Currency and accuracy of learning resources	T
	Organizing learning resources	T
	Content	L
	Use of technology	L
	Learning tools	L
	Application of knowledge	L
If you look at the progression from Confucius through to Dewey, Piaget, and Vygotsky, there is a growing realisation that the teacher's role must change. So, the learner's role must change, and it must be more problem-based.	Clarifying expectations	T
	Student-centeredness	T
	Role of the lecturer	L
	Role of the student	L
LECT (A)-B		
The problem from the student's perspective and students from contact is two-fold. The one is a lot of them tell me that the learning management activities are a repetition of what they have done before, and the other thing is you always sit with the problem of technology.	Organizing learning resources	T
	Learning environments	T
	Learning management system	L
	Learning activities	L

5.5.7.3.4. REVIEWING THEMES

To determine if the themes adequately represented the data and offered an answer to the research questions, the researcher examined them and tested them against the dataset. The themes were established and updated during this process. It was required to group related themes, separate them further, or discard irrelevant ones (Azungah, 2018). The researcher attempted to construct a compelling story that addressed the research questions while ensuring that the themes accurately represented the data (Finlay, 2021).

During the theme review process, it became apparent that the researcher could categorise some data into more than one theme since some information overlapped several themes. Subsequently, after thoroughly studying the data, the researcher decided that some themes could be grouped. This step in the analysis process is highlighted in Figure 5.2, which indicates that similar categories can be grouped into higher categories. New themes were also discovered. Unfortunately, one theme was addressed minimally by participants and, therefore, removed.

5.5.7.3.5. DEFINING SECOND-ORDER THEMES

The following analysis stage required finding connections in the data presented in each first-order theme. This process aimed to show conceptual patterns emerging from the data (Azungah, 2018). Therefore, the data was arranged into conceptually distinct second-order themes through inductive analysis after the first-order themes had been formed through the deductive analysis process (Lawrence & Dover, 2015). A detailed analysis of each theme was written to provide a narrative regarding the general themes and facts (Finlay, 2021). This analysis step was also iterative, alternating between the first-order descriptive codes and the changing patterns in the data until second-order themes were created (Azungah, 2018).

According to Azungah (2018), first-order descriptive codes mostly use informant-centric terms, while second-order codes use researcher-centric ideas, themes, and dimensions. The facts of the research were expressed in informant-centric language. They were interpretations of the lived experiences and the routine practical actions

carried out by participants at the institutions under study (Van Maanen, 1979). Researcher-centric language refers to the researcher's interpretations of participants' interpretations of encounters with the phenomenon under investigation. They represent what Van Maanen (1979) described as interpretations on interpretations.

5.5.7.3.6. CREATING A REPORT

The researcher developed the themes into a more thorough report during this stage. This required integrating the narrative and data portions of the research and relating the analysis to the body of prior work (Azungah, 2018). The analytic narrative was skilfully woven into a gripping narrative using insightful and vivid data extracts as support (Finlay, 2021). The results are displayed in Chapter 6, and the findings are presented in Chapter 7.

5.6. LIMITATIONS

The limitations of data generation are discussed below:

Communication and participation:

Before the data-gathering process commenced, it was challenging to make contact with individuals at various institutions. Consequently, only two institutions among a possible five participated in this study.

Location:

Some possible participants from Institution A were unfortunately unavailable during the researcher's visit. The researcher could not conduct interviews with these individuals owing to the expense associated with travelling to Institution A and time constraints.

Finances:

The researcher had to fund the whole research project from his personal savings. Unfortunately, the researcher had only enough savings to visit Institution A once. The researcher stayed in bed and breakfast accommodation and drove to the destination by car. These expenses accrued to a large sum, making another visit the institution impossible.

5.7. ETHICAL CONSIDERATIONS

The ethical nature of this study is of crucial importance to consider since interviews were used as a data-gathering technique. Research involving people should be conducted ethically. Protection of participants' privacy, confidentiality, and anonymity, including guaranteeing their safety from harm and obtaining their informed consent, were all ethical factors relevant to this study (Cohen, Manion et al., 2018). The participants were made aware that their participation was optional and that they might withdraw at any moment if they desired (Maree, 2018). However, none of the participants who agreed to be interviewed withdrew from this study. The researcher had indicated the purpose of the research on the consent forms and those who committed were informed.

Since it was important for the researcher to have frank discussions with the participants, it was essential to gain their trust and confidence (Cohen, Manion et al., 2018). The researcher, therefore, emphasised the anonymity and confidentiality of the participants. After gaining the participants' trust, the researcher had to ensure the participants' confidence would not be betrayed. Subsequently, the researcher asked the participants not to answer questions if they believed their responses could have a negative impact on them. Therefore, the researcher emphasised that their participation would remain anonymous throughout the interview and subsequent processes. According to the researcher, the study's participants were not reluctant to divulge information or talk honestly.

The researcher reassured the participants that the conversations were private. Each participant's anonymity was ensured, and the researcher reassured them that their identities would not be connected to their conversations. The researcher

emphasised that if he did not follow the University of Pretoria's ethics policies, a participant could complain to the university's Ethics Committee.

The results indicated in Chapter 6 and the drafted Conceptual Quality Framework cannot be related to specific participants, subsequently protecting the participants' identities. The researcher refrained from using names and assigned pseudonyms in abbreviation format to each participant. Some participants worked in departments or units with unique names. The researcher refrained from using these names and instead referred to the institution. Anonymity and confidentiality played a crucial role in this study as some participants had strong beliefs regarding DE practices in South Africa. Moreover, certain participants had firm views regarding third-party involvement in ODE practices and the general implementation of institutional DE policies, which also necessitated anonymity. Participants' attitudes and work ethics might be frowned upon if some of the information collected during interviews became known or if the information were to be considered out of context. Therefore, it was essential to keep participants' identities anonymous and conversations confidential. None of the data acquired during the interviews was shared with any other participant or any of the participants' managers.

Before the interviews commenced, the researcher explained the concepts of anonymity and confidentiality to the participants before they signed the consent forms. Afterwards, the participants were asked to sign the consent forms. All aspects, including the purpose and details of the study, confidentiality, anonymity and voluntary participation were indicated in the consent form. The researcher also informed the participants that he had obtained ethical clearance and consent from the University of Pretoria to conduct the research. The researcher's ethics clearance certificate can be viewed on page iii.

The University of Pretoria will safeguard all the data collected by the researcher and could, if necessary, audit the researcher's work. No participants were mentally compromised or had physical limitations. Each individual had the opportunity to contribute significantly. The researcher was honest with the participants throughout the study and conveyed his appreciation for their contributions. Research regarding ODE in South Africa is progressing steadily, and the researcher hoped to contribute

to these discussions. The benefit that would accrue to the participants was highlighted in the Conceptual Quality Framework discussed in Chapter 6 of this study.

5.8. TRUSTWORTHINESS

According to Gunawan (2015), a study is considered trustworthy when the readers judge it as reliable. Therefore, the researcher must persuade the reader that the investigation results are reliable. Consequently, the researcher's practices should be visible and auditable (Gunawan, 2015). The validity and trustworthiness of the findings of this study were essential since the results should describe whether or not the research accurately depicted the phenomenon under investigation (Bush, 2012).

The researcher believes that the criteria proposed by Guba (1981) should be considered when determining the trustworthiness of a study. The following criteria were discussed in the sections that follow below:

- Credibility (in preference to internal validity);
- Transferability (in preference to external validity/generalisability);
- Dependability (in preference to reliability); and
- Confirmability (in preference to objectivity).

5.8.1. CREDIBILITY

Credibility involves aligning the research findings with the phenomenon's reality (Merriam, 1998; Stahl & King, 2020). This chapter (Chapter 4) generally provides a thorough account of how this study was undertaken. Various successful studies informed the research approach followed in this study (Gunawan, 2015). Before the researcher started collecting data, he consulted individuals to understand the context of the phenomenon under investigation (Shenton, 2004). Through these engagements, a certain degree of trust between the researcher and the participants was established before data collection commenced (Erlandson, Harris, Skipper, & Allen, 1993; Lincoln & Guba, 1985).

Although the researcher did not physically spend more time in each research setting, the consultations enabled the researcher to prolong his engagement with the phenomenon. The focus group and one-on-one interviews were the main methods of collecting data. Therefore, these data collection methods assisted the researcher in reaching a point of triangulation (Brewer & Hunter, 1989; Creswell & Creswell, 2018). The data obtained could furthermore often be verified by various sources. This study also had many participants (Shenton, 2004; Van Maanen, 1979). The researcher verified the viewpoints and experiences of some participants through those of others. The various correlating contributions of participants created a clear picture of the phenomenon.

The participants of this study were allowed to refuse to participate (Shenton, 2004). Because of this, only consenting volunteers participated in the data-gathering sessions (Reiman, 1979). The researcher emphasised that he had no relationship with any of the managers of the institutions (Shenton, 2004). As a result, participants were urged to be open and honest right away and throughout the interviews. The researcher established rapport with the participants and indicated there were no correct or incorrect answers to the questions. Participants were then encouraged to discuss their experiences and offer their views without jeopardising their credibility. The study's participants were told they might stop participating without telling the researcher why (DiCicco-Bloom & Crabtree, 2006).

During some interviews, the researcher made certain inferences based on the participants' answers. Where appropriate, the researcher asked the participants if they could elaborate on their answers. This form of member-checking is essential to developing a formative understanding of the topic under discussion. The researcher conducted follow-up interviews with some participants to determine how the COVID-19 pandemic had impacted the institutions. During these interviews, the researcher attempted to confirm if the initial information provided by the participant aligned with the researcher's analysis of the findings (Creswell & Creswell, 2018).

5.8.2. TRANSFERABILITY

Merriam and Grenier (2019, p. 29) explain that external validity “is concerned with the extent to which the findings of one study can be applied to other situations”. The results of this study are limited to a few individuals and particular situations (Shenton, 2004). Therefore, it would not be easy to show that the findings and recommendations of this study could be applicable to different contexts and demographics. The contextual factors that comprised the research environments were indeed unique. Therefore, although the results of this study could apply to the broader HDE community in South Africa, this approach should be followed with caution.

Practitioners evaluating the findings of this study might relate the results to their working environments (Bassey, 1981). Therefore, the researcher provided sufficient contextual information about the investigation. This would enable readers to transfer the findings to their own contexts (Firestone, 1993; Lincoln & Guba, 1985). Only the researcher knows the “sending context” of the results; therefore, it would be challenging to make transferability inferences (Firestone, 1993; Lincoln & Guba, 1985). After considering the study's context, readers should determine how confident they are transferring the results and conclusions to other contexts (Shenton, 2004). The researcher believes that thick descriptions of the phenomenon were presented throughout the study. This would enable readers to make informed decisions regarding applying the results in their own context.

Some factors were not addressed in this study such as the evaluation component of the conceptual framework, which readers might regard as important (Firestone, 1993). Before attempting to apply the findings to other contexts, readers of this study should take into account the number of institutions involved, the number of people who participated in the fieldwork, the data-gathering techniques, and the duration of the data collection sessions (Cole & Gardner, 1979; Marchionini & Teague, 1987). Distance education in higher education in South Africa would benefit greatly from similar studies, although it is rare for comparable work to be undertaken (Kuhlthau, 1999). These studies would provide a more inclusive picture of ODE in South Africa.

The researcher believes several more studies should be conducted to understand the phenomenon rather than one major study in isolation (Borgman, 1999). Different investigations might yield different results that might not be consistent with this study's results. This does not mean that the results of this study are untrustworthy. The differentiation in results could indicate the different realities of the phenomenon under investigation, and an appreciation of these differences seems useful (Shenton, 2004). The readers of this study should determine "...whether the notion of producing truly transferable results from a single study is a realistic aim or whether it disregards the importance of context, which forms such a critical factor in qualitative research" (Shenton, 2004, p. 71).

5.8.3. DEPENDABILITY

If this study were repeated, utilising the same setting, methodologies, and participants, it might be challenging to obtain identical results owing to the shifting nature of this topic, which has been examined by qualitative researchers (Fidel, 1993; Marshall & Rossman, 2014; Shenton, 2004). The readers of this study should remember that the researcher's interpretations were bound to the study's context (Florio-Ruane, 1986). According to Lincoln and Guba (1985), credibility and dependability are closely related. Therefore, in practice, a demonstration of credibility ensures dependability. The research process was thoroughly reported in this chapter. Therefore, future researchers would be able to replicate this study, even if they did not necessarily get the same outcomes. This study's research approach might serve as a prototype for such studies in the future (Shenton, 2004). With the information presented in this chapter, the readers of this study should determine whether appropriate research practices were followed. This chapter provides in-depth explanations in the sections that follow. This would make it possible for readers to comprehend the strategies and their efficacy fully:

- The research design and its implementation described what was planned and carried out.
- The operational detail of the data collection method was presented.
- A critical evaluation of the study assessing the investigational strategy's success was included.

5.8.4. CONFIRMABILITY

Confirmability ensures that the study's conclusions reflect the participants' ideas and experiences rather than the researcher's preconceived notions (Shenton, 2004). It is difficult to remove a researcher's biases from a study to achieve absolute objectivity (Patton, 2014). It should therefore be noted that the data collection instruments used in this study depended on human skill and perception (Patton, 2014). The researcher designed the interview questions and selected the different data collection methods, which enhanced triangulating findings, reduced the researcher's bias, and thus promoted confirmability (Shenton, 2004). The reader can assess the acceptability of the data and conclusions by reading the researcher's comprehensive methodological descriptions. The researcher described each data collection method in detail and provided sufficient evidence relating to its use in this study.

5.9. CONCLUDING REMARKS

Figure 5.1 in Section 5.2 illustrates the methodology of this study, which described the researcher's plan to answer the research questions. As described in section 5.2, the methodology of this study could be regarded as the bridge between the researcher's worldview of ODE and the methods employed to investigate the research questions. Interpretivism, which was used as the paradigm for this study, provided insight into the researcher's worldview. A qualitative research approach allowed the researcher to investigate the phenomenon associated with ODE through interactions with people. An exploratory case study design facilitated the researcher's data collection regarding ODE from two institutions. Since ODE is an emerging mode of delivery in South Africa, limited literature on preliminary research was available. Data were collected through interviews analysed deductively and inductively using predetermined themes emanating from this study's theoretical framework. Chapter 6 contains the results of the investigation.

CHAPTER 6: PRESENTATION OF RESULTS

6.1. INTRODUCTION

This chapter represents step 5 of thematic analysis, as Braun and Clarke (2006) suggest, which entails developing a detailed description of each theme. The data displayed in this chapter is a structured, condensed collection of information (Alhojailan, 2012). The data display indicates organised data, which aids in the organisation of concepts and thinking (Miles, Huberman et al., 2014).

Displaying the data serves several purposes, such as:

- The capacity to better visualise and refine the data for the research;
- To prevent data overload when doing an analysis;
- Making sense of the acquired data by showing similar concepts from several statements.

The data presentation was undertaken descriptively to improve conceptual coherence by grouping data corresponding to each theme (Miles, Huberman et al., 2014). In addition, the data's interpretation of several claims is supported by direct quotations and document excerpts (Patton, 2014). This chapter unfolds the researcher's engagements with participants from the two institutions involved in this study. More specifically, this chapter shows what the researcher learned about ODE at the participating institutions. This chapter seeks to answer this study's primary research question: How could a conceptual quality framework for online distance education support South African residential institutions in transitioning their administrative, teaching and learning processes to an online format?

As mentioned in section 4.3, the theoretical framework presented in Chapter 4 provides a theoretical coat-hanger for data analysis and interpretation of results (Varpio, Paradis et al., 2020). The theoretical framework guided the development of interview questions and the data collection process (Kivunja, 2018). The results emanating from data collection are presented logically, coherently and systematically

and according to the elements of the theoretical framework and the themes identified in the data analysis process (cf. 4.4, 6.2).

6.2. FIRST AND SECOND-ORDER THEMES

As indicated in section 5.5.7.1, initially the data collected for this study were grouped according to the first-order themes or starting list. These themes could be regarded as the sub-elements of the theoretical framework, as indicated in Table 4.2. After grouping the data into the first-order themes and finding additional themes, these themes were reviewed. This meant that some themes could be grouped and disregarded, and new themes could be included. After analysing all the data grouped under the first-order themes inductively, the second-order themes could be established.

The following changes occurred during the theme-reviewing process:

Under the Institutional element, an additional theme, namely costing, was identified. Participants provided important information regarding the cost of online education, which justified the inclusion of this theme. Unfortunately, the reusability theme that forms part of the Technological element was not presented in the results since the data collected yielded little to no results on this theme. Many similarities across themes in the Instructional Design and Pedagogical elements occurred during the analysis. Therefore, the researcher merged the two main elements into the Instructional Design and Pedagogical elements. The clarifying expectations and personalisation themes of the Instructional Design element were retained. The learning resources theme includes selecting proper learning scenarios, organising learning resources and the currency and accuracy of learning resources. The social aspects theme in the Pedagogical element was merged with the communication and interactivity theme. The student-centeredness, learning environments and assessment themes were also retained.

The researcher changed the theme of administrative support into general support in the Student Support element since data revealed information over and above administration. This theme explores the importance of student support, which includes

elements of administration. Another theme, academic support, was added to this element since enough information from the interviews justified the inclusion of a new theme. The technical support theme was retained. In the Faculty Support element, administrative support was changed to general support, which included administration aspects. This was done since fitting the data into one of the existing themes was challenging. Technical assistance in course development and pedagogical support were merged into one theme named technical and pedagogical support since there was an overlap of information between these themes.

Table 6.1 summarises the first- and second-order themes identified for this study. The results in this chapter are presented according to these elements, themes and sub-themes. There was no precise order in which this chapter's results were presented. In some instances a particular document or participant from one institution might provide more information than another document or participant from another institution. As indicated in section 5.5.1.1, the purpose of this study is not to compare case data, even though data were acquired from several institutions. Instead, the researcher aimed to transmit significant effects from the similarities and contrasts in the literature. Chapter 7 provides this analysis in detail since Chapter 6 only provides the results.

Section 6.3 is a detailed presentation of the results of this study.

Table 6.1: Summary of first and second-order themes.

FOT First-order themes **SOT** Second-order themes

ELEMENTS OF THEORETICAL FRAMEWORK					
	INSTITUTIONAL	TECHNOLOGICAL	INSTRUCTIONAL DESIGN AND PEDAGOGICAL	STUDENT SUPPORT	FACULTY SUPPORT
FOT	INSTITUTIONAL AFFAIRS	DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE	CLARIFYING EXPECTATIONS	GENERAL SUPPORT	GENERAL SUPPORT
SOT	<ul style="list-style-type: none"> Policy implementation Blended/hybrid DE opportunities. Quality assurance systems Widening access to HE Third-party providers. Access to online HE in SA 	<ul style="list-style-type: none"> The demographic profile of students. 	<ul style="list-style-type: none"> Learning content 	<ul style="list-style-type: none"> Support approach 	<ul style="list-style-type: none"> Support Approach Tutor remuneration Financing student support
FOT	ADMINISTRATIVE AFFAIRS	THE FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS	PERSONALISATION	TECHNICAL SUPPORT	TECHNICAL AND PEDAGOGICAL SUPPORT
SOT	<ul style="list-style-type: none"> Adapting existing administrative processes, procedures, and systems. Online administrative-related processes 	<ul style="list-style-type: none"> The aims and objectives of educational technology. 	<ul style="list-style-type: none"> Institutional flexibility Learning artefacts 	<ul style="list-style-type: none"> Computer literacy Support helpdesk 	<ul style="list-style-type: none"> Support Approach Instructional design support The Role of an Academic in DE
FOT	RESEARCH	ACCESSIBILITY	LEARNING RESOURCES	ACADEMIC SUPPORT	
SOT	<ul style="list-style-type: none"> Improving best practice Market research 	<ul style="list-style-type: none"> Access to learning materials. Access to connectivity. Access to the internet. 	<ul style="list-style-type: none"> Learning scenarios Content development Quality-assuring learning resources 	<ul style="list-style-type: none"> Support approach Lecturer and tutor support Improving student support 	
FOT	REPUTATION	INTERFACE DESIGN	LEARNING ENVIRONMENTS		
SOT	<ul style="list-style-type: none"> Quality service 	<ul style="list-style-type: none"> User-friendly and easy-to-use user interfaces. 	<ul style="list-style-type: none"> Online learning environments 		
FOT	COSTING		STUDENT-CENTEREDNESS		
SOT	<ul style="list-style-type: none"> Influence of third-party providers 		<ul style="list-style-type: none"> How students learn 		
FOT			COMMUNICATION AND INTERACTIVITY		
SOT			<ul style="list-style-type: none"> Student interaction Alternative communication mediums Learning management system use 		
FOT			ASSESSMENT		
SOT			<ul style="list-style-type: none"> Assessment strategy Student feedback 		

6.3. RESULTS

This section presents the results of this study. The results are presented in the same format as indicated in Table 6.1. First, the element of a theoretical framework is provided, under which the first-order themes are listed. Under each first-order theme follows the data regarding the second-order themes.

6.3.1. INSTITUTIONAL ELEMENT

First-order themes

- Institutional Affairs
 - Administrative affairs
 - Research
- Reputation
 - Costing

INSTITUTIONAL		ELEMENTS OF THEORETICAL FRAMEWORK				
INSTITUTIONAL AFFAIRS		INSTITUTIONAL	TECHNOLOGICAL	INSTRUCTIONAL DESIGN AND PEDAGOGICAL	STUDENT SUPPORT	FACULTY SUPPORT
FOT	INSTITUTIONAL AFFAIRS		DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE	CLARIFYING EXPECTATIONS	GENERAL SUPPORT	GENERAL SUPPORT
SOT	<ul style="list-style-type: none"> • Policy implementation • Blended/hybrid DE opportunities • Quality assurance systems • Widening access to HE • Third-party providers • Access to online HE in SA 	<ul style="list-style-type: none"> • The demographic profile of students 	<ul style="list-style-type: none"> • Learning content 	<ul style="list-style-type: none"> • Support approach 	<ul style="list-style-type: none"> • Support Approach • Tutor remuneration • Financing student support 	
FOT	ADMINISTRATIVE AFFAIRS	THE FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS	PERSONALISATION	TECHNICAL SUPPORT	TECHNICAL AND PEDAGOGICAL SUPPORT	
SOT	<ul style="list-style-type: none"> • Adapting existing administrative processes, procedures, and systems • Online administrative-related processes 	<ul style="list-style-type: none"> • The aims and objectives of educational technology 	<ul style="list-style-type: none"> • Institutional flexibility • Learning artefacts 	<ul style="list-style-type: none"> • Computer literacy • Support helpdesk 	<ul style="list-style-type: none"> • Support Approach • Instructional design support • The Role of an Academic in DE 	
FOT	RESEARCH	ACCESSIBILITY	LEARNING RESOURCES	ACADEMIC SUPPORT		
SOT	<ul style="list-style-type: none"> • Improving best practice • Market research 	<ul style="list-style-type: none"> • Access to learning materials • Access to connectivity • Access to the internet 	<ul style="list-style-type: none"> • Learning scenarios • Content development • Quality-assuring learning resources 	<ul style="list-style-type: none"> • Support approach • Lecturer and tutor support • Improving student support 		
FOT	REPUTATION	INTERFACE DESIGN	LEARNING ENVIRONMENTS			
SOT	<ul style="list-style-type: none"> • Quality service 	<ul style="list-style-type: none"> • User-friendly and easy-to-use user interfaces 	<ul style="list-style-type: none"> • Online learning environments 			
FOT	COSTING	STUDENT-CENTEREDNESS				
SOT	<ul style="list-style-type: none"> • Influence of third-party providers 	<ul style="list-style-type: none"> • How students learn 				
FOT		COMMUNICATION AND INTERACTIVITY				
SOT		<ul style="list-style-type: none"> • Student interaction • Alternative communication mediums • Learning management system use 				
FOT		ASSESSMENT				
SOT		<ul style="list-style-type: none"> • Assessment strategy • Student feedback 				
	RESEARCH					
	REPUTATION					
	COSTING					
	<ul style="list-style-type: none"> • Influence of third-party providers 					

6.3.1.1. INSTITUTIONAL AFFAIRS

The following second-order themes are addressed in this section

- Policy implementation
- Blended/hybrid DE opportunities
- Quality assurance systems
- Widening access to HE
- Third-party providers
- Access to Online HE in SA

6.3.1.1.1. POLICY IMPLEMENTATION

Manager B (MAN-B) emphasised that “One of the things that South Africa is particularly good at is developing policies. What they are not particularly good at is implementing them.”. Policy developers do not provide proper implementation and follow-up plans. South Africa published its first Distance Education national policy in 2014. MAN-B further stressed: “I am not sure how many distance education providers engage with that policy or are even aware of it”. Nadeosa also developed a set of quality criteria for distance education providers in 2005 (Welch & Reed, 2005), while MAN-B emphasised it is worrying that people are not engaging with these documents: “It is evident from recent engagements like the Open Learning conference that many people do not even know that the quality criteria exist.”

In 2013 and 2014, the South African Institute for Distance Education (SAIDE) developed a set of good practice guidelines that investigated how general quality criteria for quality programmes, regardless of the mode of delivery, aligned with DE programmes. This investigation also informed teaching and learning quality issues related to e- and online learning. However, MAN-B expressed his concern regarding the use of the good practice guidelines: “They quickly used up their 3000-print run. So, there is [are] a lot of these guides out there. Whether or not they are being used to influence practice, I do not know”.

The head of department (HOD) for formal programmes at Institution A and the quality assurer (QA) confirmed that the institution did not have a policy for its online learning component. This HOD had occupied his position for only six months when he was interviewed and had only “loose” documents to work with during this period, guiding processes and procedures. This particular HOD emphasised that “...it is much easier

when there are policies in place, but when they are not in place, it is a nightmare getting along, getting anything done”. Furthermore, HOD-A expressed his concern regarding the absence of a policy for online teaching and learning: “So, without a policy, especially for dual-mode universities, like ours and yours, it is, it is virtually uhm an engine with no oil, you know. It is just grinding itself, to a halt, ya”. Institution A has developed a new DE policy since its current policy was outdated. The online learning component of Institution A was incorporated into their latest DE policy (HOD-A).

Institution A's instructional design director emphasised that the institution's teaching and learning policy did not accommodate online learning or DE. The director indicated that “...there is a teaching and learning policy that does not really make provision for online learning and distance”.

REFLECTION ON QUALITY IMPLICATIONS:

The results highlight a significant challenge in implementing DE-related policies and guidelines in South Africa. The lack of awareness and engagement with established policies, quality criteria, and good practice guidelines raises concerns about the effectiveness of the regulatory framework for maintaining quality standards in DE. The absence of specific policies for online learning within institutions like Institution A creates a potential obstacle to online education's smooth functioning and quality assurance. This lack of policy alignment suggests better integrating online learning considerations into overarching institutional policies to ensure a more cohesive and effective approach to quality education in the digital domain.

6.3.1.1.2. BLENDED/HYBRID DISTANCE EDUCATION OPPORTUNITIES

Most of the established distance education institutions in South Africa are still going through a transition period. They gradually move from a blended to an online mode of provision. Most institutions in South Africa are finding themselves in the middle spectrum of a mode of delivery, which is a blend. MAN-B highlighted: “We in South Africa have relatively few examples of fully online programmes” and that in “2012, 2013 there were not a lot of providers with empirical experience or doing large-scale

fully online learning”. In South Africa, the few examples of online programmes tend to be niche programmes for small student numbers (MAN-B).

According to MAN-B, Institution B’s educational delivery approach for all programmes accommodates distance teaching and learning. MAN-B indicated that “in many ways, many provisions are already kind of distance in the sense that it is resource-based, it is LMS-based, and contact as a direct lecture is a dwindling component of the student experience”. According to MAN-B, 30% of undergraduate courses should be structured staff-led activities on campus. Unfortunately, MAN-B is doubting if the institution is adhering to this regulation. MAN-B elaborated that online education would become the norm in the longer term, and contact-based education would become the exception. If institutions wanted to reach the 2030 policy goals of increasing access without building new universities, which the country cannot afford to maintain, institutions would need to go online (MAN-B).

REFLECTION ON QUALITY IMPLICATIONS:

The information suggests that South African institutions are currently in a transitional phase, moving from blended to online education. While this shift is recognised, there is a notable lack of fully online programmes, and those that exist are often niche and for small student numbers. The indication that online education is expected to become the norm in the longer term underscores the importance of ensuring that this transition is accompanied by robust policies, training, and quality assurance mechanisms to maintain and enhance the quality of education in the online distance format.

6.3.1.1.3. QUALITY ASSURANCE SYSTEMS

The good practice guidelines developed by the Council on Higher Education are not particularly strong in guiding fully online learning. The good practice guidelines reflect and use blended/hybrid teaching and learning examples dating back to 2012 and 2013 (CHE, 2014). The manager, identified as MAN-B, reminded the researcher that theories for online learning developed by experts like Gilly Salmon and Tony Bates are nuanced for first-world, developed contexts. Therefore, their expertise is not precisely refined for a diverse and developing context such as South Africa.

Subsequently, the conclusion was that a need existed to develop a set of online learning criteria that reflected what is known globally but is nuanced for the South African context. MAN-B further explained that specific quality criteria were universal to all programmes regardless of the mode of delivery.

Institution A has developed a quality assurance framework to guide all programmes' design, development, and implementation. This framework cannot be regarded as a policy but seeks to provide sufficient support for processes and procedures (QA-A). This institution's DE unit used the QA framework developed for contact provision to develop its QA framework for distance education (QA-A). The QA-A indicated: "The QA framework was initially developed for contact provision".

The quality assurance framework at Institution A was adapted to accommodate online learning processes and procedures (QA-A). They followed strict internal quality procedures to ensure their design, development and implementation processes and procedures adhered to specific quality benchmarks (QA-A). The quality assurer also emphasised: "We follow another procedure when redesigning online programmes from blended programmes. This is named the internal quality assurance process. It has its own set of rules".

Furthermore, the quality framework developed by a third party informs the institution's quality framework for online provisioning (QA-A). The following extract explains how the institution applies the quality framework: "The QA framework is provided to the institution in an Excel document. The framework consists of benchmarks that need to be checked. The additional commentary could also be included. It provides a certain structure" (QA-A). The QA-A further mentioned that although the aforementioned was a "nice" framework, the institution needed to tick checkboxes that were old-fashioned and outdated. The participant said that "we have passed this phase in quality assurance; we are now on evidence-based ..." (QA-A).

The quality assurance unit at Institution A should therefore develop an online learning policy for the institution. A shortage of staff members was found to be delaying this process. The QA-A explained "only four people are working in this department". These

staff members are responsible for ensuring the technical editing of modules, articulating modules, and reviewing the quality of a module's content" (QA-A).

Institution B developed a distance education policy to guide the Institution's distance education activities. The policy aims to guide and inform the distance education initiatives of the institution. According to QA-B, this policy includes most aspects and sub-aspects related to DE and online learning.

REFLECTION ON QUALITY IMPLICATIONS:

The results suggest recognising the need for specific quality criteria tailored to the South African context for online learning, given the nuanced nature of this educational environment. Adapting existing quality assurance frameworks and developing specific policies for distance education indicate a proactive approach by institutions. However, the challenge of staff shortages impacting the development of these policies highlights a potential bottleneck that needs attention to ensure timely and effective implementation. This underscores the importance of adequate resources and personnel in establishing and maintaining robust quality assurance mechanisms for online distance education.

6.3.1.1.4. WIDENING ACCESS TO HIGHER EDUCATION

The IDD-A emphasised that according to the Minister of Higher Education of South Africa, the demand for tertiary education is far greater than the supply. The IDD-A indicated that:

South African universities have reached their capacity to accommodate face-to-face students. Therefore, distance education is the name of the game. The largest DE provider in South Africa cannot grow more now. They are bursting out of their seams. So, therefore, the rest of the universities must come to the party.

