



**SOCIAL CONTEXT AND THE USE OF TECHNOLOGY IN TEACHING
AFRICAN LANGUAGES: A CASE STUDY OF PUBLIC UNIVERSITIES
IN KWAZULU-NATAL**

Submitted in fulfilment of the requirements of the
degree of Doctor of Philosophy in Language Practice
in the Faculty of Arts and Design at
the Durban University of Technology

Theophilus Adedayo Adedokun

March 2024

Supervisor: Dr. Felix Nkwatta Awung

Co-Supervisor: Dr. Sam Erevbenagie Usadolo

Declaration

This is to certify that the work is entirely my own and not of any other person unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Durban University of Technology or any other institution for assessment or any other purpose.

.....

.....

Theophilus Adedayo Adedokun

Date

Approved for final submission

.....

.....

Dr. Felix Nkwatta Awung
Supervisor

Date

.....

.....

Dr. Sam Erevbenagie Usadolo
Co-supervisor

Date

Acknowledgements

My profound gratitude to the Almighty God, without whom this research work would have been impossible. The Almighty sustained me from the beginning and throughout the entire period of this study.

I would like to express my unreserved appreciation to my supervisor, Dr. Felix Awung, for his guidance and unwavering support for the entire study period. This research would not have been possible without his insight and constructive feedback. I am also grateful to my co-supervisor, Dr. Sam Usadolo, for his guidance and constant support. His inspiration and knowledge were of great help to me while I engaged with this study.

Besides my supervisor and co-supervisor, I also wish to thank Dr. Sylvia Zulu, Head of the Department of Media, Language and Communication, who supervised my MA dissertation and recommended me to Drs. Awung and Usadolo. She is like a mother to me, always there to open her door and offer her immense support.

I appreciate Dr. Vaneshree Govender's top-notch research and managerial support throughout the study. My academic journey at the Durban University of Technology would be messy without her.

I thank my Research and Postgraduate Support colleagues and the Research Capacity Development unit, especially Zenande, Nontobeko, Sithabile and Themba, for their encouragement and support throughout my studies. You all keep the RCD flag flying.

I appreciate the Research Office of the Durban University of Technology for supporting me with funding during my studies and for sponsoring my conference attendance locally and internationally.

Special appreciation to my church pastor in Nigeria and his wife, Reverend David and Grace Ajiboye, for their spiritual nurturing and encouragement. May your ministry continue to prosper.

My appreciation goes to the members of my church in South Africa, Glenwood Community Church and particularly members of the Young Adults and Worship team (Asipe Kamtshe, Ayabonga Ngubane, Giselle O'Reilly, Rebekah and Charlton

Poliah, Joshua, Ashley Scheepers, Marius and Nosipho Swarts, Helper and Evelyn Zhou, Ted and Vanessa Kabongo, Ladia Kasimu, Dumisani Thomas, Amahle Mngadi, Yorkow Domsonlindsay and others) for their undaunting support. I am grateful I associate with you all. May your rewards not elude you.

Special thanks to my church pastor in South Africa, Pastor Cobus Alberts, for his encouragement and listening ears even when he also required support – a shoulder that needed a shoulder. May the Almighty continue to sustain and lead him wherever he goes.

I am grateful to my colleagues and friends turn family: Dr. Kunle Oparinde, Dr Grace Agbede, Dr. Funsho Oyetunde-Joshua, Ms. Anu Olagunju, Ms. Asipe Kamtshe, and others whom I cannot recall, whose advice, support and comradeship have been priceless blessings during the period of my programme.

I am deeply grateful to my parents, Deacon Isaac and Ruth Adedokun and siblings, Simeon, Christy and Gloria, for their encouragement and continuous support right from day one. You all remain my inspiration.

Finally, I would like to thank my lovely wife, Elizabeth Adedokun, for her unconditional love, patience, understanding, emotional and moral support and forbearance throughout this research programme. I could not ask for anything more in a forever partner. I dedicated my Ph.D. to you and my children, Bernice and Beulah Adedokun, who continue to inspire me for all I do. May you both be great and prosperous in life. Keep excelling.

Abstract

This study uses the concepts of Bourdieu's sociological theory to investigate factors influencing technology use in teaching African languages. The study contends that language lecturers' choices in teaching with technology were affected by the social phenomena of the field in which they operate. By adopting Bourdieu's concepts of habitus, capital, and field, the study offers a multi-pronged approach to understanding the complex nature of the relationship between practices of individuals and social structures. A thematic textual analysis was used to investigate the attitudes of lecturers who taught African languages in selected public universities in KwaZulu-Natal, South Africa. The analysis reveals a mutually reinforcing relationship between individuals who operate in the teaching field and their behavioural attitudes towards using technology in teaching African languages. The study contributes to understanding how individuals and groups navigate different social and cultural contexts and how they could use their resources to the advantage of their fields. In addition, the study showed how agents actively try to shape their current teaching practices and adopt new approaches while subtly resisting external pressures that conflict with the practical realities of their field and their audience (students). The results of the interviews indicate that individuals' behaviours were influenced by the forces of the field where they operated, external factors and their habitus. This study recommends that policymakers collaborate with stakeholders like communities, governments, institutions, and lecturers to ensure technology development for teaching African languages yields desirable results. It also suggests African countries create an enabling environment for African languages to thrive, and future research adopts an integrated approach examining various factors influencing technology use in language teaching.

