AN ACADEMIC SUPPORT FRAMEWORK TO IMPROVE TEACHER, SOCIAL AND COGNITIVE PRESENCE IN ONLINE CLASSES

by

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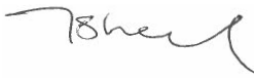
DECLARATION

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

I further declare that I have submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.



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LIST OF ACRONYMS

CAS	College of Accounting Sciences
CEDU	College of Education
CEMS	College of Economic and Management Sciences
CLAW	College of Law
CoI	Community of Inquiry
CPD	Continuous Professional Development
GSBL	Graduate School of Business Leadership
HE	Higher Education
ICT	Information and Communication Technologies
LMS	Learning Management System
ODeL	Open Distance E-Learning
ODL	Open Distance Learning
TD	Transactional Distance
UNISA	University of South Africa
ZOU	Zimbabwe Open University

ABSTRACT

The main aim of this research was to determine the key elements of an ODL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training.

The study employed a qualitative research approach that was conducted as a dissertation of limited scope. Data were collected through semi-structured and focus group interviews. A sample size of 14 academic staff members involved in teaching and learning was conveniently selected. This study adopted a case study research strategy focusing on academic staff involved in teaching and learning at selected colleges at a distance education higher education institution.

The findings suggest that the learning management system (LMS) is not fully utilised to its full capability. The results also emphasised that online teaching methods influence online learning. With large classes, lecturers are required to implement innovative online teaching methods to encourage the interaction and engagement with their students. The major findings and recommendations from this study are consistent with the global research that comprehensive support services for faculty and students, technological infrastructure, and online training are required for the transformation to a fully an online university. The recommendation is that *all faculty members and all students* should complete a training programme on effective teaching and learning in online education, including LMS use, interactive theory, design, assessment, and theories of Technology Enhanced Learning**.** Most importantly, these training packages should be designed to be offered online.

Key Words:

Academic staff training, cognitive presence, learner management system, open distance learning, social presence, teacher presence

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: ORIENTATION

1.1 INTRODUCTION

The dramatic increase in online teaching and learning during the past twenty years has been a catalyst for universities across the world to reconsider their delivery capacity to reach students and provide high quality instruction. The digital revolution has transformed nearly all social institutions in society and education is no exception (Makoe & Olcott, 2021; Moore & Kearsley, 2012; Tait, 2018). Moreover, the onset of the global health pandemic has created an opportunity for institutions and their leaders to reconsider their competitive position in the marketplace. It is becoming increasingly clear that being online is not innovative. Nearly all institutions today, open universities and traditional universities, have developed or are developing, an online capacity to serve not only the broader student market away from campus but students taking online courses on-campus (Olcott, 2021).

With a clear recognition of this dynamic and competitive new environment, institutions such as UNISA, that have depended upon correspondence print delivery to provide access, are under siege and vulnerable to new competition and new providers entering the market (Makoe & Olcott, 2021). UNISA's transformation to online is only the first step and, in and of itself, will not make the university a competitive institution in this new market. The key starting point for transformation is to ensure comprehensive training and support systems for teaching faculty members who can in turn, empower students who are engaged, connected and feel they are part of the UNISA family. This leads us to the students, who are the consumers in this instance. The purpose of this dissertation is to explore key components and best practices of a training programme for the online teaching faculty – in short, training faculty members how to teach online and create dynamic and powerful learning experiences for students.

Distance education is associated with virtual learning, whereby learners and teachers are separated by geographical location which creates a physical separation of learner and the teacher (Moore & Kearsley, 2012). Each participant in the distance learning environment has to formulate a virtual image of each other. For the distance learning environment, it becomes important to ask about the relevance of teacher presence in influencing the learning process (Garrison et al,, 2000; Swan, 2019). The learning

environment in open distance education also brings in the element of social presence. For online learning to be beneficial, the learning platform should be user-friendly to allow interaction and connections to other learners, context and the teacher. Social presence has a role to play in enhancing learner support by using tools such as forums and chats for conducting a dialogue with the learners and between learners and encouraging personal conversations or interactions between teacher and learners (Zilka et al., 2018). Open distance learning institutions have challenges in building staff capacity suitable for online distance education (Mallinson & Krull, 2013), which includes the challenge of preparing academics for online learning facilitation to avoid resorting to traditional classroom teaching methods.

Even though UNISA supports academic staff in terms of professional development and training, these interventions do not address the core training problem. Despite the interventions in the form of professional development courses for online facilitation and learning, there is no specific training programme that supports academic staff on how to facilitate online courses with the integration of teacher presence, cognitive presence and social presence incorporating the related digital teaching skills.

Leadership in these institutions can enable academic staff participating in online learning by supporting professional development, investing in online facilitation tools, and offering administrative support and technology support. In addition to participating in online learning activities, academic staff are also expected to produce research outputs as part of their workload. These academics should have adequate leadership support to enhance learner support. The workload model for these academics should integrate learner support, academic support, administrative support and research-related activities.

Finally, the criticality for preparing faculty and students for online teaching and learning is imperative given that UNISA is currently engaged in major transformation, transitioning from print-based distance learning to online teaching and learning. Without question, there are multiple areas within the institution that require reframing and modification to serve students and faculty online. The most important point here is that the key to preparing faculty and students is ensuring that faculty members are provided with optimum training to teach online and to facilitate high quality learning, engagement and retention of UNISA students. A comprehensive, high quality training

programme for UNISA's online teachers is not just necessary to survive in the new higher education (HE) competitive landscape, it is imperative to thrive in this market. The market differentiators will be quality and student success coupled with reasonable cost, sound assessment, facilitating school leavers' journey to attain degrees and secure jobs in the workplace. Digital online technologies are just the highway to deliver high-quality instruction. However, its success depends on highly trained, innovative and compensated faculty members. This will become UNISA's new normal – online quality and access. Most universities have been successful in expanding access (Murgatroyd, 2019), but it should not come at the expense of compromising the quality of the programmes offered by these learning institutions.

1.2 BACKGROUND TO THE RESEARCH

Numerous challenges are experienced by academic staff and students related to effective online teaching practices and communication patterns (Markova et al., 2017). Open distance learning institutions are expected to build staff capacity that integrates teaching, management and facilitation of online learning (Mallinson & Krull, 2013). The shift to online learning is more towards collaborative learning which promotes the joint construction of knowledge, as well as the development of skills related to the interaction that results in more essential learning processes (Herrera-Pavo, 2021).

Elements of support for future development should focus on the integration of the support required by both the student and the lecturers. In most cases, the focus has predominantly been on learner support as opposed to teacher support. Hughes (2004) highlighted several knowledge areas required for the support of online students which includes knowing the students, their readiness for online learning, supporting them, understanding their expectations, offering information, administration and technological support, study skills assistance, online educational counselling, ongoing programme advice, access to a digital library, developing a community of learning - to mention but a few. This is consistent with Brown & Dunn (2021) whose study identified the skills of time management, self-directed skills, and computer and technical skills as necessary for student success.

Although some of these areas are institutional support services necessary for an overall online institutional strategy, the online faculty member is the first point of formal

teaching contact with the student. Once the student has been admitted to the university, the student's initial satisfaction is going to be determined by the quality and depth of teaching. This accentuates why a comprehensive training programme for faculty teaching online is imperative for institutional and student success.

Pratt (2015) highlighted that student perception of support varies from one module to the other. The research also highlighted expectations of students in terms of the kind of support, the importance of creating a sense of community, ensuring students feel welcome to contact staff, clearly identifying the support that is available, and staff understanding the importance of proactive motivational support. The structure of different courses is determined by student behaviour which is closely related to their background, the characteristics of the course and the lecturer's guidance (Lu et al., 2020).

Knowing learners' characteristics is imperative in identifying the kind of support required for students and will assist the lecturer in better designing the curriculum and identifying resources required to support the students. The study by O'Shea et al. (2015), discovered that not every student wants to participate in the forums. The older generation just wanted to work independently and were not interested in participating in groups. However, this is completely counter to research that has clearly shown that discussion forums promote teacher, social and cognitive presences and access to Moore's three interactions – teacher to student, student to student and student to content (Moore & Kearsley, 2012; Swan, 2019). Moreover, pertinent to UNISA is the fact that students will have been used to nearly no teacher presence or social interaction given the print nature of the correspondence courses. Online learning has shown that the presences and interactions are essential to student learning, retention and students feeling connected to the institution. Most master online teachers require student participation in class discussions as an essential component of the student's final grade, in many instances up to 20%. The study also highlighted the lack of sense of community. Support from lecturers tended to be reactive and in most of the cases, these lecturers were defined as 'disappearing' on the platform (O'Shea et al., 2015).

Brindley (1995) advised that early engagement of students will help to facilitate connectedness with the institution and with other students to support them. In that way, it will be easy to identify learners who are struggling and ascertain how they can

be supported. According to Pratt (2015), student experiences are individual, they vary in terms of their own needs and expectations, and the expectation of the lecturers. This is an important observation, as in some open distance learning institutions, the problem emanates from the selection committees who are supposed to pick up some of these gaps. Once the student is accepted and enrolled in a programme, even though the student brings a particular set of skills, experiences, and expectations to the learning environment (Hughes, 2004), the problem shifts to the lecturer who is expected to submit an improvement plan as part of institutional and instructor support to ensure student success in online classes (Brown & Dunn, 2021). However, lecturers experience difficulties addressing student needs and abilities, resulting in challenges providing equitable and inclusive online teaching (DeCoito & Estaiteyeh, 2022).

To navigate around these issues, open distance institutions must plan and design comprehensive training programmes to accommodate both the academic staff and students to support online facilitation that incorporates the teacher presence, cognitive presence and social presence. The academic staff training programme should be extended to the administrative support staff and the ICT support staff. Academic staff should also be technically prepared to address basic ICT issues as the role of lecturers of the future, which means that they will be expected to be conversant with ICT to support their learning.

1.3 PROBLEM STATEMENT

1.3.1 Problem Statement

Online teaching faculty needs to be provided with a comprehensive training programme to provide support for creating optimum levels of teacher, social, and cognitive presence in online courses. Each academic staff member plays a critical role in the design of the course, selection of the content and materials, and the interactive framework for students to engage and interact. Students in open distance learning face some learning challenges such as deciphering effective teaching practices and utilising effective communication patterns (Markova *et al.,* 2017) with faculty members and fellow students. Effective teaching practices in open distance learning do not depend exclusively on the introduction of new technologies, but more on human interactions and dialogue and how students can approach and use all the new technologies and e-learning possibilities (Pavela et al., 2015).

Recognising that there are numerous extraneous factors that impinge upon academic staff and students, such as resourcing, technical support, technology access, workload demands and related issues, students who are more engaged and connected to their courses and the institution are more likely to complete courses and thereby reduce institutional attrition. This suggests well trained and engaged faculty also produce engaged students who are connected to the institution and find varying benefits from learning and persisting with their peers.

While UNISA supports general training of academic staff members, there is no specific training programme for academic staff to empower students in online learning and this is one of the reasons why most students complain about poor learner support from the university (Frass et al., 2017). There is limited evidence on how the community of inquiry is being applied to enhance online learning and ultimately increase institutional retention and quality particularly as the three presences within the community of inquiry theory (teaching, social and cognitive) are not applied in an integrated and consistent manner.

1.3.2 Research Questions

The main research question for the study is: *What are the potential frameworks for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes (100+) at an ODL institution?*

The following sub-questions have been formulated to support the main research question:

1. How do ICTs improve the teacher, cognitive and social presence interactions and engagement in online courses?
2. What are the key elements of an ODL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training?

1.3.3 Aim and Objectives

The main aim of this research is to develop potential framework for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes (100+) at an ODL institution.

The objectives of this study are to:

- Evaluate how ICTs can improve the teacher, cognitive and social presence interactions and engagement in online courses
- Determine the key elements of an ODL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training.

The next section elaborates on the community of inquiry theory and Moore's theory of interaction as well as his theory of transactional distance. The complementary overlap of these three theories comprises the theoretical framework from which a comprehensive faculty training programme for online teaching is envisioned from this study for UNISA.

1.4 THEORETICAL FRAMEWORK/INSIGHTS

This research uses the community of enquiry (CoI) theory (Garrison et al., 2000) and the theory of interaction (Moore, 1993). Moore's theory of transactional distance, which describes barriers to student engagement and participation in distance learning, is relative to this study primarily because online teaching faculty need to be trained about approaches and strategies such as dialogue, structure and student autonomy to reduce transactional distance (TD). This theory is supplementary to the two main theories of this study and referenced only when discussing specific aspects related to faculty training and teaching online.

The community of inquiry theory is relevant for this study to assess how the interaction of the teacher presence, cognitive presence and social presence could be enhanced to improve open distance learning in order to ensure student success. Online learning requires the support of the lecturer by making use of various online teaching tools. For the community of enquiry to be effective, it requires some level of interaction, which is where Moore's theory of interaction comes into play. This theory has three components, that is, learner-to-content, learner-to-instructor and learner-to-learner.

Learner-to-content refers to the student engaging with the learning material which are prepared by the lecturer or the instructor. The instructor needs to interact with the student to direct the learning, which is learner-to-instructor. Learner-to-learner

interaction still requires the assistance of the instructor by directing the learning. This form of interaction can take place through forums, group discussions or group work. The role of the instructor in this case would be to facilitate the learner by directing the students to focus on the learning.

1.5 RESEARCH DESIGN

The research design provides a plan on how to answer the research questions for the study (Blumberg et al., 2014; Saunders et al., 2016;). This section gives a brief outline of the research paradigm, the research approach and the research type, all of which are described and justified in Chapter 3.

1.5.1 Research Paradigm

The research uses the interpretivist paradigm in order to understand social phenomena in their context and the interpretations of individuals about social phenomena with which they interact (Rehman & Alharthi, 2016). The goal of the interpretivist paradigm is to understand the subjective world of participants and to understand the viewpoint of the subject being observed, rather than the view of the researcher (Kivunja & Kiyuni, 2017). For this research, this paradigm requires the use of methods that generate qualitative data from data collection tools such as open-ended interviews (Rehman & Alharthi, 2016).

1.5.2 Research Approach

Qualitative research is associated with the interpretivist paradigm (Saunders et al., 2016) and this research used a qualitative research approach to determine how to improve teacher, social and cognitive presence in online classes with better support and training. Qualitative research is used to address the research objectives by employing techniques that allow the researcher to elaborate and interpret the phenomena without depending on numerical measurements (Quinlan et al., 2015). Qualitative research studies participants' meanings and the relationships between them, using a variety of data collection techniques and analytical procedures (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015).

1.5.3 Research Type

This study adopted a case study research strategy. A case study is an in-depth inquiry into a topic and may refer to an organisation, a process, an event and other types of

case subject (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015).). For this study, a case refers to academic staff involved in teaching and learning at selected colleges at UNISA.

1.6 RESEARCH METHODS

This section provides an overview of the techniques and procedures that were applied in the research process for this research but is discussed in more detail in Chapter 3.

1.6.1 Selection of Participants

The participants for the study were selected based on their experience in online teaching and learning. The other criterion for selecting these participants was that they had to be teaching in a class of more 100 students.

1.6.2 Data Collection

The study used semi-structured interviews to collect the data as this type of interview allows the researcher to use a list of themes and key questions (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). In addition, focus group interviews were conducted across the targeted colleges. The key advantage about focus group interviews is that it encourages constructive interactions between participants to deliberate on the topical issue (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015).

1.6.3 Data Analysis

In addressing the research questions relating to determining the improvement of teacher, social and cognitive presence in online classes with better support and training, a thematic analysis was adopted. Thematic analysis focuses on searching for themes or patterns that occurs across the data (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). For this research, the thematic analysis starts with the coding of qualitative data to identify themes or patterns for further analysis (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). The themes were aligned with the research questions.

1.7 MEASURES OF TRUSTWORTHINESS

For research conducted in an interpretivist paradigm, the normal criterion of validity and reliability is replaced with four criteria of trustworthiness and authenticity, that is,

credibility, dependability, confirmability and transferability (Kivunja & Kiyuni, 2017), all of which are discussed in detail in Chapter 3.

1.8 ETHICAL CONSIDERATIONS

Ethics in research refers to the behaviour that guides the conduct of the researcher in relation to the rights of the participants in the research or affected by it (Saunders et al., 2016). The study used primary data sources in the form of interviews. Informed consent letters were provided to the candidate for interviews. Participants were informed that they could withdraw at any time should they not feel comfortable in proceeding. Data collected from the interviews were anonymised and participants were also made aware of this. An ethical clearance approval was obtained from UNISA before proceeding with data collection.

1.10 CONCEPT CLARIFICATION

Academic and Student Support – is defined at the direct training provided to faculty members to improve CoI presences and their specific online teaching knowledge and skills (Garrison et al., 2000) and instructional support services available to faculty during teaching. Student support includes direct support provided by online teachers, technical support and specific advising-training on being a successful online study (Galikyana & Admiraala, 2019).