In addition, Manager B commented on the executive management's vision and goals for DE: "My experience working for the last two and a half years at the institution is that there has been some ambivalence at a strategic and executive level around the

role of distance education”. The main reason Institution B created a distance education unit was to service a group of students from a gap in the market that surfaced then. The institution's executive management started raising concerns when student numbers declined after most students had graduated (MAN-B). Therefore, it could be assumed that the surplus generated from this market was more important to executive management. The manager commented on the institution's support for DE: “The reason for being in distance education is not about opening access and having more diverse students, so I think it was purely financial at executive level.”.

The Head of Support Services and Operations at Institution A (HODSO-A) and the Head of Enrolments at Institution A (HOE-A) explained that although top management verbally supported ODE at the Institution, they did not understand the practical implications that this mode of delivery required. The HODSO-A said the following:

During all these years, we are attempting to win some ground on these aspects. Some people in critical roles are starting to understand how our systems work. But some people just do not comprehend how our systems work. Therefore, they are not paying attention to our needs. They do not experience what we are experiencing.

REFLECTION ON QUALITY IMPLICATIONS:

The results suggest a complex landscape in South African higher education where the demand for tertiary education exceeds capacity, leading to a growing reliance on distance education. However, concerns arise regarding the strategic intent and understanding at the executive levels of institutions, with financial considerations potentially overshadowing the goal of broadening access. This raises implications for the quality of online distance education, as a misalignment of institutional goals and insufficient understanding of the unique requirements of online delivery may hinder adequate support and resource allocation, potentially impacting the overall quality of the educational experience. Precise strategic alignment and a comprehensive understanding of the demands and challenges of online education are crucial for ensuring its quality and effectiveness.

6.3.1.1.5. THIRD-PARTY PROVIDERS

Institution A and Institution B signed partnership agreements with an American-based company specialising in supporting institutions to develop and implement fully online programmes. These agreements influenced the operations of both institutions significantly. The following section highlights the impact of the third-party provider on institutions A and B. This company is referred to as “the third party”.

Manager B emphasised that universities were moving online to an increasing degree: “...because the university has the relationship with the third-party, it seems clear that we are moving more and more online”. MAN-B presented that he believed that online education was the way forward for higher education institutions. He explained that a wider footprint of students could be reached and more students accommodated through existing facilities. MAN-B also indicated: “It is fairly clear that new players in distance education will go immediately fully online”. New providers in DE tend to incorporate online learning in their teaching and learning strategies immediately (MAN-B).

The Tutor support person from Institution A (TSP-A) indicated that the third party provided much support at the start of their partnership. Their support included the following aspects:

- Designing, developing, and managing online learning programmes.
- Configuring a carousel enrolment model within the institution’s existing enrolment model.
- Marketing.
- Student support.

The Tutor support person from Institution A, indicated, and this is unfortunate, that the third party is “...distant from what is happening at the institution at the moment”. The TSP-A further explained that the third party “...was resourceful during the time where [when] we did not know much about online learning”. The TSP-A believed that the third party served their purpose. The HODSO-A also indicated that at the beginning of their

agreement with the third party, the party stakeholders were enthusiastic and made many promises. It was noted as regrettable that they could not keep their promises.

Although Manager B believed there was still a need for blended DE programmes for the next 10 years, Institution B had already investigated how to merge its distance learning unit with its online learning unit. Furthermore, MAN-B explained that when the institution's agreement with the third party ends after seven years, the institution would need to take responsibility for all the work that the third party has been doing:

If we want to continue with them, and in any case, they are going to be using the learning management system. So, this unit and the learning designer in this unit will need to support academics in developing the learning materials that will feed into the fully online programmes managed through the third party. I do not see that the online programme will work in education without input from the unit.

REFLECTION ON QUALITY IMPLICATIONS:

The results suggest that while third-party providers initially played a crucial role in supporting institutions like A and B in developing and implementing fully online programmes, there are concerns about such partnerships' sustainability and ongoing effectiveness. The potential distance between the third party and the institution's day-to-day operations, as well as challenges in keeping promises and meeting evolving needs, could impact the quality of online distance education. The need for a smooth transition and continued support beyond the partnership period is crucial for maintaining and enhancing the quality of online education, especially as institutions contemplate taking more responsibility for these programmes in the future.

6.3.1.1.6. ACCESS TO ONLINE HIGHER EDUCATION IN SOUTH AFRICA

Manager B claimed to believe that students studying at NQF levels 9 and 10 were more likely to have access to the necessary infrastructure and to have the skills to participate in and complete online programmes:

One of the reasons I pushed for the master's level is because I think at that level you are more likely to access the people who will have the

connectivity, will have basic ICT skills, and you could assume it, you can make it a pre-requisite.

The Instructional Design Director from Institution A (IDD-A) emphasised that developing online programmes at the lower level of the national qualification framework was not a good idea. The reason was given as being that the “context of the students does not allow this mode of delivery. The advanced certificate is already a stretch” (IDD-A).

REFLECTION ON QUALITY IMPLICATIONS:

The results suggest that the success and quality of online distance education could be influenced by the academic level, with higher levels potentially having better-prepared students for online learning and lower levels facing more significant challenges. However, it is essential to note that success can depend on various factors, and careful planning is required to ensure quality across all levels.

6.3.1.2. ADMINISTRATIVE AFFAIRS

The following second-order themes are addressed in this section

- Adapting existing administrative processes, procedures, and systems
- Online administrative-related processes

6.3.1.2.1. ADAPTING EXISTING ADMINISTRATIVE PROCESSES, PROCEDURES AND SYSTEMS

One of the biggest challenges that Institution A faced was incorporating its online business model into its existing blended learning business model. More specifically, Institution A did not allow for the unique development of an administrative system that could accommodate the third-party carousel enrolment plan for online learning. The HODSO-A expressed her concern regarding their business model: “Obviously, because our business model is so different from the rest of the university, we are faced with huge challenges”.

It is a reality that the institution's administrative staff in their enrolment team must manually enrol their online students (HODSO-A). This is not a once-off process but occurs every eight weeks during a few iterations per year. The HODSO-A further mentioned that their registrar had acknowledged their concerns (HODSO-A). It was hoped their IT department would assist them in adapting their existing administrative system to cater for their online learning programme-related needs. It was problematic that these developments were only put into action towards the end of the lifespan of the online programme. The HODSO-A said the following regarding the development of a new system:

I am not sure how much the IT department will be able to assist us. We are approaching this as a new project. This is a system that we will be able to use in the future. The short learning programmes are experiencing the same issues. The main problem is that the PeopleSoft system is not accommodating our unique needs.

The integration between PeopleSoft and the Learning Management System (Blackboard) of the aforementioned institution was also lacking. Students are not automatically registered on Blackboard when they are registered on PeopleSoft. The HODSO-A explained that "...we attempted to automate student enrolment between PeopleSoft and Blackboard, but it did not work". The students are enrolled manually according to the Blackboard system. The HODSO-A communicated her concerns to PeopleSoft as this institution's online and blended programmes used the same PeopleSoft system (HODSO-A). Therefore, all programmes offered by the institution will be affected when changes are made to the system. The HODSO-A argued that the institution hesitated to change the system as it would affect too many people and programmes. The Blackboard LMS generally used by the online programmes is not the same system as that used by the rest of the institution (HODSO-A).

According to the Quality Assurer from Institution B, the institution developed its own PeopleSoft system that could accommodate the unique needs of DE students. Their PeopleSoft system and Blackboard LMS are also integrated to some extent. Therefore, when students are enrolled on the PeopleSoft system, they are

automatically enrolled on the Blackboard LMS. This institution invested a lot of money and time to develop a unique PeopleSoft system before any programmes commenced.

REFLECTION ON QUALITY IMPLICATIONS:

The challenges faced by Institution A in integrating its online business model with the existing blended learning model highlight significant issues in administrative and technological infrastructure. Manual enrollment processes, lack of system integration between PeopleSoft and Blackboard, and the hesitancy to change systems indicate potential barriers to the smooth functioning of online programmes. In contrast, Institution B's investment in developing a tailored PeopleSoft system that seamlessly integrates with Blackboard suggests a proactive approach to address the unique needs of distance education students. These results underscore the importance of robust administrative and technological systems in ensuring the quality and efficiency of ODE. Institutions that invest in tailored systems appear better equipped to provide a smoother learning experience for online students.

6.3.1.2.2. ONLINE ADMINISTRATIVE-RELATED PROCESSES

A disconcerting aspect identified at both institutions was that students could not apply and register for programmes online. The HODSO-A confirmed that “we have to register the students manually”. Institutions A and B use PeopleSoft to manage all aspects of student administration, which includes information regarding enrolments and finances. Institution A's PeopleSoft system was initially implemented for its contact programmes (HODSO-A). Subsequently, all new programmes, including online programmes, should use this system to manage student information. At Institution A, this is particularly problematic as their online programme enrolment does not follow a traditional January to December enrolment period. Institution A allows students to enrol a few times per year. The HODSO-A explained the consequences of using this programme:

The challenge that the HOE-A is experiencing now is that our cut-off dates are different from the main campus. Since we are working on the same system, specific dates for deadlines expire, and then students are charged for late payments.

REFLECTION ON QUALITY IMPLICATIONS:

The manual registration process and the misalignment of cut-off dates in PeopleSoft for online programmes at Institution A pose significant challenges, potentially leading to administrative errors and financial issues for students. These issues highlight a lack of streamlined processes and directly affect the efficiency and quality of the online distance education experience, impacting both students and administrative staff.

6.3.1.3. RESEARCH

The following second-order themes are addressed in this section

- Improving best practice
- Market Research

6.3.1.3.1. IMPROVING BEST PRACTICE

Institution B is committed to conducting action-based research that could feed into improved programme design, development, and teaching (QA-B). The institution understands the importance of evaluating its distance education practices through research. Furthermore, the institution regards students' feedback regarding their practices as an essential part of the research. Operational decisions are based on proper market research. This institution liaises with industry experts, the government, and other professional bodies (QA-B). Institution B's learning materials are continuously improved from an academic perspective based on feedback from students, tutors, and DE research (QA-B).

Lecturer (A)-B claimed that the quality of the programme offerings at Institution B should be improved. It emerged that LECT(A)-B felt the programmes did not necessarily address the needs of DE students. LECT(A)-B indicated that their programme was extremely generic:

...this is where we went wrong in the reconstructing of this programme. The contents of the programme are too generic. We are not recruiting enough students, and if we cannot change that, we will have to close the programme.

Lecturer (C)-B also felt that the academic programme presented by Institution B was too theoretical. LECT(C)-B explained that the institution expected "...students to have a philosophical background in a subject area they are specialising in". According to LECT(C)-B, this is a traditional view of education. Current qualifications could instead be more relevant to workplace environments. LECT(C)-B indicated that the content of a programme should be relevant to the needs of students. Students should be able to apply the knowledge and skills acquired at an institution to improve their practice. Furthermore, LECT(A)-B argued that the institution should reposition itself to compete with an institution such as UNISA. According to LECT(A)-B, "...you will recruit more students when programmes are less philosophical in nature because that is where the students are not able to succeed" (LECT(C)-B).

REFLECTION ON QUALITY IMPLICATIONS:

The feedback from Lecturers at Institution B underscores a critical aspect of online distance education quality — the alignment of program content with students' practical needs and expectations. The call for more relevant, less theoretical content reflects a need to adapt educational offerings to suit better distance education students' diverse and often practical-oriented goals, emphasising the importance of continuous improvement and responsiveness to student feedback for maintaining quality.

6.3.1.3.2. MARKET RESEARCH

Institution A's decisions regarding programme offerings depend on information supplied by the Department of Higher Education (DHE). The HOD-A indicated that "what we are doing right now, since we are still a teaching focus [is] we engage with the provincial teaching development committee, and annually they give us the facts in terms of figures". The HOD-A expressed belief that this committee provided the institution with accurate data. For example, the committee indicated that the university should stop producing teachers who focused on commerce since many of those teachers were unemployed.

The Head of Short Learning Programmes from Institution A feels that the third-party provider did not conduct thorough research into the institution and students' needs. The HOSLP-A expressed his frustration:

If you have 1 500 untrained Grade R teachers and decide to develop an online course, you must justify that these teachers are willing to study online. But it does not seem like the case. It looks like the third party persuaded the University to continue with this online programme.

The Head of Support Services and Operations from Institution A explained that the third party approached the recruitment of online students from a first-world perspective. The HODSO-A presented that the third party “missed the boat” by not accommodating the demographics of South African students while actively recruiting. The HODSO-A mentioned: "The third-party promised to recruit thousands of students. Unfortunately, our student numbers are not close to the predicted student numbers". The HODSO-A further indicated that the third party received 50% of the class fees of an enrolled online student and that "...this is a lot of money. If you compare the institutions' contribution to the online programme with their contribution, then they do not deserve the 50% fees allocated to them".

The Head of Short Learning Programmes further explained that an institution should conduct thorough research to understand its target audience and added that doing so would enable the institution to determine students' knowledge and skills (HOSLP-A). This applies to students' academic ability to access and use education technologies for online learning.

REFLECTION ON QUALITY IMPLICATIONS:

The feedback from various heads and directors at Institution A highlights the crucial need for comprehensive and context-specific research when introducing online programmes. The mismatch between the third-party provider's recruitment strategy and South African students' actual needs and preferences underscores the importance of understanding the local demographic and their readiness for online learning and aligning programme offerings accordingly. This has direct implications for the quality of online distance education, emphasising the need for institutions to

conduct in-depth research to tailor their offerings to their students' specific contexts and needs.

6.3.1.4. REPUTATION

The following second-order theme is addressed in this section

- Quality service

6.3.1.4.1. QUALITY SERVICE

According to the head of department at Institution A (HOD-A), an institution's reputation is essential when students select an institution with which to study. The HOD-A indicated the following:

...for example, we advise them to, let's say, for Grade R, go to, is it, SANTS, then they say, no, we cannot, we don't know what SANTS ... you know ... is and will they get a genuine job or not, you know.

Furthermore, the head of department at Institution A proposed to believe that providing excellent service to students also had an impact on an institution's reputation. The HOD-A referred to students' possible perceptions of the institution: "But on the ground, if I were to say, do you offer a great service? I don't think so, I think we are far from it. I think we've got a long way to go to offer a good service". The HOD-A elaborated on his reasoning relating to the previous statement:

I say that because I have seen many pitfalls that we have. In terms of, like, we can't give students ... our student support is near non-existent, but because we don't have a functional call centre where students can call, we don't have valuable engagements with the students.

The Instructional Design Director from Institution A was of the view that their institution should become renowned for delivering technologically supported DE. He believed that there was much scope for this approach. He also advised the following:

The institution should not attempt to become a mini version of the largest DE provider in South Africa. The institution should indicate to students that they offer specific courses that need internet connectivity. If students do not have connectivity, they cannot enrol on [in] the programme.

Lecturer (A)-B, who was teaching one of the institution's DE programmes, conveyed concern about the quality of the DE education programme as that could harm the reputation of the institution. This lecturer agreed that the quality of the degree offered in the DE mode of delivery was not the same as the same degree offered through the contact mode of delivery (LECT(A)-B). LECT(A)-B indicated: "Why don't you have a different type of programme for distance education with content that is not aligned with an honours degree?".

Lecturer (B)-B emphasised that the institution could not present a DE course different from its contact mode counterpart. LECT(B)-B said that:

We cannot present a distance course that differs from the contact ... that's what the Deputy Dean said. What we do in contact, we must do in long-distance; what we do in the distance, we do in contact. Otherwise, it is unfair.

Lecturer (B)-B expressed her concern regarding the DE programme that Institution B offered. She confessed to believing the programme was an omnishambles in saying the following:

I am in a teachers' group on Facebook, and there are constant questions, such as "where can I do an online honours degree?" I am not going to tell them to come and do it at Institution B. It is a mess ... well, not all of it but some of it. I am not going to do that. So, will other colleagues also ... they will tell them "...no, no, no, just don't go to Institution B". You know what they said to me? They went to Stellenbosch, and they went to North-West.

REFLECTION ON QUALITY IMPLICATIONS:

The feedback from Institution A raises critical concerns about the institution's service quality and the perceived quality of its distance education programmes. The lack of a functional call centre and limited student support can significantly impact the institution's reputation. Moreover, the acknowledgement that the quality of the distance education programme might not match that of the contact mode raises questions about the consistency and competitiveness of online offerings. This emphasises the importance of maintaining high standards in online distance education to safeguard an institution's reputation and attract students.

6.3.1.5. COSTING

The following second-order theme is addressed in this section

- Influence of third-party providers

6.3.1.5.1. INFLUENCE OF THIRD-PARTY PROVIDERS

The quality assurer at Institution A emphasised that everyone believed online education was more affordable than face-to-face education. However, this has been shown not to be the case. She explained that “there are generally high input costs associated with online education. These costs need to be redeemed before you can start making a profit”. The QA further mentioned that online learning needs a robust infrastructure. This includes the costs of hardware, software, and online facilitators. An online programme cannot be compared to a traditional face-to-face programme (QA-A).

The head of department at Institution A indicated that partnering with a third party was expensive. HEPSA receives 50% of students' tuition fees. The HOD explained that the third party “... do their part, uhm, to a certain extent. However, [that] for me, my gripe is just that, that part comes with a heavy cost”. The QA-A reported: “If we want to retain 50% of our income and we do not obtain the student numbers to do this, you know if I told you what our projected student numbers were for this year. We are not even close to this projection”. Furthermore, the HOD-A emphasised that Institution A received even less than 50% of the tuition fees:

And you are left with half, plus the tax. They take half without experiencing the tax, so you are getting less than half per student. So that leaves you a bit crippled in terms of what you would want to do as a ... as an organisation in terms of expanding student support.

This head of department further indicated that he would not have partnered with the third party. A large amount of lost income could have been used to provide more efficient and effective student support, which included the establishment of technical student support. The HOD agreed that they needed a technical support team that could support students. The reality is that Institution A cannot afford this due to their cost obligations to the third party (HOD-A). According to HOD-A, the third party provides good student support. This specific HOD-A confirmed the third party contributed about 40% to the overall workload of their online programmes. The downside here was that, as the HOD indicated, the cost to the institution was much more than 60%. The HOD said, "...we probably experience 75% of the cost. It is not an ideal model; it is not a model I would advise anyone to take".

The quality assurer at Institution A reported that their online programme would generate more income if they managed it themselves. The QA-A indicated, for example, that the third party's marketing was impractical. "They are currently marketing the online programme at the same places where we market our blended programme. There is a reason why our blended programme is operational in Acorn Hoek. There is nothing". The QA-A further explained that Acorn Hoek, for example, did not have sufficient infrastructure to accommodate online learning. The QA-A could not comprehend why the third party was marketing the institution's programmes in areas that cannot accommodate online education. The QA-A felt the third party was not capitalising on their opportunities.

The distance education programmes of Institution B are funded through a dedicated budget to ensure that appropriate financial resources are made available for ongoing programme development and delivery, extensive student learning support, continuous evaluation, research, and improvement.

The Manager at Institution B emphasised that institutions that wanted to offer online learning needed to budget wisely. Since DE students only receive half the subsidy of full-time students from the DHET, technically, twice as many students must be enrolled in programmes for the institution to receive the same income. Therefore, institutions must carefully plan how many students should be enrolled in a programme to be sustainable. The target markets for online learning and blended courses should be carefully planned and differentiated.

REFLECTION ON QUALITY IMPLICATIONS:

The reliance on a third party for programme management is expensive, impacting the institution's income and ability to provide comprehensive student support. The recognition that online education involves high input costs emphasises the need for institutions to carefully plan and budget to ensure sustainability, and the mismatch in marketing strategies raises concerns about the effective promotion of online programmes in suitable areas. These financial constraints could potentially affect the quality of online distance education by limiting investments in infrastructure, student support, and overall programme development.

6.3.2. TECHNOLOGICAL ELEMENTS

First-order themes

- Development and sustainability of technological infrastructure
- Functionality of technological platforms
- Accessibility
- Interface design

TECHNOLOGICAL	ELEMENTS OF THEORETICAL FRAMEWORK				
	INSTITUTIONAL	TECHNOLOGICAL	INSTRUCTIONAL DESIGN AND PEDAGOGICAL	STUDENT SUPPORT	FACULTY SUPPORT
DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE	FOT INSTITUTIONAL AFFAIRS	DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE	CLARIFYING EXPECTATIONS	GENERAL SUPPORT	GENERAL SUPPORT
<ul style="list-style-type: none"> • The demographic profile of students. 	<ul style="list-style-type: none"> • Policy implementation • Blended/hybrid DE opportunities • Quality assurance systems • Widening access to HE • Third-party providers • Access to online HE in SA 	<ul style="list-style-type: none"> • The demographic profile of students. 	<ul style="list-style-type: none"> • Learning content 	<ul style="list-style-type: none"> • Support approach 	<ul style="list-style-type: none"> • Support Approach • Tutor remuneration • Financing student support
THE FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS	FOT ADMINISTRATIVE AFFAIRS	THE FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS	PERSONALISATION	TECHNICAL SUPPORT	TECHNICAL AND PEDAGOGICAL SUPPORT
<ul style="list-style-type: none"> • The aims and objectives of educational technology. 	<ul style="list-style-type: none"> • Adapting existing administrative processes, procedures, and systems. • Online administrative-related processes 	<ul style="list-style-type: none"> • The aims and objectives of educational technology. 	<ul style="list-style-type: none"> • Institutional flexibility • Learning artefacts 	<ul style="list-style-type: none"> • Computer literacy • Support helpdesk 	<ul style="list-style-type: none"> • Support Approach • Instructional design support • The Role of an Academic in DE
ACCESSIBILITY	FOT RESEARCH	ACCESSIBILITY	LEARNING RESOURCES	ACADEMIC SUPPORT	
<ul style="list-style-type: none"> • Access to learning materials. • Access to connectivity. • Access to the internet. 	<ul style="list-style-type: none"> • Improving best practice • Market research 	<ul style="list-style-type: none"> • Access to learning materials. • Access to connectivity. • Access to the internet. 	<ul style="list-style-type: none"> • Learning scenarios • Content development • Quality-assuring learning resources 	<ul style="list-style-type: none"> • Support approach • Lecturer and tutor support • Improving student support 	
INTERFACE DESIGN	FOT REPUTATION	INTERFACE DESIGN	LEARNING ENVIRONMENTS		
<ul style="list-style-type: none"> • User-friendly and easy-to-use user interfaces. 	<ul style="list-style-type: none"> • Quality service 	<ul style="list-style-type: none"> • User-friendly and easy-to-use user interfaces. 	<ul style="list-style-type: none"> • Online learning environments 		
	FOT COSTING		STUDENT-CENTEREDNESS		
	<ul style="list-style-type: none"> • Influence of third-party providers 		<ul style="list-style-type: none"> • How students learn 		
			COMMUNICATION AND INTERACTIVITY		
			<ul style="list-style-type: none"> • Student interaction • Alternative communication mediums • Learning management system use 		
			ASSESSMENT		
			<ul style="list-style-type: none"> • Assessment strategy • Student feedback 		

6.3.2.1. DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE

The following second-order theme is addressed in this section

- The demographic profile of students.

6.3.2.1.1. THE DEMOGRAPHIC PROFILE OF STUDENTS

The quality assurer at Institution A stated believing that not all parts of South Africa were ready for online education. She said that suburban and urban parts of South Africa, which included Gauteng and the Western Cape, were better prepared to accommodate online education (QA-A). She furthermore expressed her concern regarding the provision of online education in rural and semi-rural parts of the country:

It would be best if you did not attempt to enrol students in online programmes from Acorn Hoek, Modjadji and Kokstad. We already identified these parts of the country as places that will accommodate a blended mode of provision. So why would we market our online programme in these towns? If we cannot even sell these programmes in the correct areas and do not know where our strong points are, we (the institution) are not ready for online education.

The Manager at Institution B emphasised that the demographic profile of students significantly influenced the adoption of online learning by HEI. Therefore, Institution B decided to introduce digital elements into their curriculum in a staggered way. MAN-B explained that “for the lower levels, level 6 and level 7, maybe level 8, given the demographic profile of the students we are currently working with, more of a blended model seems appropriate”. MAN-B further explained that when the largest distance education provider in South Africa decided to go entirely online, students and staff members protested. Two weeks later, the provider adapted its teaching and learning approach. MAN-B provided a rationale for this:

They now have a trajectory till 2030 to move online progressively. Undergraduate degrees, the more diverse student body, will be blended; all the postgraduate programmes will be fully online. Other programmes that are more blended and correspondence based now will continue in that model. When a programme or curriculum gets renewed, the mode of delivery will be reviewed.

The quality assurer reiterated that the institution had to conduct a thorough baseline assessment to determine a marketing strategy for online education. The evaluation

had to be completed when the programme commenced in 2016. This strategy is still not in place, however. The IDD-A also reiterated that the third party marketed its programme in the wrong geographical areas. He said:

Our online programme is targeted at rural teachers that are ill-qualified. Most of them are in rural parts of South Africa. The third party do their marketing through Facebook. This means that they are not doing proper marketing. The person in deep rural areas does not even own a mobile phone.

The Instructional Design Director at Institution A commented that their current online programme should not be presented as an online one. The IDD-A explained his reasoning as follows:

The students in our online programme are not self-encouraged to complete the qualification. The Department of Education pays for their studies and forces these students to complete their studies. The students are not interested in the content of the programme. The only reason they finish the degree is to receive a salary increase and promotions.

REFLECTION ON QUALITY IMPLICATIONS:

The information highlights a critical consideration of the readiness of different areas in South Africa for online education. The quality assurer at Institution A emphasises the need for a nuanced approach, indicating that rural areas might be better suited for a blended mode of provision. The Manager at Institution B underscores the influence of the demographic profile of students on the adoption of online learning, suggesting that a gradual introduction of digital elements aligns with the needs and preferences of the student body. The importance of a well-planned marketing strategy, considering the target audience's unique needs and characteristics, is emphasised, as it directly impacts the success and quality of ODE. Additionally, the insight that some students may lack intrinsic motivation and engage in online programmes primarily for external rewards raises questions about the effectiveness of current online education strategies in fostering genuine learning outcomes.

6.3.2.2. FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS

The following second-order theme is addressed in this section

The aims and objectives of educational technology.

6.3.2.2.1. THE AIMS AND OBJECTIVES OF EDUCATIONAL TECHNOLOGY

The Instructional Design Director at Institution A explained that when evaluating technology in education, it was essential to consider various elements that could influence good educational practice. The “context in which education takes place, the target audience and the nature of the content...” (IDD-A) are essential factors to consider when evaluating the use of technology. The IDD-A further emphasised that it was not feasible to take a traditional paper-based programme, add a learning management system and other educational technologies, and think that was creating an online programme. Online education should consider the “context in which learning should occur and define the parameters in which it occurs. For whom is this happening? How does the typical learning look like...?” (IDD-A). According to IDD-A, the crux was that online programmes should be designed and presented based on the need for an online programme and not vice versa. The IDD-A further emphasised that institutions must determine whether their target audience was willing and able to study online.

Manager B explained that there would never be an ideal time to implement educational technology in teaching and learning. MAN-B emphasised:

This is the tricky thing. Whenever you want to change things, you wait until the old ones die off and introduce them. Everyone is ageing all the time, so you will never actually start to do something different.

Manager B further explained that the largest DE provider in South Africa adopted a pragmatic approach to incorporating educational technology into its teaching and learning initiatives. MAN-B emphasised that it made sense to integrate technology into teaching progressively, especially for those institutions that adopted an “open” distance learning policy. Institution B’s approach is not to say they are open to every student who wants to study. The policy states “we will provide distance education

opportunities of quality that are equivalent to what we offer to our campus-based students” (MAN-B). Since the policy of the largest DE provider in South Africa indicates that they are “open”, they face the dilemma of excluding students from learning opportunities as soon as the institution moved to a fully online education approach (MAN-B).

The Instructional Design Director at Institution A elaborated on the approaches to online learning in HEIs in South Africa. Institutions want to develop online programmes and fit all the parts of a curriculum into an online educational system. The IDD-A emphasised that this is not a desirable approach. The IDD-A explained his reasoning by using as example developing a programme for medical students. IDD-A emphasised that programme designers should first investigate what good teaching practice entailed. Programme designers should not decide beforehand whether a specific programme should be synchronous or asynchronous. For example, it is impossible to decide to train medical doctors online when it is believed to be a good idea. “We have to determine good teaching and learning practice for a person who wants to become a medical doctor” (IDD-A).

The IDD-A further elaborated on differentiated approaches to teaching and learning in an online environment: “Why don’t we turn around training for medical students by introducing online teaching and learning for theoretical modules? These online modules should only focus on mastering key concepts. Limited understanding is necessary”. After completing these modules, students could be allowed to commence with the practical part of the training. The practical modules should be presented in a face-to-face learning environment.

The IDD-A felt strongly about restructuring curriculums to determine where online learning could fit best. The IDD-A said, “...instead of arguing about the mode of delivery of programmes, we should rather determine the best mode of delivery for part or whole modules” (IDD-A). The IDD-A also said: “A student does not have to go to a classroom where a professor explains how body parts look”. The students can study this online. The IDD-A further acknowledged that there were certain aspects that students needed to learn in a classroom or laboratory.

Institutions, in the end, should only decide on a mode of delivery for a module, part of a programme or entire programme when considering various elements that could influence the mode of delivery. After that, we have the “privilege or maybe a big sword over our heads, to conduct thorough quality control” (IDD-A).

REFLECTION ON QUALITY IMPLICATIONS:

The results emphasise the importance of a thoughtful and context-specific approach to incorporating educational technology into teaching and learning. The focus on understanding the target audience's needs and the content's nature underscores the necessity for a nuanced and flexible strategy in online education. The call for institutions to restructure curricula and determine the most effective mode of delivery for specific modules or parts of a programme aligns with a student-centred and outcomes-focused approach, which, when coupled with thorough quality assurance, can enhance the overall quality of online distance education.

6.3.2.3. ACCESSIBILITY

The following second-order themes are addressed in this section

- Access to learning materials.
- Access to connectivity.
- Access to the internet.

6.3.2.3.1. ACCESS TO LEARNING MATERIALS

Manager B explained that disaggregating material became difficult when presenting programmes through learning management systems or massive open online courses (MOOC). MAN-B nevertheless acknowledged that it depended on how institutions designed a module or a programme. MAN-B furthermore conveyed that if institutions knew their target audience and recognised their connectivity challenges, they would need to design and use their LMS to accommodate these students. It is essential to consider whether these students have access to connectivity or cannot afford access. Consequently, these students may benefit from being able to download material and work offline. Access to connectivity remains a challenge in a third-world country like South Africa. MAN-B elaborated on this:

In the first-world countries where you get free Wi-Fi on buses and in taxis and airports and pubs and things like that, and [have] relatively good access, it is not so much an issue where you must be online to read something. The nice thing about that is when you read something, you could be doing an activity simultaneously. Whereas if you must go offline, you will read something, do an activity offline, you will upload your work and then you need to wait for feedback.

Manager B felt that students should still be able to download resources and look at them in their own time and space without logging into an LMS. MAN-B believed that the option to download material, especially readings, should still be available in future built online courses:

Because I read at different times and places, I would read on an aeroplane, for example. I read at an airport where I do not always have connectivity. I will read whilst I am waiting for a meeting to happen. And I cannot always log in, with connectivity, into the website. If I could download it, I can read it on my phone and any place.

REFLECTION ON QUALITY IMPLICATIONS:

Manager B's insights highlight the importance of adapting online education to the specific needs and challenges of the target audience. Acknowledging connectivity challenges in certain areas necessitates a flexible approach where learning management systems design accommodates offline access. This consideration is crucial for ensuring equitable access and a positive learning experience, ultimately impacting the quality of online distance education by making it more inclusive and user-friendly in diverse contexts.