Keywords: Language teaching, African languages, technology, social context, Bourdieu, education, language instructors/teachers.

Table of Contents

Declaration.....	iii
Acknowledgements.....	iv
Abstract	vi
Table of Contents	viii
List of Abbreviations and Acronyms	x
CHAPTER 1: Introduction	11
1.1 Background of the Study	11
1.2 Research Problem.....	12
1.3 Aim and Objectives.....	13
1.4 Research Questions	13
1.5 Research Methodology.....	14
1.5.1 Data collection instrument	15
1.5.2 Research population and sampling	15
1.5.3 Data analysis	16
1.6 Significance of the Study	16
1.7 Outline of the Study	16
CHAPTER 2: Literature Review	18
2.1 Introduction.....	18
2.2 Technology in Education	20
2.2.1 Massification and technology in education	21
2.2.2 How is technology used in education?	22
2.2.3 Where is technology used in education?.....	23
2.2.4 When is technology used in education?	25
2.1.5 Why is technology used in education?	27
2.1.6 Challenges of technology in education.....	29
2.3 Technology in Language Education	31
2.4 The Use of Technology in Teaching and Learning African Languages.....	34
2.4.1 Decolonisation and the use of technology.....	34
2.4.2 The roles of technology in teaching and learning African languages	36

2.4.3	Factors affecting the use of technology in teaching and learning African languages	37
2.5	The Use of Technology in Teaching African Languages at South African Universities	40
CHAPTER 3: Theoretical Framework		44
3.1	Introduction	44
3.2	Bourdieu's Theory of Practice	44
3.2.1	The concept of field	45
3.2.2	The concept of capital	49
3.2.3	The concept of habitus	54
3.2.4	The concept of <i>Illusio</i>	57
3.3	Criticisms of Bourdieu's Theory of Practice	60
3.4	Bourdieu's Theory in Education Research	63
3.5	Conclusion	66
CHAPTER 4: Research Methodology		68
4.1	Introduction	68
4.2	Research Design	68
4.2.1	Case study	69
4.3	Research Population and Sampling	70
4.3.1	Sampling	70
4.3.2	Sample size	71
4.4	Data Collection Method	72
4.4.1	Internet-aided interview	74
4.4.2	Data analysis	75
4.4.3	Trustworthiness of the study	76
4.5	Ethical Considerations	77
4.6	Limitations	78
4.7	Conclusion	78
CHAPTER 5: Analysing African Language Lecturers' Social Context and Their Use of Technology		79
5.1	 Introduction	79
5.2	 Overview of Data Collection Process and Approach	79

5.2.1	Period of Interview	80
5.2.2	Descriptive outline of the participants.....	80
5.2.3	Review of data collection.....	81
5.3	Deductive Thematic Analysis of the Social Context and Lecturers' Use of Technology	81
5.3.1	Deductive analysis.....	81
5.4	Discussion	134
5.5	Conclusion.....	136
Chapter 6: Conclusion		138
6.1	Introduction.....	138
6.2	Synopsis of the Study.....	138
6.3	Revisiting Research Questions	140
6.3	Study Contribution	144
6.4	Suggestions for Future Research.....	145
References		147
APPENDIX 1: Ethics Clearance		173
APPENDIX 2: Requests for Permission to Conduct Research.....		174
APPENDIX 3: Gatekeeper Permissions to Conduct Research		178
APPENDIX 4: Letter of Information		182
APPENDIX 5: Informed Consent		184
APPENDIX 6: Interview Questions		186
APPENDIX 7: Interview Questions and Responses		187

List of Abbreviations and Acronyms

HEI(s)	Higher Education Institution(s)
DUT	Durban University of Technology
UKZN	University of KwaZulu-Natal
UNIZULU	University of Zululand

CHAPTER 1: Introduction

1.1 Background of the Study

Research has underscored the importance of technology in education in so much as "the use of technology has made the process of teaching and learning [...] more enjoyable" (Raja and Nagasubramani 2018:1). Vijayakumar and Lawrence (2021) also argue that technology in education cannot be ignored in today's world because the world is tending towards transformation with the help of technology daily. However, in Africa, particularly in the teaching of African indigenous languages, the uptake of technology in education seems to be lagging, resulting in the ineffective and inadequate use of technology as opposed to the rest of the world (Chakravorti and Chaturvedi 2019; Padayachee 2017). The inefficient use of technology in teaching African indigenous languages is attributed to the following factors: some schools possess weak technological infrastructure, have inadequate Information Communication Technology (ICT) training for language teachers, and struggle with inconsistent internet connectivity (Maphalala and Adigun 2021; Njoka et al. 2020). These challenges highlight the need for decolonising and developing African indigenous languages, which is argued to be one of the critical approaches to correcting inequalities in African society (Ramokgopa 2010).