Autonomy – is the extent to which in the teaching/learning relationship the learner rather than the teacher, determines the goals, the learning experiences and the evaluation decisions of the learning programme (Moore, 1993).

Connectiveness – relates to a sense of belonging, a component of relatedness (Hodge, 2003) and the computer user's feeling of connectedness to the outside world (Chen & Yen, 2004).

Dialogue – is developed by teachers and learners in the course of interactions that occur when one gives instruction, and the others respond. The term 'dialogue' is used to describe an interaction or series of interactions having positive qualities that other interactions might not have (Moore, 1993).

Digital technology – is the ICT's platform or Learning Management System resources and services required to support online learning and teaching.

Engagement – refers to various ways a teacher and online course engage with students at a distance to increase their connectedness as a UNISA student, reduce transactional distance and improve student interactions with teachers, peer students, and the content of the course (Collins et al., 2019).

Faculty online training programme – is a specific training programme that will be developed as part of this study to facilitate improved interaction of the three presences of the community of inquiry in order to enhance the learner support (Garrison et al., 2000).

ICT - stands for information and communication technologies and these are technologies that provide access to information through telecommunication. These include the the internet, wireless networks, cell phones and other communication mediums (Ratheeswari, 2018: S45).

Interaction types – in an online course refers to teacher-to-student interactions, student-to-student interactions, student-to-content interactions and student-to-self (learning journal, portfolio). These interactions are reflected in Moore's theory of interaction in distance learning and online teaching (Moore, 1993).

LMS – LMS stands for learning management systems. It is software that is designed specifically to create, distribute and manage the delivery of educational content. LMS is a software system to facilitate access to learning materials that range from written materials and presentations to videos and interactive lessons (Kaziz, 2021).

Structures – express the rigidity or flexibility of the programme's educational objectives, teaching strategies, and evaluation methods. It describes the extent to which an educational programme can accommodate or be responsive to each student's individual needs (Moore, 1993).

Teacher, social and cognitive presences – teacher presence reflects the extent of teacher presence and various roles in the online classroom, social presence reflects the design of the course and social engagement between students, between students and teachers and cognitive presence refers to specific content and materials used in the course that the students and teacher interact and engage (Garrison et al., 2000; Swan, 2019).

Transactional distance theory – posits that in distance learning scenarios, separation between the teacher and students can “lead to communication gaps, a psychological space of potential misunderstandings between the behaviours of instructors and those of the learners” (Moore & Kearsley, 1996, p. 200).

1.11 OUTLINE OF THE STUDY

The chapters for this study are as follows:

Chapter 1: Introduction and Rationale

The chapter presented the background and context in relation to the role of teacher presence, cognitive presence and social presence in improving the learner support. The problem statement was also discussed to elaborate on the gaps in relation to how the three presences (teacher, cognitive and social) are not integrated. The chapter also presented the research questions, research aim and research objectives. The theoretical insights for the study were also introduced. An overview of the research design, the research methodology, measures of trustworthiness and ethical clearance are also provided. The chapter concluded with the concepts used in the study being clarified and the outline of the chapters.

Chapter 2: Theoretical Framework and Literature Review

The chapter discusses applicable theories for this study and literature aligned with the research objectives is reviewed.

Chapter 3: Research Methodology

The chapter expands on section introduced in Chapter 1, giving details of methodological choices, the research paradigm, research approach, research design, which includes sampling, data collection and analysis as well as measures of trustworthiness and ethical considerations.

Chapter 4: Research Findings

The chapter presents the findings emerging from analysis of data collected from participants during the interviews and focus group interviews. This analysis is in the form of a thematic analysis.

Chapter 5: Conclusions and Recommendations

The chapter concludes the research by offering a summary of the research findings, a summary of empirical findings, a synthesis of the research findings and the conclusion, drawing from the analysis of the data to assess how the research questions are addressed. In addition, the chapter offers recommendations.

1.12 CHAPTER SUMMARY

This chapter provided an overview of the study as well as the background. This was followed by the problem statement which highlighted gaps in the practical implications of the implementation the three presences in support for the learners and the need for faculty training in online teaching. Theoretical concepts with regard to the role of the three presences of the community of enquiry theory, Moore's theory of interaction and the supplemental consideration of Moore's theory of transactional distance was presented. The research questions and research objectives were discussed. The next chapter addresses the contextual, conceptual and theoretical frameworks and provides a selected review of literature and research related to the study and research questions.

CHAPTER 2: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter provided the introduction to the study offering an overview and background as well as establishing context. The problem statement highlighted gaps in the practical implications of the implementation the three presences of the community of enquiry theory in support for the students and the need for faculty training in online teaching. This chapter presents the theoretical, contextual and conceptual frameworks supporting this study.

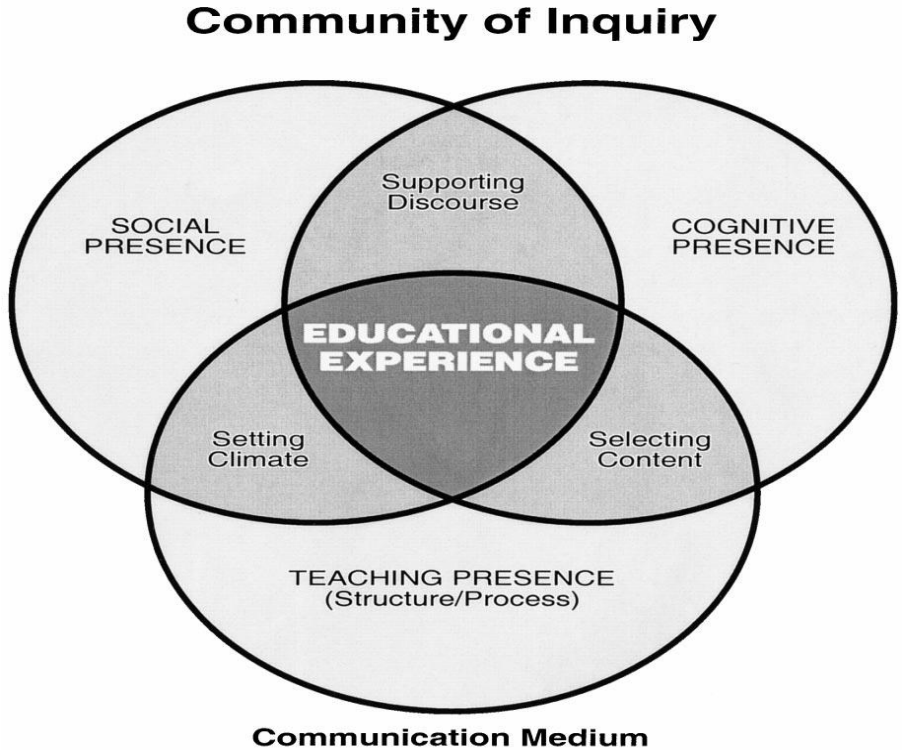
2.2 THEORETICAL FRAMEWORK

The theoretical framework for this study is based on Garrison et al.'s., Community of Inquiry Theory (CoI) (2000) and Moore's Theory of Interaction (1993). Moore's theory of transactional distance learning is a complementary theory to the two main theories of this study. It focuses on teacher-learner relationships that exist when "learners and instructor are separated by space and/or time" (Moore, 1993, p.22). Transactional distance theory describes psychological barriers to students engaging and participating in online discussions as well as feeling disconnected from the university or social agency providing the instruction. This theory describes the interrelationship between three variables namely dialogue, structure and learner autonomy, and how the interactions of these variables will affect the intensity and the quality of transactional distance (Ustati & Hassan, 2013).

A low structure and high dialogue result in a low transactional distance (and less autonomy) in that learners receive information and guidance through frequent dialogue with teachers and through instructional materials (Moore, 1993). On the other hand, a high structure with less dialogue results in high transactional distance (and more autonomy) in that learners receive instruction through more highly structured course materials (Moore, 1993). Moore's TD theory thus becomes an essential component of any faculty training programme for teaching students online at a distance.

A community of inquiry constitutes three elements – cognitive presence, social presence and teaching presence (Garrison et al., 2000). The community of inquiry

theory, as depicted in Figure 2.1, is based upon the premise that learning occurs within a community through interaction of teacher presence, cognitive presence and social presence (Garrison et al., 2000).



Source: Archer et al., 2000

Figure 2.1: Community of inquiry theory

Teaching presence is the design of the education experience which includes the selection, organisation and presentation of course content, design and development of learning activities and assessment (Garrison et al., 2000). The online teacher's actual presence in the classroom interacting and engaging students, facilitating discussions and clarifying both social and cognitive presences are all part of teacher presence. Teaching presence provides a meaningful communication for shaping, assisting in and directing cognitive and social processes (Zilka et al., 2018). Swan (2019) argues that teacher presence is the most importance element in an online course and should be incorporated in the curriculum design and the learning activities should be clearly articulated in collaboration with the teacher. This element indicates how the teacher and the learner interact to achieve the learning activities.

Although all three presences are critical to effective and high-quality online instruction, teacher presence has become increasing important to online teaching design (Swan,

2019). The faculty member is responsible for creating the pedagogical and interactive strategies to foster social and cognitive presences. Although open universities often employ a team approach to materials development, the majority of online instruction worldwide is driven by talented online teaching faculty members who blend the best of social, cognitive and teaching presences within a dynamic and interactive exchange of teaching and learning where multiple interactive strategies (See Moore's interaction theory) create the optimum learning environment for students and the most rewarding teaching environment for faculty members.

Cognitive presence is about the extent to which participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication and their interaction with the content and new learning and knowledge (Garrison et al., 2000). Social presence is the ability of participants in a community of inquiry to project their personal characteristics into the community, presenting themselves to other participants as real people (Garrison et al., 2000).

Social presence in distance education focuses more on the ability of students to project themselves socially and effectively into a community of inquiry (Jones-Roberts, 2018). Social presence cannot exist in isolation. For social presence to exist, the teaching presence needs to take the lead in executing the curriculum.

2.3 LITERATURE REVIEW

This section presents two areas of literature review. The first part of this section offers a review in relation to the role of ICTs and community of inquiry theory. The secondary part refers to literature relating to the key elements of the faculty online training programme.

2.3.1 ICTs and Community of Inquiry

Curriculum design should focus on the type of communication to be followed in the teaching and the tools to be used. Affective communication for online learning needs to recognise that instructors and course designers must facilitate and deliberately structure interaction patterns to overcome potential barriers to establish social presence (Mykota, 2015).

Creating a forum and a chat is not enough in providing direction. The use of online communication techniques has always been a problem for teachers who work in the

correspondence mode of distance education. Correspondence education is mostly associated with ‘dumping’ material through media such as the post office or courier services. There is no interaction between the student and the lecturer and the lecturer does not take any leadership in the entire learning process. Asynchronous online discussion forums are intended to support knowledge construction and higher order thinking and are becoming even more appealing for their predictive relationship with learning (Galikyana & Admiraala, 2019). A subtle point of this study is for faculty and students to realise that online teaching and learning is not the same as correspondence study.

The lecturer can assist in creating an engaged collaborative learning environment by encouraging reflection and disclosure in weekly reflection (Jones-Roberts, 2018). The reflective journal and the feedback provided by the facilitator should create a sense of social presence. Students would feel connected to the course and the learning would improve significantly. Active participation of the student in the forums can also enhance learning in open distance education. The facilitator should also encourage students to participate more in the course by creating topics that motivate discussion and debate. The type of questions posed in class should encourage the students to read and reflect.

Participation is the key in this type of environment where the classroom is simulated as though it is real. The only difference is that the student has the flexibility to attend at his or her own time, but it must be within the allocated time for the activity. The lecturer also responds, not at the same time, but within the allocated time for the activity.

The other aspect of enhancing social presence is the creation of the videos for each learning topic. Instructor-featured videos are an effective way of increase teaching presence (Jones-Roberts, 2018). Posting online videos on its own is not enough to encourage social presence. As they become less interested in the learning and the video themselves, it is important for students to participate in a question-and-answer session or engage in discussion to ensure clarity after watching the video. The lecturer’s presence during the course, his or her interactions with students and the quality of the videos presented are significant determinants of course completion (Gregoria et al., 2018).

The use of technologies such as webinars were found to be a problem mostly due to the unstable and unreliable information technology system. Internet data is an expense and in rural areas access to the internet is difficult and at times, unreliable. This can be discouraging for student participation. The only way to get around this issue is for the lecturer to take the lead and guide the students through the videos and their relation to the learning material. The lecturer can encourage social presence to be developed among the learners by providing an example of how learners effectively communicate and use social cues in an online course (Jones-Roberts, 2018).

Zilka et al. (2018) identified three dimensions of teacher presence: personality of the teacher, social characteristics and teaching style. However, these three elements are interrelated and cannot be viewed in isolation. Teaching style will obviously differ from one lecturer to the other and should not negatively influence the social presence for the online learning.

Online learning requires the connection between the student and other students, the student and the lecturer, and student and the learning material. It is only the lecturer who can influence or integrate these connections. According to Zilka et al. (2018), teaching presence can encourage climate of cooperation, community cohesion and public discourse, relying on forums and chats for conducting dialogue with the students and between students, encourage personal conversations between the lecturer and students.

For teaching presence to be effective, access to reliable technology is required to enhance online learning. Improved technology can enhance communication in online classrooms through asynchronous videos and this can be an effective way to improve teacher social presence and learner engagement (Collins et al., 2019). Learner engagement encourages participation of the students where they learn from each other. As a result, students will not feel isolated or lost but would feel connected to the course or the learning itself.

Social presence in distance education requires access to technology. Connectivity is one of the key drivers of online learning. Access to technology can be frustrating for most students when they have not received adequate training and hands-on experience with the LMS (Frass et al., 2017). Similarly, dumping learning material on the online platform without guidance would be frustrating for the students.

2.3.2 Elements of ODL Faculty Training Programme

Higher education institutions do provide training and development for their academic staff. However, there are challenges with regards to academic training and skilling for open distance learning (ODL) staff. Some academic staff have not had prior training for ODL while others are accustomed to a face-to-face approach.

Based on common training and best practices, teaching presence, cognitive presence and social presence are critical elements of a university training programme (Frass et al., 2017). Taking this into account, UNISA and perhaps many other higher education institutions, lack a formal and systematic training programme that incorporates these principles of online teaching. A study conducted by Bingwa and Ngibe (2021) revealed that higher education institutions lack a proper system to evaluate and measure the impact of academic training programmes offered to academic staff. Academic staff are expected to undergo professional development training as part of performance contract and this is more of a 'tick box' exercise rather equipping them with the relevant knowledge, skills and expertise need to be effective in teaching in an online environment.

Mohr and Shelton (2017) used the Delphi Method, a process used to arrive at a group opinion or decision, to gain consensus from a panel of experts on the essentiality of professional development items to help faculty prepare for teaching in the online environment. A consensus was reached after four rounds of surveys and identified best practices consisting of essential professional development and institutional/organisational strategies for supporting faculty teaching online (Mohr & Shelton, 2017).

ODL institutions like UNISA, continue to experience high enrolment numbers. However, the number of academic staff developing and teaching the online courses does not align with the high enrolment numbers (Loyd et al., 2012). In addition, one of the major challenges in implementing online teaching is the educator's ability to handle technical tools (Swaminathan et al., 2021) which is a core element of any faculty training programme.

A study by Samkange (2013) examined the different methods used in the training of teachers and the role of ODL in addressing skills shortages at the Zimbabwe Open University (ZOU). The study found that the lack of resources and poor stakeholder

engagement negatively impacted on the success of the ODL model of training teachers (Samkange, 2013).

Some of the measures required to improve student learning productivity in their online courses include increasing student access to content, changing the role of faculty (which had two parts: increasing access to and changing faculty roles), increasing interaction with students, emphasising student effort, connecting to the 'real world', and focusing on time (Meyer & McNeal, 2011). Emphasising student effort and participation includes the use of experiential learning, group work, learning to learn and feedback (Meyer & McNeal, 2011) and should encourage interaction among students, the content and the lecturer through feedback sessions.

To enhance student interaction in an online learning class requires some changes in the curriculum and pedagogy (Regan, 2019). This means that there is a need to incorporate some elements of pedagogy in faculty training (Regan, 2019). Pedagogical training should encourage academic staff to be effective and change their attitude and practice toward online instruction, seeing it as more participatory and interactive than face-to-face instruction (Frass et al., 2017; Gold, 2001; Ragan, 2019). The change in attitude towards online instruction could encourage academic staff to consider the online medium as more of an extension of their faculty work (Frass et al., 2017; Gold, 2001; Ragan, 2019). Pedagogy training will assist academic staff in managing the high enrolment numbers being experienced by institutions and the training should prepare faculty for learning theory, technical expertise and pedagogical shifts for teaching in the online environment (Mohr & Shelton, 2017). The high enrolment numbers mean that ODL institutions like UNISA, must equip the staff to improve their online interaction with the learning (Frass et al., 2017) and reduce the transactional distance (Moore, 1993) by increasing student engagement and interaction.