6.3.2.3.2. ACCESS TO CONNECTIVITY

Manager B explained that the distance education programmes at Institution B were designed in such a way as to accommodate students who struggled to access connectivity. MAN-B again emphasised that the target audience determined the

delivery mode that best fitted a programme or module. Institutions should consider access to connectivity, but whether students can afford it should also be considered.

MAN-B elaborated on this topic by referring to a study by Hulsmann (2016) for the Commonwealth of Learning. The study specifically focused on the cost of online learning in developing countries. MAN-B said that “the conclusion of his study, which I agree with because it supports my own experience, is that now we probably need more blended models than fully online ones until connectivity is stronger”. MAN-B explained that although the Industry Compliance and Certification Authority of South Africa (ICCASA) reports that although anyone could get a 4G connection anywhere in the country, there is a difference between a solid and a weak 4G connection. This limits the user’s ability to perform certain functions. MAN-B supported his argument in saying:

Having travelled all over the country for contact sessions and examinations, the strength of the signal goes down considerably as soon as I drive out of Pretoria or out of central Durban or Cape Town. As soon as I get into those more rural areas.

The Instructional Design Director at Institution A indicated that students enrolling in distance education programmes must declare that they have access to the internet and a computer or do not have access to it. The IDD-A further indicated that top management was responsible for removing students from a DE programme if they did not have the means to access a computer or the internet. The IDD-A explained that since ICT play a vital role in some of their programmes, students were bound to fail if they could not access a computer or the internet. Therefore, the Institution has the responsibility to remove such students from their programmes.

On the contrary, HOSLP-A believed most students have ICT access but do not know how to use it. The HOSLP-A said that “most of the time we think that students do not have access to ICT, which is not the case. They have more than enough access. The problem is that they do not understand how to use ICT...”.

REFLECTION ON QUALITY IMPLICATIONS:

The insights from Manager B and the Instructional Design Director underscore the critical importance of understanding and addressing connectivity challenges in the context of ODE. Recognising that a substantial portion of students may face issues related to internet access or affordability highlights the need for flexible and inclusive programme design. Moreover, the emphasis on blended models and consideration of ICT literacy speaks to a holistic approach to online education beyond mere access, ensuring that students can effectively engage with digital learning resources. This holistic consideration contributes to the quality of ODE by promoting accessibility, equity, and the practical relevance of the programmes to the diverse needs of the student body.

6.3.2.3.3. ACCESS TO THE INTERNET

Manager B also elaborated on the cost of being online, as mobile data in South Africa is expensive. “If you look at a high-definition video of about an hour, about a gigabyte of information should be downloaded” (MAN-B). MAN-B confessed to paying R1 000 per month just for data. In addition, MAN-B emphasised that that was not affordable for the average student. According to MAN-B, the government was committed to engaging with service providers to reduce data costs. MAN-B mentioned that “it is now almost becoming a human right that you should have access to connectivity, but specifically for education purposes”. Institution B has agreements with certain mobile data service providers that allow limited access to the institution’s learning management system free of charge. MAN-B emphasised that more similar agreements were required in South Africa. “When we have got those in place, we could get a bit more online” (MAN-B).

From a student perspective, one of the significant issues relating to online education in South Africa is access to technology. LECT(A)-B indicated that “...there will always be students that will tell you that they do not have access to the Internet”. LECT(A)-B explained that even her face-to-face students told her they did not have the data to access the LMS. LECT(A)-B indicated that if access to the internet and technology was an issue for face-to-face students, it was probably even worse for DE students.

REFLECTION ON QUALITY IMPLICATIONS:

The high cost of internet services in South Africa can be a barrier to access for many students, limiting their ability to participate fully in online learning. This cost-related barrier further exacerbates educational inequalities and hampers the overall quality and inclusivity of online education in the country.

6.3.2.4. INTERFACE DESIGN

The following second-order theme is addressed in this section

- User-friendly and easy-to-use user interfaces.

6.3.2.4.1. USER-FRIENDLY AND EASY-TO-USE USER INTERFACES

A learning management system could provide a lecturer or facilitator with opportunities to establish their online presence. In this case, online presence includes indirect and direct student communication through an LMS (QA-B). Therefore, the design of an LMS is essential since the information of the LMS should provide students with guidance and clarity.

The Instructional Design Director explained that their third party provided the institution with instructional design guidelines. These guidelines are known as the quality matters framework. Unfortunately, it is unclear how the Quality Matters framework supports interface design. It is also unclear if the evaluation of interface design forms part of the eight general standards of the Quality Matters rubric (Quality Matters, 2020). Unfortunately, the CHE's good practice guidelines for HDE do not elaborate on interface design for online education either, as these guidelines aim to support blended/hybrid DE practices (CHE, 2014).

REFLECTION ON QUALITY IMPLICATIONS:

The importance of a well-designed LMS for establishing an effective online presence and facilitating communication is highlighted. However, the lack of clarity regarding how existing frameworks, such as Quality Matters, address interface design raises concerns about the consistency and comprehensiveness of guidelines in ensuring quality in ODE. Clear and comprehensive frameworks that explicitly incorporate considerations for interface design are crucial for enhancing the overall quality and user experience of online learning environments.

6.3.3. INSTRUCTIONAL DESIGN AND PEDAGOGICAL ELEMENTS

First-order themes

- Clarifying expectations
- Personalisation
- Learning resources
- Learning environments
- Student-centeredness
- Communication and interactivity
- Assessment

INSTRUCTIONAL DESIGN AND PEDAGOGICAL		ELEMENTS OF THEORETICAL FRAMEWORK				
CLARIFYING EXPECTATIONS		INSTITUTIONAL	TECHNOLOGICAL	INSTRUCTIONAL DESIGN AND PEDAGOGICAL	STUDENT SUPPORT	FACULTY SUPPORT
• Learning content		FOT INSTITUTIONAL AFFAIRS	DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE	CLARIFYING EXPECTATIONS	GENERAL SUPPORT	GENERAL SUPPORT
PERSONALISATION		SOT				
• Institutional flexibility		FOT ADMINISTRATIVE AFFAIRS	THE FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS	PERSONALISATION	TECHNICAL SUPPORT	TECHNICAL AND PEDAGOGICAL SUPPORT
• Learning artefacts		SOT				
LEARNING RESOURCES		FOT RESEARCH	ACCESSIBILITY	LEARNING RESOURCES	ACADEMIC SUPPORT	
• Learning scenarios		SOT				
• Content development		FOT REPUTATION	INTERFACE DESIGN	LEARNING ENVIRONMENTS		
• Quality-assuring learning resources		SOT				
LEARNING ENVIRONMENTS		FOT COSTING		STUDENT-CENTEREDNESS		
• Online learning environments		SOT				
STUDENT-CENTEREDNESS		FOT		COMMUNICATION AND INTERACTIVITY		
• How students learn		SOT				
COMMUNICATION AND INTERACTIVITY		FOT		ASSESSMENT		
• Student interaction		SOT				
• Alternative communication mediums						
• Learning management system use						
ASSESSMENT						
• Assessment strategy						
• Student feedback						

6.3.3.1. CLARIFYING EXPECTATIONS

The following second-order theme is addressed in this section

- Learning content

6.3.3.1.1. LEARNING CONTENT

According to the Instructional Design Director at Institution A, one of the great strengths of online learning is its ability to present content in differentiated ways. These alternatives could enhance effective learning and are efficient alternatives for traditional textbook reading. IDD-A emphasised that QA frameworks should not penalise lecturers for using a wide range of differentiated resources. There should be opportunities for students to use a variety of resources. “This is one of the elements of online learning that should be improved to achieve successful teaching and learning” (IDD-A). The online learning environment should guide students through different learning resources and provide support on how to learn. This approach would enable students to become lifelong learners.

The Instructional Design Director at Institution A felt that “no resources stipulate that online learning is only conducted online”. IDD-A explained that there is nothing wrong with referring students to multiple academic sources in a particular module. Students should be taught how to use the content of a module and that the content itself should not be taught (IDD-A). Therefore, teaching should focus more on the application of the content.

This Instructional Design Director emphasised that it was imperative to “review the nature of content in a curriculum to determine if the outcomes are being met”. This comment was significant since the nature of the content of a programme would determine how students engaged with the content and how students would be assessed. The nature of the content would also influence the programme's mode of delivery. The IDD-A provided the following example to illustrate the effect the nature of the content has on programme delivery:

Medical students should learn how to remove an appendix. How would I (the lecturer) know that the student can remove the appendix successfully? I am going to watch the student doing it. When will I allow the student to proceed with the procedure? When he understands the theory of removing an appendix. The practice and testing of removing the appendix should take place face-to-face. This cannot be done online. Maybe you could build a simulation that will allow the student to practice the procedure before attempting it.

The aforementioned example illustrated that some curriculum components could be completed face-to-face, and some could be completed online. Regardless of the mode of delivery, educators should still determine if students can successfully reach the intended learning outcomes and objectives. The example above shows that, in this case, theoretical knowledge and simulation could be presented in an online environment. The practical component of the curriculum should be presented in a face-to-face setting. IDD-A emphasised that differentiated teaching and learning approaches in the same curriculum were unclear and required more attention. IDD-A further explained that the providers were also responsible for testing students' graduate attributes.

It was unfortunate that lecturer(A)-B believed the expectations of DE programmes were immoral. Subsequently, LECT(A)-B explained that her face-to-face students struggled with her module despite attending classes. Therefore, LECT(A)-B stated that specific components of her DE module should be taught face-to-face. This lecturer believed the institution's DE students were not self-directed learners who took responsibility for their learning. It appeared that the same level of support was not provided to DE students as face-to-face students, although the institution knew the DE students needed more assistance. Therefore, LECT(A)-B felt that the credibility of the DE programme at Institution B was compromised.

Although online learning has the potential to present content in various formats, it does have challenges. For example, one of the challenges that HOSLP-A identified was that students had access to a "maze of information" (HOSLP-A). Therefore, it is

imperative to structure content appropriately and provide sufficient guidance to students.

REFLECTION ON QUALITY IMPLICATIONS:

The Instructional Design Director highlights the strength of online learning in presenting content in differentiated ways, emphasising that quality assurance frameworks should encourage a variety of resources. However, concerns arise as some educators express reservations about the expectations and support for online learners, raising issues about the consistency of support across different modes of education. This underscores the need for comprehensive guidelines and support systems to ensure the effectiveness and credibility of ODE.

6.3.3.2. PERSONALISATION

The following second-order themes are addressed in this section

- Institutional flexibility
- Learning artefacts

6.3.3.2.1. INSTITUTIONAL FLEXIBILITY

According to the distance education policy of Institution B, their programme offerings are managed within a "...customised open, flexible learning academic model" (DEP-B). DEP-B further elaborated that they expected students to complete all their modules within a specific time. Students cannot fail a year, only modules. Students can work at their own pace. The institution provides students with their learning material in a scaffolded manner. "The learning model is uniquely flexible in that students can enrol at any time of the year and write examinations when they choose" (DEP-B). Students can write examinations twice a year. They can write as many or as few examinations as they wish in one examination sitting. "The only proviso is that they (students) finish the programme in the allotted maximum time by submitting two formative assessments and passing a summative assessment in each of their modules" (DEP-B). This assessment approach provides students with maximum flexibility. Students should, therefore, be able to remain in the programme even if personal circumstances force them to cease their studies for a while (DEP-B).

The online programmes Institution A presents are offered in a “carousel” academic model (TSP-A). Modules in this model are offered over 5 to 10 weeks (TSP-A). The programme guide for these modules stipulates: “Students who have to repeat modules will have the opportunity to repeat these modules in additional study year(s) only. The modules are offered in a “carousel mode”, and modules are repeated every second year” (PG-A).

REFLECTION ON QUALITY IMPLICATIONS:

The contrasting academic models between Institution B's flexible, self-paced learning approach and Institution A's more structured "carousel" model reveal diverse strategies in DE. Institution B's flexible model prioritises adaptability and individual pacing, allowing students to enroll at any time and offering multiple examination opportunities. On the other hand, Institution A's "carousel" model introduces a more regimented schedule with repeated modules every second year, potentially providing a more structured but less flexible learning experience. The implications on quality would depend on how well these models align with the diverse needs and preferences of the students and the effectiveness of the support mechanisms in place.

6.3.3.2.2. LEARNING ARTEFACTS

The Instructional Design Director reported that more learning artefacts were required in online learning programmes. Learning artefacts could create the possibility for learners to personalise their learning experiences. Students should moreover have the option to use additional resources to support their learning. The IDD-A used the following example to define a learning artefact:

Professor X is busy teaching a certain part of his Chemistry module. The students are struggling with the content. This is because they do not understand the content. A learning artefact could be developed that could assist the student with acquiring the foreknowledge of the knowledge, or I can build a learning artefact that could explain the content to students.

Subsequently, the Instructional Design Director decided that more learning artefacts were necessary in their online programmes. The IDD-A said: "The way our learning management system presents information is very boring. Therefore, we decided to build learning artefacts using Articulate Storyline, which will better explain the content to students and interactively assist the student in mastering the content". The learning artefacts should create clearer learning pathways and allow students to interact with learning content. Students should be able to interact with the learning artefact content. This institution used Articulate Rise and Articulate Storyline to build their learning artefacts (IDD-A).

REFLECTION ON QUALITY IMPLICATIONS:

The emphasis on developing more learning artefacts in online programmes, particularly using interactive tools like Articulate Storyline, suggests a proactive approach to improving the quality of online distance education at Institution A. This strategy aims to enhance content clarity, student engagement, and interactivity, potentially contributing to a more effective and engaging learning experience.

6.3.3.3. LEARNING RESOURCES

The following second-order themes are addressed in this section

- Learning Scenarios
- Content development
- Quality-assuring learning resources

6.3.3.3.1. LEARNING SCENARIOS

Manager B explained that lecturers attempted to create learning scenarios to support comprehension, critical thinking and skills building. Unfortunately, as MAN-B elaborated, many distance learning materials are presented similarly to traditional lectures. These lectures and materials usually offer information in the following way: "Here is the definition by person X. Memorise this definition and regurgitate it in an examination" (MAN-B). It is rote learning. Educators must ask whether it is necessary to circumscribe information in a modern era, when students can access information from various devices (MAN-B, p. 10). MAN-B furthermore added: "Educators have the

responsibility to develop people’s ability to look at authentic situations, make sense of it and come up with solutions and problems”.

The Instructional Design Director explained that the use and application of appropriate learning scenarios were associated with educators’ teaching methodologies. “Educators today are teaching as educators were teaching 100 years ago” (IDD-A). IDD-A further explained that redesigning programmes was the secret that could ensure the successful implementation of learning scenarios. The IDD-A envisioned the following approach:

Assist lecturers in approaching their modules with a renewed vision. Lecturers should identify what the critical information is that students should master. Put this into your technology platform. Give the students enough tools to work through the content and master it. When you facilitate your class, focus on what students have learned during their learning journey and what it could mean to them in the future.

Manager B further elaborated that technology could assist the teaching and learning approach mentioned above by providing students with short video clips, scenarios, and case studies. Students would then be exposed to real-life examples and tasked to analyse the scenarios, determine different strategies, and determine the impact of the various outcomes. “So, then it becomes not so much about memorising a whole lot of information that some expert has put together” (MAN-B). The information experts provide is still essential as it should be used to justify feedback. The focus should remain on the application of knowledge. MAN-B further explained that in many ways educators presented information in a medieval way by focusing on a fixed body of knowledge that students must learn. However, MAN-B emphasised:

If you look at the progression from Confucius through to Dewey, Piaget, and Vygotsky, there is a growing realisation that the teacher’s role must change. So, the learner’s role must change, and it must be more problem-based.

REFLECTION ON QUALITY IMPLICATIONS:

As Manager B and the Instructional Design Director discussed, the emphasis on shifting teaching methodologies and incorporating more problem-based learning scenarios in ODE suggests recognising the need for a more contemporary and interactive approach. This approach aims to move beyond traditional rote learning, leveraging technology to provide students with real-life examples, case studies, and scenarios that encourage critical thinking and skill development. This shift can enhance online education quality by fostering a more engaging and application-oriented learning experience.

6.3.3.3.2. CONTENT DEVELOPMENT

The Curriculum Development Expert at Institution A (CDE-A) explained that the institution employed subject matter experts (SMEs) to write the content of their modules. The unit responsible for the online delivery of the programmes does not hire academic staff full-time. CDE-A further clarified that the SMEs worked closely with the curriculum designers of the institution. The curriculum designers assist the SMEs with incorporating distance and online methodologies into each module. The curriculum designers also help the SMEs with the assessment components of the modules. The following extract explains the relationship between the SMEs and the CDEs: “It is a collaboration. The SME focuses on the content. I focus on the distance and methodology aspects of the module. I will also guide the development of activities in the modules and our approach to assessment” (ID-A).

The Curriculum Development Expert emphasised that the content of all the modules for the institution’s blended distance programme was similar to the online version of the programme. ID-A explained that, unfortunately, their online courses were imitations of the courses developed for their blended contact-based offerings. ID-A said that “the curriculum designers, together with the subject matter experts, develop the learning guides for our blended contact-based offering. We then need to use the existing learning guides and convert the content for online learning”.

REFLECTION ON QUALITY IMPLICATIONS:

The collaboration between SMEs and curriculum designers, as described by the Curriculum Development Expert at Institution A, highlights the importance of integrating content expertise and effective online methodologies in the development of ODE. However, the challenge of adapting content from blended contact-based offerings for online courses raises concerns about the potential limitations in optimising the online learning experience, suggesting a need for more tailored approaches in online curriculum development.

6.3.3.3.3. QUALITY-ASSURING LEARNING RESOURCES

The Quality Assurer of Institution B indicated that the institution commences with programme reviews in the third year of a five-year business cycle. Therefore, new learning materials are only introduced every five years. This notion aligns with national accreditation cycles.

The Curriculum Development Expert reported that Institution A reviewed its material every three years. This is in line with the institutions' policy. Institution A developed QA checklists to ensure that all the stakeholders involved in developing learning materials adhere to specific quality standards. The QA-A indicated that Institution A's learning material was reviewed internally and externally according to criteria set by the institution. CDE-A furthermore elaborated on the institution's QA framework for materials development:

When I started working here, the framework already existed...we adapted the framework continuously. It is not a static framework. We update the framework if we identify new information that must be included and remove outdated information. If I review the policy, I recognise many of the CHE's guidelines in our policy...maybe this formed the foundation for our policy.

Manager B stated that various criteria could be used to evaluate online resources. These criteria are accuracy, the author's reputation or the institution's, the standard of technical production, accessibility, and fitness for purpose (MAN-B). MAN-B further

added that although these criteria could assist educators in making informed decisions regarding the use of information (information literacy), educators needed to determine how the resources could support their teaching (pedagogical literacy) (MAN-B). MAN-B elaborated that educators needed to determine “how the resource could fit into the way that you teach in your course? What are the underlying assumptions about how learning takes place?”.

REFLECTION ON QUALITY IMPLICATIONS:

The alignment of program reviews with national accreditation cycles, as described by the Quality Assurer of Institution B, underscores the importance of systematic and periodic evaluations to ensure ongoing quality in ODE. As mentioned by the Curriculum Development Expert at Institution A, the emphasis on adapting and updating quality assurance frameworks reflects a dynamic and responsive approach necessary for maintaining the relevance and effectiveness of online learning materials.

6.3.3.4. LEARNING ENVIRONMENTS

The following second-order theme is addressed in this section

- Online learning environments

6.3.3.4.1. ONLINE LEARNING ENVIRONMENTS

According to Manager B, the flexibility of the distance education environment is crucial for success. MAN-B explained this concept through the following example:

...I read at different times and places. I would read on an aeroplane, for example. I read at an airport where I do not always have connectivity. I will read whilst I am waiting for a meeting to happen. And I cannot always log in with connectivity into the website where if I could download it, I can read it on my phone at any time and any place.

Manager B went on to explain that “we could create the spaces for students to learn in different styles, but we cannot force them to do it because we realise some people could learn these things without that engagement”. MAN-B further elaborated on this

topic by admitting that “there are some people, like myself, who are happy to learn independently, read, think about it, come up with my own ideas and find all the forced group work discussions intensely annoying”. MAN-B believes our vision for online learning should resemble the Open Universities’ mission concept when they first started, namely to be open to people, places, and ideas. MAN-B emphasised that all the relevant parties should be open to different ways of teaching and learning.

Institution B expects students to use the institution’s learning management system to complete specific academic tasks. Several lecturers and tutors nevertheless indicated that students were not using the learning management systems. A tutor stated that “they (the students) are not engaging at all. They will prefer to be on your email” (TFG-B). LECT(A)-B provided the following explanation:

The problem from the student's perspective and students from contact is two-fold. The one is a lot of them tell me that the learning management activities are a repetition of what they have done before, and the other thing is you always sit with the problem of technology.

Lecturer(C)-B explained: “It does not matter what we do on the LMS, the student’s attitude towards the course and the outcomes that it wants to reach will not be any different”. In this case, the lecturer may never reach an interactive group in an LMS or achieve other goals of an LMS. LECT(C)-B further indicated that “...we can sing and dance on the LMS. If the students are not going to use it and if the students do not want to use it...” then the use of the LMS is not practical.

In addition, Lecturer(A)-B felt that the institution’s learning management system was not intuitive, although she agreed that it could do a good job. The lecturer felt that the LMS was not user-friendly. The lecturer furthermore expressed her concern regarding the use of technology in DE:

I honestly do not know, and I do not want to tell you what I think about the role of technology – I do not believe in it, not with the calibre of students that we attract. We do not have self-directed learners or students, and there are no consequences if they miss something on the LMS, even if there are marks involved. This year I had the experience

that one of my contact students told me that he would not do any of the activities on the LMS because he knows the content, and he does not mind forfeiting 5%. He does well enough in the assignments to pass. Then I said to him 'It's your choice'.

REFLECTION ON QUALITY IMPLICATIONS:

The comments from Manager B highlight the importance of flexibility in the online learning environment to accommodate diverse learning styles and preferences. However, the concerns raised by lecturers and tutors at Institution B regarding students' limited engagement with the LMS and its usability point to potential challenges in realising the full potential of ODE. Addressing these issues, such as improving the user-friendliness of the LMS and providing adequate support for technology use, becomes crucial for enhancing the overall quality of online education at the institution.

6.3.3.5. STUDENT-CENTEREDNESS

The following second-order theme is addressed in this section

- How students learn

6.3.3.5.1. HOW STUDENTS LEARN

Manager B explained that there were two types of students enrolled in online courses, those who preferred to work independently, and those who learned through engaging with their peers. Therefore, educators should "...be careful to pretend that there is a right way to teach and learn online" (MAN-B). MAN-B further emphasised that it was vital to create spaces to accommodate different teaching and learning needs. However, MAN-B cautioned that people could rarely achieve anything in the "real world" not engaging with other people. MAN-B believed authentic learning activities should be created to simulate "real-world" scenarios. This would support students' understanding of group work in a work context. There are things that an individual could learn pretty much how they want to. It is, therefore, essential that spaces are created that could support students' different learning style needs. MAN-B cautioned that educators should be careful not to "cram everybody into a one-size-fits-all; there

is a right way to teach online scenario” (MAN-B). MAN-B emphasised that the Open University's mission was to be open to people, places, and ideas when they started. “I think that should be the same vision for online learning. We are open to different ways of teaching and learning” (MAN-B).

The Curriculum Development Expert at Institution A explained that most students enrolled in programmes at Institution A were adult learners. She further elaborated that “99% of these students were working full-time. They have much experience and want to improve their existing qualifications (CDE-A). Therefore, module content presented to students builds upon existing student experiences. “It is important to us that students are actively engaged in the learning process” (CDE-A). CDE-A continued that the traditional lecturing approach was not appropriate for these students. Active learning principles form part of the teaching and learning process. Their constructivist approach expect students to engage continuously with learning material and facilitators (CDE-A). Institution A’s learning materials are activity-based and focus on reflection. This approach allows students to engage with the content actively. The institution’s learning material focuses on the workplace and how students could improve their practice. Although they regard acquiring theoretical knowledge as necessary, students must know how to use it practically (CDE-A). Their assessments, subsequently, focus intensely on performance-based tasks (CDE-A).

Lecturer (A)-B contributed that although the module she was responsible for was theoretical, she attempted to present the content practically. Students should be able to analyse the content and apply their skills to real-life scenarios. LECT(A)-B said the following:

I will never ask them to give me the definition of a variable. Instead, I'd give them an abstract to read and then ask them to identify the dependent and independent variables. I would ask questions like: Why do you think the sample was selected according to a specific set of criteria? So that they understand how these things work.

REFLECTION ON QUALITY IMPLICATIONS:

The insights from Manager B underscore the importance of flexibility in online teaching and learning, recognising the diversity in students' learning styles and preferences. This aligns with the emphasis on active learning and constructivist approaches at Institution A, catering to adult learners who seek to apply theoretical knowledge to real-world scenarios. The emphasis on creating varied learning spaces and incorporating authentic, practical tasks in assessments contributes positively to the quality of ODE by acknowledging the diverse needs and experiences of the student population.

6.3.3.6. COMMUNICATION AND INTERACTIVITY

The following second-order themes are addressed in this section

- Student interaction
- Alternative communication mediums
- Learning management system use

6.3.3.6.1. STUDENT INTERACTION

Lecturer (D)-B explained that she used the community of inquiry framework (Garrison, 2016) as a guideline for interacting with students. This model suggests that online participants should maintain three presences to ensure effective communication in an online environment. This includes a cognitive, teaching, and social presence. LECT(D)-B further elaborates that:

...the social presence in our undergrad is difficult to sustain. Because, as I said, they would rather talk to you face-to-face or make a WhatsApp group, and they speak to one another on those groups off this site.

The Tutor support person at Institution A also agreed that the “social, emotional and academic components of learning should be in equilibrium” for active and engaged learning. A Tutor from institution B indicated that students did not participate in the LMS platform. Another tutor further reported: “You will find one, two, three students communicating, and you come in, and you find rest of [the] students don't; it seems

like that they do not understand that they are to use the learning management system.” (TFG-B). Some tutors also indicated that students were “not engaged at all”. Various lecturers and other tutors also commented on students’ non-participation in the institution’s LMS. A tutor indicated that students only used the discussion board in the LMS to ask questions but did not participate in any discussions.

In turn, Lecturer (B)-B emphasised that the discussion boards in the learning management system were underutilised. This lecturer thought it was because DE students did not have regular access to the internet. A tutor from Institution B agreed with this lecturer and explained that many students did not use the learning management systems because they had connectivity issues or limited access to Wi-Fi. When the lecturer was asked what she could do to encourage students to be more active online, the response was the following:

...perhaps utilise social media and link it up with Blackboard...I do not know if that is possible?...but something like a, everybody has got WhatsApp...And I was wondering if, and, you know, everybody has got their phone with them.

A tutor emphasised that tutors were generally frustrated that students did not use the LMS to communicate. The tutor said that “...whatever the questions that they might ask will benefit the rest of the other group. You explain the assignment, and you give the summary of a module...there is nothing; they are just quiet”.

REFLECTION ON QUALITY IMPLICATIONS:

These results emphasise the importance of addressing social and connectivity challenges in ODE. Strategies to enhance the appeal and usability of learning management systems and considerations for alternative communication channels are imperative. The findings prompt a reevaluation of the digital infrastructure and support mechanisms to ensure that the online learning environment effectively nurtures social interaction, engagement, and collaboration, thus contributing to the overall quality of education in the online distance setting.

6.3.3.6.2. ALTERNATIVE COMMUNICATION MEDIUMS

The facilitators at Institution A mainly communicate with their students using WhatsApp. This includes text and voice notes (TSP-A). TSP-A indicated they were not using the discussion groups tool in their LMS for general communication. She said the discussion groups tool "...are used for communication between students regarding a specific topic. Therefore, most communication occurs on WhatsApp". The tutors from Institution A should be available for two hours per day, six days a week (Monday to Saturday) (TSP-A). Students are encouraged to communicate with tutors during the pre-determined time every day. They can communicate with tutors outside the predetermined time, but tutors can respond to students' questions at their earliest convenience (TSP-A). Tutors could also respond to students' inquiries at their earliest convenience on a Sunday. The TSP-A indicated that the tutors were encouraged to use WhatsApp web (TSP-A). In addition, the TSP-A said that it was more effective to use the functionalities of a computer when providing feedback to students through WhatsApp Web. The TSP-A creates different groups on WhatsApp, and the facilitators are allocated administrator access (TSP-A). Students receive the links to the WhatsApp groups via SMS, which enables them to access the group. The facilitators also form part of a WhatsApp group that the TSP-A uses to communicate with them. When the facilitators encounter a problem they cannot resolve, they ask the TSP-A for assistance. The TSP-A would review the issue in the specific WhatsApp group (TSP-A).

The researcher asked the TSP-A why they were not using the institution's LMS for tutor communication and training. TSP-A responded: "We are busy developing an LMS facilitators training module. The TSP-A further elaborated that the tutors "...should understand how to facilitate adult learning, more specifically in an online environment. How do you address your audience? We also assist them with a few tech tools". The technological tools include WhatsApp Web, Zoom, and tools in their LMS. Their training includes showing the tutors how to make videos and communicating with the students using these tools. In addition, their LMS training aims to assist the tutors to "search for content, show how to clear student attempts, how to assess, how to administer the grade book and how to make announcements" (TSP-A). The TSP-A also provides LMS training online. She frequently facilitates Skype

meetings with the tutors, showing them how to work with the abovementioned tools (TSP-A). The needs of the tutors determine the frequency of these meetings. The TSP-A explained that after conducting a recent needs analysis, the tutors indicated they wanted to learn more about facilitating group discussions more effectively (TSP-A). The tutors also said they needed more guidance in using the rubrics grading function of the institution's LMS. The institution upgraded to the latest version of the LMS, and therefore the grading tool was updated.

A maximum of 50 students are allocated to one facilitator per module (TSP-A). Institution A mostly uses WhatsApp to provide support to students. TSP-A explained as follows:

WhatsApp groups work better with the type of students that we enrol. The students do not have to be online most of the time. They only must be online when submitting work. The students should be able to work offline.

The tutors employed by Institution A are situated throughout South Africa. Therefore, Institution A is providing online training to these tutors. They are using various mediums for training purposes. TSP-A explains that "...the majority of our training takes place online. They are webinars". Furthermore, TSP-A explained that she used Skype to communicate with the tutors. She also admitted to using Google Classroom to communicate with tutors. TSP-A furthermore indicated: "All the latest information is shared on Google Drive. The tutors will receive email notifications when new content is added" (TSP-A).

Institution A has a blind and a deaf student enrolled in their online programme (TSP-A). The educational videos created for the programme are transcribed (TSP-A). Therefore, the deaf student can utilise these videos. Both the deaf and blind students are allocated to the same facilitator to ensure consistency when communicating with these students (TSP-A). The blind student prefers email communication (TSP-A). The student finds it difficult to follow the communication in the WhatsApp groups.

The tutors communicate essential information like activity completion due dates and assessment submission dates to the students (TSP-A). On the other hand, the TSP-A's programme outlines for all modules are determined and communicated to the tutors (TSP-A). The programme outline should guide students in planning their learning during the week. The recommended learning programme aims to support students in scaffolding their learning.

REFLECTION ON QUALITY IMPLICATIONS:

While the reliance on WhatsApp aligns with the characteristics of the student demographic, the balance between external communication tools and the institution's LMS requires careful consideration. The decision to use various external tools like Skype and Google Classroom alongside the institution's LMS raises questions about the consolidation of resources and potential redundancy. Given students' offline work preferences, choosing WhatsApp for general communication might be pragmatic, but it poses challenges in centralised and organised communication within the educational approach.