Technology is a fundamental component of language development. However, language lecturers and teachers face numerous challenges in using technology for teaching, such as technological incompetence, poor network connectivity, and inadequate training (Balchin and Wild 2020; Chinangure and Mapaire 2018; Hermagustiana and Rusmawaty 2018). While studies have explored these challenges, there is a gap in understanding the experiences of language lecturers and teachers as an influencing factor in their use of technology for teaching African indigenous languages. Within the above context, this study is intended to investigate how lecturers' experiences influence their use of technology in teaching African languages using Bourdieu's sociological theory. My argument in this study is that lecturers' experience influence lecturers' abilities to use technology efficiently. Interviews were conducted meticulously with language lecturers to obtain data and analyse the factors that influence lecturers' readiness to use technology and how their readiness contributes to shaping the field in which they operate (education).

A case study qualitative approach was employed to identify the factors that constitute lecturers' experiences that influence their use of technology in teaching African languages. Bourdieu's sociological theory was used to understand how language lecturers' habitus and position in the field affect their readiness to use technology and whether they will use it. Bourdieu's theory of practice has been extensively adopted for educational technology. Hence, the research design enabled me to juxtapose theory adoption with the theories of other educational technology scholars.

1.2 Research Problem

Technology is argued to play an indisputable and notable role in developing education at all levels in a way that gives more meaning to the pedagogical process (Budiman and Ramdhani 2017; Cloete 2017; Shubina and Kulakli 2019). The abovementioned studies describe how technology has metamorphosed into one of the most powerful teaching and learning tools in the contemporary world. Similarly, Demirok and Baglama (2018) describe the use of technology in education as necessary in assisting people to accept the reality of the transformation of the world. To them, teaching and learning in the contemporary world is permanently tending towards the use of technology. The education sector, however, is perpetually faced with the challenge of instructors' ineffective use of technology in teaching, especially in teaching African languages.

This current study goes further to ascertain what might be responsible for the ineffective use of these transformation tools by higher education instructors teaching African languages. Previous studies on instructors' use of technology in teaching languages have paid less attention to the prior experiences of lecturers as responsible for their effective/ineffective use of technology when teaching African languages (Adetimirin 2016; Almalki 2020; Eaton 2018; Kalam 2020). Thus, Almalki (2020) suggests that further studies should endeavour to investigate "[instructors'] prior experience in other specific contexts". Previous studies on the use of technology in language teaching and learning seem to focus predominantly on Western languages, either as a first or foreign language (Karakaya 2010; Kessler 2018 2020; Morgan 2008; Pun 2013; Sabzian et al. 2013; Salaberry 2001; Shyamlee and Phil 2012) with little or no in-depth focus on indigenous languages and in this case, Africa languages, which in the long run, could relegate these languages to obscurity. This risk raises a serious

research concern, which this research intends to address by investigating the use of technology in teaching African languages. The study, therefore, was conducted to gain insight into the role of African language lecturers' experiences regarding their use of technology in teaching African languages and to rejuvenate an overall culture of effective use of technology for language teaching in public universities in South Africa.

1.3 Aim and Objectives

This study aims to critically investigate how language lecturers' experiences influence their efficient use of technology in teaching African languages. The specific objectives of the proposed study are to

1. Examine the roles of technology in teaching African languages.
2. Identify the technologies available for the teaching of African languages.
3. Investigate the challenges of using technology in teaching African languages.
4. Identify the social factors influencing lecturers' attitudes towards using technology in teaching African languages.
5. Propose a model to improve the use of technology by language lecturers.

1.4 Research Questions

The research attempts to answer the following questions:

1. What are the roles of technology in teaching African languages?
2. What are the available technologies for teaching African languages?
3. What are the challenges of using technology in teaching African languages?
4. What are the social factors that influence lecturers' attitudes towards the use of technology in teaching African languages?
5. What model can be proposed to improve the use of technology by language lecturers?

1.5 Research Methodology

This study adopted a qualitative approach to achieve the research objectives. A qualitative approach was adopted to identify the underlying dynamics in the context under investigation. Adopting a qualitative approach allowed descriptions of participants' varying experiences with using technology in teaching African languages instead of restricting the study focus to certain aspects of participants' experience with technology in language teaching. The qualitative approach adopted captures an expansive variable set by investigating participants' personal experiences, which comprise their contextual, cultural and historical settings. The approach helps to understand how each lecturer cultivates their meaning towards using technology in teaching African languages.

In light of this, I anticipated better comprehension of the unique experiences of individual lecturers regarding the use of technology in teaching while also exploring possible factors influencing their decisions to use or not to use technology in their teaching. This approach has been used extensively for studies in the field of language teaching (Biel 2017; Habyarimana 2015; Odrowaz-Coates 2018; Van Der Wildt et al. 2015; Yadamsuren 2010), which enables the pursuit of a more all-encompassing view of the landscape of the research, viewing trends from different research perspectives (Shorten and Smith 2017) because qualitative approaches access rich data sources to improve understanding of phenomena. According to Creswell and Creswell (2017), the importance of the qualitative approach is that it facilitates a connection between theory and research, allowing the study to be well understood and appropriately conceptualised. I, therefore, adopt the qualitative approach to explore, understand and explain agents' decisions to use technology for teaching African languages from diverse viewpoints, the contextual understanding of such decisions, and the factors influencing such decisions.