Additionally, assigning a teaching assistant to classes may help faculty deal with the massive workload related to large classes, particularly online courses of the future (Frass et al., 2017). The key point here is that the support framework for the teacher and students must allow high quality instruction and feedback to be maintained in this vast community of inquiry.

In their study on the barriers for improving faculty skills for online learning, Lloyd et al. (2012) identified four constructs through an exploratory factor analysis which include interpersonal barriers, institutional barriers, training and technology barriers and cost/benefit analysis barriers (Lloyd et al., 2012). This is consistent with Dzakiriaet al. (2005) that little attention has been paid to the cost/benefits of interaction in terms of preparation time versus instructional effects. A high level of interaction positively affects the effectiveness of any ODL course, and it also provides motivation for the learners to interact with teachers and the content (Dzakiria et al., 2005). Some studies have shown that strong teacher presence coupled with student engagement and interaction increase student retention (Swan, 2019). Higher ODL institutions should consider these barriers in their development of academic faculty training courses.

This literature revealed that course design was rated very high and this competency is influenced by delivery strategies, techniques and methods for teaching online (Yang & Cornelius, 2005). Online facilitators are also expected to focus on pedagogical, managerial, social and technical competence in addition to the design competency (Abdous, 2011). Because most students at UNISA tend to struggle with technology and access, online facilitators are expected to communicate synchronously and asynchronously as part of their online competencies (Guasch et al., 2010). Course communication competency was also mentioned by Hinson and LaPrarie (2005) and Guasch et al. (2010). The various competencies required for online teaching with their references are listed summarised in Table 2.1.

Table 2.1: Competencies of online teaching

Competencies of online teaching	Reference
Course design	Badiozaman et al. (2021) Hinson and LaPrarie (2005)
Time management	Badiozaman et al. (2021).
Course communication	Hinson & LaPrarie (2005) Guasch et al. (2010)
Designing course interfaces	Hinson & LaPrarie (2005)
Technical abilities	Hinson & LaPrarie (2005); Oliver et al. (2009)
Online environment management	Oliver et al., 2009)
Presences – teacher, cognitive and social	Garrison et al. (2000) Swan (2019)
Interaction in an online course	Moore (1993)
Content preparation	Oliver et al., 2009)

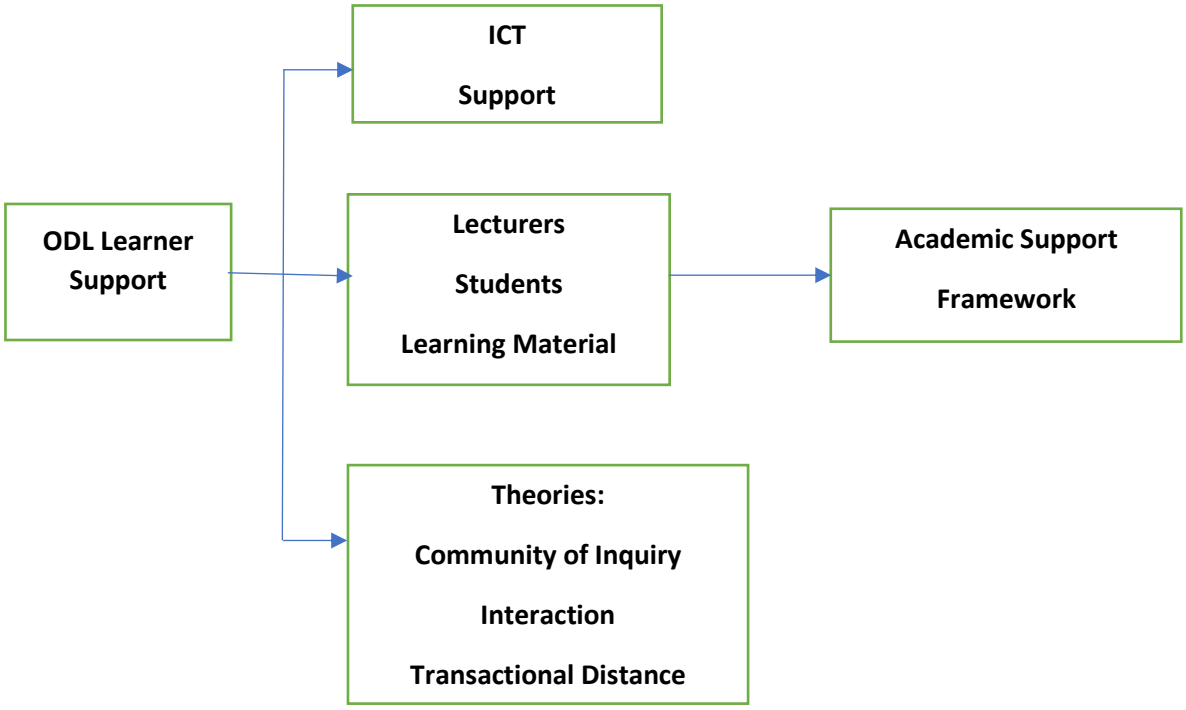
Competencies of online teaching	Reference
Techniques and methods for teaching online	Yang & Cornelius (2005)
Delivery strategies	Yang & Cornelius (2005)

Source: Author's own work

Oliver et al. (2009) emphasised that online facilitators must be able to manage the online environment as well as content preparation for online learning. Techniques and teaching methods for online learning was also mentioned by authors such as Yang and Cornelius (2005). As some students tend to struggle with the online learning environment, time management is one of the critical skills required for online learning (Badiozaman et al., 2021; Hinson & LaPrarie, 2005), time allocation for facilitating online is not the same as for facilitating face-to-face interaction. This means that course design and teaching methods must take into consideration time management for the online environment.

2.4 CONCEPTUAL FRAMEWORK

Figure 2.1 below provides an overview of the conceptual framework for this study. The conceptual framework is aligned with the research problem which is centred around the learning interactions. The learner interaction is informed by the learner support. The main variables that influence the learner interactions are the lecturers, students and the learning material. For online learning, the interaction is facilitated by ICT support in the form of infrastructure and personnel. The three theories relevant to student interactions are the community of inquiry theory, theory of interactions and transactional distance theories. The output of the conceptual framework is the academic support framework.



Source: Author's own work

Figure 2.2: Conceptual framework for academic support training programme

2.5 CHAPTER SUMMARY

This chapter discussed the theoretical framework of this study which consists of three theories: the theory of community of inquiry, the theory of interaction and the theory of transactional distance. The contextual framework was also discussed drawing on a selected literature review relating to the community of inquiry relevant for this study and the elements of an ODL faculty training programme. Key elements related to common faculty competencies associated with online teaching were presented. The final section of this chapter presented the conceptual framework for this study which is built on the concept of learner support, the actors in learning, that is, ICT support, lecturers, students and learning material, relevant theories were also incorporated into the framework. The final product of the conceptual framework is the academic support programme. The next chapter discusses the research methodology relating to this research in depth.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The chapter discusses the research methodology for this research study. An overview of the research questions is provided in order to set the parameters for this chapter. The rationale for this research is also discussed in order to inform the research design and link purpose to practice and the broader scholarly continuum of research in the field. The study adopted an interpretivist research paradigm and this informs a qualitative research approach. Because the focus of the study is on the online academic training programme, the research type is a case study and the unit of analysis is the University of South Africa (UNISA).

The population, sampling, data collection and data analysis are also discussed. Finally, the chapter address the measures of trustworthiness and ethical considerations.

3.2 RESEARCH QUESTIONS

The main research question for the study is: *What are the potential frameworks for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes (100+) at an ODL institution?*

The following are sub-questions for this study:

1. How do ICTs improve the teacher, cognitive and social presence interactions and engagement in online courses?
2. What are the key elements of an ODL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training?

3.3 RATIONALE FOR EMPIRICAL RESEARCH

Higher Education institutions have been transitioning to online delivery even before the global pandemic forced them to make the move. Online teaching and learning are not a market differentiator given that most institutions globally have online digital capacity.

Therefore, higher education institutions need to be adaptive to an innovative culture which requires different skills and competences from the lecturer, student, mentor and administrator and at the same time, has the ability to maintain the quality of the products (Taylor et al., 2020).

Open universities are no exception, and many have only recently begun the transition from print-based correspondence study to online delivery, particularly as online learning is the future, and the future is now. Improved training and support will necessarily improve academic programmes and support for students in which academic staff are committed to ensuring the best opportunities for success and graduation. Technology in and of itself cannot guarantee this success. Rather it is the support and training of faculty who in turn can better support and empower the students. A sound faculty training programme for new online teachers is imperative to ensure academic quality, student engagement and retention and institutional reputation.

The study contributes to the body of knowledge by developing a framework to incorporate a design of a faculty training programme to improve teacher, social and cognitive presence in online classes with better support and training. This framework will encourage a community of learning for students, lecturers, the learning platform and the learning content. The study also contributes to the body of knowledge on how ICTs and digital technologies can be effectively utilised to cater for all students regardless of their background and societal status.

Developing a framework requires an interpretivist approach. Interacting with participants assists in eliciting rich data in terms of understanding and dialoguing with the participants and understanding their views (Rehman & Alharthi, 2016).

3.4 RESEARCH DESIGN

This research followed a qualitative research approach integrating semi-structured interviews and focus group interview data with known research evidence and studies supporting how to improve teacher, social and cognitive presence in online classes with better support and training. Qualitative research is associated with interpretivism in order to make sense of the subjective and socially constructed meanings expressed about the subject being studied (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). The research design incorporates the research paradigm, the research

approach and the research type. This research utilised an interpretivist paradigm, a qualitative research approach and the case study research type, each of which are discussed in the subsequent sections.

3.4.1 Research Paradigm

Qualitative research is characterised by interpretations to make sense of the subject being researched in order to create meaning (Saunders et al., 2016). The research paradigm supporting this research is interpretivism. The goal of the interpretivist paradigm is to understand social phenomena in their context and the interpretations of individuals about social phenomena with which they interact (Rehman & Alharthi, 2016). It is important to understand the subjective world of human experience and to understand the viewpoint of the subject being observed, rather than the view of the researcher (Kivunja & Kiyuni, 2017). This paradigm employs methods that generate qualitative data such as open-ended interviews, observations, filed notes, personal notes and documents (Rehman & Alharthi, 2016). This study collected qualitative data through interviewing participants by using both individual semi-structured interviews and focused group interviews. The participants were given the freedom to express themselves freely as they responded to the interview questions. In addition, the researcher had the opportunity, to clarify the focus group dialogue and any open-ended questions associated with the research data.

Additionally, the theory of constructivism (Vygotsky, 1978) permeates the field of open and distance learning and is centred around the capacity of students to construct knowledge from their environment and experiences. Similarly, faculty members can employ the constructivist theory to experiment with new design features for online teaching, particularly constructivist approaches for the three presences (teacher, social, and cognitive) as well as complimentary strategies derived from faculty experience to build teacher-student, student-to-student and student-to-content and reflective interaction in online courses (Garrison et al., 2000; Moore, 1993).

3.4.2 Research Approach

This research followed a qualitative approach. Qualitative research can be used to address the research objectives by employing techniques that allow the researcher to elaborate and interpret the phenomena without depending on numerical measurements (Quinlan et al., 2015). Qualitative research studies participants'

meanings and the relationships between them, using a variety of data collection techniques and analytical procedures (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). Data collection for this approach was non-standardised to allow for questions and procedures to be modified during the research process so that it was naturalistic and interactive (Saunders et al., 2016).

3.4.3 Research Type/Strategy

This study adopted a case study research strategy. A case study is an in-depth inquiry into a topic and may refer to an organisation, a process, an event and other types of case subjects (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). For this study, the case was the academic staff involved in teaching and learning at selected colleges at UNISA. The focus of the case study was to understand the application of the community of inquiry theory in the academic setting to enhance learner support through the creation of a master framework for a faculty online training programme.

3.5 RESEARCH METHODS

This research used a qualitative research approach. Data were collected in the form of interviews which included semi-structured interviews and a focus group interviews. This section elaborates on the target population and the sampled participants, data collection and analysis.

3.5.1 Selection of Participants

The participants for the study were selected based on their experience in online teaching and learning. The other criterion for selecting these participants was that they had to be teaching in a class of more 100 students. Large student classes present several challenges such as how to ensure interaction amongst students and with the instructor. The researcher needed to understand the challenges experienced by these participants and what level of support was required to assist them in improving the interaction with the learners.

3.5.1.1 Target population

The population for this research covers all academic staff involved in open distance learning at an ODeL institution. The target population for this study is various colleges within UNISA which comprise the College of Education, the College of Law, the

College of Economic and Management Sciences, the College of Accounting Sciences and the Graduate School of Business Leadership. The selected colleges are diverse in terms of student characteristics. Five of the six colleges have relatively high student enrolment numbers and deal with modules in which students experience challenges. The College of Education is more experienced in using pedagogy and the implementation of ODL strategies. The target population is a subset of a population focusing on an area of interest and it is manageable (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). The focus for this study is on teaching and learning in the selected colleges at UNISA as these colleges are confronted with diverse student profiles associated with socio-economic issues. Some of the challenges include technological reach to poor and marginal disadvantaged learners.

3.5.1.2 Sampling method

The study adopted a convenience sampling method in selecting the academic staff members in the target colleges at UNISA. The college website has profile information and the contact details of potential participants which were sourced through each college's website. The researcher went through the profiles of the potential participants to ensure that the criterion of online teaching and learning experience for classes of over 100 students was met. Participants were invited to participate in the study via email.

In the early stages of developing the design methodology, the researcher explored possible approaches to using a random selection process of subject representatives of the broader faculty staff population at UNISA. This became problematic given the challenges presented by the global Covid-19 pandemic whereby random selection of subjects from across multiple colleges just became difficult. Faculty workload, lockdown, family obligations and other barriers made this impossible. As a result, convenience sampling, as a type of non-probability sampling, was used as the sample was drawn from the part of the target population that was close at hand.

3.5.1.3 The Sample

The sample comprised academics drawn from all target colleges and was made up of academic staff members involved in teaching and learning. Fourteen participants comprising academic staff members such as Senior Lecturers and Professoriate were sampled for the semi-structured interviews with 14 participants, 12 were senior

lecturers and two were professors. The recommended minimum sample for a homogeneous population unique for academic staff involved with teaching and learning is recommended at between four and 12 (Saunders et al., 2016). In addition, two focus group interviews were conducted with the selected participants who were also involved in the semi-structured interviews. Focus group interviews were conducted after the semi-structured interviews were concluded. The focus group interviews were conducted online through MS Teams and each focus group interview lasted about an hour. Each focus group was comprised of four participants. This number of participants was constrained by the availability of the participants and as a result, it was not possible to get a sample size of more than five participants at a given point. The focus group discussion was based on the foundation of the semi-structured interviews.

3.5.2 Data Collection

The data collection for this research was conducted through semi-structured interviews with academic staff members to understand their views on the integration of the teacher, cognitive and social presence. The benefit of the interviews is that the researcher has directly interacted with participants to build up rapport. The semi-structured interviews were guided by an interview guide (see Appendix D: Interview Guide). Semi-structured interviews usually start with specific questions and allow the participants to follow their own thoughts (Blumberg et al., 2014). In this research, the semi-structured interviews allowed the researcher to use a list of themes and key questions (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). In contrast, unstructured interviews start with respondents' views and may not follow any specific topic or question (Blumberg et al., 2014). Therefore, the semi-structured interview was deemed relevant for this study since has specific research questions relating to the three presences of the community of inquiry theory.

In addition, focus group interviews were conducted across the targeted colleges (See Appendix E: Focus Group Interview Guide). The key advantage about the focus group interviews is that it encourages constructive interactions between participants to deliberate more on the topical issue (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). Two focus group interviews were conducted with participants who had participated in the individual semi-structured interviews forming part of the

focus groups. Not all participants who participated in the semi-structured interviews were available to participate in the focus group interviews. Therefore, participants were conveniently selected based on their availability to participate.

3.5.3 Data Analysis

In addressing the research questions relating to determining the improvement of teacher, social and cognitive presence in online classes with better support and training, a thematic analysis was adopted. The recorded data were transcribed verbatim and the transcriptions were analysed through thematic analysis. Thematic analysis focuses on searching for themes or patterns that occur across the data (Saunders et al., 2016; Blumberg et al., 2014; Quinlan et al., 2015). In this research, the thematic analysis began with the coding of the data to identify patterns for further analysis (Saunders et al., 2016) which was then categorised and developed into themes. The themes were aligned with the research questions.