6.3.3.6.3. LEARNING MANAGEMENT SYSTEMS USE

The researcher asked the Tutor support person at Institution A what the students did on the institution's LMS. The TSP-A indicated that the students submitted their assignments and participated in discussions on the LMS (TSP-A). The TSP-A further said: "There are videos that the students should watch, and the students can access readings. Everything is downloadable...". Although the discussion could occur on the institution LMS, the TSP-A indicated that "...most of these sessions are conducted on the WhatsApp groups".

Lecturer (B)-B said they believed that students feared using technology and felt uncertain about using the LMS, therefore tools such as the discussion board were underutilised. LECT(B)-B further emphasised that an application such as WhatsApp could support communication between tutors and students more effectively, primarily because it supports recording voice notes. LECT(B)-B indicated: "We are going to get them (the students) far more involved if we use something like that or, like Viber or

WhatsApp or um... yeah, not necessarily Messenger, but I think something like Viber.”. LECT(B)-B emphasised that if “... we are not going to listen to the needs of our students, then we are going to lose them”. LECT(B)-B further explained that the institution should “...adapt and see how we can manage by doing something, you know, with Viber or WhatsApp...”.

A tutor said he believed the reason “...they (the students) post personally to presenters is that they are not, some of them are not confident”. Therefore, students know they are not exposing themselves to criticism from other students. Another tutor emphasised that “...maybe also we should boost their morale. I do not know how you can do that so that they feel confident that they can go to the learning management system and post any question on the discussion board”. LECT(G)-B agreed with the tutors (TFG-B). LECT(G)-B confessed to believing that students’ communication preference was influenced by their confidence to communicate in a group. Students would therefore post their questions on the LMS if they did not mind that all the students viewed the post. However, they instead email the lecturer or tutors if they do not want all students to see their posts. LECT(G)-B said: “I think it depends on the students. Sometimes they do not want to put something on the discussion board...”. They might feel, “I am stupid, I do not know how to answer this”, you know, and then they send it privately”.

Lecturer (C)-B indicated that he did not believe most students wanted to interact on the LMS. He elaborated that if “...your aim is only to get a paper from this programme, and to complete this programme most effortlessly, you do not want to interact. You want answers”. LECT(C)-B explained that students’ demeanour was a problem and “...the things that usually happen in an interactive session is [sic] very shallow. There is no deep thinking, and there is no deep reading before the interactive session”. According to LECT(C)-B, the institution seemed content with lacking engagement and deep learning in modules. The institution appeared satisfied if students only submitted their assignments on the LMS. LECT(E)-B believed that students’ poor online participation could result from their inability to use the institution’s LMS effectively.

Lecturer (D)-B emphasised that lecturers’ use of an LMS influenced students’ use of the system. LECT(D)-B said that “...not all the lecturers in our department are as

familiar with the LMS, so some students would say it is confusing because not everybody is using the same amount of time on the LMS.”. LECT (D)-B further emphasised that students tended not to participate in online discussions if the activities did not count as marks. LECT(D)-B stated that “...even if we just ask them, please introduce themselves and it is not counting towards the marks, they do not.”. LECT(D)-B mentioned that the conversations she had seen on the LMS between the students and their peers and between students and the tutor were fantastic. She actually intends to write an academic paper on this. LECT(D)-B said: "There are such insightful conversations. Yes, they read the stuff: especially one activity the tutor gave them about teacher perspectives. They need to complete a questionnaire. Nevertheless, they had wonderful contributions...”. LECT(D)-B also mentioned that the “LMS has a place, but if people are not aware of what is going on or as comfortable or do not have data, then...”.

Lecturer (C)-B confirmed that students needed to use the institutional LMS more effectively, especially for communication. LECT(C)-B said the following about the tutor’s involvement in his module:

I just think that there are not many resources to sustain it. The tutors already have full-time jobs, and the quality of feedback will be a 9:00 in the evening type of response. Their job is not to assist the students on a full-day basis.

The academic support person assisting LECT(D)-B “helps a lot with announcements and guiding the students”. LECT(D)-B and her academic support person created avatars and include them when communicating with students. LECT(D)-B believed that “creates some sort of a presence”. Whenever the lecturer or academic support person sends a message, they include their avatar. LECT(D)-B emphasised that “...it takes a lot of admin, but I think the social presence is extremely important, even if not more important than the cognitive and teaching”. LECT(D)-B professed to believe the students wanted to feel part of the group, therefore the lecturers sent regular reminders and motivational messages to the students. LECT(D)-B shared that unfortunately only a small number of students in her module participated online. The reason for the poor participation is not known. LECT(D)-B suggested that online

communication through an LMS should be coupled with other forms of communication to reach more students.

Institution A's head of formal programmes underlined that their LMS was underutilised. According to HOD-A, the institution paid the LMS provider for 5,000 licenses, although only 500 students used the LMS. The HOD-A explained that staff members argued that "...students will not be able to use those that are in the distance ...the blended...". The HOD-A had decided that students must use the LMS for all assignment submissions and advised that the institution's courier services should also be discontinued (HOD-A).

It is unfortunate that Lecturer (C)-B only used the institutions' LMS as a place to drop content. This lecturer explained: "It is more of an organising mechanism to say what you must do in this unit" (LECT(C)-B). LECT(C)-B expressed interest in using more LMS tools. LECT(C)-B said: "I am planning for the module that is starting now...to use our discussion boards. And if there is trouble, to use a webinar or to organise (a) collaborate sessions" (LECT(C)-B).

Lecturer (E)-B primarily used the institutions' LMS for dropping content and said the following about the institution's LMS:

It is beneficial, um, I will probably, for many modules, keep it more as a data dump...and make all notes available. I will always have the web links available, so if I prescribe any... uh, articles for my students to read because most of our stuff, you cannot prescribe a book – there is no book.

Lecturer (D)-B reported using online discussion boards to create a space where students and lecturers could communicate. LECT(D)-B explained that the design of the online learning environment played a crucial role in student success. LECT(D)-B elaborated on elements in her module that could be considered necessary for academic delivery, and replied to the question in this regard with the following:

Structure. I see our students want to know exactly where they are heading; they want to know their assignment dates and plan well in advance. Because our students struggle with planning, even our

younger students do not understand how to break down tasks into smaller tasks and plan for time.

Lecturer (D)-B also explained that the navigation on the platform should be straightforward. The lecturer uses the following principle: "...just three clicks and then you add your document or your assessment and whatever" (LECT(D)-B). Furthermore, LECT(D)-B said that every unit's structure or format should be similar. Students become familiar with the uniform structure used across a module and programme. Therefore, consistency achieved through universal design principles could enhance students' engagement with a module.

REFLECTION ON QUALITY IMPLICATIONS:

Lecturers and tutors exhibit varied attitudes towards the institution's LMS. While some see it as a data dump or a place to drop content, others emphasise its potential for fostering interaction and engagement. The varied usage suggests a need for a coherent institutional strategy to guide educators in leveraging the full potential of the LMS. The dominance of WhatsApp for communication, especially in discussion forums, highlights a mismatch between the platform's features and students' perceived needs and preferences. While WhatsApp is favoured for its accessibility and voice note capabilities, it raises concerns about the centralisation of communication and the potential exclusion of students who may not prefer this platform.

Lecturers express concerns about students' confidence in using technology, particularly the LMS. There is a belief that students fear exposure to criticism, impacting their willingness to participate in open forums. This suggests a need for strategies to boost student confidence and encourage active participation in the LMS. The effectiveness of the LMS is influenced by the level of support and training provided to lecturers and tutors. Instances where some educators feel less familiar with the LMS, highlight the importance of ongoing professional development to ensure that all faculty members are equipped to use these platforms optimally. The emphasis on social presence through avatars, regular reminders, and motivational messages underscores the recognition of the importance of the social aspect in online learning.

This balance between cognitive, teaching, and social presence is crucial for student engagement and success.

Tutors' constraints in providing full-day support due to existing full-time jobs raise questions about the sustainability of support systems. This highlights the need for institutions to consider the workload of support staff and ensure realistic expectations regarding response times. The fact that the institution's LMS is underutilised despite substantial investments raises questions about alignment with student needs, awareness, and institutional policies. It suggests a comprehensive review of the LMS implementation strategy and reevaluating the decision to discontinue alternative services. Lecturers emphasise the importance of consistency in the structure and format of units within a module. This raises the need for a universal design approach to enhance student familiarity and engagement across modules and programmes.

6.3.3.7. ASSESSMENT

The following second-order themes are addressed in this section

- Assessment strategy
- Student feedback

6.3.3.7.1. ASSESSMENT STRATEGY

Students at Institution B are expected to complete two assignments and an examination or a third assignment equivalent to an examination for each module in the programme. Institution B's policy document further indicates that some programmes could include "...a programme-level integrated assessment task that requires evidence of achievement across the programme's learning outcomes and must be completed over and above passing the individual modules" (DEP-B). Although students from Institution B work in study groups, they are assessed individually. Therefore, students must submit individual assignments.

Institution A has adopted a continuous assessment approach. QA-A explained that the programmes following this approach did not refer to assessments as formative or summative. "The continuous assessments comprise various small activities and more

structured assignments”. CDE-A underlined that performance-based assessment formed an integral part of the assessment strategy for selected programmes. Applying knowledge and skills in real-life scenarios is essential to the institution. Most assessment questions focus on reflection (CDE-A). CDE-A explained that “...there is not necessarily a right or wrong answer to these questions”. CDE-A elaborated that students’ experiences were essential to consider when introducing new knowledge or skills to them.

Curriculum Development Expert at Institution A highlighted that the institution’s assessment approach aimed to develop the knowledge and skills necessary to apply theoretical knowledge in a work environment. CDE-A emphasised that it was essential for the institution that assessments remained timeless. CDE-A explained that “...the same assessments could be administered year-on-year and applied in different contexts. There is no memorandum for the assignments, and there is no right or wrong answer”. CDE-A further elaborated on this topic by providing reasons why the assignments would remain timeless:

The students should apply what they have learned in practice and reflect on their experiences. Students should also provide evidence of their interventions, and the assessor will provide feedback to the student. Therefore, we do not have to redesign the assignments every year.

REFLECTION ON QUALITY IMPLICATIONS:

The assessment approaches reflect the broader pedagogical philosophies of the institutions. Institution A's emphasis on continuous assessment, real-life application, and reflection aligns well with contemporary educational theories prioritising active learning and practical skills development. However, careful consideration is needed to balance the timeless nature of assessments with the need for adaptability. In contrast, Institution B's assessment model might benefit from exploring opportunities for collaborative assessments, fostering a sense of community and shared learning. Additionally, both institutions should ensure that their assessment strategies align with online distance education's unique characteristics and challenges, such as effective feedback mechanisms and student support structures.

6.3.3.7.2. STUDENT FEEDBACK

Assignments form an essential part of institution B's learning facilitation strategy. Lecturers or markers should provide comprehensive feedback on assignments to enhance learning and understanding. LECT(C)-B explained that markers did not provide constructive feedback to students' for their assignments. Furthermore, when markers commented on students' assignments, "it is not commenting that leads to growth" (LECT(C)-B). LECT(C)-B felt that the number of comments needed to establish academic growth was not attainable. This lecturer said that "...there are not enough resources to be able to implement it in a justifying way" (LECT(C)-B).

It is interesting to note that the tutors mentioned that students do not implement the feedback communicated by markers when evaluating students' performance in her module. A tutor emphasised: "I communicated with every assignment, and it also seems that I do not engage with the comments". This tutor further expressed her frustration that students "...do not even make an effort to read what I have written to them, and then the next assignment will do the same. So, it is almost like giving them the same thing repeatedly".

Lecturer (C)-B explained that increasing the payment of markers will not increase the number of comments they provided to students. Markers "...see that they have this big pack of marking, and it needs to be submitted before a specific date" (LECT(C)-B). Therefore, it appears that markers focus on time and are not concerned with the quality of comments. LECT(C)-B reported that few people loved marking. He felt that most markers wanted to "...finish the marking and move on to do something else" (LECT(C)-B). This lecturer questioned the markers' commitment when they were alone while marking and indicated that most markers would not provide comments to the necessary extent. LECT(C)-B felt that it was possible to provide detailed feedback to students, and lecturers could "...spend a lot of hours to do something like that, and to do track changes" (LECT(C)-B). However, "there is not time for it, not for the amount of mass production of students that we want to get out of university" (LECT(C)-B).

Lecturer (A)-B emphasised that lecturers "...immediately receive complaints if there is not any feedback. So, I do think that there is value to it". Students would inform the

lecturers that they only had “ticks and crosses” on their assignments and that there was no feedback. This indicated that students did not know why their answers were mismarked. LECT(A)-B believes, in respect of feedback, that “...there is a lot of worth to it, and it forms part of the formative practice, which I think is important”.

The researcher asked a lecturer if she thought the feedback provided to assignments motivated the students to complete the subsequent assignments. LECT(A)-B said that she hoped so but that she “...does not have any evidence which indicates that the feedback of assignment one helps the students to complete assignment two”. LECT(A)-B further explained that students’ performance in their first assignment usually determined their performance in their second assignment. LECT(A)-B further elaborated on this by saying “...it is in exceptional cases that the student performs worse in the second one than in the first one. LECT(A)-B explained that students who performed worse in their second assignment did not understand the assignment. This lecturer said that when a contact student performed poorly, she usually had a face-to-face meeting to work through the feedback (LECT(A)-B). LECT(C)-B also believed that growth came through one-to-one interaction (LECT(C)-B). This lecturer or academic supporter did not schedule individual appointments with their DE students, however. The institution nevertheless has the necessary online tools that could be used to schedule one-on-one meetings with DE students. The lecturer admitted to believing that written and verbal feedback was essential to support students and for them to develop academically (LECT(A)-B).

Lecturer(D)-B explained that they “...usually give them [the students] a complete rubric of precisely what they will be assessed on. The rubric should guide the student through the assessment process. LECT(F)-B indicated that not all the assignments in her modules were assessed using a rubric. In addition, LECT(F)-B explained that students complained about not receiving good feedback and only seeing a mark. LECT(F)-B believed that was not acceptable since “...feedback is specific. It is part of the support”.

REFLECTION ON QUALITY IMPLICATIONS:

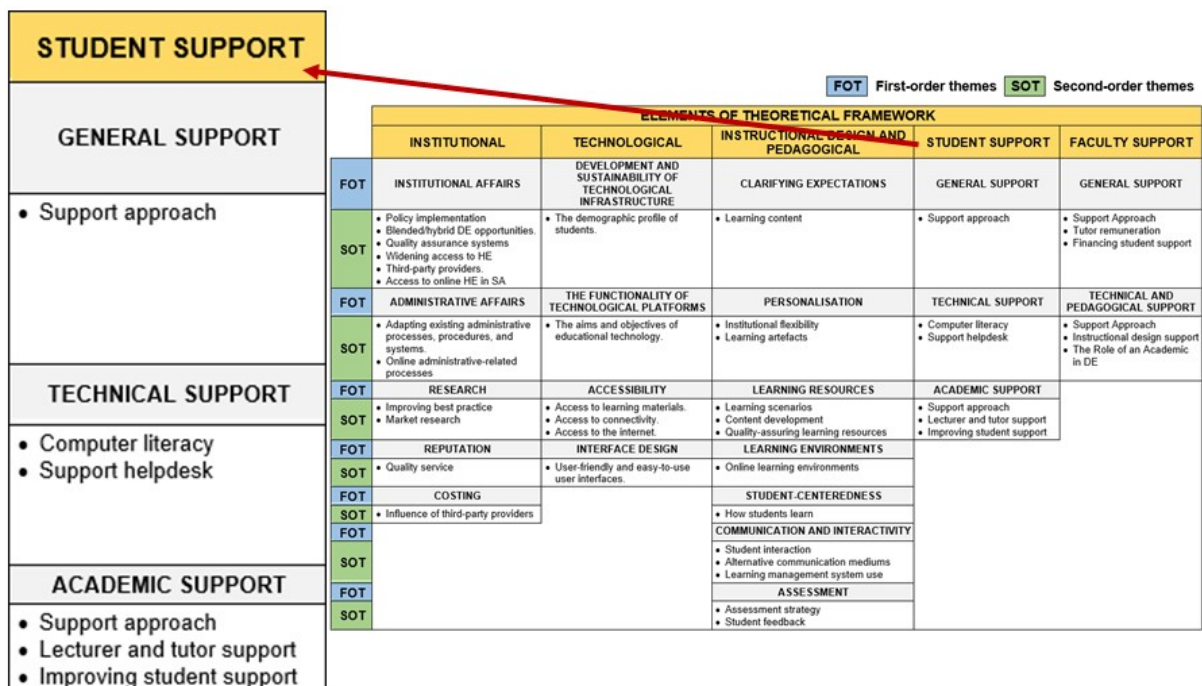
Effective feedback mechanisms are foundational to the quality of online distance education. The challenges identified, such as resource constraints, time limitations, and student engagement issues, highlight areas for improvement. Addressing these challenges may include investing in professional development for markers, exploring technological solutions to streamline feedback processes, and emphasising the integration of rubrics for transparent and consistent assessment.

Moreover, the importance of one-on-one interaction for student growth should prompt institutions to explore innovative ways to facilitate personalised engagement, leveraging available online tools. Addressing these aspects is essential for ensuring that the feedback loop becomes robust and integral to quality ODE, fostering a culture of continuous improvement and student success.

6.3.4. STUDENT SUPPORT ELEMENTS

First-order themes

- General Support
- Technical Support
- Academic Support



6.3.4.1. GENERAL SUPPORT

The following second-order theme is addressed in this section

- Support Approach

6.3.4.1.1. SUPPORT APPROACH

According to Institution B, administrative and academic support form an integral and inseparable part of each student's learning environment (QA-B). Institution B followed a distinctly holistic approach to student support, although it is unfortunate that their student administrative support was centrally organised. QA-B described their student support as follows: "There is one central administrative hub from which the learning materials are sent out, and all enquiries (both academic and administrative via fax, phone, email and in person) are handled from this hub" (QA-B). Student support is provided in various forms, including academic interaction through assignments, tutorials, online discussion forums, and logistical and administrative support.

The administrative support activities conducted by Institution B included the following:

- Administrative SMS per six-month academic cycle.
- Mobile academic interventions per six-month academic cycle.
- A letter of motivation when a student is halfway through their study programme.
- A letter of encouragement when a student has been inactive for two exam sessions.
- Students are encouraged to correspond with the university via post, email, SMS, and phoning or faxing the call centre.
- Although many students do not have access to the Internet, the institution still maintains a presence on their LMS, containing programme information, contact details, learning materials, admin booklets and tutorial letters.
- The administrative staff is available at every contact session.

The Head of Department at Institution A emphasised that their general support in their online programmes was more effective than in their blended programmes. The HOD-A said, "...in the online space, I think we are doing a better job than the blended. You

will find that in our online, that the student performance is much higher than blended and distance learning” (HOD-A).

The Head of Short Learning Programmes at Institution A emphasised that much of the student support in an online programme could be digital and planned. For example, when a student struggled, students should first be able to use the information available on the LMS before a support person intervened. The information on the LMS could be a short information brochure or a video showing or illustrating a concept (HOSLP-A). The HOSLP-A further elaborated that when online programmes attracted large student numbers, it would be essential to build a knowledge base of typical questions and answers, which should be readily available for students online. This could be seen as another form of support.

In addition, the Head of Short Learning Programmes cautioned that providing students with too much reading could be overwhelming. Therefore, providing students with a manual for performing specific tasks could be insufficient. According to HOSLP-A, “...providing students with a manual where they have to read pages of information to figure out how to do something will not work” (HOSLP-A). Instead, it would be more efficient to “...repackage the manual information into videos, where someone shows and explains to students how to perform certain tasks” (HOSLP-A).

REFLECTION ON QUALITY IMPLICATIONS:

The provided insights suggest that effective student support in ODE involves a blend of centralised administrative processes, diverse support channels, and strategic use of digital resources. Balancing centralisation with personalised support, leveraging digital tools judiciously, and adapting to diverse learning preferences contribute to the quality of the online education experience. Continuous evaluation and adaptation of support strategies are essential to meet the evolving needs of online learners and maintain high standards of educational quality.

6.3.4.2. TECHNICAL SUPPORT

The following second-order themes are addressed in this section

- Computer literacy
- Support helpdesk

6.3.4.2.1. COMPUTER LITERACY

The researcher asked Manager B whether he thought students needed specific skills to participate in an online environment. MAN-B explained that most online environments were still heavily text-based. “So, the ability to read on-screen, highlight important issues, type assignments, and save files in different formats, word, pdf etc.” were essential skills that students needed to learn online (MAN-B). MAN-B further explained that “one of the arguments [about] going digital is that we can get away from being dependent only on the text so that we could have video, audio, animation, and things like that”. Using these online tools could become data-intensive for students and consequently expensive. MAN-B emphasised that two main issues must be addressed in the South African online learning environment, namely the cost of online programmes needed to be discussed first, and that only South Africa could develop their students’ digital literacy skills.

Manager B explained that most people “associate watching a video with TV and going to the cinema for entertainment. Using this technology to learn requires a specific discipline. It requires a critical engagement with what I am hearing and seeing”. South African DE institutions underwent a period where classes were presented through telecentres (MAN-B). MAN-B indicated that this form of instruction was not effective:

So, we went through a period a few years ago where every university had a telecentre. And what we got was hundreds and thousands of hours of talking head videos. So, what was the point of that? Why use video? All I am doing is looking at someone talking to me. It does not seem like a good use of the media.

Manager B illustrated that video and other forms of media should be reimagined and used more appropriately to teach students specific skills. For example, a video taking a student into the workplace, showing the student different processes and interactions, seemed more effective. MAN-B further explained that doctors performed surgeries using complex technologies and computer screens. These doctors had to develop new skills to perform their jobs perfectly. “So, I think, as you are moving more into using video, audio and other formats, you have to develop a new set of digital literacies and critical literacies” (MAN-B).

REFLECTION ON QUALITY IMPLICATIONS:

Ensuring the quality of ODE goes beyond the delivery mode; it encompasses the development of digital and critical literacies among students. Institutions must invest in creating engaging, context-specific, and skill-oriented digital content while addressing practical challenges related to costs and accessibility. This holistic approach to digital literacy is foundational for enhancing online education's overall quality and impact.

6.3.4.2.2. SUPPORT HELPDESK

The Tutor support person at Institution A indicated that their online programmes provided dedicated technical support to students. The technical support included assisting students with any username and password issues they might experience on the LMS or using the LMS (TSP-A). The institution appointed a facilitator to provide dedicated technical support. TSP-A explained that “...the facilitator only offers support. The facilitator is available to the students on all the academic WhatsApp groups. The facilitator assists the students with the steps to change their passwords” (TSP-A). However, when students enter their details incorrectly too often, their student profile is soft-blocked. The institution's ICT services need to support students with removing the block to re-access their profiles. TSP-A explained that “...students should phone the ICT services of the institution. Unfortunately, the students complain about the duration of the phone calls and the cost they incur on receiving support” (TSP-A). The TSP-A stressed the need for a dedicated ICT support centre that could service DE students only.

Lecturer(C)-B explained that students' attitude was influenced when they did not get the necessary support. LECT(A)-B believed that when students struggled, "they either give up or they ask each other...". LECT(A)-B further contributed that "this generation of students wants to solve a problem instantly, and if you cannot assist them in that instant, they are not going to go on". LECT(C)-B felt that a technical support system should be available for students, primarily to assist the students in using the LMS of the institution. LECT(C)-B hoped that their new online LMS induction week would assist students in managing challenges they might have with the LMS of the institution. LECT(C)-B also agreed with the viewpoint of LECT(A)-B that students easily give up when they struggle with technical challenges. LECT(C)-B said:

Many students will say that they cannot manage, and it is a type of learned helplessness that says, 'I do not know how it works, so, then I will not use it. I will leave it then'. And I do not think this is the correct attitude for students to have.

REFLECTION ON QUALITY IMPLICATIONS:

The quality of ODE is intricately tied to the accessibility and effectiveness of technical support systems. Addressing technical challenges promptly, providing instant assistance where possible, and fostering a culture of resilience among students are vital components of a thriving online learning environment. Educational institutions must prioritise the establishment of dedicated support structures to enhance the overall quality and accessibility of online distance education.

6.3.4.3. ACADEMIC SUPPORT

The following second-order themes are addressed in this section

- Support Approach
- Lecturer and tutor support
- Improving student support

6.3.4.3.1. SUPPORT APPROACH

Institution B provides support through various media to suit different student needs and contexts. In addition, it includes proactive interventions on the part of the institution to identify and support at-risk learners (QA-B). Institution B primarily provides academic support through face-to-face contact sessions. Learning support is provided in the following way:

- Students receive carefully designed and regularly timed modular tutorial letters, administrative letters (two every six-month cycle) and administrative SMSs during each six-month cycle.
- Students should also submit two assignments, for which they receive extensive feedback, every six months.
- Students are invited to attend contact sessions throughout the country, during the school holidays, per module, for every sixth-monthly cycle. In addition, appropriate numbers of highly trained tutors are involved in the academic support of DE students throughout the country.

The institution also has strategies to effectively recruit appropriate tutors and their training and monitoring (QA-B). The feedback from tutors is also considered when designing and reviewing programmes (QA-B).

Institution B creates opportunities for students to attend limited face-to-face contact sessions. MAN-B explains that face-to-face sessions are not compulsory, and students who want to work independently have the necessary resources. MAN-B emphasised that students have access to "...learning resources, guiding activities and the assignments". Therefore, the face-to-face sessions are aimed at students who need more support. MAN-B further explained that those students "...who do not want to come to contact sessions but are struggling with the learning materials could use online discussion forums". MAN-B reiterated that making everything a student must do online compulsory was challenging. Therefore, managing tasks is more achievable when only the assessments are mandatory. All the additional support is available but the student's choice to use. Students could use the academic support if they find it useful otherwise they do not have to use it. MAN-B indicated that he, for example,

“...never survived a MOOC. Because I just cannot be bothered with all these discussions. It just drives me crazy”.

The institution operates according to an open-learning academic model comprising six-month academic cycles. Examinations are scheduled at the end of each cycle, in April and October. The institution has implemented a comprehensive student support system encouraging students to submit assignments and take examinations. The following measures are in place to ensure that a student stays active:

- Students could attend contact sessions for each module in their learning programme.
- Students are encouraged to attend contact sessions in their administrative and tutorial letters.
- Students receive two tutorial letters in each academic cycle. The first letter is sent with the learning materials at the beginning of each academic cycle. The second letter is sent just before the examination at the end of each cycle.
- Students receive letters about the planning and structuring of their studies. One of these letters is sent when students are halfway through their studies. The aim is to encourage them to complete their studies. The other letter is sent when students have been inactive for two examination sessions. In this letter, the student is encouraged to become active again.
- Administrative and motivational SMSs are sent to students at specific points during each academic cycle.
- Students receive an administrative booklet at the beginning of their academic cycle. This booklet explains all administrative matters to students and encourages students to contact the institution when needed.
- Students who enter their final year of study receive a letter urging them to finish their studies and contact the university if they need support.

Student and teacher support for Institution A is unfortunately not well defined or structured. The HOD-A, IDD-A and QA-A confirmed that the institution did not have an online DE policy to provide guidance and structure for all DE-related activities. The HOD-A emphasised having to work with “loose” documents that guided processes and

procedures. Therefore, the information provided on Institution A's student and teacher support was loosely structured and based on individual participants' viewpoints.

The HOD-A reported that their online programme was not self-paced and that online facilitators were involved. Each of the programme's online modules "...teaches the students what I can call the pedagogical principles you know and the life cycle of how to be a self-directed or self-determined learner" (HOD-A). The online facilitators take over after students complete this component in each module and should be "...directing the student, ensuring that the student does not feel somewhat neglected..." (HOD-A). Furthermore, the third-party also assists the institution with student support.

REFLECTION ON QUALITY IMPLICATIONS:

Institution B's approach seems more holistic, with a systematic framework for support, flexibility, and proactive interventions. In contrast, Institution A's lack of a well-defined policy and reliance on loosely structured documents may result in variations in the quality and effectiveness of student support. A clear, comprehensive, and flexible support structure, coupled with proactive measures, is crucial for ensuring the success and satisfaction of online distance learners.

6.3.4.3.2. LECTURER AND TUTOR SUPPORT

Lecturer (B)-B indicated that her academic support person assisted students with academic inquiries. LECT(B)-B outlined that when she received a question via email from a student, she would help the student if she had the time. Otherwise, the questions from students are sent to the academic support person. LECT(B)-B confirmed that "...the questions students ask are more content-based...I do not get technical questions. Students might sometimes ask you a link, and then we screenshot a link that you need to follow". LECT(B)-B expressed her concern that tutors "...support the students far more than they are expected". LECT(B)-B further indicated that tutors were not paid according to the support they provided. Institution B only pays tutors to provide support on their LMS. Therefore, tutors are not compensated for giving support through email communication. LECT(B)-B emphasised that "...students

prefer email support”. LECT(D)-B also confirmed that students submitted support enquiries by email. LECT(H)-B indicated that she received many support enquiries by email. LECT(H)-B referred the students back to the LMS to find relevant support material or referred them to the correct person who could assist them. LECT(H)-B reported receiving many technical support enquiries: “I get a lot of that – that they cannot submit”. LECT(H)-B explained that she usually referred students to the DE student administration department because she did not feel equipped to answer the students.

Furthermore, Lecturer (B)-B explained that when students struggled and the tutors' support and academic supporter's assistance were insufficient, the lecturer supported the student. LECT(D)-B ensured that email support requests were delegated to the correct persons. These would be either a tutor or a presenter. The tutor or presenter must provide feedback on general support inquiries on a discussion board that all students can view (LECT(D)-B). This discussion board could be considered an informal chatroom where frequently asked questions are addressed, almost like a WhatsApp group (LECT(D)-B). LECT(D)-B confirmed that tutors would usually indicate to students that “...this is the answer, but I am going to put [it] on the LMS so that everybody else also sees the question”. The aim is to create a frequently asked question bank that is always available to students. LECT(D)-B indicated that she “...barely hears anything from my students. So that says that my support structure is doing well”. LECT(H)-B explained that she delegated support inquiries to the academic supporter of her module when students indicated that they needed more assistance, over and above the support provided on the LMS. LECT(H)-B emphasised that she:

... do[es] not give them [the students] what they want through emails. I refer them back to the LMS to say, when you are stuck, you come back, and I'll tell you where to go, and then I connect them with their academic supporter.

Lecturer (F)-B presented that she had a close relationship with her academic supporter, making it easier to deal with student inquiries. LECT(F)-B said:

Well are very active together; she calls me if she needs something. She is constantly texting me and sending messages. She also sends messages to the Instructional Designer of the DE unit, for example.

Lecturer (F)-B further explained that her academic supporter was so active in the module that she as lecturer sometimes lost track of the students' progress in the module: "...because she is so active, she is taking care of putting up everything and all the videos and everything. I sometimes do not know what is happening". The lecturer and her academic supporter frequently communicate to ensure that students receive the best support and guidance. The lecturer said that the academic supporter was "...always calling me quickly..." to make sure of the workings of the module (LECT(F)-B). The communication between this lecturer and the academic supporter is excellent.

Lecturer (F)-B reported that she and her academic supporter received academic enquiries. LECT(F)-B further emphasised that informing students that their queries were being attended to was essential. The lecturer said that "I say to that student I did forward your query to the academic supporter, so she knows that I read it" (LECT(F)-B). The lecturer mostly forwards enquiries to the academic supporter, but she would immediately answer students to support them if possible. It should be noted that the academic supporter assigned to LECT(F)-B occupies a full-time academic position at another institution. Regardless of her work at the other institution, she is doing an excellent job supporting LECT(F)-B.