Alongside the qualitative approach is the case study adopted to gain an in-depth understanding of the context under investigation. Data was collected and analysed with a focus on specific agents with particular specialities, in this case, language lecturers from language departments at three universities. Baxter (2010) defines a case study as an approach where a particular example of a specific phenomenon is used to examine the connection between the phenomenon and the context. A case

study allows paying more attention to the contexts of the study, the complexity of the contexts, the specific problems associated with the contexts, and the history of the contexts, thereby allowing the researcher to draw inferences about other cases (Litawa 2018). In this instance, the case study approach allowed me to explore the language lecturers' beliefs, feelings and lived experiences to understand their use of technology in teaching African languages in their pedagogical practices. The case study approach, however, has been critiqued for its difficulty around the generalisation of one case to other cases due to the limitation of the number of cases investigated (Lakhal 2017:79). In this study, generalisation of the results of technology use for teaching African languages may not be possible; however, the cases may offer relevant information that is instrumental in the study of technology use for teaching different languages in other contexts that are like this study.

1.5.1 Data collection instrument

The data for this study were collected from primary sources, i.e., interviews and researcher notes/guides. The interview data were collected through internet-aided interviews using MS Team. I sent open-ended questions through email ahead of the interview sessions. Reminder emails were sent periodically to remind the participants of the scheduled interviews.

The choice of internet-aided interviews for collecting data is because first, it gives the participants enough time to go through the guiding interview questions, and second, the COVID-19 pandemic at the time did not permit travel to meet participants to conduct face-to-face interviews. The internet-aided approach was considered safe for both the researcher and the participants. It is also argued that participants feel more comfortable responding to sensitive issues in a virtual space than in a face-to-face situation (Chia et al. 2020; Roulston and Choi 2018).

1.5.2 Research population and sampling

This research took place in Kwazulu-Natal province of South Africa. I selected three public universities in Kwazulu-Natal. The universities selected were the University of Kwazulu-Natal (UKZN), the University of Zululand (UNIZULU) and the Durban University of Technology (DUT). The research population comprises language lecturers from these universities' language departments/programmes.

1.5.3 Data analysis

The data collected for the study was presented using a thematic approach. Data codes were grouped into sub-themes and emerging themes, establishing the foundation for this study's findings. Thematic analysis, according to Braun and Clarke (2006), is a careful and thorough process of classifying, analyzing and presenting themes that appear in qualitative research. Thematic analysis assisted in developing organisations of the phenomenon and simultaneously accounted for all cases in the study, ensuring that each theme was reported and related. The thematic analysis was then compared to the descriptive data, after which inferences were drawn and the study findings presented.

1.6 Significance of the Study

The study examines the role of the social context of language lecturers in their use of technology in teaching African languages, with the expectation that it would contribute to the body of knowledge in the education field and, in particular, language teaching. In addition, this study intended to shed light on how lecturers' actions could be influenced by the social forces that prevail in the field of teaching/education. In conclusion, the study proposed a model that offers African language lecturers practical and viable strategies and the relevant skills to support existing traditional teaching and learning methods. These strategies provide valuable technological insights, tools and resources for successfully teaching and learning African languages.

1.7 Outline of the Study

Chapter One introduces the study. It consists of a description of the background, research problem, aims and objectives, research questions, research methodology, and the significance of the study and its scope. It is concluded with an outline of the dissertation.

Chapter Two focuses on reviewing existing literature about the use of technology in education and teaching languages.

Chapter Three provides an outline of the conceptual framework, namely, Bourdieu's social theory and the application of that social theory to education studies.

Chapter Four presents the research methodology for the study.

Chapter Five focuses on the presentation and analysis of data gathered with interviews about language lecturers' social contexts and the factors influencing their use of technology.

Chapter Six concludes the dissertation with a discussion of the analyses and study's contributions to the body of knowledge in education and language teaching studies.

CHAPTER 2: Literature Review

2.1 Introduction

This chapter focuses on the concept of technology as related to education. I look at how technology is used in education and discuss how language education has benefited from the transforming role of technology, as well as the challenges associated with using technology in language education. I offer a background within which to explore the use of technology in teaching and learning African languages at South African universities and how South African universities could benefit from the transformative role of technology in African language teaching.

The pervasive adoption of technology in the educational realm has catalyzed a paradigm shift, disrupting traditional pedagogical methodologies while simultaneously unlocking novel opportunities. Within the specific realm of language education, technology has facilitated the creation of interactive and immersive learning experiences, granting access to authentic materials and fostering cross-cultural exchange. However, this integration is not without its obstacles, as issues such as digital divides, teacher training, and the adaptation of technological tools to local contexts demand careful consideration. By turning its focus towards African language education at South African universities, this chapter seeks to illuminate pathways through which technology can be leveraged as an instrument to preserve linguistic diversity, empower local communities, and provide equitable access to quality language instruction.

Research has underscored the importance of technology in all human endeavours, including education. Education has enjoyed the impact of technology in a way that is now difficult to ignore in teaching and learning as the world tends towards transformation with the help of technology daily. However, in Africa, the uptake of technology in education is lagging. The lag can be attributed to fundamental drawbacks, such as weak technological infrastructure, inadequate ICT training for teachers, and inconsistent internet connectivity in many educational institutions. It is alarming to discover that such challenges have become noticeable in African language teaching. I argue that the challenges associated with using technology in teaching African languages could be overcome by decolonising African indigenous languages,

that is, by developing them so that they can be used effortlessly in all domains of language use.