3.6 MEASURES OF TRUSTWORTHINESS

For research conducted in an interpretivist paradigm, the normal criterion of validity and reliability is replaced with four criteria of trustworthiness and authenticity, which include credibility, dependability, confirmability and transferability (Kivunja & Kiyuni, 2017), all of which are discussed in the subsections.

3.6.1 Credibility

Credibility refers to the extent to which data and data analysis are believable, trustworthy or authentic. This criterion relates to the researcher's ability to investigate the question: How do the findings align with reality as constructed by the researcher and the research participants? (Kivunja & Kiyuni, 2017). For this study, the researcher made sure that the question and responses from participants were clarified during the interview, before moving on to the next question. At the end of each interview question, the research recapped and summarised the views of the participants and asked them to confirm the researcher's understanding of their views.

3.6.2 Dependability

Dependability is the ability of observing the same outcome or finding under similar circumstances (Kivunja & Kiyuni, 2017). For this study, the participants were encouraged to express themselves freely during the interview sessions while the

researcher remained an active listener. Accurate and detailed recording notes were captured through MS Teams recording function.

3.6.3 Confirmability

Confirmability is the extent to which the findings of the research can be confirmed by others in the field (Kivunja & Kiyuni, 2017). This study and data collection can be replicated at UNISA hence all elements of the study are amenable to validation and confirmability. The overriding goal of this criterion is to ensure that researcher's biases are minimised and preferably eliminated to guard against contaminating the results of the data analysed (Kivunja & Kiyuni, 2017). The researcher did not express a position or preference to the responses. The researcher also ensured that there were no biases in the way questions were framed and also not pushing participants to respond in the researcher's favour. The researcher also ensured consistency and fairness in the way the questions were posed to the participants. In cases where the participant was unclear, the researcher asked for clarification to the answers.

3.6.4 Transferability

This criterion represents the researcher's efforts to ensure that enough contextual data about the research is given so that readers of the findings can relate those findings to their own contexts (Kivunja & Kiyuni, 2017). For this research, a convenient time and venue (online in this case) setting was provided to the participants. The context of this study was fully described, and its findings can be related to other contexts.

3.7 ETHICAL CONSIDERATIONS

Prior to the collection of data, ethical clearance approval was sought from UNISA (see Appendix A: Ethical Clearance 2021/ 5/12/11743964/20/AM). The study used primary data sources in the form of interviews. Participant information sheet (Appendix B) and informed consent letters (Appendix C) were prepared and provided to the candidate which were signed prior to the interviews. Participants were informed that they could withdraw from the study at any time should they not wish to proceed. Data collected from the interviews were anonymised and participants were also made aware of this.

3.7.1 Confidentiality

Confidentiality in research is the guarantee that the researcher makes to the participants that their contribution to the research will remain confidential (Quinlan,

2015). Some of the participants were concerned about confidentiality in participating in the study. The researcher assured participants that their identity would not be revealed in the study and pseudonyms were used in reporting the responses of the participants, to protect the identity of the participants.

3.7.2 Informed Consent

Informed consent is an agreement given by participants to participate in the study after being informed of the possible consequences (Quinlan, 2015). Participants were provided with a participant information sheet which provided them with details of the research and would assist them in making a decision on whether to participate or not. In addition, participants were required to sign an informed consent form as an agreement to participate in the study. The informed consent form is the record that participants understand what the research is about and understand what is required of them by participating in the study (Quinlan, 2015). The informed consent also made it clear that participants could withdraw from the study at any time without question or consequence (Quinlan, 2015).

3.8 CHAPTER SUMMARY

This chapter discussed methodological processes related to this research. The rationale of this research and its contribution was discussed. The research paradigm in the form of interpretivism was discussed taking into consideration the qualitative research approach relevant for this research. Case study research type was adopted for this research. The chapter also highlighted the target population for this study, convenience sampling, data collection and data analysis, measures of trustworthiness and ethical considerations. The next chapter discusses the research findings emerging from the analysis of data.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

This chapter presents the analysis of the data collected through semi-structured interviews and focus group interviews. The chapter starts with the demographic profile of the participants. The findings of the semi-structured interviews are discussed first. This is followed by the findings emerging from the discussion of the focus group interviews. Measures of trustworthiness are discussed, and the last section summarises the chapter.

4.2 DEMOGRAPHICS OF THE PARTICIPANTS

A sample of fourteen (14) lecturers from five (5) different colleges at UNISA participated in this research. These participants represented the following colleges:

- College of Accounting Sciences (CAS)
- College of Education (CEDU)
- College of Economic and Management Sciences (CEMS)
- Colleges of Law (CLAW)
- Graduate School of Business Leadership (GSBL)

Table 4.1 shows the demographics of the semi-structured interview participants.

Table 4.1: Demographics of semi-structured interview participants

Colleges	No. (%)	Gender	Teaching Level	Participants
CAS	4 (29%)	Male: 1 Female: 3	Undergraduate	MN, KN, CB, NC
CEDU	1 (7%)	Male: 0 Female: 1	Undergraduate	PM
CEMS	2 (14%)	Male: 0 Female: 2	Undergraduate	MP, RMK
CLAW	1 (7%)	Male: 0 Female: 1	Undergraduate	AB
GSBL	6 (43%)	Male: 4 Female: 2	Postgraduate	MM, MM1, MR, PMR, NP, BM

Source: Author's own work

In terms of gender, the interviews were dominated by female lecturers with a representation of 64% and male lecturers with a representation of 36%. In terms of the teaching levels, 57% of the participants are involved with undergraduate teaching and 43% of the participants are involved with postgraduate teaching.

The research is well represented in terms of gender, colleges at UNISA and the teaching levels. Table 4.2 presents the demographics of the focus group interview participants.

Table 4.2: Demographics of focused group interviews participants

Colleges	No. (%)	Gender	Teaching Level	Participants
CEDU	2 (33%)	Male: 1	Undergraduate	PM, MM2
		Female: 1		
CEMS	1 (17%)	Male: 0	Undergraduate	RMK
		Female: 1		
		Female: 2		
GSBL	3 (50%)	Male: 1	Postgraduate	MM, PMR, NP
		Female: 2		

Source: Author's own work

Focus group interview participants were drawn from those who had participated in the semi-structured interviews. Two focused group interviews were conducted. The first focus group had four participants and the second focus group had two participants. Although the second focus group had four confirmed participants, two participants withdrew due to unforeseen circumstances.

In terms of gender, females represented 67% and males represented 33%. In terms of the teaching levels, 50% of the participants are involved with undergraduate teaching and 50% of the participants are involved with postgraduate teaching.

4.3 DEVELOPMENT OF THEMES

The research questions were aligned with the interview questions (see Appendix D) and the focus group questions (see Appendix E) and in the analysis, themes were developed from the research questions.

The main research question for the study was: *What are the potential frameworks for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes (100+) at an ODL institution?*

The following are sub-questions for this study:

1. How do ICTs improve the teacher, cognitive and social presence interactions and engagement in online courses?
2. What are the key elements of an ODL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training?

4.4 PRESENTATION OF THE FINDINGS

The findings emerging from this study are presented according to the themes as developed in Tables 4.3 and 4.4.

Table 4.3: Themes emerging from the semi-structured interviews

Research Questions	Semi-Structured Interview Questions (Appendix D)	Themes
RQ1	1,2,3,4,6	Theme 1: Online digital technologies Theme 2: Online teaching methods Theme 3: ICT support Theme 4: Learner Management System's interaction and efficiency
RQ2	5,7	Theme 5: Online Facilitation Theme 6: Level of Support

Source: Author's own work

Table 4.4: Themes emerging from the focused group interviews

Research Questions	Focused Group Interview Questions (Appendix E)	Themes
RQ1	2	Theme 7: ICT improvement
RQ2	1,3	Theme 8: Key elements of academic staff training Theme 9: Potential frameworks

Source: Author's own work

4.4.1 Theme 1: Online Digital Technologies

Sakai/Moodle is the Learning Management System (LMS) used at UNISA. Most of the colleges at UNISA use MyUNISA which is built on Sakai. Only one college (GSBL) implemented Moodle LMS in 2021, with the remaining colleges planning on implementing it in 2022. Sakai/Moodle has the following characteristics:

- Uploading and downloading learning material
- Lessons with learning units.

A summary of its key characteristics for teaching is provided under Theme 9 for Potential Frameworks. In addition, Sakai/Moodle is compatible and can be integrated with other technological systems such as MS Teams. WhatsApp is a social media communication/messaging tool and it is not integrated with the LMS.

Most participants indicated that online digital technology plays a role in uploading and downloading learning materials.

> *"From my side, it makes life easier because it means that you can work from wherever you are on the online system and then also download and upload the script and mark them in and also communicate with a student wherever you are, as long as you've got connectivity" MR.*

MR's view on working remotely is supported by RMK:

> *"… right now, the students are learning remotely, fully online, and even classes are offered online. And now we can even have one on one session with a student via Microsoft Teams".*

MR's view on the use of the LMS to upload material is supported by BC:

> "*We also use it a lot to upload all the videos, the meetings that are recorded on Microsoft Teams, we upload them there".*

Other uses of online digital technologies include communication. This is in the form of posting announcements and notifications when learning material has been uploaded on the learner management system (LMS).

> *"I think this has actually been the only medium which we have used, to be able to lecture our students, to communicate to our students, and to be able to do any tutorials which we have done with our students. So, I think it has been the main medium actually for us to be able to deliver what we have been delivering" PMR.*

Other participants indicated that the LMS's capabilities were not fully explored.

"…MyUNISA, for my module, we haven't used it that much in terms of some of the capabilities that it had. That this is simply for how to post materials, make announcement, communication with students" KN.

Facilitation was also mentioned as MS Teams is used to delivery lectures. However, it is not linked with the LMS. MS Teams is used to interact and engage with the learners.

"Number one, our lecturers, our classes, we deliver them online. So, we are using Microsoft Teams to deliver the classes, I know that we only started with the Microsoft Teams" NM.

Most of the participants indicated that they do not use the chat forums as a means of interaction and engagement which means that there is low participation of students on the LMS. The other part that the online digital technologies play is the recording of the lecturers and this allows the learners to go through the recorded lectures repeatedly.

"I sometimes use YouTube videos, record videos, especially for my undergrad students. And they are able to watch the videos or listen to the recordings, and they got convenient time" PM.

This assists in improving the cognitive presence for the learners. Students engage with the recordings repeatedly. Where they are not clear, they could refer to the learning material but they also have an opportunity to contact the lecturer.

4.4.2 Theme 2: Online Teaching Methods

In responding to the question of how their teaching methods are aligned with ICT, some participants struggled to relate their teaching methods. Most participants indicated that they share the learning material first to prepare learners for the class. This is in the form of sharing slides and sharing the teaching material.

"I share them on the LMS platform with an invitation. So, normally the invitation would be like three weeks before. And then I share the actual slides on the LMS on/or MyUNISA for them to prepare for the lesson. So, I will tell them, what would be covered in that lesson that we are going to have online. And then when they come, they know, when they attend the class, they know that we're in chapter, maybe one and two, I try to keep them short. And so, I do one lesson" RMK.

"Okay, so with us, before the class, we post the slides on MyUNISA under the additional resources, then we'll put the slides there so that the students can go through the slides, and then in the lecture, then we go through the slides again, but also what we do, in most cases, when you do these classes on Teams, we go through previous test questions or exam questions and things like that, or some question. So, we will also post the question on MyUNISA before we have the lecture, and then the students get a chance to go through the questions. And then when we meet online, then we discuss and then they've got questions and things like that" NM.

The method of sharing resources beforehand was not directly applicable to other participants as they would prefer to give a demonstration whereby both the lecturer and the students are able to build the concept together. They indicated that the ICT (infrastructure and support personnel) is not aligned with their teaching methods in that there is a lack of tools required for demonstration purposes when conducting online classes.

"And I'll prepare all the work breakdown structure and network and all that. And then I will send it to them. And then I will project it here while they are looking at it themselves as well on the screen, or if they have printed it out. And then we'll go through it together. So, we are not building it up together. Because I like the demonstration where we can build it up together instead of me building it first" PMR.

Most participants, particularly those in GSBL and CAS indicated they never used the forums. However, participants from other colleges did indicate the benefits of using the forum as it provides a means of interaction with the learners.

"So, with the discussion forum, as I have explained earlier on, students are able to have a discussion over a particular topic and they get to engage with the content, with myself as their facilitator and also amongst themselves as students" PM.

However, they did express that there is poor participation of the learners in the forums. Some indicated that learners need to be forced to participant and one of the measures is to grade student participation.

Feedback emerged under this theme. Feedback could be provided after the assignment has been assessed and this could be through a summary recording and written feedback which is posted on the LMS.

Participants PM, RMK and AB indicated that pre-recording of the lecture sessions was done especially when the number of students was excessively high.

4.4.3 Theme 3: ICT Personnel Support

In response to the question of the support provided by ICT during online teaching and learning, all participants responded that there is little or no support provided by ICT personnel either because the ICT office is under resourced or the ICT personnel are also not skilled enough to address the technical challenges. Part of this problem may be due to a personnel support system which was skilled and developed to support a mega correspondence print-based distance learning operation. However, transitioning to a modern online university will require a complete redesign of the support infrastructure for students staff, and faculty including some of the necessary support staff needed for an online operation to run effectively and efficiently.

Some of the interventions implemented during online classes is the use of more devices, particularly when a lecturer facilitates the online class alone.

> *"…yes, nobody else alerts me or otherwise I normally tell students like in the other section, I told them that I'm going to put myself into a mode so that I can see side by side on the screen, but I made my screen like larger side and smaller size there so that I can handle the questions" PN.*

Those who do not use more devices indicated that they view chats during breaks and respond accordingly. Others view the raised hands and they could pause and allow the question from the learners.

> *"Okay, so I will talk to Microsoft Teams. So, if it's a big class, we normally ask them to post their questions. There's a messaging tool on the Team's platform. So, students can post their questions using the messaging and then we are able to reach them and respond. But sometimes, if students want to ask, what we do is we enable the hand function, to allow them to raise their hands. And then we unmute them. And then they are able to speak, but mostly use the messaging function, where they could type the question. And when they type their question,*

because normally live sessions, if it's a relevant question, we publicise it so that every other student can be able to see it" NM

Participants such as NM, BC, NC, who teach excessively large classes, tend to work as a team on a single module. Lecturers have a colleague who moderates the online sessions which means that one lecturer teaches and the other monitors the chats.

"…so normally, what happens is, there will be a lecturer who's teaching, and then there will be someone looking at the messaging. And then if it's something that needs my attention, while I'm still delivering the lecture, she will just let me know, so that I can address it. But in the meantime, all the questions that are typed, there's always someone assisting. So, you never do a lecture alone. So, there's always someone who will be looking at the messages, and someone will be later on because it can be destructive at times" NM.

4.4.4 Theme 4: The Learning Management System's Interaction and Efficiency

This theme comprises LMS's user-friendliness and its interaction

4.4.4.1 Learner management system's user-friendliness

Participants were asked if the LMS is user-friendly for students taking online classes. Most participants indicated that the LMS is not user-friendly in most of the cases. Some of the issues identified with the LMS includes uploading of assignment submissions and Turnitin. This is evident with the devices used by students, who tend to use their cellphones. In addition, many students are not digitally literate and are challenged in using the LMS, particularly as they are given little training on it use.

"Yes, most of our undergrads are not necessarily using, they're not digital literate, in essence, that not all of them were exposed to a digital tape due to an avoidance that developed during their high school years. So, they would only do the basics. When it comes to the LMS, they tend to find it challenging at first, especially that it's something that they have to learn by themselves, they don't have the necessary support from, I would say from ICT and myself, since I cannot easily assist them as they have to, they have to navigate it through. I mean, wherever they are, and not necessarily we have a class that I can teach them or introduce them to the LMS. So, it's very kind of frustrating for them that they find it challenging, some of them are failing to submit their assignments, due to not

being able to access the system, some of them are just not a digitally viable, because we tend to think that that they have cell phones that we can use for WhatsApp and so on. We tend to just again a blanket approach that they all can navigate the system which is not effective because nobody trains them. Nobody introduces their LMS to them. It's a matter of them finding out" PM.

"I think the greatest problem with MyUNISA as it is on Sakai now is the fact that there is no mobile app. By far most of our students study virtually everything, they use their phones to access learning from the university. I don't know if you've ever opened MyUNISA on your phone, it is very hard to manage and navigate MyUNISA. On a mobile phone, the page opens differently. The buttons look different. It's hard to establish where the tools on where you find your modules" AB.

The other challenge experienced by students is the system itself. The system tends to crash during submission. According to the participants RM and PN, most students tend to submit assignments a few minutes before the system closes for the submission.