Lecturer (D)-B supports students in various ways to complete and submit assignments. LECT(D)-B developed sets of "...frequently asked questions for every assignment and even for the research assignments". LECT(D)-B also provided students with assignment examples so that students could grasp the structure of an assignment. The lecturer supporter of LECT(D)-B uses the institution's LMS to communicate with students, providing frequent information and guidance. Regular

interaction occurs between the academic staff members and the students in this module.

Lecturer (E)-B was of the view that students' poor performance could be attributed to their language proficiency. LECT(E)-B explained that students "... do not know how to read, then they do not know how to write". LECT(E)-B further elaborated on this matter by saying:

They do not know how to write paragraphs; it is as if they have never heard about writing a paragraph or an exciting sentence. There is a definite need for language tutoring apart from anything else, and then typing.

Lecturer (E)-B emphasised that for the aforementioned reason, many lecturers teaching undergraduate modules avoid written assignments when class sizes are large. They would instead administer computer-based tests. This would not require the students to write. LECT(E)-B stressed that students' "...writing skills are atrocious, and it is getting worse".

The Curriculum Development Expert at Institution A also agreed that language proficiency influenced student performance significantly. CDE-A explained: "Students find the reading and interpreting text extremely difficult, and they need support in this regard". Institution A uses its LMS system for continuous assessment. CDE-A confirmed: "Students have to submit activities on pre-set dates. These activities form part of continuous assessment. Students receive marks for their submitted work".

The Quality Assurer at Institution A explained that various practice activities were built into the institution's learning guides. Some activities are group activities, and discussion forums in which students should participate (QA-A). CDE-A emphasised that these activities should be essential to DE students' learning experience. QA-A expressed regret having to mention that those learning activities were not assessed. The reason given was that the amount of assessment needed would become unmanageable. CDE-A further explained that students received a participation mark

of 5% for participating in these activities. CDE-A emphasised that many faculty members argued these activities should not count towards marks.

On the other hand, the Curriculum Development Expert argued that students would not be motivated to complete the activities if no marks were awarded. LECT(A)-B said that students could also attain 5% for completing online activities in her module. It was unfortunate to note that a student informed LECT(A)-B that they did not want to complete the online activities and did not mind forfeiting the 5%. CDE-A was unsure whether it was worth students' while to complete the activities for an additional 5%. CDE-A said that "...it depends on a student's attitude towards the activities. These activities will be more important for some students than others". CDE-A further indicated that "...in my opinion, I do not believe that the 5% awarded for completing the online activities provides enough motivation for students to complete these activities. It will also not make a big difference in students' performance in a module".

REFLECTION ON QUALITY IMPLICATIONS:

Institutions need to consider clear policies for compensation, effective language support mechanisms, and well-structured communication channels to ensure that online learners receive reasonable support. Addressing language proficiency becomes crucial for ensuring equitable access to education. Strategies like language tutoring and consideration of alternative assessment methods, such as computer-based assessments, could be explored.

6.3.4.3.3. IMPROVING STUDENT SUPPORT

Lecturer (F)-B was asked how the institution could improve its academic support. In answer, LECT(F)-B explained that it was essential that a lecturer in DE should scaffold information for students. This scaffolding will create clear learning pathways (LECT(F)-B). According to LECT(F)-B, although students are "...generally English proficient... they can, for example, have a conversation in English, but then it does not mean that they understand academic language". Therefore, the lecturer's module introduces important terminology before the rest of the content is presented. The lecturer explained that students could easily get lost in academic language.

Student support in distance education was found to be a neglected area. MAN-B explained: "Traditionally, DE has been print-based and contact-supported in Sub-Saharan Africa, and we had traditionally pretty poor retention and throughput rates". MAN-B elaborated on the possible reasons for poor retention and throughput rates in DE by saying that "partly because a lot of the people studying through that medium were doing other things; they are working full-time, have families and other commitments. Increasingly, recently finance has been a major problem".

Manager B emphasised that "...if we want to improve from the 15% throughput that the DHET reported in its first cohort analysis study in 2016, we have to look at where we are losing students". Face-to-face programmes traditionally lose 15% of their students from programme commencement in the first year. After that, students are usually retained (MAN-B). In respect of DE multiyear programmes, the throughput could be as low as 12% to 15% per annum (MAN-B). MAN-B stressed that "...clearly we need to do something. But we must know, be able to know, where the problem is. And then have an intervention to address that problem and a mechanism to see if that intervention has worked" (MAN-B). MAN-B added that electronic information and communication technologies added new dimensions to DE, as stated in Institution B's DE policy (DEP-B). Institutional data, which are unfortunately not always "clean", should provide practitioners with the necessary indicators to address issues associated, for example, with students at risk. This is where an LMS plays a vital role. The LMS should indicate "...for example, who is engaging and who is not, who is submitting assignments and who is not" (MAN-B).

Manager B reiterated that the historical data and trends provided by the Higher Education Management Information System (HEMIS) were clean and reliable. Unfortunately, the said data represent only students who had already exited the higher education system. MAN-B said that "...there is nothing you could do for those students because they already have been through the system" (MAN-B). It seems evident that institutions should have a strategy to intervene. Institutions should identify students who are not active and determine how they could assist them. MAN-B confirmed that was difficult in a traditional DE environment. "We would not have known that until the student has posted us an assignment" (MAN-B). Now that we have online tools like an LMS, institutions should identify and act on at-risk students sooner. MAN-B

emphasised that practitioners' data should indicate specific patterns over time. For example, "... if we could get students to do assignment 1 in the first two weeks, we tend to retain them for the rest of the programme" (MAN-B). When patterns are noticed, practitioners should predictively and pre-emptively develop strategies to benefit from the identified patterns.

REFLECTION ON QUALITY IMPLICATIONS:

Implementing effective scaffolding, leveraging technology for student support and early intervention, and adopting a proactive approach to data-driven decision-making can significantly improve retention rates and overall educational outcomes. The commitment to addressing historical challenges and embracing innovative solutions positions institutions to provide a more responsive, adaptive, and supportive online learning environment.

6.3.5. FACULTY SUPPORT ELEMENTS

First-order themes

- General support
- Technical and pedagogical support

FACULTY SUPPORT	ELEMENTS OF THEORETICAL FRAMEWORK				
	INSTITUTIONAL	TECHNOLOGICAL	INSTRUCTIONAL DESIGN AND PEDAGOGICAL	STUDENT SUPPORT	FACULTY SUPPORT
GENERAL SUPPORT	FOT INSTITUTIONAL AFFAIRS	DEVELOPMENT AND SUSTAINABILITY OF TECHNOLOGICAL INFRASTRUCTURE	CLARIFYING EXPECTATIONS	GENERAL SUPPORT	GENERAL SUPPORT
	SOT <ul style="list-style-type: none"> Policy implementation Blended/hybrid DE opportunities Quality assurance systems Widening access to HE Third-party providers Access to online HE in SA 	The demographic profile of students.	Learning content	Support approach	Support Approach Tutor remuneration Financing student support
<ul style="list-style-type: none"> Support Approach Tutor remuneration Financing student support 	FOT ADMINISTRATIVE AFFAIRS	THE FUNCTIONALITY OF TECHNOLOGICAL PLATFORMS	PERSONALISATION	TECHNICAL SUPPORT	TECHNICAL AND PEDAGOGICAL SUPPORT
	SOT <ul style="list-style-type: none"> Adapting existing administrative processes, procedures, and systems Online administrative-related processes 	The aims and objectives of educational technology.	Institutional flexibility Learning artefacts	Computer literacy Support helpdesk	Support Approach Instructional design support The Role of an Academic in DE
TECHNICAL AND PEDAGOGICAL SUPPORT	FOT RESEARCH	ACCESSIBILITY	LEARNING RESOURCES	ACADEMIC SUPPORT	
	SOT <ul style="list-style-type: none"> Improving best practice Market research 	Access to learning materials. Access to connectivity. Access to the internet.	Learning scenarios Content development Quality-assuring learning resources	Support approach Lecturer and tutor support Improving student support	
	FOT REPUTATION	INTERFACE DESIGN	LEARNING ENVIRONMENTS		
	SOT <ul style="list-style-type: none"> Quality service 	User-friendly and easy-to-use user interfaces.	Online learning environments		
	FOT COSTING		STUDENT-CENTEREDNESS		
	SOT <ul style="list-style-type: none"> Influence of third-party providers 		How students learn		
	FOT		COMMUNICATION AND INTERACTIVITY		
	SOT		Student interaction Alternative communication mediums Learning management system use		
	FOT		ASSESSMENT		
	SOT		Assessment strategy Student feedback		

6.3.5.1. GENERAL SUPPORT

The following second-order themes are addressed in this section

- Support Approach
- Tutor remuneration
- Financing student support

6.3.5.1.1. SUPPORT APPROACH

Gilly Salmon, an e-learning expert, states that online facilitators typically need to provide 10 hours of support per week (Salmon, 2012). The researcher asked MAN-B if that was possible in the South African context. MAN-B responded, "...how many contact programmes do you know where the tutor engages for 10 hours a week with every student? It does not happen". MAN-B explained that he deliberately tutored a module presented by Institution B to determine how much time online tutoring takes. MAN-B indicated: "No students waited for more than three days for feedback. I had discussion forums and summaries for every unit". Institution B expects its tutors to perform 25 hours of support over 14 weeks (module duration). MAN-B emphasised, "I did all the things I expect my tutors to do, and it took me about 16 hours".

The researcher subsequently asked MAN-B if a tutor could provide effective support within an hour and twenty minutes per week. MAN-B indicated that it depended on how active students were online. Significantly few students from Institution B were engaging in online activities. MAN-B provided the following insight regarding students' online participation:

So, if you go in twice a week, the chances are that you do not get anything from the students for some weeks. You pose questions or put up a problem for them to think about, and very few of them engage.

Manager B provided the following response regarding making online activities compulsory for students to complete:

Suppose you have a different kind of group of constantly engaging students, and you say you have to do this. In that case, you must

understand that there will be very high attrition rates initially if it becomes compulsory. But the ones who stay in, I could spend my whole life just chatting and talking to the students online. So, where do you find the balance between what is needed and what is superfluous?

Manager B furthermore mentioned that lecturers get very excited about using social media for teaching and learning purposes but, unfortunately, do not plan and determine their appropriate use. Many lecturers are active on the institution's LMS and social media. MAN-B indicated that the lecturers "...spend their whole lives frittering away their time on lots of different things". MAN-B emphasised that it was essential for students to know what was core and central to the teaching and learning process.

In an honours programme, for example, Salmon's (2012) approach to online learning makes sense where 10 students work on the same problem (MAN-B). This would make it possible to schedule a 1-hour in-depth discussion every week, and to provide students with online tasks that they must complete, and where a lecturer could give thorough feedback to students (MAN-B). However, unfortunately, this does not happen. A large university in Gauteng, for example, started with a 1:25 e-tutor ratio. They have now changed the ratio to 1:200. This is a result of students not engaging (MAN-B). Therefore, the question arises: What will e-tutors do 10 hours a week?

Manager B reported that Institution B had diverse tutors. These tutors could support students in various ways in a given timeframe. MAN-B suggested that tutors' online support time should be tracked to determine how tutors were helping students. The institution has a few tutors who are "very good at responding to students and getting them to respond to them". However, many tutors regrettably only do the absolutely bare minimum, which includes posting unit summaries developed in the previous year (MAN-B).

REFLECTION ON QUALITY IMPLICATIONS:

The expectation for tutors to provide 10 hours of support per week, as suggested by e-learning expert Gilly Salmon, seems unrealistic in South Africa. Student engagement in online activities emerges as a critical factor influencing the effectiveness of tutor support. There is a significant lack of student participation, with forums and discussions often receiving minimal engagement, even when tutors actively pose questions and present problems. This raises questions about the viability of making online activities compulsory, as this could lead to high attrition rates if such a mandate is enforced. The discussion on e-tutor ratios adds another layer to the challenges faced by the institution. The shift from a 1:25 to a 1:200 ratio, driven by low student engagement, prompts questions about the meaningful utilization of e-tutors' time. The divergence in engagement levels among tutors is noted, with some actively responding to students while others perform only the minimum requirements. Striking a balance between realistic expectations for tutor engagement, promoting student participation, and strategically employing online tools are critical considerations for enhancing the quality of the online learning experience.

6.3.5.1.2. TUTOR REMUNERATION

Lecturer (B)-B expressed her concerns about Institution B not remunerating tutors well enough for their services:

At one point, we first had the problem of first finding tutors, then I almost feel ashamed of saying this, but I feel humiliated when those people sitting there have a PhD, and you know, and then I tell them, but this is the kind of payment you're going to get.

In addition, Institution B lacks empirical evidence to show that tutors, for example, should be reimbursed better as they spend more time online supporting students. This is also why institutions have differentiated DE costing structures. MAN-B stressed that "...none of the distance providers in 2011, when we had the last kind of financial discussion, could provide a case, financially, of why there should be more money for distance education". MAN-B stated that many institutions made healthy surpluses from DE programmes. Furthermore, MAN-B elaborated on the use of the reserves:

So, if you were spending all those surplus on improving quality and retention and throughput, and then you came back and said that you needed more money, one could understand it. But if you are sitting on R5 billion rands of reserves, why would we give you more money? So that you could increase your reserves? So what is the case?

Therefore, Manager B taught a module to see how much time facilitation takes in a module. MAN-B reiterated: "I think I can teach one of these modules quite adequately in 25 hours of online stuff in a 6-month cycle, in a block for one module". Subsequently, MAN-B still needed to see a case where tutors claimed they needed more time to support students. At Institution B, the remuneration framework for tutors is based on the assumption that the institution has an adequate number of students enrolled in DE programmes. Regarding tutor remuneration, MAN-B said the following:

The rates are exploitative. So I would not do it. I would not do what I ask our tutors to do for the fees that the institution is willing to pay. But I can't make a case when we are running a programme at a loss. I know the basic rate at a large university now is R350 per hour. If they ask me to do work for them, my rate is R350 per hour. And I think we are paying about R100 an hour, R97.

The payment structure at Institution B tutors is based on the assumption that students provide support. Most e-tutors are persons who have completed their qualifications and are working full-time. However, these e-tutors are still doing the work. MAN-B said he felt that the remuneration for facilitating a contact session was reasonable. He nevertheless commented that the compensation for marking could be increased. MAN-B explained that "...on the one side, tutors are motivated to get engaged based on the payments for marking and contact sessions. But the e-tutoring is not worthwhile".

REFLECTION ON QUALITY IMPLICATIONS:

Acknowledging that e-tutoring is not perceived as worthwhile due to inadequate compensation raises concerns. If remuneration is perceived as inadequate, it can deter experienced and knowledgeable tutors from participating in ODE. The absence

of empirical evidence supporting better reimbursement for tutors who spend more time online suggests a potential disconnect between the actual workload and the compensation provided. This lack of evidence may contribute to a flawed remuneration structure. If institutions generate healthy surpluses from DE programmes, there should be a transparent investment to improve quality, retention, and throughput. The term "exploitative" used to describe the rates suggests that tutors may feel undervalued and demotivated. Such sentiments can lead to a decline in the quality of student support.

6.3.5.1.3. FINANCING STUDENT SUPPORT

Manager B elaborated on the role a third-party provider would fulfil at Institution B, and indicated that the third party would receive 50% of all student fees. MAN-B further explained: "The university will get the subsidies, the input and output subsidies, and the university will get 50% of the fees. So they manage to operate a call centre for 50% of the fees the third party will take".

Manager B explained the support the third party would provide:

For the first three months of the course, the students get a call asking them how it is going every week. Then they have another team who will only intervene when students are not active. So, there are two teams. They are managing to cover quite substantive student support in 50% of the fee income.

Institution B spends 60% of their budget on student support. Most expenses are related to the costs of providing face-to-face contact sessions. The expenses include flights, accommodation, subsistence, and professional payments for presenters (MAN-B). The costs incurred for contact sessions only allow the institution to support 70% of the students. This is because 30% of the students are unable or choose not to attend the contact sessions. Previously only about 30% of students attended contact sessions (MAN-B).

Manager B emphasised that it would not be necessary to spend money on the abovementioned factors if they were all moved online. Therefore, the only means of mediation is digital. In addition, most of an institution's budget would be spent supporting students online since this is central to online learning (MAN-B). MAN-B indicated that students were not obliged to participate in the discussion forums at Institution B. MAN-B said that a tool such as a discussion forum became central to an online programme's teaching and learning approach (MAN-B).

REFLECTION ON QUALITY IMPLICATIONS:

The heavy reliance on face-to-face contact sessions, which consume 60% of the budget, poses challenges, especially since only 70% of students participate. Transitioning these support elements online could optimize spending and extend support to all students. Acknowledging that online tools like discussion forums are central suggests the importance of leveraging digital platforms for effective online learning experiences. The introduction of a third-party provider at Institution B, receiving 50% of student fees, has implications for the quality of ODE. The third party's support structure, including regular check-ins and intervention for inactive students, offers a model for efficient student support within budget constraints.

6.3.5.2. TECHNICAL AND PEDAGOGICAL SUPPORT

The following second-order themes are addressed in this section

- Support Approach
- Instructional design support
- The Role of an Academic in DE

6.3.5.2.1. SUPPORT APPROACH

The head of department at Institution A explained that the markers, facilitators, and moderators employed by Institution A were less computer-competent than expected. Although the institution is trying its best to equip these part-time staff members, various challenges are evident. One of the biggest challenges identified is assuming that everyone living in a city is computer literate. The HOD-A emphasised that "I am from

QwaQwa. Coming to the city, I thought everyone knows computers but little did I know that people are so far behind in terms of their knowledge of computers”.

Institution A invites their part-time staff members to several training sessions and provides them with various training materials. The HOD-A in addition emphasised that despite their interventions, challenges remained. The staff members are unfortunately not as computer-competent as originally anticipated by HOD-A. The HOD-A furthermore explained that staff members who were trainable should be appointed. The HOD-A emphasised that some staff members “... are not trainable, they were fine with the old system, but the old system was not working; you cannot be sending assignment via post today”.

The The head of department at Institution A explained that future part-time positions advertised by the institution should include LMS experience as a requirement. The HOD-A also indicated that it was a challenge for full-time staff members to understand the necessity of this requirement. Therefore, the HOD-A planned to rethink and refocus the recruitment and training strategy of the DE department. New part-time staff members should be trainable and able to adapt to unique teaching and learning environments quickly and effortlessly.

REFLECTION ON QUALITY IMPLICATIONS:

The challenges identified in the computer competence of part-time staff at Institution A highlight a critical aspect influencing the quality of online distance education. Computer literacy is paramount for effective teaching and student support in the digital environment, especially in working with an LMS. The institution's commitment to reevaluating recruitment and training strategies, emphasising LMS experience, indicates a proactive approach to address these challenges and enhance the overall quality of online education.

6.3.5.2.2. INSTRUCTIONAL DESIGN SUPPORT

Most lecturers from Institution B indicated that the instructional designers employed by the institution assisted them with using the institution's LMS effectively and

efficiently. LECT(B)-B said: “I depend on the great support that [the] instructional designer gives me”. LECT(D)-B indicated that the general support structures of the institution were of a high standard. LECT(D)-B emphasised: “Well, I must tell you the support structure here is excellent...”. This lecturer further indicated that all the instructional designers assisting her provided outstanding service (LECT(D)-B). She also highlighted that the support she received from DE administrative staff members was excellent (LECT (D)-B).

What was interesting to note was Lecturer (G)-B's explanation that when she encountered a challenge with the LMS of the institution, she usually attempted to find the solution using Google. LECT(G)-B also reported that the answers to the challenges lecturers experienced on the LMS were out there. When searching for solutions to the challenge on Google, the search engine directs the user to the Blackboard website. This lecturer indicated that sometimes the answers were not on the Blackboard help site but on other websites. LECT(G)-B explained that she would only contact an instructional designer in extreme cases when she could not find the answers to her challenges. LECT(G)-B used the following example to explain her approach:

For instance, I had an LMS test scheduled for the fourth of October and, um, I have a student overseas because of her sports, so she cannot write it on that day. It is an open-book test. I need to accommodate her when she is back, but I do not know how to do that only for one student. So, I was looking and was searching, and I did not find anything, so I sent the email to the instructional designer.

Lecturer (E)-B indicated that she sometimes struggled to find instructional designers to assist her. LECT(E)-B emphasised that she did not “...have time to write long emails saying, could you please help me...”. LECT(E)-B further explained that there were times when she urgently needed assistance from instructional designers and unfortunately could not reach them for two or three days. Other colleagues had to assist the lecturer with her LMS-related challenges (LECT(E)-B).

REFLECTION ON QUALITY IMPLICATIONS:

The varied experiences of lecturers at Institution B regarding support for using the institution's LMS underscore instructional designers' critical role in ensuring effective online distance education. While some lecturers express high satisfaction with the support received, others highlight challenges in accessibility and timely assistance. Consistent and easily accessible support services are essential for maintaining the quality and efficiency of online education, emphasising the need for institutions to address any disparities in the support structures provided to faculty.

6.3.5.2.3. THE ROLE OF AN ACADEMIC IN DISTANCE EDUCATION

Lecturer (E)-B said she was incredibly frustrated by the lack of support by the DE unit. This lecturer emphasised a disconnect existed between the DE unit and other academic departments (LECT(E)-B). MAN-B was of the view that the disconnect between the DE unit and other academic departments "...arose because of academics". Manager B explained that many academics working at Institution B took up a position there to work with contact students. Therefore, some academics might feel that "...there is no real benefit, to me personally, in being involved in DE" (MAN-B). It appears that staff members doing DE work and their faculties have not seen the contribution financial surpluses have made in the past (MAN-B). "Back when there were large numbers here, DE might make a R78 million surplus in one year" (MAN-B). Unfortunately, this is not reported at the faculty level. "When finance came to report last year, they reported on the five academic departments and their financial contribution – nothing about DE." (MAN-B). Unfortunately, DE today is not generating the enormous surpluses of the past. MAN-B emphasised that people had realised DE could make a significant contribution if the unit could get back to scale (MAN-B). MAN-B emphasised that it was crucial, in the case of Institution B, for the DE unit to form an integral part of a faculty. It is not desirable for the unit to operate independently (MAN-B). Once it is incorporated, then only would the heads of different departments understand and see the DE unit's contribution (MAN-B).

Subsequently, the heads of department could then motivate their staff members involved with DE programmes. MAN-B explained that most academics involved in DE

programmes were spending very little time on these programmes. LECT(B)-B also reiterated that departments usually divided one 40-hour DE position into two 20-hour positions and only one of the lecturers would do DE work. The other lecturer would be used in face-to-face programmes (LECT(B)-B). MAN-B emphasised that “academics are most important to the academic departments for their work in face-to-face programmes” (MAN-B). The only benefit that most academics working in the DE unit of Institution B appear to understand is that their posts are paid from DE income (MAN-B).

Manager B explained it was frustrating that “I cannot pay full-time staff to help us do things”. Full-time academic staff members are not incentivised to undertake the additional work in the DE unit. MAN-B emphasised that it was crucial for module coordinators in a DE programme to be involved in typical academic activities such as tutoring and marking. MAN-B expressed regret that he could not reimburse full-time academic staff members for these activities. Consequently, full-time academic staff declined the invitational opportunity to tutor DE students at Saturday face-to-face contact sessions. MAN-B understood staff members' reasoning and said: “So, why would they work on a Saturday? They have already taught all week”. The same principle applies to the marking of assignments. “Who will then train the tutors and other markers” (MAN-B) if full-time academic staff decline to assess assignments?

Consequently, full-time staff members with roles in DE at Institution B struggle to identify problems as they are not actively involved in teaching and learning (MAN-B). MAN-B reported that the “...ordinary lecturer does not even know, very often, about the financial contribution that distance can make to the faculty because it does not filter in any way down to them” (MAN-B). Therefore, MAN-B felt that an ordinary lecturer would only have a particular interest in DE if the lecturer was employed in a DE post.

Manager B thought that lecturers at Institution B could be more involved in the academic processes and procedures of the DE unit. MAN-B explained that “we have had a number of offers to academics for support, training, and discussions, and a few of them are available”. The DE unit of Institution B invites academic staff members to every contact session to conduct quality assurance and engage with students and

tutors. The unit covers the costs involved in these activities, which includes the travel and accommodation costs. The staff member also receives a subsistence allowance (MAN-B). MAN-B explained that, unfortunately, in the past two years only two academic staff members attended face-to-face contact sessions. The model Institution B adopted for DE provision seems to minimise the engagement of academics with teaching and learning (MAN-B). There is some disconnect between the vision of the DE unit and the institutional vision for all the other faculties of the institution (MAN-B). Ideally, the buy-in from all staff members involved in DE, whether academic, support or administrative, would ensure that DE operated effectively and efficiently. All DE stakeholders need to meet frequently to determine best practices, eliminate inadequate approaches and establish how they can improve as a unit (MAN-B). Unfortunately, rendering this approach feasible is much more complex than MAN-B is suggesting.

The tutors emphasised that students should understand studying at a distance means a student should have some form of access to the internet otherwise students will be unable to do research or submit their assignments. A tutor further explained that "...if you can use WhatsApp and be on Facebook, then in your spare time, you can be able to access the learning management system".

Lecturer (H)-B emphasised an important point about how lecturers approached DE. LECT(H)-B explained that DE students "...are the most important people we have to look out for because they are far [away]. They need constant communication". LECT(H)-B further elaborated that DE students "...need reassurance. They need to be listened to and to be communicated [with] regularly so that they feel important. Because they are important as well as much as contact students we see". LECT(H)-B also expressed students should use email communication since "... it is more convenient for the students".

REFLECTION ON QUALITY IMPLICATIONS:

The results highlight significant challenges in integrating DE effectively within the broader academic structure at Institution B. There is an apparent disconnect between the DE unit and other departments, with academic staff often perceiving DE work as less valuable or unintegrated into their regular responsibilities. This lack of engagement from full-time staff in teaching and participation in DE-related activities poses a risk to the quality of DE programmes, as critical contributors may lack a deep understanding of the unique challenges and opportunities in the online learning environment. The call for increased involvement and understanding from faculty emphasises the need for institutional strategies that incentivise and integrate DE into the broader academic culture. Additionally, the emphasis on consistent communication and support for DE students underscores the importance of maintaining a student-centric approach in online education.

6.4. CONCLUDING REMARKS

Table 6.1 provides a thorough account of the themes that emerged from and were displayed during data analysis. The goal was progressively to turn raw data that appeared unorganised into a recognised system of thought. The deductive analysis process assisted the researcher in clustering large segments of data. This was achieved by categorising the data into the five main elements of the theoretical framework. After that, the researcher used inductive analysis to find new themes that emerged from the data clusters.

Chapter 7 contains the findings of this investigation and presents it as a conceptual quality framework. The framework attempts to answer the primary research questions by providing guidelines for residential institutions on the quality implications of transitioning their administrative, teaching and learning processes online.

CHAPTER 7: FINDINGS

A conceptual quality framework

7.1. INTRODUCTION

This chapter includes a representation of step 6 of the thematic analysis, as Braun and Clarke (2006) suggested, which is creating a report on the findings of this investigation. The aim of this section, as explained by Miles, Huberman et al. (2014), is:

- Identifying relevance between themes and identifying corresponding patterns in the data;
- Assembling or creating categories of data that can be related;
- Creating conceptual coherence and consistency by investigating the validity of the findings to ensure that they are compatible with the study's theoretical framework.

This final step involved writing the final analysis and a description of the findings (Braun & Clarke, 2006). Therefore, the final report went beyond outlining codes and themes. The report constructed a narrative that offered a precise, succinct, and logical description of how the researcher interpreted the data and justified why the choice of themes and interpretation of the data was of critical importance (Braun & Clarke, 2006).

Using narrative descriptions and references to the results obtained in Chapter 6, the researcher attempted to evaluate the data and provide a case for why his explanation richly and fully answers the research questions (Kiger & Varpio, 2020). The discussion section broadened the study by analysing the significance of the results and challenging the presumptions or circumstances that gave rise to the themes (Braun & Clarke, 2006). Referenced literature strengthened the study by demonstrating the rationale for selecting specific themes and locating results within the body of literature already in existence (Aronson, 1995; Tuckett, 2005)

7.2. PRESENTING THE FINDINGS AS A CONCEPTUAL QUALITY FRAMEWORK

According to Minsky (2019), when someone encounters a new phenomenon or substantially changes their view of a problem, a structure in that person's memory, called a frame, is influenced. The remembered framework in that person's memory must be adjusted by changing its details to accommodate the changing reality (Minsky, 2019). Therefore, a frame could be viewed as a data structure representing a particular, stereotyped phenomenon (Minsky, 2019). Each frame also contains different kinds of information, which includes how to use the frame, the expectations of the frame, and information regarding frame expectations not being met (Minsky, 2019). Therefore, a frame can be viewed as a network of nodes and relations (Minsky, 2019).

The Cambridge English Dictionary describes the word "framework" as "a system of rules, ideas, or beliefs that are used to plan or decide something" (Cambridge University Press, 2018). The Collins English Dictionary supports this description and describes the word as "a structure that forms a support or frame for something" (Collins, 2018).

From the academic perspective, a framework can guide a specific enquiry (Grant & Osanloo, 2014). As case in point, Fulton and Krainovich-Miller (2010) describe frameworks as maps that provide a rationale for research questions and hypotheses. LoBiondo-Wood (2014), in turn, views a framework as a design. LoBiondo-Wood (2014) furthermore suggests that the research question/s, the purpose of a study, the literature review and the theoretical framework should be aligned with the conceptual framework to assist the operationalisation of the strategy.

According to van Straaten (2019), a framework is a fundamental organisation that supports a concept, system, or text. A framework could provide the structure for the functions or solutions to a particular problem in a concept or system (van Straaten, 2019). In this study, the findings presented in this chapter must be considered a conceptual framework that adds value to evidence-based practices (Spencer, Schooley, Anderson, Kochtitzky, DeGroff, Devlin, & Mercer, 2013). The framework's

value lies in its ability to offer a shared understanding for strengthening the evidence for ODE in the South African HE context.

Furthermore, the proposed framework presented in this chapter should be viewed as a roadmap of how the findings of this study addressed the primary research question (Grant & Osanloo, 2014). This framework allows the researcher to specify and define concepts related to the research problem (Luse, Mennecke, & Townsend, 2012). Each theme discussed in Chapter 6 can be regarded as the frame of a more significant phenomenon. A collection of these frames or themes would subsequently constitute a frame system or framework (Minsky, 2019). The researcher, therefore, believes that understanding online DE in a South African HE context cannot be achieved by studying the themes outlined in Chapter 6 as single entities. Masoumi and Lindström (2012) emphasise the importance of interrelationships between elements in a framework. Subsequently, the holistic nature of the framework presented in this chapter is more significant than the parts of the framework alone.

When comparing the Conceptual Quality Framework (Table 7.2) with the summary of the first- and second-order themes addressed in Chapter 6 (Table 6.1), the refinement of the elements in Table 7.2 becomes evident. In order to provide conceptual clarity and consistency, related data types were grouped. Table 7.1 explains why specific themes addressed in Chapter 6 (Table 6.1) were adapted, grouped or added to the Conceptual Quality Framework (Table 7.2). Table 7.1 indicates the element in which each theme and sub-element is situated (column A). Column B indicates the themes addressed during data analysis in Chapter 6. The “status” column (column C) indicates whether any changes were made to the themes indicated in Column B when the findings of this study were constructed. This included grouping themes, adapting the names of themes or adding new themes to the Conceptual Quality Framework. Column D indicates the elements addressed in the Conceptual Quality Framework. Column E provides the rationale for why a theme was grouped with another theme or when the name of a theme was adapted.

Table 7.1: The refinement of the themes addressed in Chapter 6.