Research has also emphasised the importance of technology in dealing with massification in education (Baran and AlZoubi, 2020; Maulana, 2021; Modise, 2022), especially higher education, to instantly reach students in various locations and address the massive classroom settings in higher education. While there are numerous challenges facing lecturers regarding the use of technology in teaching, such as a lack of technical support, inadequate training, and time constraints (Lai & Hung, 2021), as well as insufficient resources and resistance to change (Özişik et al., 2019), studies have barely reported on the social context of lecturers as an influencing factor in their use of technology when teaching. A study by Shelton (2017) highlights this gap and calls for more research exploring lecturers' social context as a factor in their technology adoption for teaching. The challenges lecturers face in integrating technology can also stem from teacher beliefs, institutional constraints, and limited professional development opportunities (Ertmer & Ottenbreit-Leftwich, 2013).

While some studies have investigated the barriers to technology integration in specific contexts, such as language teaching (Özişik et al., 2019), there is a need for studies examining the role of lecturers' social context in shaping their adoption and use of technology for teaching across different disciplines and institutional settings (Shelton, 2017). We cannot overemphasise that the coming of the COVID-19 pandemic has caused many disciplines to opt for using different technological platforms to teach; however, using technology goes beyond these platforms because different ranges of technological applications are used in teaching and learning (such as Zoom, MS Teams, Moodle, Google Meet, Webex Meet, etc.).

It is within the above context that this study intends to review the literature about the role of technology in education, the role of technology in an era of the massification of higher education, the effect of decolonisation conversations about the use of technology, and the use of technology in the teaching and learning of African languages.

It should be noted that this study focuses on if and how African language lecturers use technological tools beyond traditional platforms, such as Zoom, MS Teams, Moodle,

Google Meet, Webex Meet, etc., in their practice using Bourdieu's social theory as a lens. My argument in this study is that their social context influences lecturers' abilities to use technology efficiently.

2.2 Technology in Education

The Fourth Industrial Revolution (4IR) has brought the relevance of technology in education to the forefront (Oke and Fernandes 2020:15). It illustrates several motivations for using technology that are still valid more than 50 years after technology's introduction to education (Van der Merwe 2021:37). It should be noted that students' enrolments have increased, thereby putting burdens on the capacities of higher education institutions. A disproportional demand for academic knowledge has created more courses, disciplines and fields. There is, therefore, a need to access the technology used to teach students. Similarly, it has been argued that technology makes teaching more interactive, providing students with active roles in their learning endeavours by enabling instructors to use various teaching methods (Zhai et al. 2019:311). Technology is also used in education to offer distance learning to students, such as those with disabilities and those who cannot be physically present. Such technology is not economically efficient alone but overcomes logistic and distance limitations.

It is important to note that each emerging teaching method requiring technology may require corresponding significant investments of money, effort and time for instructors and learners to become acquainted and competent with emerging teaching methods requiring technology (Gorgoretti 2019:7). Some of the available courses of action could be training manual for instructors and their institutions organising training workshops for them. The instructors' institutions may outsource the latter (Mahboobi 2021:111). It is worth pointing out that these methods often focus on using technology in teaching and fail to describe the more pressing questions of how, where, when, and why technology is being used in education. The methods suppose that instructors are already aware of what they would do and just need to be instructed on how to accomplish it. Instructors' awareness may not be the case. However, even instructors with no interest in technology or what it stands for might like to learn why and when such technology might be helpful.

2.2.1 Massification and technology in education

Research has emphasised the importance of technology in dealing with massification in education, especially in higher education. Massification refers to the immense upsurge in student registrations at higher learning institutions due to the widening admission to higher education (Fouche et al. 2021; Sanga 2011). This strategy encourages a massive growth in the number of students and a considerable increase in various institutions catering to the needs of students from different walks of life. According to Mohamedbhai (2014), massification occurs in two stages: the institutional and national stages. In the institutional stage, massification refers to the overload of higher institutions of learning when infrastructure is insufficient, the surge in the number of enrolled students does not correspond to the number of staff available to service such students, and the expenditure of the government on higher institutions of learning drops significantly. The national stage of massification is connected with a rise in citizen education access, and it is perceived as an achievement for the government in terms of fulfilling the socioeconomic advancement agenda.

In this era of massification of higher education at the institutional level, technology has been shown to address the massive increase in student enrolment. Some higher institutions have developed initiatives to decongest the university environment by delivering lectures and concurrently transmitting videoconferences of the same lectures to other venues on and off campus, for example, in Dakar, Senegal by Cheikh Anta Diop University (Yade et al. 2020). A similar initiative was adopted by the University of Ghana, where practicals were offered live with LCDs, which are projected to large groups of students in different venues using CCTV (Arko et al. 2019). According to Mohamedbhai (2014), due to the vast numbers of students, technology has also been used successfully to assess students and process their results; admit and register students for various courses; and automate library access and the design of teaching and learning software that are used to plan lectures to avoid lecture clashes. The COVID-19 pandemic in the first quarter of 2020 also demonstrated that teaching and learning activities can be planned and carried out successfully with technology. To this end, the massification of higher education has made the use of technology more relevant by not only making education reach various geographical locations instantaneously but also helping to deal decisively with the massive

classroom settings that are prevalent in higher institutions of learning (Hornsby and Osman 2014; Tlali et al. 2019).