"I think with Moodle, the students are struggling. Like for instance, there were cases that you find that the student cannot upload the assignment and therefore have to request it to upload it for them" MR.

The inability of the system to accommodate large numbers of submissions just prior to the system closing, remains a challenge for the students. Participants reported that some students tend to email the submissions to the responsible lecturer as they experience problems with uploading their assignments on the system. Participants noted that students tend to contact the lecturer instead of the ICT personnel. Lack of support from ICT personnel exacerbates the problem, both for lecturers and students, particularly as ICT personnel never answer their phones or respond to emails.

4.4.4.2 Learner management system's interaction

Participants were asked if the LMS allows interaction with learners in their online courses seamlessly and effectively. Most of the participants indicated the system is not seamless.

"Yes, it does, but not seamlessly and effectively because I can make announcements. Yes, with the learner through the LMS we can have discussions in the discussion forums. However, with a large number of students, it's a bit cumbersome as most of them, as I indicated, are challenged with access to the LMS system due to digital illiteracy. And also due to a connection problem as our system is always giving them error messages" PM.

To assess the LMS's interaction facility, the following factors must be taken into consideration: class size, LMS capacity and the effect of class size on using the LMS effectively for discussions.

Participants indicated that they never used the LMS for interacting with students. They mostly use it to upload learning material and not as a teaching platform. They use other means to conduct their online lecture or provide feedback to the students.

"I'm not really familiar with the Moodle LMS. [We offer our classes through MS Teams as MS Team is not linked with the Moodle LMS]" MR.

When asked why they never use the LMS, some of the participants indicated that they were not properly trained and did not have any support from ICT. This is supported by those who indicated that they experienced system challenges.

The major reason for not using the LMS is that the system is not integrated with other technological platforms. There are those participants who acknowledged that the system is not used to its maximum capacity and this relates to training on how to use the system effectively.

4.4.5 Theme 5: Online Facilitation

Participants were asked about their experience in facilitating student interaction, cognitive interaction and teacher interaction in larger online classes (100+) of students. All participants facilitated classes of more than 100 students with some classes having over 3 000 students. Participants indicated that online interaction with students was difficult since they cannot determine if everyone is present or listening attentively.

"… if the students are actually understanding what you are teaching. So, you have to put in more effort, and you have to interact with the students more,

because you find that maybe a handful of students are the ones that attendance rate is also not very high. So, you're not sure if those that are not attending even go back to their recordings to listen in to what was offered. So, it becomes very challenging with a larger group of students when you're teaching online, as compared to if you have them in a class setting. Because then you could have different groups, smaller groups" RMK.

"Yes, these are the student teachers who are registered for a B Ed degree. And some of them are for people who have registered for postgraduate certificate in education. Interaction, it's very difficult with a large number of students, because not all of them are able to actually participate in the interactions because they are always challenged by connectivity, one, they are always challenged that by the time they get into the platform, it's already way past the discussion that we are busy with, because they always complain about the system was always offline or it's not actually giving them access" PM.

"I think that one, in my experience will be linked to what I've already said. Because you read the question, you explain a concept or you ask a question, but students will be quiet for a bigger group, which is the plus 100. Students will be quiet; they won't make any comment. And then maybe after a few seconds or a minute you decide to also answer the question. So, my experience in facilitating those, it's tricky because students are not participating" NC.

It was reported that some students log on to the session but they focus on other things and prefer to go through the recordings later on to catch up with the lectures.

"From the student's perspective, yes, are they able to comprehend? You know, I think that's the benefit with these online sessions. Because even if you don't comprehend, it's there, you can go back to it, and listen to it over and over again, until you understand it. So, if you miss something, you're able to go back and listen to it over and over again. And obviously, our channels of communication, they're always open. So, if you go back, and you listen to it, and there's something that you do not understand, we do have an email or a mailbox, where you can send your question, and then we can we can provide you with clarity" M.

Participants RMK, PM and MR highlighted the problem of low participation of the students on the forums. It is difficult to gauge if the class is struggling with certain

concepts, as reported by participant RM. Participant RM indicated that student learning can only be measured by their performance in the written assignments.

The other form of interactions indicated by the participants RMK, PM and NM, are communication and announcements. These are mostly one-way since information is delivered to the students who are not able to engage with the lecturer except by sending an email to seek clarity.

Participants RMK and PM indicated that there is limited interaction when their students prefer to go through the recorded lectures instead of attending the online classes.

4.4.6 Theme 6: Level of Support

Participants were asked about the level of support required to improve the teacher, social and cognitive presence in online classes.

Most of the responses related more to system functionality and system capability. It seems that there is a major need to improve the ICT infrastructure and align it with their online teaching.

ICT support (infrastructure and personnel) and technological options were also mentioned as important to enable online teaching. Technological options should be flexible enough to allow the use of other apps to accommodate different students. In addition, ICT personnel with technical knowledge of the system should be able to assist lecturers and students with technological and technical challenges.

> *"More software support in terms of more applications that are relevant to what the students are using now. So, I don't know if perhaps an app of some sort that could assist." RMK.*

ICT support is also required to assist lecturers and students in navigating the system with ease. Participants stressed the importance of training for both lecturers and students, emphasising that training should be focused and address their needs.

> *"I think it's fair for UNISA to capacitate ICT in terms of resources, if for instance, ICT had 50 people that used to service the entire university before, now it's different because everyone is remote, therefore, we need more support. And in that capacity, I would strongly suggest that each department is supposed to have dedicated personnel from ICT. To say at this college, this is your person from*

ICT and that person from ICT as well. Maybe we do explain what we do as a department because sometimes we might blame them to say they do not want to help us whereas maybe they are frustrated they do not understand exactly what we are doing" NC.

"I would like the ICT person as well to be on standby. It must be made sure that there is a person there so that everything can run smoothly or when there is a problem that can be addressed. I think that will make it better. And probably the other aspect the support could be more to do with the preparations and when I talk about preparations, I mean, in the morning, I would prefer, at least when they start, that they deal with whatever aspects the students may be facing on the system before I can come in to start my specific lecture, which I'm going to make" PMR.

"So that is important and for me ICT support as well. It is of key for me as I will be able to use all those techniques with a system that is working and with connectivity that is on the correct level or standard. So that you can be able to be online throughout because most of the time, you find that the system is not really working, and we can be as present as possible to the students" PM.

Participants also mentioned that they tend to do more administrative work than academic work as they assist learners with administrative-related issues. They stressed that management should support them with the allocation of more administrative staff. In other cases, it is not the allocation of the resource but the poor performance of the administrative support staff.

"I think, for me, the level of support, what I would prefer, as I've already indicated, is to have the administrative support as a backup continuously especially when you are delivering the material. But the second aspect, probably which I would prefer, is that, especially if we are going to go into a situation where they say I've got a full day for a module, which I need to finish" PMR.

Management of communication was also mentioned as equally important. The system should make provision for communication and notification to the students. Communication is through a student-allocated email address called *mylife* email address. However, it seems that students do not log on to their student emails allocated by the university as they tend to use their personal emails.

With regards to announcements on the LMS, the system should be able to send messages to students' mobile numbers notifying them that resources have been uploaded on the LMS.

4.4.7 Theme 7: ICT Improvement

Participants were asked about improving the use of ICT to ensure teacher, cognitive and social presence interactions and engagement in online courses. The first thing that came to mind with most participants is the ability of ICT itself. Ability relates to ICT infrastructure, the system and its functionality. Digital technology was also mentioned. The digital technology relates to access and its integration with the system.

> *"So, I think the ICT establishment needed to do a little bit more to make sure that actually the supply chain of what we are offering is an oiled machine. So, it's not only focusing on the lecturers and not neglecting the other parts of the supply chain" PMR.*

Participants indicated that there must be room for different technologies to make learning more interactive. The other factor raised by participants is the readiness of both the lecturers and students as it seems that many students do not make an effort to learn how to use the system effectively.

> *"There are three things because it's not only about that, how digital technologies do, we know that it depends on ability, it depends on readiness, ability of the student, I'm talking about readiness in terms, whether a student can use those tools which you have provided, then in terms of context of digitisation, many times, we have seen that if you are putting some poll or something, whether students are able to do it and be able to access it, because some of them often do this thing, or often access the lectures on mobile devices. So that's another thing because it affects the experience of the students. And it also affects our interactions and engagement with them" PN.*

> *"What I've noticed is that the three presences, I am able to actually see the balance using the different technologies. But also, depending on the type of students I have, I find it very difficult, I would say very difficult for my undergrads to be able to try to have a balance between the three presences because as one of our colleagues has indicated that we can use all the technologies that we have,*

but our students do not come to the party. That's what I have come to realise, as I said, they always focus on the end result of I want to get it over and when I want to get done with this module, I don't want a lot of things. Because already the mindset is there. We also need to work on the mindset, but the presences are a challenge for me in a sense that it's not all students who are able to participate. Even if I were to be there to engage with them, especially at undergrad level, it's difficult" PM.

ICT support was also seen as important in supporting the lecturers and students in accessing the system.

"Yes, but for me actually the support from ICT needs to be constant, and the way in which we are doing it now, I don't think that if it is the right one,[for example, I know at UCT, they have a system where you will have something like that they allocated additional two ICT personnel (learners) to provide ICT support. One is on standby and the other one is doing allocated normal duties. But in our case, when you look at the way in which you want to render support, you're dealing with two people. And sometimes, they're overwhelmed]." PMR.

4.4.8 Theme 8: Key Elements of an Academic Staff Training

Participants were asked to suggest key elements needed for an academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training.

Participants suggested the following key elements which should be considered by lecturers in a training programme:

Provision of equipment for students is vital for participation in online classes:

"Students need to be able to have better equipment for them to be able to attend online classes, and especially the equipment which is more than the computer. But the second aspect being that how comfortable are they, for them to be able to get enough data to be part of it. And then from there, that's when you can look at the specific now, elements of what training are going to be" PMR.

Readiness for training was suggested as an element, particularly with lecturers, students and administrative staff:

"Another thing I was thinking about is in terms of students, we talk about teacher readiness, but we also need to focus on this because this is participation and engagement, all parties which are engaging are important. So, student readiness, programme administrator's readiness [and say there is an examination, examination office personnel's readiness and teacher's readiness are other important elements of academic staff training]" NP.

"…another element, which should be part of the academic staff training programme, I would like most of trainers/facilitators to go into details, because some of them claim to be experts on the principles… because sometimes I've seen a situation where these people is like they are reading from a holy book when you do it like this or you don't do it like that. And I thought that that is not the best way of having a sustainable training programme to improve all these aspects you are mentioning here" PMR.

Flexibility of the training programme was raised by participants, who suggested that each college or even lecturer would have specific requirements that need to be addressed in the training. As a result, the idea that one size fits all would not work in this case. Participant PMR emphasised that the impact of the training can be enhanced by understanding the dynamics of online classes for both for the trainers/facilitators and the students.

"I just realised one important point because many a time in the training and many times working on different new programme development, I realise that teachers training should not be like what you said is that one, one size fits all kind of thing, because there are different professions within UNISA like different colleges like Law's requirement is completely different, their requirement is different, what a student expects from them is different. So that is important. Like for us business school, their training requirements are completely different, what is required from us, what kind of professionals is required, what kind of issues are required. And similarly, we have Science college. College of science teaching requirement is completely different. So, one size doesn't fit all. And that is very important for any kind of teachers training to understand" NP.

"Yeah, and then actually, because of that, I thought one of the elements should be when these people come in, and I think they should not jump in and start staff

training, I think they should first of all understand what the different offerings which we are giving entails, I will give you an example, the way in which the university came up with the exam system, for me did not recognise that there are certain module resources and subject matters, which cannot be served by that approach of what they are doing. You are going online, you are given time, this is what you are going to do. Now, that didn't show me that they understood that different subjects have got different need here" PMR.

These sentiments were echoed by PM who emphasised that the Continuous Professional Development (CPD) training unit at UNISA should develop programmes that are adapted to one's module:

"That is the first thing that I would expect from CPD. And secondly, I would appreciate it if they can just have more like a course that talks to how I orientate or how I should orientate my students into my specific module and also the different learning platforms that I can use where we have such but then sometimes, they don't talk to our own modules. And we tend to, like force them in a way that they don't necessarily talk to my modules, but then or they're not really waiting for me. But then if we can have such kind of training that actually talk to maybe different disciplines"

Participants raised important factors relating to a specific training programme developed for academic staff to work effectively and efficiently online, particularly as the majority of learning has transitioned to the online platform.

4.4.9 Theme 9: Potential Frameworks

Participants were asked about the potential framework needed for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes (100+). Participants indicated that potential framework should include the following:

- Stakeholder needs

"… to understand the needs of those actually involved, because the needs of those who are lecturing, but then the needs of the students. And some of the challenges. Now you can't know those things unless you talk to those people." PMR.

- Administrative support during online classes

"…with another element, which I find actually that it should be a must. I think sometimes back when you interviewed me, I spoke about an example of what I saw with Vodacom. When Vodacom offer programs, that there is always the administrator, who is there full time when you are lecturing. Now that person has got certain aspects, which is he/she supposed to do, for example, sometimes when you start actually presenting your work, some people seem to manage, it is different for me, the moment I am presenting, I focus on what I'm presenting, and I imagine my students. So sometimes you don't know whether those students, some of them, probably they are trying to stop you on the way they want to ask questions and things like that." PMR.

"Yes, I agree with my colleagues, the fact of administrative support, …to an extent that we ended up being, you know, the lecturers become the first point of call for students when they're frustrated, they then contact the lecturer. So, that is an area that requires a lot of improvement, then it will also help alleviate the problems of workload because it takes time to resolve students' administrative problems" MM.

"… it's also other supporting departments, for example, have the queries that I deal with administratively, I'm not sure what has happened to the call centre, or that was previously there to assist with such. Perhaps, if that could be brought back to assist with some of the things because that would really alleviate some of the stresses that academics are dealing with. So, it's not just from ICT side. It's also other support departments that I think would need to relook at how certain things are being done" RMK.

- Infrastructure to support online learning

  "I think if you look on the management side, I think the infrastructure which is available for me, it is not adequate. And I don't know where that comes from. There was no proper thinking or what because when they decided to move an exam to the Moodle platform, I could have expected that probably they must have done the need analysis, because I don't see that very much" NP.

- Skills management for online learning

"…those who are available to support, what kind of ICT skills they have, and if they can provide support. So, I'm just putting into three types hardware, software and human resource skills" NP.

"For me, if they are going to have a system, which they are introducing, I think the first call of duty in terms of preparing it is the ICT people we have. So, you prepare them in such a way that they have sufficient knowledge of knowing what we are entering into. Because that brings a bit of confidence to them. And then it helps for them to be able to support us." PMR.

"The problem is not only an ICT, you know, people are assigned roles that they do not have competencies for or qualifications for, they only master few aspects and claim to be experts in the role" PMR.

"…people many a time they are learning on jobs. I think that when people are employed, if they claim because of their educational qualification and experience, both things are important. I'm just going to stress on these two things. And I think another thing perhaps a point which you have mentioned is that that this skill shortage or skill mismatch is not with ICT only; it is across many services and that becomes quite an important reason if people claim to be expert into something, they have to demonstrate these skills and expertise." NP.

- Qualified and experienced personnel to support online teaching and learning

"You can handle the human resource there, because there is something on the human resource, which is not easy to touch, which is not easy to explain. And I will tell you why. This is my observation. I've looked at the people, the ICT people we have, and I've come to realise that sometimes when we are stuck on something, and when you tell them, it looks like given some of them, they don't actually know your problem" PMR.

"Yeah, probably good ICT is a resource. So, we need a resource framework first framework, flowchart and responsibility taking" NP.

- Teaching methods suitable for online learning

"I think the framework is affected by the type of the learning, the different learning methods that we use, for an example, for my module, looking at the different ways that I try and engage with the students to try and reach the diverse group

of students that I have, for example, I would use the discussion, I do have discussion classes with them on Teams. But what I do also is an audio clip of a video, short ones, because I understand that they do not have enough data. So, to re-emphasise that learning unit, I will try and perhaps if they hear it from somebody else's perspective, or I would also do recordings as well, and then post them on the platform on the learning platform. So that those that do not have time to attend the discussion class, or want them in smaller versions of the class, not necessarily in the discussion, the discussion forum, they can also look at that to support the learning. So, I do think that it does talk to some frameworks that you could come up with" RMK.

- Management support for online learning

  "… in terms of management, I divided into two parts. One is ICT management and monitoring in terms of our college management. So, technology has to be because whenever there is a change into technology, update has to be looked from the perspective of hardware and software" NP.