A	B	C	D	E
Elements	Themes (Table 6.1)	Status of Theme	Unchanged, adapted or grouped with the following sub-elements	The rationale for adapting/grouping the theme
Institutional	Institutional affairs	Unchanged	Institutional Affairs	N/A
	Administrative affairs	Unchanged	Administrative Affairs	N/A
	Research	Unchanged	Research	N/A
	Reputation	Adapted	Quality service	Since students lack the necessary information or expertise to assess the quality of an institution's offerings, prospective students frequently rely on an institution's reputation to inform their decisions. Institutions' quality of service influences their reputation (cf. 6.3.1.4).
	Costing	Adapted	Third-party providers	Both institutions partnered with a third-party provider, influencing them significantly financially (cf. 6.3.1.5).
Technological	Development and sustainability of technological infrastructure	Adapted	The demographic profile of students	When institutions create online programmes, it is critical to evaluate the demographics and technological characteristics of the students, the technology in question, and whether students have access to devices and the internet (cf. 6.3.2.1).
	The functionality of technological platforms	Adapted	The aims and objectives of educational technology	Digital tools used in education need to be justified. The needs of the students should be considered while using technology. If technology controls the transactional distance between students and facilitators, institutions should ensure that it does not impede learning (cf. 6.3.2.2).
	Accessibility	Adapted	Access to learning resources, the internet and devices	Institutions must decide how students should access curriculums and resources, how students will be supported and how students will be assessed validly and reliably (cf. 6.3.2.3).
	Interface design	Adapted	User-friendly and easy-to-use user interfaces	Simple interface designs will free up stakeholders' time and cognitive resources, allowing them to concentrate more on the platform's content and less on navigation (cf. 6.3.2.4).

A	B	C	D	E
Elements	Themes (Table 6.1)	Status of Theme	Unchanged, adapted or grouped with the following sub-elements	The rationale for adapting the theme
Instructional Design and Pedagogical	Clarifying expectations	Grouped	Learning resources	Section 6.3.3.1 focused on clarifying expectations regarding the use of differentiated learning resources.
	Personalisation	Grouped	Learning flexibility	Students are increasingly taking responsibility for their learning processes rather than teachers. A student's needs, goals, knowledge, and interests should all be considered while designing the learning environment (cf. 6.3.3.2).
	Learning resources	Unchanged	Learning resources	N/A
	Learning environments	Adapted	Online learning environments	Students' and facilitators' attitudes and participation in an online environment contribute to student success and achievement (cf. 6.3.3.4).
	Student-centeredness	Grouped	Learning flexibility	Section 6.3.3.5.1 focuses on how students should learn and, more specifically, emphasise that students can learn in various ways. Learning has moved from traditional approaches to constructivist approaches.
	Communication and interactivity	Grouped	Online learning environments	Most communication and interactivity occur in the online learning environment (cf. 6.3.3.6).
	Assessment	Unchanged	Assessment	N/A
Student Support	General support	Adapted	Support approach	Section 6.3.4.1.1 elaborated on how the participating institutions approached and designed support provided to students.
	Technical support	Unchanged	Technical support	N/A
	Academic support	Unchanged	Academic support	N/A
Faculty Support	General support	Adapted	Support approach	Section 6.3.5.1.1 focuses on how lecturers engaged in online learning should be supported.
	Technical and pedagogical support	Unchanged	Technical and pedagogical support	N/A
		New	Professional development	By providing technological and professional development possibilities, institutions should help lecturers transition from a traditional to an online teaching style (cf. 7.7.2).
		New	The role of an academic in DE	There are challenging teaching conditions for lecturers who facilitate online and face-to-face learning. Therefore, their roles should be clearly defined (cf. 7.7.4).

Table 7.2: Elements, sub-elements and divisions of the Conceptual Quality Framework.

ELEMENTS OF THE CONCEPTUAL QUALITY FRAMEWORK				
INSTITUTIONAL	TECHNOLOGICAL	INSTRUCTIONAL DESIGN AND PEDAGOGICAL	STUDENT SUPPORT	FACULTY SUPPORT
INSTITUTIONAL AFFAIRS <ul style="list-style-type: none"> Quality assurance and policy implementation. Widening access to higher education through distance education 	THE DEMOGRAPHIC PROFILE OF STUDENTS	LEARNING RESOURCES	SUPPORT APPROACH	SUPPORT APPROACH
	THE AIMS AND OBJECTIVES OF EDUCATIONAL TECHNOLOGY	LEARNING FLEXIBILITY	TECHNICAL SUPPORT	PROFESSIONAL DEVELOPMENT
ADMINISTRATIVE AFFAIRS <ul style="list-style-type: none"> Adapting existing administrative processes, procedures and systems 	ACCESS TO LEARNING RESOURCES, THE INTERNET AND DEVICES	ONLINE LEARNING ENVIRONMENTS	ACADEMIC SUPPORT	TECHNICAL AND PEDAGOGICAL SUPPORT
	USER-FRIENDLY AND EASY-TO-USE USER INTERFACES	ASSESSMENT		THE ROLE OF AN ACADEMIC IN ONLINE DE
RESEARCH				
QUALITY SERVICE				
THIRD-PARTY PROVIDERS				

The Conceptual Quality Framework (Table 7.2) comprises five main elements and 20 sub-elements. Table 7.2 could therefore be regarded as a summary of the findings presented in this chapter. Sections 7.3 to 7.7 provide an outline of the Conceptual Quality Framework. These sections include descriptions of the elements of the conceptual framework based on the data collected in this study (Chapter 6) and the literature reviewed in Chapters 2, 3 and 4. In sections 7.3 to 7.7, the Conceptual Quality Framework element is provided first. Hereafter the sub-elements and divisions are listed and discussed in detail.

The Conceptual Quality Framework presents theoretical and practical knowledge. Although the framework addresses the primary research question of this study, it should act as a roadmap or blueprint for institutions to design, evaluate, maintain and enhance their ODE practices. The framework is regarded as a conceptual framework since it was not reviewed by DE experts, or accepted, nor applied by the broader DE community in the South African HE context.

7.3. INSTITUTIONAL ELEMENT

Sub-elements:

- Institutional Affairs
- Administrative Affairs
- Research
- Quality Service
- The financial influence of third-party providers

7.3.1. INSTITUTIONAL AFFAIRS

The following divisions are addressed in this sub-element

- Quality assurance and policy implementation
- Widening access to higher education through distance education

7.3.1.1. QUALITY ASSURANCE AND POLICY IMPLEMENTATION

(This section refers to Section 6.3.1.1.1)

The emphasis on South Africa's proficiency in policy development but weakness in implementation reveals a significant challenge. While the country has developed robust distance education policies, the lack of awareness and engagement at the institutional level raises concerns. This gap implies that, even with well-crafted policies, their impact on the ground might be limited due to insufficient awareness and implementation strategies. This unawareness could lead to a disconnect between institutional practices and the standards set by national policies or quality frameworks. The implications include potential non-compliance, quality variations, and a lack of standardised approaches in the online learning landscape. Therefore, Aluko, Krull et al. (2022) contend that agreement must be established on what quality is for institutions to collaborate and create the desired quality culture.

The underutilisation of the good practice guidelines developed by SAIDE is a critical concern. Despite being a valuable resource for aligning quality criteria with distance education programmes, the limited distribution and use of these guidelines suggest a missed opportunity for influencing positive practices. This underlines the importance of creating guidelines and actively promoting and ensuring their integration into institutional practices. The absence of a specific policy for online learning indicates a potential hurdle in transitioning online. Without dedicated policies, institutions might struggle to navigate the unique challenges and opportunities online education presents. This lack of policy alignment hampers smooth functioning and raises questions about the institution's commitment to quality assurance in the digital domain.

The unique challenges faced by institutions offering both traditional and online modes underscore the need for carefully integrated policies that consider the distinct requirements of each mode. Failing to address this can lead to operational difficulties and hinder the overall quality of education (Hodges, Moore et al., 2020; Wolhuter & Jacobs, 2021). Therefore, institutions should develop a comprehensive policy framework that addresses the needs of traditional distance education and caters explicitly to online learning. Policies should be clear, accessible, and regularly updated to ensure alignment with the rapidly evolving digital landscape (Tadesse, 2016).

Furthermore, institutions should recognise the historical challenge of policy implementation and invest in robust strategies for effective execution. This involves creating policies and ensuring that all stakeholders are aware of them and actively engage with the guidelines. Regular training sessions, workshops, and communication channels can facilitate effective implementation (Latchem, 2016).

Leadership at all levels should be actively involved in transitioning administrative, teaching and learning processes online. They should foster a collaborative culture where academic leaders, administrators, and faculty work together to align online education policies, practices, and visions (Jung, 2022). They should also create interdisciplinary teams to ensure a holistic approach to the transition. Institutions should implement continuous quality assurance mechanisms that go beyond policy development. They should regularly assess the effectiveness of policies and guidelines through feedback mechanisms, audits, and benchmarking against best practices and use the insights gained to refine and enhance existing policies (Kayyali, 2023).

7.3.1.2. WIDENING ACCESS TO HIGHER EDUCATION THROUGH DISTANCE EDUCATION

(This section refers to Sections 6.3.1.1.2, 6.3.1.1.4 & 6.3.1.1.5)

The transition of South African institutions from blended to fully online education presents a complex landscape with nuanced reflections on quality implications. The underlying demand for tertiary education and the limitations of face-to-face capacity propel institutions towards online delivery. However, this transition is marked by challenges and potential misalignments at an executive level, raising concerns about the overarching quality of ODE.

The current landscape indicates a gradual shift from blended to online provision, with most institutions in a transitional phase. The scarcity of fully online programmes, often tailored for small student numbers, emphasises the need for a robust framework to ensure the quality of education in the online distance format. The recognition that online education is expected to become the norm underscores the importance of

comprehensive policies, training, and quality assurance mechanisms to facilitate a smooth and effective transition.

The demand for tertiary education exceeding capacity in South Africa necessitates a reliance on distance education. However, reflections on executive management's ambivalence and potential financial motivations for supporting distance education raise questions about strategic intent. The misalignment of goals and insufficient understanding at the executive level may hinder the quality of ODE, emphasising the need for precise strategic alignment and a comprehensive understanding of the unique requirements of online delivery.

Partnerships with third-party providers, while initially influential (Houlden & Veletsianos, 2019), raise sustainability concerns. The potential distance between the third party and day-to-day operations, coupled with challenges in keeping promises, underscores the need to evaluate such collaborations carefully. As institutions contemplate assuming more responsibility for online programmes in the future, a smooth transition and continued support beyond the partnership period become imperative for maintaining and enhancing the quality of online education.

Guidelines for residential institutions transitioning their administrative, teaching, and learning processes online should be rooted in a strategic and comprehensive approach. Institutions should ensure that executive management is strategically aligned with the goals of online education, emphasising its importance in widening access rather than purely financial considerations (Price, Casanova et al., 2016). As indicated in Section 7.3.1.1, institutions should develop robust policies encompassing all aspects of online education, including programme development, student support, and quality assurance. Policies should align with long-term goals and accommodate potential shifts in the mode of delivery.

To enhance the efficacy of online education delivery, institutions must invest in comprehensive training programmes, ensuring that staff at all levels possess the requisite skills. This encompasses academic, administrative, and support personnel who play pivotal roles in cultivating a thriving online learning environment (Modise & Van den Berg, 2021). Additionally, strategic evaluation of partnerships with third-party

providers is crucial, emphasising ensuring sustained support throughout the collaboration. Minimizing the distance between third-party entities and institutional operations is essential to foster effective collaboration. Anticipating organisational transitions, such as potential distance and online learning unit mergers, is vital. Institutions should proactively plan for the conclusion of agreements with external partners, being ready to assume full responsibility for online programmes. Implementing robust quality assurance mechanisms involving continual assessments and improvements to ensure the ongoing quality of online education is imperative. Regular evaluations, feedback mechanisms, and a dedicated commitment to addressing emerging challenges are integral components of this quality assurance framework (Kayyali, 2023).

7.3.2. ADMINISTRATIVE AFFAIRS

The following divisions are addressed in this sub-element

- Adapting existing administrative processes, procedures and systems

7.3.2.1. ADAPTING EXISTING ADMINISTRATIVE PROCESSES, PROCEDURES AND SYSTEMS

(This section refers to Sections 6.3.1.2.1 & 6.3.1.2.2)

In administrative infrastructure, the lack of a dedicated system for online enrollment and the manual enrollment processes at Institution A showcase the complexity of incorporating online models into existing structures. The delayed action in adapting the administrative system further highlights the challenges of aligning technology with evolving educational models (Mays & Aluko, 2019). The hesitancy to make necessary changes until the end of the online programme's lifespan points to a potential oversight in anticipating and proactively addressing the unique needs of online education.

Technological integration, especially between PeopleSoft and Blackboard, is crucial. The inability to automate student enrollment between these systems at Institution A, leading to manual enrollment on Blackboard, raises concerns about the efficiency and accuracy of data management. The reluctance to change systems due to potential impacts on various programmes and stakeholders underscores the intricate decisions

institutions must make in transitioning online. In contrast, Institution B's investment in a bespoke PeopleSoft system tailored for distance education signals a forward-thinking approach, reflecting a commitment to addressing the specific requirements of online learning.

A particularly disconcerting aspect affecting both institutions is the inability of students to apply and register for programmes online. The manual registration process at Institution A and the misalignment of cut-off dates in PeopleSoft for online programmes introduce significant challenges. Such issues directly impact the student experience and contribute to a perception of the institution's inability to adapt its systems to the needs of online learners.

Smooth administrative processes are crucial for quality online education (Mays & Aluko, 2019; Nadeosa, 2021). Institutions should invest in developing or adapting administrative systems to accommodate online seamlessly and blended learning models' unique needs. Manual enrollment processes, as seen in Institution A, can lead to inefficiencies and errors. Automation and integration between systems like PeopleSoft and Blackboard should be a priority to ensure accurate student information management.

Integrating technological systems, such as PeopleSoft and Blackboard, is vital. Institutions should work towards creating a cohesive technological environment where student data flows seamlessly across systems. This requires proactive investments in technology that cater specifically to the needs of ODE students (Dziuban, Graham et al., 2018). As demonstrated by Institution B, having a tailored PeopleSoft system that integrates seamlessly with their LMS contributes significantly to the effectiveness of online programmes. Incorporating educational technologies should eliminate learning hurdles rather than introduce more, aiming to facilitate access and remain adaptable to evolving contexts (Nadeosa, 2021).

7.3.3. RESEARCH

(This section refers to Sections 6.3.1.3.1 & 6.3.1.3.2)

Institution B demonstrates a commendable commitment to action-based research and continuous improvement based on student feedback. This approach aligns with the ethos of quality assurance and responsiveness to the evolving needs of distance education students (Nadeosa, 2021). However, feedback from Lecturers at Institution B reveals a challenge in the programme's generic nature, suggesting a misalignment with the practical needs and expectations of ODE students. This emphasises the necessity for programme content to be relevant and applicable, underlining the importance of continuous adaptation and responsiveness to maintain quality (Simonson, Zvacek et al., 2019).

In contrast, Institution A's decisions are strongly tied to data provided by the DHET, indicating a reliance on external sources for programme direction. The feedback regarding the third-party provider reveals a potential pitfall — the failure to conduct thorough research into the institution's and student's needs. This misalignment results in unmet expectations and a significant gap between predicted and actual student numbers. The financial implications of this misjudgment further underscore the critical need for rigorous, institution-specific research when transitioning to online programmes (Farley-Ripple, May, Karpyn, Tilley, & McDonough, 2018).

Both cases underscore the importance of research and understanding the local context when making decisions about online education. The quality of online distance education is intricately tied to how well institutions understand their students, their needs, and the readiness of the local demographic for online learning. The feedback and frustrations expressed in these cases highlight that a one-size-fits-all or first-world-centric approach may lead to significant quality issues. Institutions must conduct thorough research into the feasibility of online programmes and their students' specific needs, preferences, and capabilities (Farley-Ripple, May et al., 2018).

Institutions should prioritise comprehensive research before launching online programmes. This research should extend beyond technological feasibility to include an in-depth understanding of the local demographic, students' needs, and the cultural

context. This includes understanding the preferences and readiness of students for online learning. Institutions should conduct regular needs assessments to inform programme development and to ensure that online offerings align with the practical requirements of students (Masoumi & Lindström, 2012). Student feedback mechanisms are indispensable (Sahawneh & Benuto, 2018). Establishing robust systems for collecting and analysing feedback from students, tutors, and other stakeholders is crucial. This continuous feedback loop helps identify areas for improvement, gauge the relevance of programme content, and ensure that the institution stays responsive to the evolving needs of its online student body.

Administrative decisions must be grounded in accurate and context-specific data. Relying on external data sources, as observed in the case of Institution A, can be beneficial, but it should be supplemented with institution-specific research. Data-driven decisions, especially those related to programme offerings and expansions, should be supported by thorough research conducted within the institution.

Partnerships with third-party providers should be scrutinised. The experience from Institution A indicates that relying on external partners without ensuring their alignment with the institution's goals and understanding the local context can lead to significant mismatches and financial implications. Institutions should thoroughly vet third-party providers, ensuring they understand the local demographic and are committed to their mission and values. Financial models and partnerships should be transparent and mutually beneficial. The terms regarding revenue-sharing models should be fair and justified, such as the one observed in Institution A. Institutions must ensure that financial arrangements with external partners do not compromise the institution's financial sustainability and commitment to quality education.

The transition to online education for residential institutions necessitates a proactive and research-driven approach. It is not merely about adopting new technologies but about understanding the unique characteristics and expectations of the student body. Quality is deeply intertwined with how well institutions can tailor their offerings to local contexts, continuously improve based on feedback, and ensure that decisions about online education are rooted in comprehensive and institution-specific research.

7.3.4. QUALITY SERVICE

(This section refers to Section 6.3.1.4.1)

The Head of Department from Institution A emphasised the significance of an institution's reputation in influencing students' choices. This indicates that the perceived quality of online programmes directly affects how potential students view and select an institution (cf. 3.3). The HOD-A's concern about the institution's service quality and student support mechanisms highlights a critical aspect. Effective online education requires robust support structures, including functional call centres and meaningful student engagement. The absence of such services can undermine the overall student experience, affecting satisfaction and, subsequently, the institution's reputation (Su, Swanson et al., 2016). Aluko, Krull et al. (2022) emphasise that quality assurance practices should enrich students' learning experiences and ensure meaningful learning.

Lecturer (A)-B and Lecturer (B)-B's concerns about the consistency and quality of DE programmes compared to contact mode programmes raise critical questions. If the quality of ODE education does not align with traditional delivery, it can create a reputational risk. Ensuring that the content and standards remain consistent across different delivery modes is essential to maintain the integrity of the institution's educational offerings. Lecturer (B)-B's mention of colleagues recommending other institutions over Institution B on platforms like Facebook highlights the potential impact of word-of-mouth recommendations. Ensuring a positive and consistent online learning experience is crucial, as dissatisfaction can spread rapidly through digital channels. The concerns expressed by Lecturer (A)-B and Lecturer (B)-B shed light on the need for faculty buy-in and a fair approach to programme delivery. Institutions should engage faculty in discussions about the design and delivery of online programmes, addressing concerns about programme alignment and fairness. Encouraging a collaborative approach and providing necessary support for faculty adapting to online teaching methods are crucial elements of a successful transition.

Regarding technological integration, the advice from the Instructional Design Director underscores the importance of a strategic approach. Institutions should aim to become renowned for delivering ODE, leveraging their strengths rather than attempting to

replicate larger providers. Communicating clearly to students about courses requiring internet connectivity ensures transparency and helps manage expectations, contributing to a more positive online learning experience.

Heffernan, Wilkins et al. (2018) contend that reputation and trust are important factors for students to consider before deciding where to study. The embodiment of the institution's mission, the quality of research activities and community service influence the success of online education (Masoumi & Lindström, 2012; Mystakidis, Berki et al., 2021).

7.3.5. THIRD-PARTY PROVIDERS

(This section refers to Section 6.3.1.5.1)

The discussion about the cost of online education emphasises the misconception that online education is inherently more affordable (Hulsmann, 2016). The quality assurer (QA-A) rightly points out the high input costs associated with online education, including infrastructure, hardware, software, and online facilitators (Prinsloo, 2019). Institutions must recognise and communicate these realities to avoid financial miscalculations and ensure that the financial expectations align with the actual costs of delivering quality online programmes.

The cautionary tale about partnering with a third party underscores the financial implications of such arrangements. While third-party collaborations might bring certain benefits, the cost-sharing model, as described by the head of department (HOD-A), can be financially burdensome for the institution. The loss of income due to revenue-sharing agreements can limit the institution's capacity to invest in essential areas such as student support and technical assistance. The HOD-A's regret about the partnership emphasises the importance of thoroughly assessing such collaborations' financial implications and long-term sustainability.

Moreover, the insight that managing the online programme internally would generate more income highlights the potential advantages of self-management. The QA-A's critique of the third party's marketing strategy points to the importance of aligning marketing efforts with the unique characteristics and needs of the target audience for

online programmes. This reinforces the idea that institutions should consider the financial aspects and critically evaluate external partnerships' strategic alignment and effectiveness.

The funding model at Institution B provides an alternative perspective. The dedicated budget for distance education programmes demonstrates a commitment to ensuring adequate financial resources for ongoing programme development, student support, research, and improvement. This serves as a valuable guideline for institutions transitioning online, emphasising the need for careful budgeting, sustainable financial planning, and a dedicated commitment to the long-term success of ODE.

The manager at Institution B's emphasis on wise budgeting and the careful planning of target markets for online learning aligns with the financial realities outlined by the QA-A at Institution A. The recognition that DE students receive only half the subsidy of full-time students underscores the importance of planning enrollment numbers carefully to ensure financial sustainability. Institutions need to assess their capacity, market demand, and the unique financial considerations of ODE to create realistic and sustainable financial models.

The guidelines for residential institutions transitioning online revolve around a clear understanding of the financial landscape, careful budgeting, and strategic planning. It is essential to dispel misconceptions about the affordability of online education, critically evaluate external partnerships, and consider the long-term financial implications. Financial models should align with the institution's quality commitment, ensuring adequate infrastructure investment, student support, and overall programme development. By adopting a realistic and strategic approach to finances, institutions can navigate the challenges of transitioning online while focusing on delivering high-quality education.

7.4. TECHNOLOGICAL ELEMENT

Sub-elements:

- Demographic profile of students
- Aims and objectives of educational technology
- Access to learning resources, the Internet and devices
- User-friendly and easy-to-use user interfaces

7.4.1. DEMOGRAPHIC PROFILE OF STUDENTS

(This section refers to Section 6.3.2.1.1)

The acknowledgement by the Quality Assurer at Institution A that not all parts of South Africa are ready for online education emphasises the importance of a nuanced approach to online programme marketing. Institutions must conduct thorough baseline assessments to identify areas with better readiness for online education (CHE, 2014; Nadeosa, 2021). Marketing strategies should align with the demographic profile and readiness of specific regions, avoiding mismatches that could lead to ineffective marketing and enrollment challenges.

Institution B's approach to gradually introducing digital elements, particularly for lower levels, underscores the significance of considering the demographic profile of students. The decision to blend traditional and online methods based on the student's readiness reflects an understanding that a one-size-fits-all approach might not be suitable. Institutions should evaluate the preferences and preparedness of their student body and adopt a phased approach to integrating online components, ensuring a smoother transition and greater acceptance by students and staff (Borotis & Poulymenakou, 2004).

The misalignment of marketing strategies by a third party underscores the need for institutions to have control over their marketing processes. It emphasises the importance of direct engagement with the target audience and utilising appropriate marketing channels. Relying on platforms like Facebook might be inadequate for reaching audiences in deep rural areas. Institutions should ensure that their marketing

strategies align with the characteristics and preferences of their target demographic, employing diverse and effective communication channels.

The insight from IDD-A regarding students' motivation in their online programme at Institution A raises questions about students' readiness for self-paced online learning. Institutions need to be cognizant of the motivations and expectations of their students (Serin, 2018), especially those in online programmes. Strategies for student engagement, support, and completion should be tailored to the unique characteristics of the online student body (Bergeron & Fornero, 2018).

Thorough baseline assessments, phased integration based on demographic considerations, direct control over marketing strategies, and a nuanced understanding of student motivations are crucial considerations by institutions. Institutions must adapt strategies to their student body's specific needs and readiness to ensure a successful and sustainable transition to online education (Ali, 2020).

7.4.2. AIMS AND OBJECTIVES OF EDUCATIONAL TECHNOLOGY

(This section refers to Section 6.3.2.2.1)

The gradual integration of technology into teaching and learning, especially for institutions with an open distance learning policy, aligns with the notion that change should be progressive and tailored to the institution's and its students' needs. Manager B's acknowledgement that there is never an ideal time for implementing educational technology speaks to the ongoing nature of technological evolution. Waiting for the "old ones to die off" is impractical, and institutions must adopt a pragmatic approach (Djouab & Bari, 2016). Recognising that online education cannot merely replicate traditional models by integrating technologies into existing frameworks is crucial. Instead, institutions should thoroughly evaluate the context in which education occurs, considering the target audience and the nature of the content (Djouab & Bari, 2016).

A key takeaway is the emphasis on the need for a nuanced and context-specific approach to integrating educational technology. IDD-A's perspective underscores that digitising traditional programmes does not constitute effective online education. Instead, institutions must consider the context of learning, the target audience, and the

nature of the content. Furthermore, IDD-A's insights into the pitfalls of trying to fit all parts of a curriculum into an online system highlight the importance of a strategic and outcome-driven approach. The suggestion to restructure curricula and determine the best mode of delivery for specific modules or parts of a programme indicates a student-centric approach. It also highlights a commitment to practical outcomes. It implies that not all curriculum elements may be suitable for online delivery, and certain aspects might be better learned in a traditional classroom or laboratory setting. This involves understanding when online learning is most effective and when face-to-face instruction is essential, as exemplified in the case of medical training.

A fundamental principle is to design online programmes based on the genuine need for an online format rather than imposing an online structure onto traditional programmes. This demands careful consideration of whether the target audience is willing and able to engage effectively in online learning (Ouadoud, Chkouri et al., 2016). Recognising that technology integration is an ongoing process, institutions must acknowledge that there is no perfect time to implement educational technology. Waiting for ideal circumstances is impractical, and a pragmatic, progressive integration aligns with the evolving nature of technology.

The case of the largest DE provider in South Africa provides valuable lessons. The institution's commitment to quality in distance education, equivalent to on-campus offerings, suggests that a focus on maintaining educational standards during the transition is crucial. However, the challenge arises when adopting an "open" policy, potentially excluding students when moving entirely online. This emphasises balancing inclusivity with quality to avoid compromising educational standards.

IDD-A's perspective on developing online programmes reflects a rejection of a one-size-fits-all approach. The emphasis on investigating good teaching practices, determining synchronous or asynchronous delivery based on pedagogical needs, and considering a hybrid model for specific disciplines underscores the importance of flexibility and student-centred design (Hodges, Moore et al., 2020).

7.4.3. ACCESS TO LEARNING RESOURCES, THE INTERNET AND DEVICES

(This section refers to Sections 6.3.2.3.1, 6.3.2.3.2 & 6.3.2.3.3)

The challenges associated with access to technology and connectivity in South Africa pose significant quality implications for residential institutions transitioning their administrative, teaching, and learning processes online. Manager B's insights underscore the complexity of delivering online programmes, especially when considering the diverse connectivity landscape in the country. The need for students to download materials and access them offline, reflecting on the cost and availability of mobile data, highlights the importance of accommodating students with varying levels of connectivity (Du Preez & Le Grange, 2020). As a result, institutions must tailor their online programmes to their target audience's needs, considering both access and affordability (Kumar & Owston, 2016).

Acknowledging that solid connectivity is not uniform across the country, particularly in rural areas, raises equity concerns. This has direct implications for the effectiveness of online education delivery, impacting students' ability to engage in synchronous activities and receive timely feedback. The conclusion that more blended models might be necessary until connectivity strengthens aligns with the need for flexibility in transitioning to online education (Sun, Tang et al., 2020). Institutions must carefully weigh the benefits of fully online programmes against the practical challenges associated with connectivity, urging a nuanced approach to programme design (Kruger, 2017). The effective use of technology in education does not occur by increasing access to ICT (Tondeur, van Braak, Siddiq, & Scherer, 2016)

The contrasting views between IDD-A and HOSLP-A at Institution A regarding students' ICT access highlight the importance of understanding the actual needs and capabilities of the student population. Institutional efforts may be misdirected if students are falsely assumed to lack access. Thus, a thorough assessment of students' technological literacy is essential, and educational institutions must provide necessary support and training to bridge potential gaps in ICT usage (Masoumi & Lindström, 2012).

In transitioning online, institutions must consider the student's access to technology and the cost implications (Bates, 2022). The commitment of the South African government to engage with service providers to reduce data costs indicates a recognition of the financial barriers that students may face. However, it also underscores the need for collaborative efforts between educational institutions and stakeholders to ensure that access to connectivity does not hinder education.

7.4.4. USER-FRIENDLY AND EASY-TO-USE USER INTERFACES

(This section refers to Section 6.3.2.4.1)

An effective LMS plays a pivotal role in establishing the online presence of lecturers or facilitators, providing them with avenues for direct and indirect communication with students (Masoumi & Lindström, 2012). Guidelines for residential institutions should underscore the importance of a well-designed LMS interface that offers clarity and guidance to students navigating the online learning environment (Hodges, Moore et al., 2020; Puspitasari, 2021). This includes considerations for intuitive navigation, accessibility features, and a user-friendly interface (Firat, Sakar et al., 2016).

Additionally, institutions should seek or develop comprehensive quality criteria that explicitly address interface design within online education (Kamaruddin & Sulaiman, 2018). Clear guidelines, such as those provided by established criteria like Quality Matters, are essential (Quality Matters, 2020). These guidelines should not only focus on content delivery but also specifically address how interface design contributes to the overall quality of online education. User experience, accessibility, and engagement should be integral to these guidelines.

While existing quality criteria might provide valuable insights, institutions should critically evaluate their applicability to the unique context of their programmes, modules and learners. If criteria lack clarity on interface design, institutions should proactively supplement these criteria with additional considerations that ensure a consistent and user-friendly online learning experience.

7.5. INSTRUCTIONAL DESIGN AND PEDAGOGICAL ELEMENT

Sub-elements:

- Learning resources
- Learning flexibility
- Online learning environments
- Assessment

7.5.1. LEARNING RESOURCES

(This section refers to the Sections: 6.3.3.1.1, 6.3.3.2.2, 6.3.3.3.1, 6.3.3.3.2 & 6.3.3.3.3)

Transitioning administrative, teaching, and learning processes online demands a nuanced approach to resource utilisation, as highlighted by the Instructional Design Director at Institution A. Online learning's strength lies in its capacity to present content diversely, promoting effective learning beyond traditional methods (Omer, 2015). Therefore, QA frameworks must encourage varied resource use, avoiding penalisation for employing differentiated materials. QA criteria should shift from rigid guidelines to fostering creativity and effectiveness. This approach aligns with the understanding that online learning is not confined to digital spaces; it extends to integrating various resources, acknowledging that effective teaching involves guiding students on how to use these resources for application-based learning (Bates, 2022).

A critical aspect is considering the nature of content in curriculum design. As emphasized by IDD-A, specific components, like practical medical procedures, might be better suited for face-to-face instruction. This necessitates a judicious review of curriculum elements, distinguishing between what can be effectively delivered online and what requires physical presence. QA frameworks should incorporate guidelines that help educators make informed decisions regarding the mode of delivery based on the nature of the content, ensuring that learning outcomes are consistently met across different formats.

HOSLP-A's identification of the challenge wherein students have access to a "maze of information" underlines the importance of structured content and clear guidance

(Omer, 2015). This involves not only the provision of information but also guidance on how students should engage with it. Educators must curate content effectively, providing clear pathways and supplemental support where needed (Mohammadi, Abrizah et al., 2017).