Massification of higher education, on the one hand, could result in challenges such as lecturers being dissatisfied with frequent increases in student enrolment and having to teach a massive population of students, which, in turn, puts more teaching and administrative stress on them (Englund et al., 2017; Rasheed et al., 2020; Zhu, 2015). Because the massification of higher education tends to increase the workload of lecturers, this could impact their willingness to teach with technology because they would feel technology is an additional burden.

2.2.2 How is technology used in education?

The interest in the use of technology in education in recent years has come to light not only as a tool for teaching and learning but also as a key performance indicator (KPI) in institutions of learning and at a national goal. The relentless interest in technology in education can be credited to the acknowledgement of technology as ubiquitous; technology substantially affects humans' daily lives and livelihoods, so it is expected to impact education.

The word 'technology' ordinarily suggests computers and their other components. However, the specific area of interest/study determines its definition. For instance, Lumsdaine (1963) defines technology as any procedure that can be replicated with the same outcome; it must be duplicatable. This general definition of technology can be applied at different levels, from teaching methods to technologically designed tools to augment students' problem-solving approaches and tools tasked with presenting information to students on a particular subject for upskilling their cognitive abilities, such as analytics.

Thornburg (2000), in his study, argues that the potency of technology is derived not just from being able to execute old tasks in new manners but also from these technology tools allowing educators to execute actions in education that were initially difficult to do. Thornburg's vision of the 21st century, as outlined in his work of 1999, gives some practical approaches for discussing a research agenda. His work focuses on how technology is used in education, and he argues that how it is used in education is of greater importance than the technology itself: technology is used in education to

transform education processes, and people's thinking about education is also transformed in the process (Thornburg 1999).

Bruer (2003) also considers how technology is used in education. He argues that technology in education provides powerful instructional tools that further create what he refers to as 'new representational tools', which are used as a support mechanism to enhance cognitive and analytical abilities. For instance, a tool like Excel is capable of data modelling, data entry, data storage, and data verification that were impossible or difficult 30 years ago. In recent years, technology has also made possible some other 'representational tools', for example, visual representation of complex data sets, data mining and hypertext. These technological tools, according to Bruer (2003), can expand and strengthen the cognitive abilities of both educators and students.

The contribution of technology to education has not only influenced the design of technology-enhanced learning but has also influenced learning and teaching theories. Therefore, technology in education plays a transformative role in the classroom by providing various tools to create a more effective teaching and learning environment. Equally, technology infuses into the teaching and learning environment contents that enhance the thinking abilities of both instructors and learners.

2.2.3 Where is technology used in education?

Technology is used in education at almost every level, from preschool to higher institutions, and each level uses technology in different ways and for different purposes. Scholars have identified the different aspects of education in which technology is used and point to technology as essential for delivering top-notch, goal-driven teaching and realising more effective learning outcomes (Camacho Freire, 2019; Gülbahar et al. 2010). Gülbahar et al. (2010) identify two aspects where technology is used in education, one being in the *instructional aspect* and two being the *aspect of the curriculum*. The instructional aspect highlights the teaching and learning facets of education. Technology has been incorporated into teaching and learning in three ways – face-to-face classroom settings, virtual classroom settings, and hybrid classroom settings. A *face-to-face classroom* is held at a particular location and time where the learners and instructor are present in person (Gold 2004). The definition suggests that the face-to-face classroom requires the instructor and students to meet for it to occur.

On the other hand, Farris (2021) defines a *virtual classroom* setting as a classroom arrangement where the learners and instructor meet for teaching and learning engagement in a real-time digital environment using audio, camera, chat box and other available means of communication. The definition implies that the virtual classroom does not require the instructor and the students to be physically present but access an organised virtual platform where teaching and learning seamlessly occur as though they were in a room. The *hybrid classroom* setting encompasses the features of the face-to-face and virtual classroom setting. This definition indicates that the teaching co-occurs in the physical and virtual classrooms, which implies that learners could choose which settings best suit them and their needs. Also, the setting allows the learners to not only plan their time but also plan and control the place where they choose to receive instruction on any day and at any time (Xiao et al. 2022).

Technology has thus been successfully infused and used in the above-described aspect of education, that is, instructional aspects in the form of material to support teaching and learning, such as videos, audio, graphics and instructional aids, and in the form of tools to enhance the reach of teaching/learning, such as platforms like Zoom, WebEx, MS Teams, Google Meet, etc. The continued popularity of education can be attributed to the success of integrating technology into teaching and learning, as educators now depend on technology more than ever for even basic tasks.

The second aspect of education where technology is used is the aspect of the curriculum. Curriculum constitutes the foundation of any educational activity and, as such, is crucial to the success of such activity and, by extension, sets the strategies and blueprints to be deployed before and during the execution of educational activities (Camacho Freire 2019). Curricula are the heartbeat of education and thus become an essential investment for education stakeholders who serve as crucial advisers and content drivers and, by extension, guides in the ambits and appraisal requirements of the curriculum so it can serve the purpose of its design, that is, it ought to be immediately transformable into practice and open to constructive criticism (Prideaux 2003:1).