  "I want to support the issue of support of management and ICT support. It must start from management and be able to make sure that ICT supports us and remember ICT it's just a supporting department. But most importantly, I think we also need the tools of trade because it doesn't help for me to be working with an old laptop or to be using my own data. I know maybe moving forward, we might not even receive data from the university, but we didn't receive it before. But then, for us to be able to use all the necessary digital technologies, we need all the tools of trade to be able to perform to the best of our abilities" PM.

- Support for online teaching and learning

  "I also agree with a few on the issue of academic support, I would actually summarise it and say that the institution at large needs to look at the different types of support, we talked about academic support, we also talked about administrative support, but they could be quite a number of support measures that needs to also be taken into consideration and mainly direct students to the relevant divisions for any other type of support that they need." PM.

The findings for the potential framework for a faculty training programme indicate that the stakeholder needs must be established. This is consistent with Frass et al. (2017)

who emphasised the importance of faculty to conduct an internal needs assessment of potential faculty members to gauge their level of current preparation for teaching online. Support for online teaching and learning was found to be important and should include administrative, ICT personnel, and teaching and learning. Skill management for online teaching and learning, and qualifications and experience of personnel to support online teaching and learning were also found to be important for online learning. Frass et al. (2017) emphasised the importance of providing training and development for those who teach online. Training and development for lecturers could lead to high quality online courses and greater student satisfaction (Frass et al., 2017).

4.5 CHAPTER SUMMARY

This chapter provided the demographics of the participants which presented the gender and the teaching level of the participants and their relevant colleges. The chapter discussed the findings emerging from the analysis of the semi-structured interviews according to the themes developed from the interview guide. Focus groups responses were also discussed in line with the themes of the focus group interview questions. The next chapter presents the conclusions and offers recommendations based on the findings of the study.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents the conclusions of the study. It starts with the summary of the research findings by giving an overview of the objectives of the study, the theoretical framework, the conceptual framework, the research methodology and research findings. This is followed by a conclusion section which provides conclusions for each research question, followed by sections on the recommendations, avenues for future research and the limitations of the study. The chapter concludes by providing concluding remarks.

5.2 SUMMARY OF THE RESEARCH

This section provides a summary of the research and offers a summary of the literature review, a summary of the empirical study (research methodology and research findings) and synthesis of the research findings.

5.2.1 Summary of Literature Review

The theoretical framework for this study was based Garrison et al.'s, Community of Inquiry Theory (2000) and Moore's Theory of Interaction (1993). The conceptual framework was built on the concept of learner support, the actors in learning, which included ICT support, lecturers, students and learning material, with the relevant theories being incorporated into the framework.

The contextual framework drew from a selected literature review relating to the community of inquiry theory relevant for this study and the elements of an ODL faculty training programme.

Key elements related to common faculty competencies associated with online teaching were discussed. Section 2.3.1 reviewed the literature addressing the role of ICTs in enhancing the learner interactions (Moore, 1993) and the three presences included in the community of inquiry theory (Garrison et al., 2000). Teaching presence can encourage climate of cooperation, community cohesion and public discourse and it relies on forums and chats for conducting dialogue with the students and between

students, encourage personal conversations between the lecturer and students (Zilka et al., 2018). Based on common training and best practices, teaching, cognitive and social presence are critical elements of a university training programme (Frass et al., 2017).

Section 2.3.2 presented the elements of ODL faculty training programme with competencies of online teaching being summarised in Table 2.1. Online facilitators are also expected to focus on pedagogical, managerial, social and technical competence in addition to the design competency (Abdous, 2011). Section 2.4 presented the conceptual framework supporting this research (see Figure 2.2). The conceptual framework addresses the research problem which is centred around ODL learner support. This is governed by theories of transactional distance and theories of interactions (Moore, 1993; Garrison et al., 2000) which can be enhanced through ICT support, and interaction of students, learning material and lecturers. The output of the framework is the academic support training programme.

5.2.2 Summary of Empirical Study

This section provides a summary of research methodology used in the study and the findings of the empirical research.

The research methodology and research design were presented in Chapter 3 of this study. This research was nested in an interpretivist paradigm and employed a qualitative research approach which was characterised by interpretations to make sense of the subject being researched in order to create meanings (Saunders et al., 2016). This study adopted a case study research strategy and the case for this study refers to academic staff involved in teaching and learning at selected colleges at UNISA.

Data were collected from 14 selected participants (academic staff members such as Lecturers, Senior Lecturers and Professoriate) based on their experience in online teaching and learning. The study adopted a convenience sampling method in selecting the academic staff members in the target colleges of an ODeL institution. Data collection tools included semi-structured interviews and focus group interviews which were guided by an interview schedule where research questions were aligned with the interview questions. Thematic analysis was conducted to analyse the transcribed data.

Trustworthiness and ethical considerations issues such as informed consent and confidentiality were assured throughout the study.

Chapter 4 presented the finding of this research. Section 4.2 presented the demographics of semi-structured interviews participants (see Table 4.1) and focused group interview participants (see Table 4.2). Section 4.3 covered the development of the themes and these themes are aligned with two research questions and these themes were summarised in Tables 4.3 and 4.4. The findings were presented and discussed with Research Question 1 being answered by five themes (Themes 1, 2,3,4,7) and Research Question 2 by four themes (Themes 5,6,8,9) (see Section 4.4). The synthesis of the findings is discussed in the next section (Section 5.2.3).

5.2.3 Synthesis of Research Findings

The findings from the empirical study are synthesised and discussed below using the main themes as they speak to the research question: *What are the potential frameworks for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes (100+) at an ODL institution?* and the related sub-questions.

Research Question 1: *How do ICTs improve the teacher, cognitive and social presence interactions and engagement in online courses?*

The themes that addressed the role of ICTs in the improvement of interactions for online learning were: *Online digital technologies, Online teaching methods, ICT support, Learner Management System's interaction and efficiency* and *ICT improvement.*

The study revealed that the LMS is not utilised to its full capacity and in most cases, the lecturers are not even aware of its functionalities. Ragan (2019) indicated that most learning management systems provide a rich array of tools that assist the faculty in attending to the details of course management. The effective use of the LMS is for tracking student engagement, student support, providing problem solving, lecturer's availability on the discussion forums, and responding to students' emails (Martin et al., 2019; Taylor et al., 2020).

It is, therefore, important for online lecturers to be familiar with and competent in using the LMS in order to take full advantage of its capability (Ragan, 2019). Participants indicated that they did not use the LMS to interact with students because they were not properly trained, and they also did not have support from ICT personnel. To address this competency issue, it is important that ODL institutions conduct frequent workshops to refresh lecturers' skills in using the online platform (Taylor et al., 2020). Most participants struggled to articulate their teaching methods in relation to online learning. They did, however, indicate that they posted learning material onto the LMS before the scheduled online lectures. However, this was problematic with pedagogy because online teaching involves the integration of technology into the teaching and learning environment (Frass et al., 2017).

The themes that addressed the key elements of online training for academic staff were: *Online facilitation, Key elements of academic staff training* and *Potential frameworks.*

The study revealed that the low participation of students in the forums made effective interaction difficult. Posting learning material before class attendance should encourage the learners to have time to interact with the materials and post their reflection of the learning material in the discussion forum which would assist in improving class discussions (Mahmood, 2021). Because most classes have large numbers, to allow effective online interaction, Mahmood (2021) encourages the lecturers to divide the class into smaller modules or discussion groups to ensure concentration and interaction.

Research Question 2: *What are the key elements of an ODL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training?*

The study revealed the following *key elements required for academic staff training* programme designed to improve teacher, social and cognitive presence in online classes with better support and training:

- *Provision of equipment for students for participation in online classes:*

In addressing the ability of students to participate in online classes, it seems that students lacked the necessary equipment as well as connectivity which caused them

to miss the sessions. Students should be provided with recordings of online lectures (Fagan, 2019; Mahmood, 2021) which would help them review the lectures in their own time.

- *Readiness (teacher, student and administrative staff) for training*

The requirements for readiness for online learning should be assessed by evaluating the technical competencies of the lecturers involved with online learning (Paliwal & Singh, 2021). The shortcomings in the competencies should be addressed with training in the concerned areas mainly to learn the right online teaching techniques and strategies to keep their learners engaged (Paliwal & Singh, 2021).The findings on readiness for online learning are consistent with Khatiry and Yousef (2021) who indicated that it should be assessed by evaluating students' achievements and limitations, problem-solving skills, information technology and computer skills, monitoring and motivating techniques, communication, and class management skills.

Despite this study focusing on teacher training, the field of online learning by extension includes staff and student training, for if absent, will not result in high quality online engagement by students and responsive support services by staff.

Participants indicated that a *potential framework* for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes should include the following: stakeholder needs, administrative support during online classes, infrastructure to support online learning; skills management for online learning, qualified and experienced personnel to support online teaching and learning, teaching methods suitable for online learning, management support for online learning and support for online teaching and learning.

These findings are consistent with Taylor et al. (2020) that online learning requires dedicated management, a close knowledge of each student's problems and progress, and available advice to address them. Open distance learning should ensure that students have high quality resources and learning skills to benefit from their courses (Fagan, 2019; Taylor et al., 2020). Online lecturers fulfil different roles which include facilitator, course designer, content manager, subject matter expert, and mentor (Martin et al., 2019). Management of open learning resource falls under one of the competencies for online lecturers, that is, course design or teaching (Martin et al., 2019). This is consistent with Roberts (2018) who indicated that competencies for the

role of technology and instructional designer have emerged as crucial for distance educators, and that future training programmes need to be developed to support these areas. Online lecturers are required to be visible and active in leading the learning experience, and also to provide class oversight and management (Fagan, 2019).

5.3 RESEARCH CONCLUSIONS

The main aim of this research was to determine the key elements needed for an ODeL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training. A secondary purpose was to link Moore's theory of interaction with these presences and accentuate the interconnectedness of presences and interaction models.

The research focused on two research questions:

1. How do ICTs improve the teacher, cognitive and social presence interactions and engagement in online courses?
2. What are the key elements of an ODL institution's academic staff training programme designed to improve teacher, social and cognitive presence in online classes with better support and training?

5.3.1 ICTs: The Teacher, Cognitive and Social Presence Interactions and Engagement in Online Courses

Research Question 1: *How do ICTs improve the teacher, cognitive and social presence interactions and engagement in online courses?*

The results confirmed that online teaching technologies are important in providing access to online learning. This will provide learner interaction with the learning materials which are uploaded on the learner management system. The efficiency of the learning management system is important as it will promote interaction for learning, that is, student-student interaction as the students would connect with each other through the platform, student-lecturer interaction as the students would interact with the lecturers during online lectures or during forum discussions, and student-content interaction as the students engage with the learning material posted on the learning management system (Moore, 1993). The learning management system provides academic teaching staff the autonomy to design presences and interactions within the course (Garrison et al., 2000; Moore, 1993).

For the interactions to be effective, ICT support, in terms of both resources and skills, is required. Moreover, it is readily apparent that the alignment of ICT support staff skills needs to be reviewed. In some cases, support staff were not skilled enough to assist lecturers with LMS issues. The results also emphasised that online teaching methods influence the online learning. With large classes, lecturers are required to devise innovative online teaching methods to encourage the interaction and engagement with their students. The high number of students inhibits interaction and by extension, lowers the effectiveness of learning. Consideration needs to be given to using more teaching assistants in each class to facilitate and scaffold interactions with students and to coordinate student-to-student interaction. A related strategy for some instructional goals would be to organise student in groups of 20 and appoint a leader and co-leader responsible for leading interactions to effect discussion and learning. This is consistent with Mahmood's suggestions (2020) that a large online class should be divided into smaller groups or discussions to encourage learning interaction.

The results also confirmed that LMS is not utilised effectively to its fullest primarily due to lack of training for faculty and students. Participants indicated that they never used the LMS for interacting with students. They mostly used it to upload learning material and not as a teaching platform. This suggests that faculty members had not received adequate training for use of the LMS and hence were only using it in very basic ways. The learning material, such as the recordings, are a valuable resource for students, and the LMS provides a repository for these resources. Some participants indicated that they did not use the LMS as they were not properly trained and did not have any support from ICT. As a result, lack of LMS-focused training beyond the very basic operations is a concern, supported by those who indicated that they experienced system challenges.

5.3.2 The Critical Teaching and Learning Design Strategies for Implementing Teacher, Social and Cognitive Presence

Research Question 2: *What are the key elements of an ODL institution's Academic staff Training Programme designed to improve teacher, social and cognitive presence in online classes with better support and training?*

Online facilitation requires the learner management system to be effective which will allow the facilitator to focus on the actual online learning and not on technical issues.

The learner management system should also allow for interaction, but it needs to take into consideration the large online classes.

The study found that participation in the online forum is problematic in that there is a very low participation of students. Some participants indicated that they have resorted to grading online participation to encourage participation. The only challenge with this requirement is that the interaction would be very limited if not one sided. The lecturer would not be able to grade the forums if all participants submit their responses to the forum topics to comply with the grading requirements. One of the solutions is to allocate teaching assistance to groups of students. In other words, forming more groups and allocating a teaching assistant to each group which would encourage a much-focused interaction among the learners in a group and with the teaching assistant guided by the lecturer. This finding aligns with Mahmood (2020) who recommended that large online classes should be divided into smaller groups or discussion groups to ensure student interaction.

Another factor that was found to be important is the system's ability to communicate with learners instantly. Online facilitation is also enhanced by the system which has the ability to record the lectures. Learners are able to go through the recordings several times. This how they can improve their cognitive presence in that they are given the opportunity to spend time going over the content and developing a good understanding as well as seeking clarity. They would also have an opportunity to interact with the lecturers through email and online appointments, if further assistance was needed.

Various levels of support are required for online learning. System functionality was one of the challenges experienced by most participants. It is important that online lecturers focus on learning and not spending time on technical aspects of the system. The system capability was also considered important in that it needs to be flexible to allow lecturers to integrate other apps that will enhance the learning. Interacting with learners should not only be limited to forum discussions, but methods such as simulations, demonstration and collaboration should be considered.

The system-related issues should be addressed through ICT support. The other form of support required is administrative support to manage communication of technical-related issues with ICT. Support from the ICT team is lacking as they do not provide

comprehensive support for online learning, in contrast to correspondence-print dominated support. It is important to recognise that this is not a direct criticism of ICT support staff abilities; it is a clear recognition that online learning in the 21st century requires different expertise, knowledge, design and teambuilding skills, and theoretical knowledge and experience using the theories that comprised the essence of this study around Community of Inquiry and Interaction Theory. These collectively create a completely different set of support challenges for a student taking a correspondence course, who might go months without communicating with anyone. Therefore, ICT personnel who are supporting teaching and learning in online classes must be trained for online classes (Cicco, 2013).

The other form of support that is required to enhance the online learning is focused training relevant for lecturers and students. Focused training is important as it directly address the module specific issues and caters for the type of student for that particular module. This will assist in addressing the challenges of lecturer interaction and engagement with the students. Open distance learning institutions must develop a clear and simple pathway to help staff and students effectively navigate through the curriculum (Taylor et al., 2020).

The elements of academic staff training identified a need to implement a mandatory online training programme for all faculty members and all students to ensure that they are supported in transitioning to online teaching. The training programmes should be delivered online. One does not go to tennis courts to learn how to play golf. Online teaching requires online training and if one is going to teach online, then one should be trained online. Institutions preparing for a fully online teaching mode must implement requirements for training faculty to teach online (Frass et al., 2017).

Student capability to access and navigate through the online learner management system is a pre-requisite for an online training programme. The online facilitator should be qualified and experienced to address the technical challenges experienced by the students. Some participants suggested an orientation online module either through video recording or a question-and-answer document. This will assist the learner in navigating the system prior to participating in the online lectures. Online facilitators should have competency in online course design, and they must have relevant knowledge and skills (Badiozaman et al., 2021; Hinson & LaPrarie, 2005).

Focused training will also enhance the online presences – teacher, cognitive and social presences. Frustration with the system would discourage any form of interaction and in most cases, students blame the system's inefficiencies and end up resorting to the traditional face-to-face approach in seeking assistance from the lecturers. This was also experienced by lecturers when students requested a physical meeting despite the Covid-19 regulations prohibiting such a request.

Readiness of parties involved in online learning also came across strongly from some of the participants. Those involved include teacher, student and administrative staff. Readiness can only be achieved with teamwork and assigning responsibilities to the party that is competent and well-skilled to address issues relating to online learning. ICT support is also required to enhance the virtual learning environment.

The other aspect raised by participants is the details of the training programme for the academic staff. The training should be adaptable to each lecturer's situation and it should not be a 'one-size fits all' programme. These observations are contradictory to all major training programmes by the best online universities. Their training programmes require all faculty members and all students to take a basic – usually one long online course – that cover the basics of online teaching and learning, learning design, online assessment, interactive models, facilitating presences, and detailed LMS application and knowledge**.** Most importantly, these training packages are offered online – if one is going to teach online, one should be trained online**.** Academic staff training conducted at UNISA is of a general nature regardless of the type of module they are teaching. This is counterproductive and does not promote innovation for online learning.