The incorporation of learning artefacts, as advocated by IDD-A, represents an innovative way to enhance online learning. These artefacts, designed to clarify complex concepts or provide additional context, exemplify personalised learning experiences. QA frameworks should encourage the integration of such artefacts, fostering a more interactive and engaging learning environment (Czerkowski & Lyman, 2016). Additionally, institutions should invest in tools and platforms, like Articulate Storyline, to empower educators in creating these artefacts effectively.

Regarding pedagogy, the need for a paradigm shift, as highlighted by Manager B, necessitates a comprehensive review of teaching methodologies. Traditional lectures replicated online risk perpetuating rote learning. Therefore, guidelines should emphasise a move toward problem-based learning, incorporating real-life examples, scenarios, and case studies (Bates, 2022). The focus should shift from memorisation to the application of knowledge, aligning with evolving educational philosophies.

As elucidated by CDE-A, the collaboration between SMEs and curriculum designers must be a focal point during a transition. QA frameworks should ensure that SMEs are content experts proficient in online pedagogies. Curriculum designers play a pivotal role in translating content effectively for online delivery. Guidelines should thus stress the importance of a collaborative approach, ensuring that online courses are not mere imitations but tailored to the specific requirements of online learning (Akcaoglu & Lee, 2016; Czerkowski & Lyman, 2016).

Regarding the review cycle, QA frameworks must adapt to the dynamic nature of online education. As the Quality Assurer of Institution B mentioned, the traditional five-year review cycle might be too inflexible for the rapidly evolving online landscape. Guidelines should encourage frequent reviews, ensuring materials stay current and align with industry standards and technological advancements (Mncube, Mutongoza

et al., 2021). Incorporating external reviews, as identified by CDE-A, ensures that QA frameworks remain robust, responsive, and aligned with national standards.

Manager B's criteria for evaluating online resources—accuracy, author reputation, technical standards, accessibility, and fitness for purpose—should be integrated into QA frameworks. Educators must be equipped with information and pedagogical literacy, understanding how these resources fit into their teaching methodologies.

7.5.2. LEARNING FLEXIBILITY

(This section refers to Section 6.3.3.5.1)

As Manager B emphasised, transitioning teaching and learning processes online demands a flexible approach to accommodate diverse learning styles. He acknowledged that online students differ in their preferences - some prefer independent work, and others thrive on peer engagement - which is essential. Institutions should prioritise the creation of adaptive spaces that cater to various teaching and learning needs. The caution against adopting a one-size-fits-all approach is crucial. Instead, institutions should foster authentic learning activities that simulate real-world scenarios, encouraging a nuanced understanding of group work in professional contexts (Condelli, Wrigley et al., 2008). This approach aligns with Manager B's belief that actual achievement in the real world often involves engaging with others. Therefore, institutions must create spaces supporting different learning styles while avoiding imposing a rigid teaching model (Masoumi & Lindström, 2012).

The unique characteristics of adult learners, as highlighted by the CDE-A, must be considered in ODE. Most adult learners at Institution A work full-time and have many years of experience. Institutions should underscore the importance of building module content leveraging this experience. Active learning principles and a constructivist approach should be central to the teaching and learning process, focusing on continuous engagement and reflection (Lee & Kim, 2018). Activity-based learning materials integrating workplace scenarios are vital, enabling students to apply theoretical knowledge actively. Assessment strategies should reflect a performance-based orientation, emphasising practical application over rote memorization.

Institutions transitioning online should prioritize these principles, ensuring that the learning experience aligns with the needs and characteristics of adult learners.

Lecturer(A)-B's approach to combining theoretical content with practical application offers valuable insights for learning flexibility. Institutions should encourage educators to infuse practical elements into theoretical modules. This involves presenting abstract concepts that require students to apply their knowledge to real-life scenarios (Serin, 2018). The emphasis should shift from memorizing definitions to analysing and understanding the practical implications of theoretical concepts. This pedagogical shift promotes a deeper understanding of the subject matter, aligning with the broader goal of fostering practical skills alongside theoretical knowledge. Institutions should encourage educators to adopt such a flexible and application-oriented approach, ensuring that online learning is not confined to theoretical abstraction but is deeply rooted in real-world applicability.

7.5.3. ONLINE LEARNING ENVIRONMENTS

(This section refers to Sections 6.3.3.4.1, 6.3.3.6.1, 6.3.3.6.2 & 6.3.3.6.3)

Both Institutions highlighted challenges in students' use of Learning Management Systems. Many students at Institution B were not engaging with the LMS, and various reasons were cited, including repetition of activities and technology issues. While a student's disposition could significantly influence their online learning experience, it is crucial to acknowledge that the facilitator also shapes students' perceptions of the online environment (Costley & Lange, 2016). Lecturers expressed concerns about the lack of user-friendliness of the LMS, indicating a potential barrier to effective online learning. Unfortunately, students' attitude towards their online learning environment influences their achievement in a course (Costley & Lange, 2016). Therefore, educators and instructional designers need to be mindful of the design of the online learning environment (Akcaoglu & Lee, 2016; Czerkawski & Lyman, 2016). Institutions should emphasise the importance of intuitive, user-friendly LMS platforms to encourage student engagement. Moreover, institutions should conduct regular training sessions to familiarise students and educators with the functionalities of the LMS.

The underutilisation of discussion boards in the LMS, as Lecturer (B)-B noted, could indicate a need for alternative methods of communication. Institutions should investigate the need to leverage external platforms like WhatsApp or social media to supplement LMS interactions. Recognising that students may be more comfortable with these tools, integrating them into the teaching process can enhance communication and engagement, but it should be carefully planned (McLoughlin & Lee, 2010). Institution A's approach to using WhatsApp for student communication suggests that a mix of tools may be more effective than relying solely on the LMS. Educators should be allowed to use various platforms based on student preferences. The training of tutors and faculty in utilising various technologies, including WhatsApp, Zoom, and others, should be a priority to ensure effective communication and support for students (Englund, Olofsson et al., 2017; Masoumi & Lindström, 2012; Simamora, De Fretes et al., 2020).

The concerns raised about students' fear or uncertainty in using technology, particularly the LMS, highlight the need for additional support mechanisms. Institutions should invest in providing comprehensive training programmes for students, faculty and support staff. This should encompass the effective use of the LMS, various communication tools, and strategies for promoting student confidence in online interactions (Masoumi & Lindström, 2012; Simamora, De Fretes et al., 2020).

Addressing the needs of diverse learners is crucial, as noted by the presence of a blind and deaf student at Institution A. When institutions develop content, they should emphasise the importance of creating accessible content, including transcribing educational videos. Institutions must consider the varied needs of students, ensuring that the online environment is inclusive and supportive of all learners.

The discussions on online participation and engagement quality point to the necessity of a thoughtful design for online modules and programmes (Akcaoglu & Lee, 2016; Czerkawski & Lyman, 2016). Institutions should advocate for a structured, organised, consistent online learning experience. This involves clear programme outlines, straightforward navigation within the LMS, and a standardised format for module structures. Such design principles, as highlighted by Lecturer (D)-B, contribute to a positive learning experience, aiding students in planning and engaging effectively with

the content (Rodríguez-Ardura & Meseguer-Artola, 2016). Swan (2001) found that interactions between students and teachers increased perceptions of learning. Therefore, instructors should be cautious in considering how they encourage student participation and to ensure that they foster a feeling of community (Berry, 2017; Conklin & Dikkers, 2021; Din, Haron et al., 2016; Masoumi & Lindström, 2012).

7.5.4. ASSESSMENT

(This section refers to Sections 6.3.3.7.1 & 6.3.3.7.2)

Assessing students in distance education remains among the most challenging aspects of this mode of delivery (Xiong & Suen, 2018). Particularly in South Africa, universities have been scrutinised for their assessment procedures, which strongly favour summative assessment (Wolhuter & Jacobs, 2021). According to Bloom's Taxonomy, this type of evaluation frequently focuses on lower-order learning objectives, which is out of step with global assessment trends (Wolhuter & Jacobs, 2021).

Institution A and Institution B have distinct approaches to assessment, emphasising the need for institutions to align their assessment methods with the nature of online education. While Institution B relies on traditional assessments, including examinations and individual assignments, Institution A adopts a continuous assessment model. The latter focuses on small activities and structured assignments, emphasising integrating theoretical knowledge into practical scenarios. This approach, rooted in performance-based assessments and reflection, aligns with the flexibility and real-world application essential in online education. Regular, ongoing assessments can benchmark students' academic progress (Simonson, Smaldino et al., 2014). Also, a continuous assessment strategy appears to be more beneficial if assessments are adequately constructed to examine the application of knowledge (Jansen, 2020). Furthermore, Institution A emphasised the timeless nature of assessments, allowing for reuse across years while promoting student engagement through the application of acquired knowledge.

However, challenges exist in the assessment processes of both institutions. Institution B faces issues with providing comprehensive feedback to students due to constraints on resources and time. Lecturers express frustration about markers' lack of constructive feedback, indicating a potential gap in student learning experiences. Similarly, at Institution A, there are concerns about the effectiveness of feedback, with tutors noting that students often do not implement the feedback provided. This highlights a critical aspect of online education: the importance of feedback in fostering student growth and understanding (Akhter & Ali, 2016). Constructive feedback forms an essential part of assessments (Simonson, Zvacek et al., 2019) and could improve students' results but could also encourage and motivate them (Ogange, Agak et al., 2018). According to Simonson, Smaldino et al. (2014), students should receive constructive criticism explaining their development and improvement areas. Assessments, in general, should focus on improving students' skills and critical thinking (Masoumi & Lindström, 2012). Markers, who are not necessarily knowledgeable about DE practices, should remember that opportunities for formative assessment might improve student-lecturer interaction and, in some cases, be the only communication channel between a lecturer and facilitator or marker (Akhter & Ali, 2016; Ogange, Agak et al., 2018). As institutions transition online, they must prioritise mechanisms for providing timely and meaningful feedback, recognising its role in enhancing the learning experience.

Additionally, the issue of individual versus group assessment arises, especially in the context of online collaboration. While students at Institution B are assessed individually despite working in study groups, the collaborative nature of online learning environments calls for reevaluating assessment methods. Institutions should explore strategies that allow for both individual and collaborative assessments, fostering teamwork and preparing students for real-world collaborative scenarios (Kent, Laslo et al., 2016). Implementing group projects or assessments could enhance teamwork and communication skills, which are crucial in an increasingly interconnected virtual work environment. When students are active learners, they learn meaningfully (Bates, 2022).

The use of rubrics emerges as a significant factor in ensuring transparency and clarity in assessments. Providing students with detailed rubrics that outline assessment criteria can guide them through the assessment process and contribute to a more comprehensive understanding of their performance. This practice aligns with the principles of transparency and fairness in assessment, which are crucial in maintaining the quality of education during the transition to online platforms (Masoumi & Lindström, 2012).

7.6. STUDENT SUPPORT

Sub-elements:

- Support Approach
- Technical Support
- Academic Support

7.6.1. SUPPORT APPROACH

(This section refers to Section 6.3.4.1.1)

It is crucial to consider the way that support staff members manage students. Online students also want to feel like they are a part of the institution, and how staff members interact with them may affect how they perceive support (Din, Haron et al., 2016). Therefore, institutions must develop policies and procedures that guide staff members' day-to-day interaction with students (Bergeron & Fornero, 2018). These guidelines should furthermore provide direction to all staff members.

Institution B exemplifies that a central administrative hub that manages academic and logistical inquiries is a crucial component of a DE environment. This centralised structure facilitates streamlined communication and support services for students, ensuring that administrative activities, such as sending learning materials, responding to inquiries, and conducting regular interventions, are effectively coordinated. This approach is particularly relevant for online programmes, where the physical distance between students and the institution necessitates efficient and centralised support mechanisms (Bergeron & Fornero, 2018).

Institutions should leverage digital tools and resources to enhance student support in online environments. As highlighted by the Head of Short Learning Programmes at Institution A, the availability of information on their LMS can be a valuable resource for students facing challenges. Creating a knowledge base with frequently asked questions and answers contributes to a digital support system that empowers students to find solutions independently. This aligns with planned and digital support, allowing students to access information promptly and encouraging self-directed problem-solving.

However, institutions must balance providing digital resources and overwhelming students with excessive information. The transition to online platforms should involve a thoughtful restructuring of manuals and readings into more digestible formats, such as videos. This approach, as suggested by the Head of Short Learning Programmes at Institution A, ensures that instructional materials are not only accessible but also engaging. Recognising students' diverse learning preferences and potential technology constraints, institutions must prioritise user-friendly and interactive formats, like video tutorials, to convey information effectively.

As practised by Institution B through activities like sending letters of motivation and encouragement, regular communication and encouragement should persist online. These gestures contribute to a sense of community and personalised support, addressing the potential isolation that online learners may experience.

A successful transition to online education involves replicating administrative functions and reimagining and enhancing support structures. Debattista (2018) emphasises an institution's need for a clear vision and strategy for online learning. Putting strategies in place, like centralised hubs, digital knowledge bases, and thoughtful repackaging of instructional materials into engaging formats collectively contributes to a robust support framework that ensures the success and satisfaction of online learners (Bergeron & Fornero, 2018).

7.6.2. TECHNICAL SUPPORT

(This section refers to Sections 6.3.4.2.1 & 6.3.4.2.2)

Din, Haron et al. (2016) and Masoumi and Lindström (2012) emphasise that technical support is a critical component of self-directed learning. When students encounter technical issues and cannot continue learning efficiently, they grow disheartened (Hiemstra, 2013). Establishing teams that focus only on technical and administrative support inquiries is important (Din, Haron et al., 2016). Manager B rightly emphasises the foundational skills students require for successful online participation, such as reading on-screen, typing assignments, and handling various file formats (Din, Haron et al., 2016). As institutions incorporate multimedia elements like video and audio, the development of digital literacies becomes crucial. However, it is not just about using these tools but critically engaging with the content. Therefore, institutions should integrate training on digital literacy and critical thinking skills into their online programmes, acknowledging the need for a new set of competencies in the digital realm (Din, Haron et al., 2016). Ultimately, students without fundamental technological proficiency will not engage in online learning environments (Borup & Stevens, 2016).

The experiences shared by the Tutor Support Person at Institution A highlight the necessity for dedicated technical support. An appointed facilitator assisting on academic platforms is a positive step, but students' challenges, like forgotten passwords and profile blocks, indicate the need for a specialised ICT support helpdesk (Masoumi & Lindström, 2012). This helpdesk could promptly address technical glitches, preventing students' frustration and discouragement. The cost and duration of support services are critical considerations, and institutions should strive to make technical assistance easily accessible and affordable for online learners.

The insights from Lecturer(C)-B and LECT(A)-B underline the psychological aspect of technical support. The level and timeliness of assistance significantly influence students' attitudes. Therefore, active learning can occur only when timely and effective technical support is in place (Gay, 2016). The expectation of instant problem resolution is characteristic of the current generation, and institutions must recognise and adapt to this mindset. Masoumi and Lindström (2012) also suggest that institutions should determine when to provide just-in-time, just enough or at the point-of-need technical

assistance over and above timely and practical help. Implementing initiatives like an online LMS induction week, as suggested by LECT(C)-B, can serve as a proactive measure to familiarise students with the technical aspects of the LMS, potentially mitigating challenges and reducing the likelihood of learned helplessness.

7.6.3. ACADEMIC SUPPORT

(This section refers to Sections 6.3.4.3.1, 6.3.4.3.2 & 6.3.4.3.3)

Creating a universal support system that could function alongside any academic curriculum would be challenging. Institutions should, therefore, tailor support structures to specific programmes. Despite the obstacles and challenging situations lecturers face, they must guide, assist, and encourage students (Van Wyk, 2019).

Institution B's approach, offering a variety of support mechanisms through face-to-face contact sessions throughout the country, tutorial letters, and assignments with extensive feedback, is a robust model. However, it is essential to acknowledge that a one-size-fits-all approach may not suit every student. MAN-B rightly emphasises the importance of non-compulsory face-to-face sessions, recognising that students have varying needs. This flexibility is crucial in the online learning environment, allowing students to choose the level of support that aligns with their learning preferences and requirements.

Moreover, Institution B's strategy of recruiting and training tutors and considering their feedback in programme design is commendable. This two-way communication ensures that support structures are dynamic, responsive, and aligned with the evolving needs of students. Other institutions should adopt similar strategies, acknowledging the significance of tutor involvement and feedback loops in refining the quality of academic support. In contrast, Institution A's approach to student and teacher support appears less defined and structured. The absence of a comprehensive ODE policy and reliance on loosely structured documents might lead to inconsistencies and gaps in support provision. To address this, it is crucial for institutions transitioning online to establish clear policies and guidelines that provide a framework for consistent and effective support mechanisms.

The role of online facilitators, as described by HOD-A, is critical in guiding students through self-directed learning (Chen, Basma, Ju, & Ng, 2020). However, the balance between structured guidance and fostering independent learning should be carefully maintained. The transition to online teaching should prioritise technological aspects and pedagogical principles to cultivate self-directed and critical students.

The issue of language proficiency, as raised by several lecturers, should be acknowledged and addressed proactively. Institutions should consider incorporating language tutoring as part of academic support in an online setting, where communication is often text-based. Providing additional resources for language proficiency development could significantly enhance students' comprehension and engagement with course materials.

The importance of technical support cannot be overstated (Din, Haron et al., 2016). The experiences shared by lecturers regarding students' struggles with technical issues highlight the need for dedicated ICT support helpdesks. These helpdesks should be easily accessible, cost-effective, and equipped to handle various technical challenges promptly. Recognising that students often give up when faced with technical difficulties, institutions should prioritise establishing robust technical support systems.

7.7. FACULTY SUPPORT

Sub-elements:

- Support Approach
- Professional Development
- Technical and Pedagogical Support
- The Role of an Academic in DE

7.7.1. SUPPORT APPROACH

(This section refers to Sections 6.3.5.2.1 & 6.3.5.2.3)

Traditional face-to-face lecturers who undergo technical training will not necessarily become effective online instructors or facilitators. In order to incorporate educational resources into teaching and learning contexts effectively, lecturers need to be well-trained (Omidire & Aluko, 2022). Therefore, transitioning to online education requires a comprehensive approach to faculty support, as highlighted by the challenges faced by both Institutions A and B. The first critical aspect is recognising the diversity in computer literacy among faculty members. The experience shared by HOD-A underscores the importance of assessing the digital skills of staff and tailoring training programmes to support staff. Incorporating LMS experience as a requirement for future positions is a proactive step, aligning recruitment with the technological demands of online education.

It is imperative to establish a clear understanding of the contributions and benefits of online education. The financial incentives and broader impacts of ODE on the institution's overall goals should be communicated effectively. Integrating ODE into existing faculties rather than operating independently, as suggested by MAN-B, fosters a sense of shared responsibility and understanding among staff members. This might lead to increased engagement from academics who recognise online education's value and potential impact.

Incentivising full-time staff for their involvement in ODE activities is crucial for their active participation. If module coordinators and academic staff are expected to contribute to ODE tutoring, marking, and training, there should be mechanisms to compensate them adequately. As pointed out by MAN-B, financial considerations play a pivotal role in motivating staff members to participate actively in DE activities.

Moreover, encouraging regular engagement of lecturers in academic processes and procedures of ODE is essential. Unfortunately, many academics lack the knowledge and skills to work in an online DE environment (Arinto, 2016). Offering support and training and creating discussion opportunities can help bridge the gap between academic departments and ODE units functioning independently. The reluctance of

academics to engage might also be due to a lack of awareness or understanding of the benefits and processes involved in online education. Proactive initiatives, such as covering costs for academic staff attendance at contact sessions, can encourage greater participation.

The management of institutions should create policies for online education that emphasise staff support. For successful implementation of this concept, policies should encourage management's support and appreciation of online learning (Moakofhi, Leteane et al., 2017). Policies need to be effective, hence, applying workload and intellectual property rights should be guided by appropriate processes (Masoumi & Lindström, 2012). A faculty-focused support approach should emphasise constant communication and reassurance for DE students. Lecturers should adopt convenient communication channels for students, ensuring that the challenges of distance learning are addressed promptly. Recognising the unique needs of DE students is crucial for maintaining a supportive and inclusive learning environment.

7.7.2. PROFESSIONAL DEVELOPMENT

(This section refers to Sections 6.3.5.1.1, 6.3.5.2.1)

The teaching and learning environment should include more than just physical technology. Lecturers should anticipate how technology will affect teaching and learning (Hodges, Moore et al., 2020). Unfortunately, pedagogical change is challenging for lecturers and faculty (Arinto, 2016). The challenges faced by Institution A in terms of the computer literacy of part-time staff members highlight the need for targeted and continuous professional development initiatives (Englund, Olofsson et al., 2017; Masoumi & Lindström, 2012; Simamora, De Fretes et al., 2020). As suggested by the HOD-A, incorporating LMS experience as a requirement for future positions is a practical step to ensure faculty members are equipped with essential technological skills. However, this should be accompanied by accessible and ongoing training sessions tailored to the specific needs of faculty members.

In planning the recruitment and training strategy, institutions should consider the adaptability of faculty members to unique teaching and learning environments. This involves technical skills and pedagogical strategies suitable for online education.

Faculty development programmes should foster a mindset of adaptability and innovation, ensuring faculty members can confidently navigate the evolving landscape of online education (Hodges, Moore et al., 2020).

Institutions should implement differentiated training programmes to address varying computer competencies among staff members. Tailoring training sessions to the specific needs of individuals, as identified by the HOD-A, can bridge the competency gap effectively. Additionally, creating a culture of continuous learning and providing ongoing support through peer mentoring or online communities can further enhance faculty members' confidence and competence in the online teaching environment.

7.7.3. TECHNICAL AND PEDAGOGICAL SUPPORT

(This section refers to Section 6.3.5.2.2)

The lecturers should have access to hands-on technical and instructional support throughout programme design, development, and delivery (Masoumi & Lindström, 2012). In addition, lecturers need guidance regarding teaching and learning in online learning environments (Simamora, De Fretes et al., 2020). Adequate technical and pedagogical support is pivotal for faculty navigating online teaching environments, as observed in the lecturers' experiences at Institution B. The positive feedback from lecturers on the support structures provided by Instructional Designers underscores the importance of investing in robust support mechanisms. In transitioning administrative, teaching, and learning processes online, institutions should prioritise the availability and responsiveness of Instructional Designers. This entails ensuring faculty members can easily access the expertise they need, fostering a culture of timely assistance. Subsequently, Lecturers and Instructional Designers should work closely together since both parties contribute different skills (Outlaw & Rice, 2015)

Recognising diversity in approaches to problem-solving, institutions should encourage faculty members to leverage online resources independently. Platforms like Google and official software documentation can be valuable tools for addressing common issues. This not only empowers faculty to find solutions promptly but also promotes self-sufficiency. However, institutions must strike a balance; while self-reliance is

encouraged, a safety net in the form of accessible instructional support should be readily available for complex or urgent challenges.

The experiences of Lecturer (E)-B, who faced delays in reaching instructional designers, highlight the need for streamlined communication channels. Institutions should establish efficient communication protocols, ensuring faculty can quickly connect with support personnel. Interactions between the instructor and instructional designer are crucial (Simamora, De Fretes et al., 2020). This might involve dedicated communication platforms, well-defined procedures for issue escalation, and mechanisms to address urgent queries promptly. Timely access to instructional designers is fundamental to maintaining the continuity and quality of online education.

7.7.4. ROLE OF AN ACADEMIC IN ONLINE DISTANCE EDUCATION

(This section refers to Section 6.3.5.2.3)

Transitioning to online distance education demands a reevaluation of the role of academics to ensure a seamless and effective learning experience. Teaching online does not mean that face-to-face classes can be transferred to online classes (Schmidt, Hodge et al., 2013). Online teaching requires specific teaching abilities and capabilities (Aruleba, Jere et al., 2022; Omidire & Aluko, 2022). Schmidt, Tschida et al. (2016) agree that there are challenging teaching conditions for lecturers who teach in traditional classrooms and online settings. The disconnect highlighted at Institution B emphasises the necessity for a holistic integration of online programmes within the larger academic framework. One essential guideline involves fostering a sense of inclusivity and recognition for academics involved in ODE. These educators must not feel marginalised but consider their roles integral to the institution's academic mission. This involves acknowledging the financial contributions made by DE programmes and ensuring that this information is communicated to all faculty members, dispelling the notion that DE roles are secondary.

Institutions should establish clear incentives and support structures to encourage the active involvement of full-time staff in ODE. Addressing frustrations voiced by Manager B, acknowledging and compensating academics for their contributions to DE, such as tutoring and marking, is crucial. Financial incentives, professional development

opportunities, and acknowledging their efforts within the broader academic community can motivate faculty to engage in online teaching actively.

Regular communication and collaboration are paramount to bridge the gap between the vision for ODE and the institution's broader goals. As suggested by MAN-B, frequent meetings involving all stakeholders can provide a platform for sharing best practices, resolving challenges, and aligning ODE strategies with institutional visions. Creating a culture of collaboration requires commitment from ODE unit leaders, academic heads, and administrative staff across departments.

Academics involved in ODE must be equipped with the necessary skills and training (Englund, Olofsson et al., 2017; Modise & Van den Berg, 2021). Without assistance in creating and delivering an online course, faculties cannot expect traditional, face-to-face lecturers to teach effectively in online contexts (Mays, 2016; Schmidt, Tschida et al., 2016; Simamora, De Fretes et al., 2020). The insights from Lecturer (E)-B and the emphasis on providing support and training opportunities underscore the importance of technical proficiency and pedagogical skills. Regular training sessions, workshops, and accessible resources should be provided to ensure that academics are well-prepared for the nuances of online teaching.

The academic's role in ODE extends beyond content delivery and student support. Lecturer (H)-B rightly points out the need for constant communication and reassurance for DE students. This highlights a paradigm shift where academics are not just instructors but also mentors who actively engage with students, providing the necessary support and guidance.

7.8. CONCLUDING REMARKS

This chapter's outline of the Conceptual Quality Framework (cf. Table 7.2) can be seen as a response to the lack of quality criteria that could guide online DE practices in HE in South Africa (cf. 1.2). The foundations of the framework are based on the literature review presented in Chapter 2 and 3 and the theoretical framework presented in Chapter 4. The results of this study presented in Chapter 6 were incorporated into the conceptual framework (cf. Table 7.2) as they exemplified how the participating institutions in this study applied the elements of the Conceptual Quality Framework. Therefore, the framework consists of theoretical and practical knowledge. Moreover, the framework highlights the key quality elements HE institutions in South Africa should consider when transitioning to online DE programmes. The elements could assist institutions in evaluating, maintaining and enhancing their online DE practices and offerings. The Conceptual Quality Framework should be viewed as a whole systematically. Therefore the quality of institutions' online DE offering could only be determined by considering all the elements and sub-elements and their interrelationships.

It should be noted that the placement of the sub-elements in the conceptual framework is based on the researcher's approach to this investigation. Subsequently, these sub-elements could be assigned to more than one element or another based on the investigation's approach, methods or the interests of roleplayers. It could be that this framework is omitting critical elements not considered by the researcher. These critical elements could be regarded as essential for roleplayers in the DE community in South Africa.

The final chapter of this study, Chapter 8, elaborates on how the primary and secondary research questions were answered and reflects on the contributions made by this study. Some reflections by the researcher are included in this chapter. The generalisability of the findings is explained, the study's limitations are indicated, and recommendations for future research are made.

CHAPTER 8: CONCLUSION

8.1. INTRODUCTION

Chapter 7 presented the proposed Conceptual Quality Framework for online distance education in a South African HE context, especially for institutions transitioning their administrative, teaching and learning processes online. This chapter aims to reflect on the contribution made by this study to research in the fields of distance education, online learning and higher education. This chapter further provides the conclusions reached and the implications of the findings of the research questions. The study's limitations are briefly explained, the generalisability of the findings is discussed, and some suggestions are provided for further research. A few closing remarks are made on conclusion.

8.2. RESEARCH OVERVIEW

Various components informed the research problem of this study. Quality distance education provision in South Africa remains a burning issue, especially with educational technologies that can now support teaching and learning (cf. 1.5). The lack of an existing quality framework outside the Nadeosa Quality Criteria (Nadeosa, 2021) and Good Practice Guidelines (Council on Higher Education, 2014) that practitioners could use to design, evaluate, maintain and enhance quality ODE in South Africa also informed the research problem of this study (cf. 1.2).

There was sufficient evidence that DE provision in South Africa needed to expand significantly to meet the increased demand for HE (cf. 2.3). It is regrettable that the DHET, CHE, and NADEOSA could not proactively provide institutions with guidelines for designing, evaluating, maintaining and enhancing ODE programmes in South Africa (cf. 2.2). The outbreak of the COVID-19 pandemic forced institutions to implement emergency remote teaching and learning approaches (cf. 2.4). Institutions were unable to take full advantage of the affordances of online learning. Therefore, developing a quality framework for online DE in South Africa (cf. Chapter 7) exemplifies the essential elements residential institutions should consider for Online

Distance Higher Education. The elements could be used as guidelines to design, evaluate, maintain and enhance ODE practices to improve the quality of ODE provision in South Africa.

Based on the background, problem statement and rationale for this study, the primary research question for the study was formulated as follows:

How could a conceptual quality framework for online distance education support South African residential institutions in transitioning their administrative, teaching and learning processes to an online format? (cf. 1.4).

The following secondary research questions were formulated in support of the investigation of the primary research question:

SQ 1: What are the key quality elements of online distance education?

SQ 2: How do the participants at residential institutions enact the quality elements identified in the theoretical framework?

The following sections address the secondary research questions formulated in Chapter 1 (cf. 1.4) based on evidence from the literature review (cf. Chapters 2 & 3), the theoretical framework (cf. Chapter 4), and the findings (cf. Chapter 7).

8.3. PRIMARY AND SECONDARY RESEARCH QUESTIONS ADDRESSED

The following sections show how this study dealt with the research questions in section 1.4. According to the researcher, the investigation was successfully conducted to determine how a conceptual quality framework for online distance education could support residential institutions in transitioning their administrative, teaching and learning processes online. Research to answer the secondary research questions assisted in dealing with the primary research question by serving as a foundation for developing the Conceptual Quality Framework for Online Distance Higher Education in a South African context.

8.3.1. FIRST SECONDARY RESEARCH QUESTION

What are the key quality elements of online distance education?

Chapters 3 and 4 of this study attempted to determine whether quality elements presented in the academic literature could serve as a foundation for ODE, considering the context of the South African DE environment. It is essential to highlight that ODE has not been defined in the South African HE environment. Therefore, to understand the importance and impact of this term, it was essential to describe what was already known about DE and online learning in South Africa and worldwide.

Section 2.3 emphasised that the Department of Higher Education and Training's goal to achieve a headcount enrolment of 1.6 million in HE by 2030 primarily drives the intended growth in the post-school education sector in South Africa (Prinsloo, 2019). In addition, the DHET claims that insufficient institutions offer opportunities to meet South Africa's expanding demand for HE (DHET, 2014). Also, the DHET acknowledges that South Africa has reached its capacity to accommodate full-time, face-to-face students. Notable authors and DE practitioners agree that e-learning is essential for increasing access to HE (Aluko, Krull et al., 2022; Daniel, Kanwar et al., 2009). However, what emerged from the COVID-19 pandemic and subsequent lockdowns was that many institutions and lecturers were unprepared to transition from face-to-face or blended/hybrid approaches to one hundred per cent online education (Dwivedi, Hughes et al., 2020; Modise & Van den Berg, 2021).

Online education should be adequately planned, developed, and implemented effectively to use the benefits and opportunities offered by this format (Appolloni, Colasanti et al., 2021; Hodges, Moore et al., 2020). Undoubtedly, access to and opportunities for HE for geographically separated students is a significant advantage of remote and online education (Houlden & Veletsianos, 2019). South Africa's demand for HE exceeds the supply (Badenhorst, 2019; Bezuidenhout, Furtak et al., 2019), and in addition, there is a growing need for more flexible learning options that allow students also to attend to other obligations in their personal lives (Gaebel, Zhang et al., 2018).