In the current development of education, integrating technology into the curriculum has been one of the focal points of discussion for educational stakeholders and education research. The reason is not a mystery: technology is ubiquitous and

includes other aspects of education. Education stakeholders in the aspect of curriculum development and design thus seek strategies to integrate technology to meet the needs of 21st-century lessons, instructors and students (Mohanasundaram 2018:6). This does not mean that the traditional curriculum has been abolished or discarded; instead, it means traditional curricula have been improved with technology through the advancement in technological skills that emphasise representation and the conception of information, with particular attention on the digital visual design of the curriculum. According to Hanzl (2019), digital visual design links verbal ideas and their visual representation using diverse tools to represent the view, space, and timing organisation. The digital visual design of the curriculum helps the curriculum not only fit into the 21st-century requirement but also allows educators to have a visual representation of how their lesson should be organised at all stages.

To this end, technology continues to be used in the aspects of instruction and curriculum to attract innovation through linear, cutting-edge knowledge flow to not only education but also knowledge production in educational research, which, in the long run, could yield the production of innovative implementation perspectives towards inspiring, receptive and fruitful education.

2.2.4 When is technology used in education?

Research has underscored when technology is used in education, from the preparation/planning stage of teaching until assessment and even the post-assessment stage (Novitasari 2019; Sailer et al. 2021). For this study, the use of technology in education will be divided into the following stages: the planning stage of teaching and the teaching, after teaching, during assessment, and post-assessment stages.

2.2.4.1 During the planning of teaching (pre-teaching stage)

The planning stage of teaching is critical. The instructor commits to choosing teaching materials and activities that are appropriate for the teaching tasks and match the characteristics of the target learners. During the pre-teaching stage, technology is used to identify the appropriate teaching and learning materials and learning activities that match the specific objectives of the lesson (de Lima et al. 2020). This stage implies that the instructor uses technology in the pre-teaching stage to decide what learners should learn and how they should learn what should be learned. The instructor thus

uses technology to assess the teaching materials and activities' veracity to the teaching objectives. The role of technology in the pre-teaching stage in education, therefore, indicates that instructors play a vital role in using technology to select the appropriate teaching materials in the knowledge construction for learners, understand how the previous knowledge of learners is connected to their current knowledge structure, and assess the suitability of the teaching materials to knowledge production.

2.2.4.2 During teaching (teaching stage)

The teaching stage has also enjoyed the use of technology. During this stage, based on the appropriate teaching materials and activities the instructor has selected, the teacher uses technology for teaching and learning sessions, which can be face-to-face, virtual, or hybrid and delivered through dialogues, workshops, and talks. The instructor, during the teaching stage, plays a dual role regarding the use of technology; the first is that the teacher uses instructional technology (technology tools) to reinforce meaning-making for students in the classroom, and two, the instructor guides the students on the use of technology to accomplish classroom tasks on their own (Kahl 2018; Lyublinskaya and Kaplon-Schilis 2022). This stage indicates a dual role of the instructor in a technology-enabled classroom that could promote instructor-student interaction. At the same time, knowledge transfer between students is enhanced.

2.2.4.3 After teaching (post-teaching stage)

Technology has also been effectively used in the post-teaching stage to keep discussion further outside the four walls of the classroom. The post-teaching engagement includes lesson follow-up activities by the instructor, such as the lesson's conclusion, teaching and learning process evaluation, and giving homework to learners before the next class meeting (Mirawati and Amri 2013). The use of technology comes in handy in these activities when the instructor uses technology to check learners' understanding of the lesson, and the learners also use technology to provide feedback on their understanding of the lesson to the instructor. In addition to technology for seeking an understanding of the lesson is that technology is also used in setting assignments, conducting projects, and other teaching and learning activities for learners (Zhang 1998). The medium for communicating to learners regarding the abovementioned teaching and learning activities ranges from email, fax and learning management systems (LMSs), such as Moodle, Blackboard and Google Classroom.

The goals of using any of the mentioned mediums are the flow of communication between the instructor and the learners and vice versa, timely feedback from both parties and tracking learners' progress and performances.

2.2.4.4 During assessment

Technology has brought innovative ways of assessment to education. It is now used to prepare assessments, such as tests, examinations, interviews, etc., for learners, and in the same manner, it is used to facilitate tests, examinations, and interviews for assessment purposes (Brady et al. 2019). Thus, technology serves as an examiner for learners in real time to assess their knowledge, skills and efficiency regarding a subject matter they have mastered over time. In addition, technology is used for assessing and grading learners' assessments (Mayhew et al. 2022), suggesting the role of technology goes beyond an assessor to an adjudicator whose role is to provide timely feedback to learners in real-time with the instructor's supervision. The advantage of this to education is that technology lessens the instructor's work and makes assessments less complicated and more accurate.

2.1.5 Why is technology used in education?

The previous subsection identified where technology is used in education, including the pre-teaching stage, teaching stage, post-teaching stage, and during assessment. This subsection is devoted to identifying why technology is used in education. It is no longer news that technology in education has become popular in recent years, and it is being used in virtually all areas of education by educators and students for the smooth running of teaching and learning. Research has also identified why technology is used in education. Technology use in education improves access to education and educational materials (Tezer and Ertarkan 2010; Yilmaz et al. 2020). Technology facilitates improved access to education through the use of technological tools, which provide timely and up-to-date access to information and, on the other hand, presents to education innovative tools that are used in the efficient running of teaching and learning. So, technology not only equips instructors with various resources that could assist their lesson design and delivery to learners, but it also equips learners with supplementary pedagogical experiences, thereby taking their learning out of the classroom.