The most important element for the potential framework is the engagement of the stakeholders and awareness of their needs. The framework for training online academic staff needs to be informed by the needs of the students and should take into consideration students from disadvantaged communities as they often experience access-related challenges. The ICT infrastructure needs to be flexible to accommodate these learners. The academic staff teaching online should be able to manage their learners with ease if the skill management of the staff facilitating online classes is effective.

With large classes, lecturers should work as a team to support each other. Academic support is important to facilitate interaction and engagement with the learners. The academic staff training programme should thus take into consideration training for a teamwork approach which should also include administrative support. The teamwork approach is an important measure to manage academic workload. The other important aspect is the teaching methods of academic staff. In addition, academic staff training should take into consideration the teaching methods needed to teach effectively online, particularly with large classes. Teaching methods should be supported by a flexible learning management system that can accommodate the diverse needs of the students.

5.4 RECOMMENDATIONS

The major finding and recommendation from this study is consistent with support that is required for UNISA transformation towards becoming an online university. The recommendation is that all faculty members and all students must complete a training programme on effective teaching and learning in online education, including LMS use, interactive theory, design, assessment, and theories of Technology Enhanced Learning. This is consistent with Roberts (2018) whose findings indicated that competencies in the roles of technology and instructional design are deemed crucial for distance educators, and that future training programmes need to be developed to support these areas. Most importantly, these training packages should be designed to be offered online – if you are going to teach online, you should be trained online. All faculty members and all students are expected to attend these training programmes to ensure that they are fully equipped with the relevant knowledge and skills to teach and learn in an online environment

There were several related issues that were raised by participants and the following additional recommendations are made:

- The student online learning primer training course for all students should be taken prior to enrolling in online courses. Taylor et al. (2020) emphasise that if an institution is moving towards online delivery of course material, it is important to develop a clear and simple pathway to help staff and students navigate through the curriculum. This could be in the form of a guide on how to navigate the system to address challenges that students experience with online learning.

Some of the challenges raised include the uploading and downloading of learning materials or assignment submissions.

- Faculty members must complete a formal training programme before teaching online. This is consistent with Frass et al. (2017) that institutions preparing for a fully online teaching mode must implement requirements for training faculty to teach online. There is also a need to conduct a needs analysis for academic teaching staff to assess their readiness to teach online (Frass et al., 2017). This will also prepare the academic teaching staff who have little to no online experiences of teach online to be able to convert their traditional courses to online formats (Cicco, 2013).
- Due to large online classes, the LMS capacity should be enhanced to address system crashes during assignment submissions. The LMS gives faculty members the autonomy to design presences and interactions within the course (Garrison et al., 2000; Moore, 1993).
- The LMS must be enhanced to allow for online forum discussions and to allow the lecturers and teaching assistants to grade these sessions seamlessly. Teacher presence is the most critical presence in any online course because the teacher and support team make all decisions for other presences (social and cognitive) and interactive assignments and exercises such as online discussions, small group work and reflective reviews by students ensure development of their own learning.
- The ICT office must be adequately resourced to support large online classes. The ICT department should recruit more personnel to support online learning. A space must be created for ICT personnel to partner with the academic staff members during the facilitation of online learning as this could improve learner interaction and also allow smooth student access to online classes.
- ICT personnel must be properly trained and be equipped with knowledge and skills required to support online classes. When institutions of higher learning are transitioning from face-to-face to online classes, the skills applicable for face-to-face might not be adaptable for online learning. Therefore, ICT personnel who are supporting teaching and learning in online classes must be trained for online classes (Cicco, 2013).

The following recommendations are made for the potential framework for implementing teacher, social and cognitive presences to maintain student interaction, engagement and connectiveness in large classes at an ODeL institution:

- To enforce interaction and engagement, it is recommended that a 10% grade be allocated for participation in the online forums. However, this decision should be at the discretion of the online facilitator. The activities should encourage more interaction and dialogue between course participants (Ragan, 2019) and align with the transactional theory and the community of inquiry theory which encourages interaction and engagement (Garrison et al., 2000; Moore, 1993).
- Online facilitators should have competency in online course design (Badiozaman et al., 2021; Hinson & LaPrarie, 2005) and develop the relevant knowledge and skills.
- Management must invest in ICT infrastructure to be aligned with online teaching in the 21st century.
- Appropriate teaching methods need to be implemented and collaborative teamwork used to enhance the overall support for online classes.

5.5 AVENUES FOR FURTHER RESEARCH

The findings from this study contribute to the body of knowledge in terms of understanding lecturers' interactions with their students during online classes which point to a number of shortcomings with the effectiveness of the LMS. Future studies should focus on the integration of the capabilities of the LMS, ICT personnel skills for online learning and various teaching methods to support online learning.

Future research at UNISA may benefit from examining alternative funding models for online delivery by open universities. Moreover, in the area of institutional policy, online teaching and learning will need to be reconsidered for applicability towards promotion and tenure and institutional organisational structures may need to be researched to adapt best practices in the field for implementation at UNISA.

Finally, Unisa will need to prioritise its institutional research on the characteristics of both traditional age students and older, working adult students to position the university for integrating emerging micro credentials OERs and digital assessment models and technologies.

5.6 LIMITATIONS OF THE STUDY

The major limitation for this study is the generalisability of the findings due to the sample size which was not representative of the entire higher education institution. The sample focused on selected colleges within the institution and these were not equally represented. The other challenge was the availability of semi-structure interview participants to contribute to the focus group discussions.

More research needs to be conducted in other colleges at UNISA to assess the interaction and engagement of the learners and lecturers in large online classes.

5.7 CONCLUSION

The road ahead will be challenging for UNISA. The training programmes that are needed to ensure faculty members are trained in online teaching and learning and that students are prepared for online courses, may only be the start. This study has shown, even with its small sample size, that the support infrastructure at UNISA is haphazard and that ICT and other support systems may be sufficient for a correspondence-print based university but fall short when promoting a future online university with enrolments in the 300-400 thousand plus range. Critical questions need to be asked by senior leadership followed by sound decision making. In sum, the future will require courageous leadership to shift the institution to move in these new directions.

Do senior leaders of an ODL institution of higher learning need to re-assess their support capacity and models for online learning? Do they have the right staff with the right talents and skills to train and support online faculty and students at UNISA? Does UNISA have 24-7 support service for online students and faculty members? This is the norm across the world for online education. Does UNISA need a major online Support Desk to provide these services? Does the current structure allow this, or must it be built? These are critical questions and require candid dialogue amongst all key leaders at the university as well as governing bodies, the Board and the South African government.

These are difficult questions, but the cold hard truth is that UNISA's competitors are all gearing or have geared up to support online teaching and learning. They have adapted support systems, elevated training programmes, and in some instances, even modified promotion and tenure criteria to fit online teaching and workload activities.

Competitors are using 24-7 support desks, hiring teaching assistants for large classes, and actively marketing and promoting their new online programmes in South Africa, Pan-Africa and in some cases, globally.

And in concert with these developments by UNISA's competitors, online capacity is the norm today – it is not a market differentiator for the university. Almost all institutions have online capacity and this does not make an institution unique. It is the standard for all universities going forward in the 21st century. The factors that will matter to UNISA's potential students will be quality, service, flexibility (different academic session lengths), low fees, and a fully functional LMS supported by a comprehensive support desk, trained staff, administration and ICT professionals. All roads lead to online teaching and learning for UNISA 2030. The recommendations in this study are centred around training, support, infrastructure and vision. It will take every member of this institution from the Vice Chancellor to the rural students across South Africa to build this new UNISA, fully capable of delivering online education anywhere, anytime, to anyone on this planet with quality, service, low cost and credibility. In the final analysis, these attributes will define the new Access and Humanity for UNISA's future mission for higher education in South Africa. UNISA's future success will be dependent upon its capacity to deliver quality and responsive programmes and services to its students, faculties and partners.

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APPENDICES

Appendix A: Ethical Clearance

UNISA university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2021/05/12

Ref: **2021/05/12/11743964/20/AM**
Name: Prof M Tshehla
Student No.:11743964

Dear Prof M Tshehla

Decision: Ethics Approval from 2021/05/12 to 2024/05/12

Researcher(s): Name: Prof M Tshehla
E-mail address: tshehlmf@unisa.ac.za
Telephone: 082 937 7001

Supervisor(s): Name: Prof D Olcott Jr
E-mail address: don.olcott@gmail.com
Telephone: +40 760 914 852

Title of research:

An academic and training support framework to improve teacher, social and cognitive presence in online teaching

Qualification: MEd ODL

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2021/05/12 to 2024/05/12.

*The **low risk** application was reviewed by the Ethics Review Committee on 2021/05/12 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

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3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
7. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
8. No field work activities may continue after the expiry date **2024/05/12**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **2021/05/12/11743964/20/AM** *should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,

Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
motlhat@unisa.ac.za

Prof PM Sebate
EXECUTIVE DEAN
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Appendix B: Participant information sheet

PARTICIPANT INFORMATION SHEET

26/04/2021

Title: An academic and training support framework to improve teacher, social and cognitive presence in online teaching

Dear Prospective Participant,

My name is Makgopa Tshehla and I am doing research with Prof. Don Olcott. My study is being conducted in the college of education (CEDU) towards a Master of Education (ODL) at the University of South Africa.

The purpose of the study is to determine the key elements of a Unisa Academic staff Training Programme designed to improve teacher, social and cognitive presence in online classes with better support and training

The study will entail collecting data through a semi-structured interview. Information collected through this interview will be subjected to thematic analysis to determine the results.

The study will contribute to the body of knowledge by developing a framework to incorporate a design of a faculty training programme to improve teacher, social and cognitive presence in online classes with better support and training. This framework will encourage a community of learning for learners, teachers, learning platform and the learning content. The study will also contribute to the body of knowledge on how the ICT can be effectively utilised to cater for all learners regardless of their background.

You have been selected to participate in my study because of your knowledge and experience in online teaching.

You will be required to answer the questions with honesty as possible. This should not take more than 15-20 minutes of your time.

It is important to note that being in this study is voluntary and you are under no obligation to consent to participation. By accepting the invitation for the interview, you will be given consent to participate in the interviews and you will be given this information sheet to keep as your reference. You are free to withdraw at any time and without giving a reason. But it will not be possible for you to withdraw the interview session is completed. There is no penalty or loss of benefit for non-participation.

You will not benefit directly from your participation in this research. You will receive no payment or reward, financial or otherwise.

There are no foreseeable physical or psychological risks involved in participating in this study. The potential risk in conducting this study is that the time you may take to participate in the research project might be a cause of concern, since it requires between 15 and 20 minutes to conclude the interview. If you would like to discuss the research and your reactions to the interview questions, you are welcome to do so after the session.

Any information obtained in connection with this study and that can identify you will remain confidential. Your name will not be recorded anywhere, and no one will be able to connect you to the answers you give. Your answers will be given a fictitious code number, or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including a transcriber, external coder, and members of the Research Ethics Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

The data collected may be used for research reports which include but may not be limited to journal articles, conference presentation, etc. Your privacy will be protected in any publication of the information. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

Hard copies of your answers will be destroyed by the researcher as soon as the information has been electronically captured and data analysis performed. Electronic information will be stored in a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies information with be destroyed by calcination on completion of the research project and electronic copies will be permanently erased from my computer hard drive.

This study has received written approval from the Research Ethics Committee of the College of Economic and Management Sciences, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

Should you wish to be informed of the final research findings, please contact Makgopa Tshehla on 082 937 7001 or tshehlmf@unisa.ac.za. The findings will be accessible end 2021.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Makgopa Tshehla on 082 937 7001 or tshehlmf@unisa.ac.za.

Should you have concerns about the way in which the research has been conducted, you may contact Prof. Don Olcott; don.olcott@gmail.com.

Thank you for taking time to read this information sheet and for participating in this study.

Makgopa Tshehla

Appendix C: Consent form

Informed consent for participation in an academic research project

An academic and training support framework to improve teacher, social and cognitive presence in online teaching

Dear Respondent

You are herewith invited to participate in an academic research study conducted by Makgopa Tshehla, a Master of Education (ODL) student at UNISA's college of Education (CEDU).

The purpose of the study is to determine the key elements of a Unisa Academic staff Training Programme designed to improve teacher, social and cognitive presence in online classes with better support and training

The study will entail collecting data through a semi-structured interview. Information collected through this interview will be subjected to thematic analysis to determine the results.

All your answers will be treated as confidential, and you will not be identified in any of the research reports emanating from this study.

Your participation in this study is very important to us. You may however choose not to participate, and you may also withdraw from the study at any time without any negative consequences.

You will be required to answer the questions with honesty as possible. This should not take more than 15-20 minutes of your time.

The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.

Please contact my supervisor, Prof. Don Olcott/ don.olcott@gmail.com if you have any questions or comments regarding the study. Please sign below to indicate your willingness to participate in the study.

Yours sincerely

Makgopa Tshehla **Date: 26/04/2021**

I, ……, herewith give my consent to participate in the study. I have read the letter and understand my rights with regard to participating in the research.

_____ _____

Respondent's signature **Date**

Appendix D: Interview Guide

1. What role do online digital technologies play in your module?
2. What are your online teaching methods aligned with digital technologies, including your online learning platform (LMS)?
3. Do online digital technologies provide any additional support during your online teaching and learning?
4. Is the learner management system user-friendly for the students taking online courses?
5. What is your experience in facilitating student interaction, cognitive interaction and teacher presence in larger online classes (100) + of students?
6. Does the learner management system allow you to interact with the learners in your online courses seamlessly and effectively?
7. What level of support would you require to improve the teacher, social and cognitive presence in online classes?

Appendix E: Focus Group Interview Guide

1. What are the key elements of a UNISA Academic staff Training Programme designed to IMPROVE TEACHER, SOCIAL AND COGNITIVE PRESENCE IN ONLINE CLASSES WITH BETTER SUPPORT AND TRAINING?
2. How do digital technologies, including the LMS, improve the teacher, cognitive and social presence interactions and engagement in online courses?

What are the potential frameworks for implementing teacher, social and cognitive presence to maintain student interaction, engagement and connectiveness in large classes at UNISA (100+)?

Appendix F: Interview Transcription

Interviews - ODL research-AB

Sat, 12/11 · 11:05 AM34:17

Speaker 2 (75%), Speaker 1 (21%)

1

Speaker 1
0:02
I'm also going to share the questions so that we, we don't waste too much time. Okay. I'm going to start with the first question, which has to do with the role of online digital technology. What does it play in your module?

2

Speaker 2
0:23
Okay, so what is the role of online digital technology? In my module? I think, you know, I can see the questions. All right, I'm teaching the law means that we digital, digital technology is not directly related to the content of what I teach. So, technologies are only used to facilitate the teaching. We have mainly used in the last while we've created some YouTube videos that we have embedded so we do use video technologies. We refer students to websites, but really no other specific digital technology specific to our module.

1

Speaker 1
1:18
So, you're only using it for teaching. That's right. Right. But other than that, it's not really relevant.

2

Speaker 2
1:30
Now not specifically to the course content. But we do try to enhance our online teaching. What I would we've also done this year is we did Microsoft Teams meetings with our students. So that worked well that we did live classes with them. And the students did appreciate that. So yeah, that also worked well.

1:53
But before COVID What did you do?

2

Speaker 2
1:57
Significantly less I will tell you that we did have online videos as well. We did no live classes. But we did have a significantly smaller number of short videos that we had pre-recorded and I created a YouTube channel for the module and we embedded these videos in the lessons too on my UNISA so we would have a little bit of text and then

2:39
I'm losing your love I lost you I lost you Andrea? Oh, yeah. Okay.

2

Speaker 2
3:44
Apologies, I have absolutely no idea why I got disconnected. So sorry about that.

1
Speaker 1
3:51
is fine, you will hear where you said you pre-recorded and you posting lessons jams.
2
Speaker 2
3:58
So, before COVID, we had some pre-recorded videos that we used. I had created we were focusing a bit on visual learning. In our course, there's very little progress on visual learning in legal education. So, I have created infographics related to the course content of my module. So, it's not really a specific technology, but we do make use of digital visual content in our course. But there's not really a specific technology. So, we had a few videos and some images, but mainly we before COVID We stuck to the My UNISA tools as they were provided. We didn't go outside the extent of that
1
Speaker 1
4:48
much. Is it correct to say before COVID The digital technology did not play any role in interaction with learners there was no interactive interactiveness
2
Speaker 2
5:03
Yes, I would say that we mainly, I mean, we did interact with our students a lot, but it was through discussion forums, telephone calls and emails. Before COVID, even three or four years before COVID, we had very few students take the effort to make an appointment and actually come and visit us in our offices. So everything was forums, emails and calls. So definitely significantly less contact with students before all types of contact or channels for them to contact us before COVID.
1
Speaker 1
5:42
Correct? No, I think I'm covered, we can move to the second question. Am I still sharing? Yes. All right. How your online teaching methods aligned with digital technologies, including the LMS.
2
Speaker 2
6:03
Okay, so we have used the LMS as a guide, and we've built everything around the tools that are available on my UNISA. So we have been guided by what the university provides us. So we have used, for example, external software, we have made use of Camtasia and the embedded recording to in PowerPoint to for example, record short presentations and then with audio over it. And these we've uploaded in the lessons on my knees, for example, but we didn't we haven't really used significant other digital economic technologies outside of my own Nice.
1
Speaker 1
6:59
Alright, so very clear. Question three. Do online digital technology, provide any additional support? during online teaching and learning?