It was necessary to define online distance education as it is not a term being used or promoted in South Africa. Section 3.2 attempted to establish such a definition. Figure 3.2 contains the four main elements of ODE that the researcher identified. These elements were elaborated on in section 3.10. Section 1.2 advocated that practitioners and HE institutions should not sacrifice the education standard they offer when they focus on increasing an institution's capacity. Subsequently, institutions should implement measures to establish criteria or standards for teaching and learning excellence and improve current teaching and learning standards (Masoumi & Lindström, 2012; Tadesse, 2016).

Chapter 4 aimed to establish if existing theories regarding online distance education could be applied to this study. This was essential since the theories underpinned the researcher's train of thought about ODE and guided the planning and implementation of this study (cf. 4.3). The first theory identified by the researcher was the e-quality framework developed by Masoumi and Lindström (2012). This is a framework that HE institutions could use to enhance and assure quality in ODE. The elements addressed by the e-quality framework are shown in Figure 4.1. The second theory, the Nadeosa quality criteria, seeks to give HE institutions in South Africa a set of guidelines they might utilise to ensure successful programme delivery through DE. The quality criteria can be viewed in section 4.3.2. It made sense for the researcher to compare the two theories to identify similarities and differences. Another advantage was that the E-quality framework focused on online education, whereas the Nadeosa quality criteria focused more on blended/hybrid learning but incorporated the South African context into their criteria.

What emanated from the comparison of the two theories were elements that could comprise a theoretical framework. The elements provided an academic foundation and the structure for the data collected and analysed in this research. The theoretical framework's elements helped the researcher find detailed information in the obtained data, draw links between them, and analyse the findings in the context of pre-existing theories (Kivunja, 2018). Section 4.4 further elaborated on the elements of the theoretical framework. The elements of the theoretical framework are presented in Table 4.2. Section 4.6 contains a theoretical review of the elements of the theoretical framework. The review aimed to show how the elements and sub-elements of the

theoretical framework are applied in online higher-distance education environments. Section 4.7 elaborated on some key findings from Chapters 3 and 4. As elaborated in section 4.4, for the purpose of this study, the elements and sub-elements of the theoretical framework could be regarded as the key quality elements of ODE.

8.3.2. SECOND SECONDARY RESEARCH QUESTION

How do the participants at residential institutions enact the quality elements identified in the theoretical framework?

Chapter 6 primarily attempted to answer this secondary research question. Chapter 6 contains a detailed analysis of each theoretical framework theme, as indicated in Table 4.2. As shown in section 5.5.7.3.5, the analysis of the data acquired required finding connections in the data presented in each first-order theme. This procedure was intended to demonstrate conceptual patterns in the data (Azungah, 2018). As a result, once the deductive analytical process had produced the first-order themes, the data was organised into conceptually different second-order themes (Lawrence & Dover, 2015). A thorough analysis of each theme was produced to provide a narrative account of the significant themes and facts displayed in the data. Table 6.1 summarises the first and second-order themes addressed during the data analysis. Some critical results displayed in Chapter 6 under each of the elements of the theoretical framework are presented in Table 8.1.

Table 8.1: Critical results derived from Chapter 6.

Institutional elements	Technological elements
<ul style="list-style-type: none"> • Policies should be developed and used as critical guidelines to support and guide the ODE initiatives of institutions (cf. 6.3.1.1.1). • Most established DE institutions in South Africa still offer blended and hybrid programmes and few online programmes (cf. 6.3.1.1.2). • Existing quality assurance systems focus on blended/hybrid teaching and learning approaches. Little guidance is provided for online education (cf. 6.3.1.1.3). • Widening access to HE remains a contentious topic among the top management of institutions and should be carefully considered (cf. 6.3.1.1.4). • The use of third-party providers should be carefully considered. Unfortunately, more negative than positive outcomes are associated with these providers (cf. 6.3.1.1.5). • Only students categorised under a specific demographic profile can access online HE in South Africa (cf. 6.3.1.1.6). • Adapting existing administrative processes, procedures, and systems is critical for the success of ODE (cf. 6.3.1.2.1). • Students should be able to apply and register online for programmes (cf. 6.3.1.2.2). • Action-based research is needed to improve programme design, development and teaching (cf. 6.3.1.3.1). • Market research is needed to ensure that institutions address the needs of students through the programmes they present and plan to present (cf. 6.3.1.3.2). • Institutions' quality of service influences students' perceptions of the institution (cf. 6.3.1.4.1) • The use of third-party providers to design, implement and manage online programmes should be carefully considered, as their involvement could have significant financial implications (cf. 6.3.1.5.1) 	<ul style="list-style-type: none"> • The demographics of institutions' student bodies significantly influence the adoption of online learning (cf. 6.3.2.1.1). • The role of education technology should be clear to students. Students should know which tools they will be using during an online programme and how to use them. The rationale for using the tools should be clear (cf. 6.3.2.2.1). • Institutions should consider making materials downloadable for students in the South African context (cf. 6.3.2.3.1). • Access to connectivity and the internet remains problematic for many students in South Africa. High costs are involved in attaining a proper internet connection and access to a suitable device for online education (cf. 6.3.2.3.2, 6.3.2.3.3). • User-friendly and easy-to-use LMS interfaces assist in creating clear learning pathways for students (cf. 6.3.2.4.1).

Instructional Design and Pedagogical elements	Student support
<ul style="list-style-type: none"> • Learning content could comprise various forms, both online and offline. Learning content must be presented as structured and systematic to guide and support students (cf. 6.3.3.1.1). • Learning artefacts can present content in differentiated ways, including interactively. Subsequently, learning artefacts could personalise students' learning experiences (cf. 6.3.3.2.2). • Institutions should place more emphasis on the use of learning scenarios. The application of knowledge is essential. Students should be provided with real-world scenarios, analyse the situations and determine the consequences of possible results (cf. 6.3.3.3.1). • The use of online learning environments by students and lecturers should be thoroughly planned. The online learning environment should enhance collaboration between students, their peers and lecturers. Online learning environments should also encourage engagement with resources (cf. 6.3.3.4.1). • Although communication and interactivity should be promoted in an online learning environment by applying active learning principles, educators should be careful to draw towards a particular method for teaching and learning. The online learning environment should accommodate differentiated teaching and learning needs (cf. 6.3.3.5.1, 6.3.3.6.1). • Student interaction is encouraged and promoted when a lecturer actively engages in the online learning platform (cf. 6.3.3.6.1, 6.3.3.6.3). • Approaches to assessment should attempt to foster the knowledge and abilities needed to put theoretical knowledge to use in the workplace (cf. 6.3.3.7.1). • Thorough formative assessment feedback is vital in guiding students through an assessment process to improve learning and understanding (cf. 6.3.3.7.2). 	<ul style="list-style-type: none"> • High-level computer literacy skills are essential to online programme participation (cf. 6.3.4.2.1). • Institutions should consider providing dedicated technical support to students. Dedicated support could assist in retaining more students in a programme (cf. 6.3.4.2.2). • Institutions should implement proactive interventions to identify and support at-risk learners (cf. 6.3.4.3.1). • A lecturer or tutor must respond to academic inquiries in a reasonable time (cf. 6.3.4.3.2). • Institutions should consider supporting students with their use of English for academic purposes (cf. 6.3.4.3.3). • Institutions must utilise student data generated by an LMS, for example, to determine any teaching and learning issues and develop interventions that could address these issues (cf. 6.3.4.3.3).
	<p style="text-align: center;">Faculty support</p> <ul style="list-style-type: none"> • Financing student support initiatives will be challenging if third-party providers receive a percentage of student income (cf. 6.3.5.1.3). • Staff members working in DE must be trained, monitored, and supported for their specific roles (cf. 6.3.5.2.1). • Instructional designers provide excellent support to lecturers. This includes assisting lecturers on the LMS of an institution and providing technical and pedagogical guidance regarding the use of technology in education (cf. 6.3.5.2.2). • Institutions should highlight the benefits of working in DE to lecturers and motivate academic staff to engage more with students (cf. 6.3.5.2.3).

8.3.3. PRIMARY RESEARCH QUESTION

How could a conceptual quality framework for online distance education support South African residential institutions in transitioning their administrative, teaching and learning processes to an online format?

As indicated in section 1.5, this study aimed to establish a conceptual quality framework for online distance education, which residential institutions should consider as a foundation for best practices when transitioning their administrative, teaching and learning processes online. To achieve this purpose, the current study aimed, firstly, to determine key quality elements for online DE as derived from existing literature (cf. 8.3.1). Secondly, after establishing the key quality elements in the literature, it was essential to determine if and how these elements were addressed by the institutions who participated in this study (cf. 8.3.2).

Subsequently, Chapter 7 presented the findings of this research in the form of the Conceptual Quality Framework (cf. 7.2). As elaborated on in section 7.2, this framework provides a shared understanding of how online DE at the participating institutions in a South African HE context is exemplified. Furthermore, the framework presented in Chapter 7 could act as a roadmap or blueprint for institutions to design, evaluate, maintain and enhance their ODE practices.

To strengthen the findings of this investigation even more, the researcher believes that the elements of the Conceptual Quality Framework could be further grouped into the four main elements of ODE, which are discussed extensively in section 3.10. Figure 8.1 illustrates this study's final Conceptual Quality Framework, which includes the four main elements of ODE. The Institutional elements (cf. 7.3) of the CQF could be grouped under the Institutionally-based element of ODE (cf. 3.10.1). The Technological elements of the CQF discussed in section 7.4 could be grouped under the Use of Technology element of ODE (cf. 3.10.3). The Student Support elements (cf. 7.6) of the CQF could be grouped under the Geographical Separation between the Student and Institution element of ODE (cf. 3.10.2). The Instructional Design and Pedagogy elements (cf. 7.5) and the Faculty Support elements (cf. 7.7) of the CQF could be grouped under the Learning and Interactivity element of ODE (cf. 3.10.4). Table 8.2 provides the rationales for grouping the CQF and ODE elements.

Table 8.2: Rationale for grouping the Conceptual Quality Framework and online distance education elements.

Elements of online distance education	Conceptual Quality Framework elements	The rationale for grouping the elements
Institutionally based programmes	Institutional	Section 3.10.1 explains that educational offerings presented by accredited institutions typically characterise ODE. Subsequently, the Institutional elements presented in the CQF (cf. 7.3) focus on all the intricacies associated with institutions offering ODE programmes.
Geographical separation between the student and the institution	Student Support	Section 3.10.2 emphasises that students enrolled in ODE programmes are geographically distanced from the institution and typically from all types of support offered by an institution. Subsequently, the CQF emphasises the importance of the support approach followed by institutions to provide students with adequate academic and technical support (cf. 7.6).
The use of Technology in ODE	Technological	The use of technology is a critical component of ODE (cf. 3.10.3). Therefore, the technological elements of the CQF contain crucial information regarding the use of technology in ODE environments that institutions should consider (cf 7.4).
Learning and Interactivity	Instructional Design and Pedagogical	Since educational resources and instruction should be planned and arranged to provide meaningful learning pathways and experiences, instructional design and appropriate pedagogy for online learning are crucial elements in online learning environments (cf. 3.10.4). The CQF elaborates on these essential elements (cf. 7.5).
	Faculty Support	As indicated in section 4.6.6, lecturers and support staff are not appropriately equipped with the required knowledge and skills to support students effectively in ODE environments. Poor support will affect students' academic performance. Therefore, section 7.7 emphasises the support that faculty members require to support ODE students efficiently and effectively.

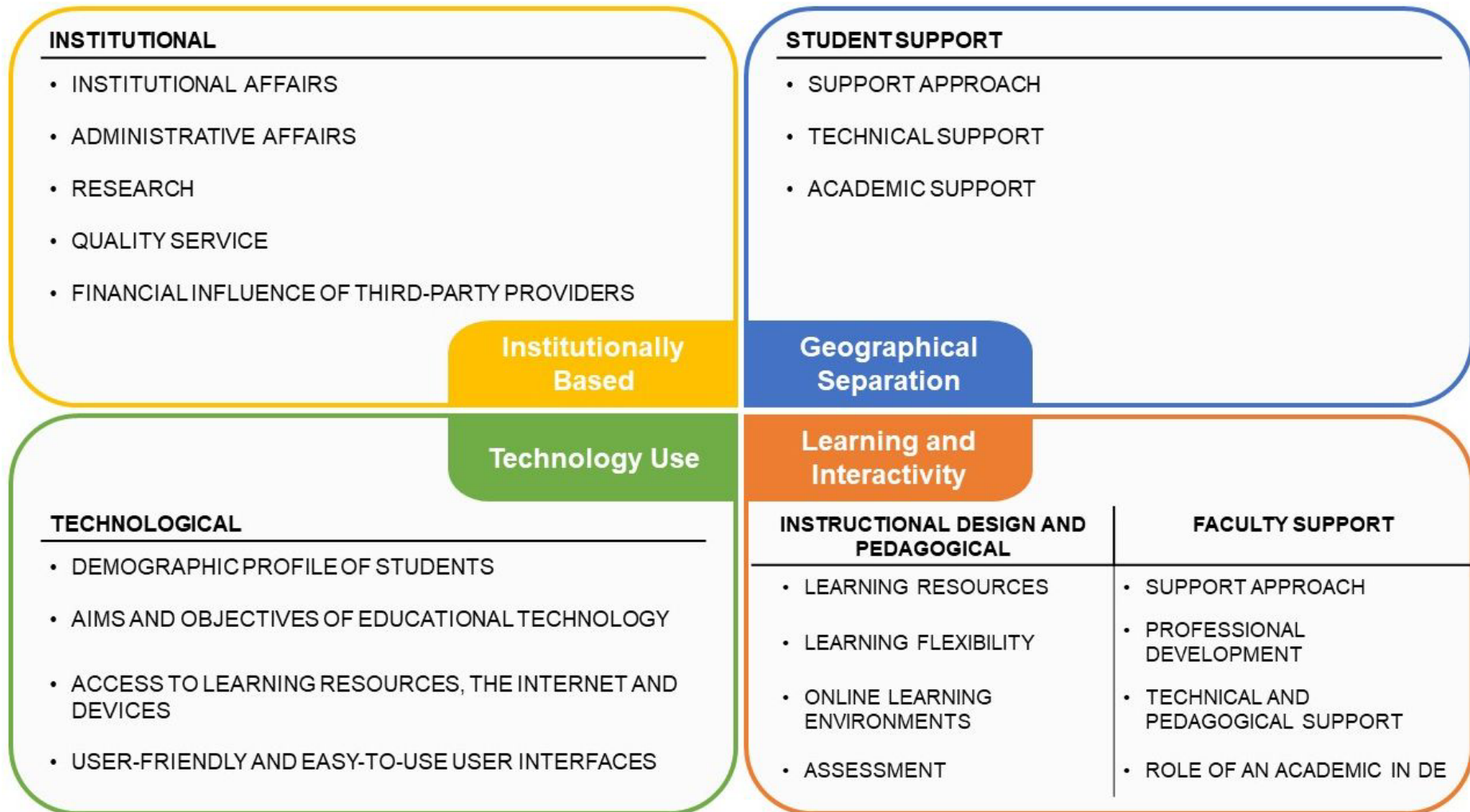


Figure 8.1: A Conceptual Quality Framework for ODE in a South African HE context.

8.4. RESEARCH CONTRIBUTIONS

After analysing the collected data, the researcher developed the proposed quality framework for online higher distance education in the South African context (Figure 8.1). This framework incorporates all the data collected and contributes to the body of research in the following three ways:

8.4.1. THEORETICAL CONTRIBUTION

The findings of this study presented as the Conceptual Quality Framework in Chapter 7 added to the emerging body of knowledge on ODE in a South African HE context. Furthermore, this study made an ontological contribution by presenting claims and presumptions about the nature of reality regarding ODE in the South African HE context. This includes assertions about its existence, appearance, constituent parts, and the interrelationships of these parts. Theoretically, this study contributed to the existing literature by providing a novel framework (Chapter 7) for understanding which key quality elements South African residential HE institutions should consider when transitioning their administrative, teaching and learning processes online.

By investigating the online DE practices of the institutions that participated in this study, the researcher gained insight into how the research participants employed the elements of the theoretical framework. Even though the conceptual framework's roots are related to theories on online learning and DE, connections were evident between the participants' experiences and the statements made by theories. The findings presented in Chapter 7, and the application of theories regarding ODE within the context of the participating institutions in a South African context confirm the theoretical contribution of this study.

8.4.2. METHODOLOGICAL CONTRIBUTION

This study contributes to selecting possible methods for studying institutions' ODE practices in a South African context. This study's methodological approach was designed around the theoretical framework (cf. 4.3). The theoretical framework was extensively reviewed and informed by existing literature (cf. 4.6). As indicated in

section 4.3, the theoretical framework acted as a “coat-hanger” for data analysis and the interpretation of results. Furthermore, the theoretical framework helped the researcher develop a "data mining" lens to make sense of the data gathered for this study through the information derived from previous studies.

The researcher used an exploratory multiple case study design to collect sufficient data since ODE is still developing in the South African HE context. Subsequently, two HE institutions participated in this study. Figure 4.6 indicates the researcher's process for collecting data on the investigated phenomenon. The elements derived from existing literature were used to create a proposal or conceptual framework that assisted the researcher in making particular data collection and analysis decisions. The theoretical framework guided the researcher to develop specific interview questions that would address the elements of the theoretical framework. Table 5.2 shows how the elements addressed in the theoretical framework align with the interview questions of this study. The theoretical framework also played an essential role in the inductive and deductive data analysis processes. Section 5.5.5 elaborates on how the data collected were analysed.

The deductive approach allowed the researcher to create categories into which the data were grouped. The categories comprised the elements identified in the theoretical framework (cf. Table 4.2). After the categories were established through the deductive approach, inductive analysis occurred. The researcher read through all the data meticulously to gain a holistic understanding of it and ensured that all the essential aspects of the data were captured. The researcher then coded the data, attempted to establish relationships between the pre-determined elements and analysed the data. The methodological approach followed in this study is unique since it relies on a theoretical framework and deductive and inductive analysis methods to create accurate and rich descriptions of the collected data. The methodology applied in this study created rigour and transparency in the data analysis process.

8.4.3. PRACTICAL CONTRIBUTION

Based on the findings of this study, insight into online distance education may potentially guide HE institutions in South Africa when they design, evaluate, maintain and enhance their ODE practices and offerings. Subsequently, HE institutions in South Africa could use the Conceptual Quality Framework presented in Chapter 7 as a roadmap or blueprint.

By identifying the breadth and extent of the guidelines presented in Chapter 7, institutions can evaluate, maintain, and improve the quality of their practices and offerings using the suggested Conceptual Quality Framework as a prototype. The Conceptual Quality Framework could result in a practical framework for evaluating, maintaining and enhancing quality in ODE. The framework could also be seen as a set of minimum requirements that institutions should consider when designing, evaluating, maintaining and enhancing ODE practices and offerings.

Institutions could use the conceptual framework to determine the strengths and weaknesses of their current teaching and learning approaches and accordingly use the guidelines to improve their practice. Subsequently, the “health” of an institution's current approach could be established. If this or a similar framework is implemented and used nationally, the guidelines could translate into benchmarks. This approach will furthermore allow institutions to share knowledge and compare data according to the benchmarks to improve existing practices.

Institutions should not attempt to accomplish all the guidelines at once. This would be challenging to achieve as many guidelines are provided. Therefore, creating a short version of the framework that only includes the essential elements is possible. These fundamental elements should provide a steady foundation from which the remaining elements could be incorporated. Institutions might use the Conceptual Quality Framework on a smaller scale. As a result, only a portion, or portions of a portion, of the framework might be employed to resolve a particular problem. A condensed version of this framework may then be created to meet a specific objective.

By outlining this framework for the key role players at ODE institutions, decision-makers and lecturers, it enables advancing knowledge, changing attitudes, and raising expectations, which would improve the quality of educational environments. A set of guidelines or a framework that could direct institutional practitioners in several domains might be helpful. By systematically introducing the Conceptual Quality Framework in ODE environments, the researcher hoped that a culture of evaluation would be established among all the actors working in these environments. The conceptual framework could also form the basis for ongoing discussions within the DE community in South Africa to enhance and ensure the quality of ODE. The researcher hoped that the framework would contribute to and enrich the debates regarding ODE by providing a conceptual starting point for these discussions.

Ultimately, the researcher believed that the proposed framework could support the development of a formalised policy and enhance quality criteria guidelines that practitioners in South Africa could consult when designing, evaluating, maintaining and enhancing ODE offerings. Furthermore, the conceptual framework could also be used by other researchers to conduct further studies regarding the provision of quality ODE in HE contexts.

8.5. RESEARCH REFLECTIONS

A critical account of the researcher's scientific, methodological, and personal reflections is provided below. These reflections offer a holistic understanding of the researcher's thoughts on the study and the research processes.

8.5.1. SCIENTIFIC REFLECTION

This study investigated institutions' use of existing quality assurance guidelines in online and blended modes of ODE provision. The theoretical framework of this study guided the investigation. Interpretivism was the paradigmatic lens through which the researcher viewed the study. A qualitative approach allowed the researcher to explore the meaning individuals or groups ascribe to a phenomenon. The research design equipped the researcher to collect data through interviews and guided the reporting of findings through the conceptual framework. The researcher analysed the data through

deductive and inductive reasoning, which led to the new, proposed Conceptual Quality Framework. The data reflected institutions' need for support and guidance when implementing ODE programmes. The structure of the study and research design proved to add value to the study by achieving saturation of data. The proposed framework could assist institutions in designing, evaluating, maintaining and enhancing their ODE practices. The proposed framework furthermore contributes to the existing body of knowledge regarding ODE in the South African HE context. Other studies could use the conceptual framework of this study to determine the effectiveness of the conceptual framework in different research settings.

Furthermore, other institutions could evaluate the applicability and interrelationships of the various elements presented in the conceptual framework and determine their value in their current practices. The researcher gained valuable insight into existing ODE practices in the HE environment in South Africa. The knowledge acquired through this study should contribute to further research in the South African and global distance education fields.

8.5.2. METHODOLOGICAL REFLECTION

The theoretical framework of this study significantly influenced the methodology of this study. The theoretical framework underpinned the methodological process of collecting the relevant data to fulfil the purpose of this study. Herein lies the uniqueness of the approach followed in this study. The research approach and design could be regarded as uncomplex and straightforward. Investigating the theoretical framework elements allowed the researcher to understand ODE practices worldwide. The interpretivistic nature of the methodology allowed the researcher to determine how the theoretical framework elements were represented in participants' practices. Subsequently, the researcher consolidated the collected data into a proposed framework that could be used as a foundation for future research. This study's unique methodological nature could be an example for future researchers within the field.

8.5.3. PERSONAL REFLECTION

The researcher believes that the proposed framework presented in Chapter 7 could make a valuable contribution to the DE community in South Africa. Today, DE practitioners in South Africa need more guidance on ODE than ever. The researcher specifically gained new skills and knowledge by using a theoretical framework as the foundation for data collection and analysis. More specifically, this study's deductive and inductive data analysis techniques proved to make a valuable contribution. The researcher gained comprehensive insight into the affordances and challenges of ODE at both participating institutions. Not only did these components assist the researcher in developing a proposed framework, but they also influenced the researcher's approach to ODE in his working environment. The study assisted the researcher in acquiring new experiences, knowledge, and skills.

The researcher experienced many challenges throughout the writing of this thesis. Personal health issues as well as family bereavements were challenging hurdles. Maintaining a balance between work, studies and leisure time was also challenging. My experienced supervisor's understanding, guidance, and support were essential contributors to the success of this study. Looking back at this journey, it was a rich, intense and rewarding experience.

8.6. GENERALISABILITY OF FINDINGS

The proposed Conceptual Quality Framework for online distance education in the South African HE context was informed by validated and accepted theoretical contributions and valuable contributions from DE practitioners. The framework cannot be generalised without further intervention and application. The possibility exists for the guidelines to be evaluated and tested in quantitative research studies. Future studies should apply and test the framework guidelines in multiple contexts to an extent that would allow the generalisation of findings. Therefore, the framework could potentially be generalised if the guidelines are applied and tested beyond the units of analysis in this study.

The lessons drawn from this study could be helpful for decision-makers in South Africa and other similar environments. Furthermore, the framework should benefit DE practitioners planning to move their programme offerings online. The Conceptual Quality Framework should assist institutions with identifying their limitations for ODE and provide enough guidance on what is needed to offer ODE programmes. The framework could inform future DE policies in South Africa and countries with similar social, economic and educational environments.

8.7. LIMITATIONS OF THIS STUDY

The Conceptual Quality Framework presented in Chapter 7 cannot be regarded as a complete and flawless tool. The framework should instead be viewed as a work in progress. The framework should allow institutions to adapt the elements to their context and reformat the guidelines to suit their needs. Furthermore, the quality framework should receive acceptance from management teams at DE institutions in South Africa to ensure effective and efficient implementation and use. Subsequent studies that utilise the quality framework of this study could find some elements and guidelines irrelevant or could improve the proposed elements and guidelines.

The researcher's views and interpretations of the elements and guidelines drawn from literature and collected data influenced the Conceptual Quality Framework presented in Chapter 7. Additional essential elements and guidelines could nevertheless exist that the researcher did not address in this framework. If this is the case, it does not mean that the additional elements and guidelines are irrelevant as regards their influence and use in ODE environments in the South African HE context.

The data collected in this study was limited to two institutions. Only one institution offered a fully online programme, while both offered various blended or hybrid programmes. Unfortunately, some institutions that offer online programmes declined to participate. The involvement of these institutions would have contributed to the reliability and validity of the study's findings. Therefore, the results of this study are not representative of South Africa's ODE population. Also, several intended participants were unable to participate for various reasons. Unfortunately, the researcher did not have the time, opportunity or finances to reschedule interviews with these participants.

These participants were envisioned to make valuable contributions and represent a loss.

Distance education experts did not have the opportunity to review the proposed quality framework presented in Chapter 7 prior to the completion of the thesis. A framework review could have contributed to acknowledging and refining the guidelines provided. Furthermore, objective feedback from distance education experts could have improved the framework's rigour.

8.8. RECOMMENDATIONS FOR FUTURE RESEARCH

When investigating and answering the research questions in this study, additional issues and questions emerged that could provide scope for further research. More research is necessary to determine how most DE institutions in South Africa design, evaluate, maintain and enhance their online offerings. These studies should not only be limited to public institutions but should include private institutions. This research, in particular, should provide sufficient results to determine the essential baseline elements of ODE practices for most institutions in South Africa, whether public or private. Further studies could also determine more precise relationships between the various elements and sub-elements of the Conceptual Quality Framework.

Government institutions could use the guidelines provided by this study as a baseline for developing an ODE policy. In this case, the guidelines presented in this study should be piloted to allow generalisability of the results. Subsequently, the results should show whether some of the guidelines of this study could translate into benchmarks.

Further studies could also explore how various distance education institutions in developing and developed countries implement the proposed quality framework. Therefore, the distinct differences in the application of the framework could be determined. Subsequently, the validity and feasibility of the framework in developing and developed countries could be examined. As mentioned in section 8.7, distance education experts did not review the proposed quality framework. The framework was

only informed by existing literature and data obtained from participants. Therefore, the framework must be validated by DE experts in South Africa and DE experts worldwide.

Although this study was only conducted with South African participants, international DE practitioners could apply the proposed framework presented in Chapter 7. Although only South African participants influenced the guidelines presented in the Conceptual Quality Framework, the researcher believed that this should not affect the implementation of the framework on a global scale.

8.9. CONCLUDING REMARKS

It is the desire of the researcher that the Conceptual Quality Framework presented in this study would generate discussion and debate in various DE communities, particularly in South Africa, and worldwide. The researcher hopes that DE practitioners will accept the framework as a helpful tool through which they could design, evaluate, maintain and enhance ODE practices and offerings.

The researcher believed that the quality framework could challenge attitudes and broaden the expectations of all educationists, particularly DE practitioners. Institutions should emphasise equipping staff with the necessary knowledge and skills to work efficiently and effectively in ODE environments. Stakeholders' mindset regarding ODE would hopefully change for the better. This should lead to the active engagement of staff and students in online learning environments. The quality framework must raise awareness among DE institutions and emphasise the significance and importance of quality assurance. Therefore the different elements in the Conceptual Quality Framework must act as signposts that guide practitioners.

Distance education practitioners in South Africa must adopt a culture of evaluation. Institutions should systematically introduce the different elements of the framework to essential stakeholders and encourage and monitor the application of the guidelines. The systematic implementation and use of the guidelines should assist stakeholders in establishing quality ODE offerings. With the assistance of the guidelines, institutions should be able to determine how to offer ODE programmes successfully.

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APPENDIX A

PERMISSION LETTER



Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Department Science, Mathematics and Technology Education
Faculty of Education
University of Pretoria

November 2018

PERMISSION TO CONDUCT RESEARCH STUDY

To whom it may concern

I am a student studying through the University of Pretoria. I am currently enrolled for my PhD (Computer Integrated Education) in the Faculty of Education. My study will investigate the design and development of an e-quality framework specifically aimed at online distance education (DE) delivery in South Africa.

I hereby request the institutions approval to recruit employees that could participate in this research study. It will be expected of the employees to take part in an interview of approximately 40 minutes. I furthermore request that the employees are allowed to share any institutional documentation that could inform this study. This could include but is not limited to the following documents:

- Strategic plans.
- Institutional technology plan.
- Human resource policies.
- Programme rules and regulations.
- Latest risk assessment.
- Community service strategy.
- Documented specification and plan that ensures the reliability, integrity, and validity of information collection, storage, and retrieval.
- Course outlines.

The information provided by the participants will be used to design a new framework to guide e-learning quality in the design and development of online distance education programmes.

Your approval to conduct this study will be greatly appreciated.

Sincerely,


Hendri Kruger

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APPENDIX B

LETTER OF CONSENT



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

Department Science, Mathematics and Technology Education

November 2018

LETTER OF CONSENT: PARTICIPANT IN RESEARCH STUDY

A Holistic E-Quality Framework for Online Programmes in South African Higher Distance Education Institutions

I am a student studying through the University of Pretoria. I am currently enrolled for my PhD (Computer Integrated Education) in the Faculty of Education. My study will investigate the design and development of an e-quality framework specifically aimed at online distance education (DE) delivery in South Africa. We request that you participate in this research where we shall explore the challenges, developments, implementations and impact of online learning at distance education institutions in South Africa.

I hereby request your participation in this study. The information that you provide to the researcher will be used to design a new framework to guide e-learning quality in the design and development of online distance education programmes.

Should you agree to participate, please read the following and sign the letter of consent;

- Agree to be interviewed by the researcher for approximately 40 min.
- Agree that the interview could be audio recorded.
- Share institutional documentation with the researcher as agreed by your institution.
- Authorise the use of this data in order for the researcher to complete his thesis and to write at least one article.

I acknowledge that:

- I have been informed that participation is voluntary and I am free to withdraw from the research at any time without explanation or prejudice and to withdraw any unprocessed data previously supplied.
- I have been informed that the confidentiality of the information I provide will be safeguarded.
- I and my institution will be referred to by pseudonym or code name in any publications arising from the research.
- I can withdraw my participation from this research if feel forced to participate due to the researcher's position of authority.

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A Holistic E-Quality Framework for Online Programmes in South African Higher Distance Education Institutions.

CONSENT FOR PARTICIPATION IN RESEARCH

I, _____, hereby give my consent to participate in this study. I am assured of anonymity, and know that I can withdraw if I do not wish to participate any more.

I participated in this during the following intervention: _____

Signature: _____ Date: _____

Researcher: _____ Date: _____

Supervisor: _____ Date: _____

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