7:12
Additional support?
1
Speaker 1
7:17
You've done that you've done the team's? Yes, do you need any support other than yourself?
2
Speaker 2
7:26
You know, the cloth is extremely large, we have on average between eight and cheese. Last year, we had in like 15,000 students per semester, this year, we had 11,000 students, there is very little you can do when you have astronomical numbers of students. So, we don't use whatsapp at all, I will go insane if students can contact me on my cell phone. So, we stick to teams, telephone calls discussion forums, we're extremely active on our discussion forums, we invite students to participate regularly what we did do from this year, which worked really well, we did live chat session sessions on my UNISA. So, we would say we will be online. Next week during this hour. This is what we will be discussing during this time. So, go and read the relevant material. And if you have questions or comments come and join us in the forum. So, we did a type of live chat. But with extremely large student numbers, we cannot really go outside the bounds of what my UNISA and teams provides us. I hope that makes sense among the most audible
1
Speaker 1
8:59
okay. What I'm trying to understand is when you teach your number of students, how do you make sure that you don't leave them behind one example, if somebody is raising a hand you are able to see yourself while you're teaching.
2
Speaker 2
9:17
Okay, so because we have these very large numbers, we did not use a normal teams meeting, because we could have actually because the participation was extremely low. Very few students came to our live classes, and very few students access the recordings afterwards. But we anticipated more students that then what a normal teams meeting can have. So we made use of the team's live events. What that does is that students can only participate in the chat they cannot switch on a camera or a microphone and provide a question that way. So what we did would work really well, we have three lectures in the module, one would present the class, and at least one of the other two or both would actively monitor the chat. So if it were unrelated questions, for example, to what was discussed in the class, or administrative matters, they would type out the answers in the chat as we went along, and if it was content related questions, relevant to the lecture of the day, we would have a session afterwards, and my colleagues would, for example, help me and say there are seven questions, I'm going to read them to you. And that is how we made sure that we handled every question because it would have been extremely hard had only been one person managing the lecture and the chat. So we figured out a way eventually to help students.
1
Speaker 1
11:02

Alright, so clearly, the digital online does not provide any support. It is not support because you had your own pupil or two colleagues, monitoring. So the system does not automatically alert, you

2

Speaker 2

11:21

know, so So the responses appeared in the chat as we went, but it's very hard to manage your slides and discuss them and keep an eye on the chat. So it helped to have additional hands and eyes because no teams the platform does not present provide one with the ability to really do it all at the same time. If you are only one person.

1

Speaker 1

11:47

Okay, thank you. I think we can move to question four. Is the learning management system user friendly for your student taking online classes.

2

Speaker 2

12:00

I think the greatest problem with my UNISA as it is on Sakai now is the fact that there is no mobile app. By far the majority of our students study virtually everything, access everything from the University on a phone, I don't know if you've ever opened via nice on your phone, it is very hard to manage and navigate my UNISA. On a mobile phone, the page opens differently. The buttons look different. It's hard to establish where the tools on where you find your modules. So I am looking forward to a transition to Moodle, where Moodle itself as a platform has an app, that will be something that students can download, which will be easier to manage and view and navigate. So I think that is definitely a step in the right direction to have something that students can access understand easier on a mobile device.

13:06

Alright, so the app like that one it Olden back?

2

Speaker 2

13:10

I think so yes. Because for a long time, we as lecturers didn't realize that it looks so significantly different. So we tried to explain to them or navigate them through the page, while for example, you're on the phone with someone. And they'd say, but I can't see what you're seeing, because I'm on a phone. And we had to go and look at it on a mobile screen to realize that it is harder for someone on the phone, we eventually had to for example, we did screenshots of where to find content on our my user page, we ended up having to do screens, not a screenshots for if you are on a computer and screenshots if you are on a mobile device because they looked so significantly different. So we ended up having to do additional support for students. Once we realized that the site's look significantly different. But it took us a while as lecturers to understand that the students can't see what we can see. So that was a challenge.

1

Speaker 1

14:06

No, that's interesting. Let's move to question five. What is your experience in facilitating student interaction, cognitive indexing and teacher presence in online classes? of more than 100 students? I think you said you've got more than 15,000 students.

2
Speaker 2
14:25
Yeah, it goes up into this year we had 11,000. But we've had I think the worst was 16,000. That was that was bad man. tating student interaction, cognitive interaction, teaching presidency. This is a very good question and a very hard question to answer. With first is especially just getting them to actually go on to my UNISA to find the information that they need is hard enough to get them to participate in the online discussions is really hard. Students are one year I use the poll function on my UNISA, to ask them about how and why they do and do not participate in the forums. And many of them said, I'm too ashamed to type out my question. So I would rather I enjoy the forums, but I enjoy reading other people's questions and answers. I don't want to post my question, because I'm afraid I look stupid. So I think if especially first years, are fearful of the public aspect of the forum, and I think that they will embarrass themselves if they, if they post a question, this is in spite of the fact that we tried to tell them, there are no stupid questions you can ask anything you want. So students, especially first years, are not all keen on typing in a public forum. Many of us were we receive quite a lot of emails rather than online discussions. But what we did, which works really well in some semesters and not in others, and we cannot establish why it doesn't work all the time, some of our content is on Ubuntu in the law and our South African courts have incorporated Ubuntu into, for example, constitutional court decisions. And what we did is created a discussion forum to ask students how they have experienced instances of Ubuntu in their own lives. And so we ask them to provide a story of something that had happened to them or that they participated in or even something that they had seen in their community. And this Sadly, in some semesters, in not in all spot, right interest in the students. So this semester, not at all, I'm wondering whether it was because they had too many modules, and it was extremely stressful. Yeah, but last year, we had hundreds of comments in this discussion forum, and students telling the most heart-warming stories and students interacting with each other. Without the guidance and facilitation of us as lecturers. This was such an open discussion that students really felt free to participate in, I think that definitely is in the majority of semesters. The forum that we see the most interaction between students and we have most definitely seen that many of them involves their cognitive processes. Many of them especially for example, white students say but this, I always thought that I understood what Ubuntu is. But the spectrum of these stories illustrates that I had not understood as well as I thought I had. So there was significant increase in student presence and their communication with each other in a forum like this and has such a personal angle. But I see the question is also about teacher presence. In these very large groups, it's hard to do our focus on our T two presence ad and then being extremely active in the discussion forums. And it has helped to have small recordings, where we do show our faces, we are considering next year doing short tech like mp3 files with short verbal feedback on assignments. We’re thinking on giving general feedback, just a short discussion of what students, for example, how they can improve on their assignment performance. But we have had feedback that seeing our faces in videos and hearing our voices. This is from students who started studying before COVID They say they're thankful that the pandemic has forced the university to do more in relation to online teaching and seeing and hearing us has made our presence more palpable and more meaningful for them. So that has been positive feedback from our students.
1
Speaker 1
19:18

So if somebody here is on the same topic, let's say you get a video from YouTube, about a certain topic. How do they respond to that video done to yourself as a lecturer? Do they feel comfortable when they hear your voice when they see you or it doesn't matter?

2

Speaker 2

19:41

So, what we've had is, seen this as an example, where it just helped to have multiple colleagues in for example, a live lecture. I was busy once and my colleague stopped me 10 minutes into the lecture and he said, we've had three comments as students saying that you're speaking too quickly. This is new to terminology and we need you to move slower. So that is an example of how students have in a live setup told us that the communication was poor, because of because of the speed at which the pace at which we were going. So that was positive feedback. It never happened again, because we were then conscious of moving slower. But that was valuable feedback to receive. We received a few messages or thanks and compliments after the lectures. But we did receive some, but the participation was really low. And so, we didn't expect compliments and thank you by the hundreds. But we've mainly students did tell us that they were struggling to participate because of my lack of mobile data or lack of spices to connect to the internet, I think it is a really good idea that I saw a draft policy on providing mobile data to students permanently every month from sometime next year, I'm not sure when the policy will be implemented. But that I think, is an excellent idea, and will significantly increase student's participation online, their attendance of lectures, because now they will have the data to do so. So, in that has also been something that has affected their presence and participation.

1

Speaker 1

21:25

Okay, thank you. Let's move to the next question. Question six. Does the learner management system allow you to interact with learners in your online classes seamlessly and effectively? You've just responded? Maybe you can just clarify. Um,

2

Speaker 2

21:45

yeah, so as I said earlier, with a very large courses, it is the easiest way to communicate is through the LMS. It is an interesting time for you to ask these questions because of the fact that we are moving from Sakai to Moodle. It will be interesting to see what functionalities are different that we whether we will be able to communicate with students better from next year. I think what is challenging in, for example, with the discussion forums is that it is more of an asynchronous type of communication with students unless you notify students that you will be having a live session. And there will be synchronous communication at that time in a specific discussion forum, for example. That is one of the challenges with communicating with large groups of students online, is the fact that for many, the asynchronous works really well because they are working full time and they want to go visit the forum tonight and read what happened this week. But some would like an answer now. And for example, cannot call electronic. So, for some it works well to have certain hours in the exact month, for example, we would I do know that we will be online live. But an LMS can do more should be able to do more than that. I think it is exciting that Moodle has a bunch of tools that we need to get used to. I see there is a chat function in Moodle, which I will be excited to try out next year. Yeah, I think Moodle platform has a lot of options that don't have now,

1

Speaker 1

23:35
let's hope you will learn from us at a business school. We had a lot of challenges with model. I had an interview with someone else yesterday. And she indicated that purchase giving feedback to the model team to say most of these tools are not interactive. But hopefully in your case when you when you roll it out next year. I think you should benefit from our lessons.
2
Speaker 2
24:02
I think it's always terrible to be the guinea pig. So, I feel sorry for you. But I'm very glad to hear that. Well. I'm hoping I agree with you that we can learn from other mistakes. And I sincerely hope we don't make the same ones because that's just a waste of time.
1
Speaker 1
24:17
I hope so I actually it should not be 82. That should be the case. Because the other issues that we've seen, our classes are not as huge as yours. Like you'll find that we've pulled around less than two or three students. In one particular case the system crashed when they were submitting their assignments. So, but I'm hoping that even during the exams, it crashed in one of my exams, but I'm hoping that with your case those glitches would be would have been addressed.
2
Speaker 2
24:51
I really hope so because that is part of the argument that they have provided for moving to Moodle is that it is more stable platform with a larger capacity some sincerely hoping and thinking, figure out these kinks before the next assessment period.
1
Speaker 1
25:06
Yeah, I think we can move to the last question. We are almost there. What level of support would you require to improve the teacher social and cognitive presence in online classes?
2
Speaker 2
25:20
Okay, I'm also very good question, I have now completed the University of Oldenburg certificate, which is a, it was relatively intense course. And I've learned so much about OTL and Technology Enhanced Learning. And I remember specifically learning about teaching teachers social and cognitive presence and for the life of me now, I cannot remember how one facilitates cognitive prisons, I think so much more for lecturers who have not had any formal training, or introduction to OD l theory outside of their own courses, something like being provided with information on how to how to focus on cognitive presence in your course. It would be great to have my handouts or, or a site that one could visit, to explain what cognitive prisons is, and provide lecturers with an idea of how they can focus on this type of prisons, in the teaching, because I mean, we all know teacher prisons and students, so all socialist student burns, which is I know, it's not the same thing. But cognitive presence, I think needs more of our focus. And I think very, like few lecturers know about it, and it would, I think, benefit the university and the quality of our teaching in general, if lecturers were provided with the basics, on how to flow aspects.
1

Speaker 1
27:10
I think if I hear you correct, the training that we get from the institution, even from the CPD is not talking to some of this, this this thing? Absolutely.
2
Speaker 2
27:24
I think when there are several OTL courses, and online teaching courses and things that we can do, for example, through CPD, these are not mandatory. And all of these do not touch on what you mean, what we're discussing now. And what has been my great frustration over the years is m, the session is so short, you don't get to everything that was promised in the description of the training session. So yes, there could be a greater variety of content on the type of training that we as academics can participate in to improve our knowledge of the theory of online learning and education, as well as ideas or introduction to tools or strategies to help us improve our own presentation, of course content online. So definitely allowing or giving academics access to a wide variety of training sessions or training. Strategies is an excellent idea.
1
Speaker 1
28:38
Now coming to, you've just hinted on, introductions to more tools is not a better way to go. When you've got like you. You're talking about the module because you're hoping that it's going to be different to my UNISA. Is it not one of the things that you would want to make your life easier?
2
Speaker 2
29:05
This is definitely a good question. I agree with you. More training on? Definitely the Moodle tools, I think is a good idea. The initial training sessions earlier this year on Moodle, were an absolute disaster. The sessions are so confusing. And the team members presenting the training. We're not certain have half of the tools and couldn't answer our questions because the system was talking both it was a hot mess. And the training is going better now, but I still feel that there could be more specialized training right now on what Moodle has to offer in what specifically individual tools do so I agree that even now the training is better, but the training could be even better. If I answered your question
1
Speaker 1
30:00
I think you did. But I think while on the portal because you think most of the questions you hinted on Moodle, and play in title, if you've got all the tools that you need, then it is going to be much, much more better. But in my experience, on the model, there are not many tools. Some of the colleagues that ICT when you need their help, they're not there. And even the guys that were trained in some we could not even hear the accent or watch TV is cleaning is not even specific. It's not specialized. We are not given the individual attention has left.
2
Speaker 2
30:43
Absolutely, absolutely. The groups are too large. People in the groups of attendees have different levels of experience, generally just in computers. And while some field things are moving too slowly, others feel that things are moving too fast. So, training so many people at

the same time. I'm sure it is hard for them. But it has not always been effective. I completely agree with you on the accents of some of the training presenters, it's hard to understand someone and even more so if you cannot see their face, it isn't a face to face session. I do not like the fact that you are telling me that you have been requesting assistance from ICG. And it has not come. But I'm not shocked by this. I think I teach UNISA the entire division is severely understaffed. And for online university that is an absolute shame. So, I think I'm sorry. I just think that this is somewhere where the university can invest in significantly more staff to help us with the basics with our hardware and our software. And then I think we need specialized colleagues who will be able to assist us with Moodle questions. And with Moodle challenges.

1

Speaker 1

32:10

Yeah, so some of us has to resolve to YouTube's, but it's okay. Yes.

2

Speaker 2

32:17

We've done the same. Yes, I think you're right, I think I am putting too much hope into what it is that Moodle will be able to do for us next year. Maybe I need to be a bit more realistic. And low my expectations of what the software and the package will be able to really do for us.

1

Speaker 1

32:39

I have compared anyway; we don't we don't have an we do have lots of apps. Yeah, how we integrate them into the model have not tested that. Okay, but I hope that if you let's say those like whiteboard, you can easily use and link then it will be okay.

32:58

Oh, that would be great. Yeah, I didn't even think of that. Yeah.

1

Speaker 1

33:02

But anyway, thank you for participating. We came to the end of the session. Absolute pleasure. Yeah, I've got the press. I ran one focus group session. I don't know if you would want to participate in my next session.

2

Speaker 2

33:22

You haven't you don't have a date yet. Right. Oh, no, wait, you are having it. I would like to participate if possible. But I'll let you know once you've once you've figured out a time, but definitely put me on the list of colleagues who would be willing to bet to get involved.

Appendix G: Language Editing

To whom it may concern

This letter serves to confirm that editing and proofreading was done for:

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AN ACADEMIC SUPPORT FRAMEWORK TO IMPROVE TEACHER, SOCIAL AND COGNITIVE PRESENCE IN ONLINE CLASSES

Cilla Dowse
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Cilla Dowse PhD in Assessment and Quality Assurance in Education and Training: University of Pretoria 2014 Basic Editing and Proofreading: McGillivray Linnegar Associates 2008 Programme on Editing Principles and Practices: University of Pretoria 2009 Editing and Proofreading for Academic Purposes: McGillivray Linnegar Associates 2021 Professional Editors' Guild Associate Member, DOW003	Rosedale Farm P.O. Box 48 Van Reenen Free State cilla.dowse@gmail.com Cell: 084 900 7837