Another reason for using technology in education has been attributed to the continuing technological revolution in all spheres of human existence, including education. Education has always been in the spotlight, especially regarding its roles and effectiveness in transforming 21st-century minds and mindsets (Boatman 2021). Education has been at the forefront of the United Nations Sustainable Development Goals (SDGs), and one of the critical indicators of inclusive education is to use of technology as a means to “leave no one behind” (Adedokun and Zulu 2022:148; CPADA n.d:7). Education as a way of fulfilling one of the SDG key indicators of leaving no one behind is saddled with the onus of using technology as one of the revolutionary tools to ensure that education is available to all and is also as a means for putting education at the forefront of innovative practices (Adedokun et al. 2023).

The use of technology in education has also been linked with improved access to information. Access to information plays a vital role in informing people about what is happening in the environment. In practice, when there is no suitable information, there is the possibility that pertinent information will be jettisoned as nonessential. On the other hand, access to information could also impart a systematic framework that expedites the way perceived environmental hints are ordered and understood (McAllister et al. 2018). In practice, technology in education also serves the purpose of improving instructors and learners’ access to information through the various tools it offers. For instance, learners can access information to strengthen their understanding of the lesson and use technology tools to access information in digital libraries that could be unavailable in traditional physical libraries, suggesting that the use of technology in education goes beyond access to information for educational purposes; however, users can also access information that could assist them in creating sustainable futures for themselves and others around them.

Effective presentation of teaching and learning materials has also been linked to the use of technology in education (Jamal et al. 2022:676). In a classroom of diverse learners, learners bring in different motivations, learning styles and interests. One of the challenges the instructors encounter is to attempt to combine the presentation of lesson materials to diverse groups with various learning needs. It should be noted that a lesson, no matter how well it is presented, will have learners who would be left behind, while the lesson may be too slow for others. It is easy to assume that the safer

approach for the instructor is to make presentations on certain subjects multiple times using different styles of presentation; however, this multi-lesson approach might constitute excessive demands on an instructor.

Using technology comes in handy to address the instructors' challenges (Agbevivi 2018; Ismara and Saputri 2022; Zakirova and Qarshieva 2020). At an elementary stage, during the in-classroom lesson presentation, the teacher could switch the pace of the presentation from using projectors or chalkboards, which should ordinarily stimulate learners' engagement and participation. For instance, instructors could incorporate computer models and audio-visual animations (Kuziboyevich 2021; Sari et al. 2022) into their teaching to cater to learners with a wide range of learning needs. In addition, technology in education can cater to learners outside the four corners of the classroom. Through online conserving of various lesson materials, the instructor could enable learners to retrieve online resources that apply to their needs whenever appropriate. So, during the out-of-class experience in using technology, learners are in charge of the pace of the presentation of the online resources, and they can navigate through materials that are familiar to them and steadily through topics that they consider difficult or new.

2.1.6 Challenges of technology in education

The previous section has been instrumental in understanding technology's role in education and pedagogy. This section explores some of the identified challenges of using technology in education in general. A common challenge in using technology in education is the shortage of technological infrastructure for teaching and learning (Cleveland-Innes et al. 2019; Mellati and Khademi 2019; Sengupta and Blessinger 2022; Taghizadeh and Hasani Yourdshahi 2020). The shortage of technological infrastructures for teaching and learning relates to the lack of teaching and learning that technology brings into education, such as software, hardware and networking. These educational challenges could make technology use in education frustrate the user, that is, instructors and learners. These frustrations, by extension, lead to a waste of time on what could have benefitted learners and instructors, thereby disenfranchising users (Kronenfeld et al. 2015). Other issues identified are poor network connections; the high cost of data; insufficient teaching and learning

resources, such as computers and tablets; and primary resources, such as projectors, video players and audio materials.

Another challenge of using technology in education is the choice of suitable instructional resources to facilitate teaching. Instructors who use technology have faced unsuitable instructional resources for teaching (Cleveland-Innes et al. 2019; Prasetyo and Putri 2022; Rasheed et al. 2022). This challenge emanates from attempts by instructors to use instructional resources designed according to the learning characteristics, learning styles and interests of diverse learners. Any instructional strategy the instructor adopts should be suitable for the lesson and encourage an inclusive classroom; such strategies must carry all learners along. An attempt by instructors to pull off this Herculean task in teaching and learning using technology poses a potential threat to inclusive education among learners.

Incorporating contemporary technology into existing learning theories is another challenge when using technology in education (Ajewole 2021; Yan and He 2022). Educators are keen to rely on different theories that guide their lesson designs. One of those guiding influences is learning theories, which focus on how learners learn and how learning takes place. At the same time, technology in education falls in the ambit of instructional design. Instructional design helps instructors by equipping them with descriptions for simplifying data on learning, and it indicates learners' performance (Stefaniak 2019). Instructors experience the above-indicated challenge because they lack the proficiency to incorporate modern instructional design into the existing learning theories of instruction. It should be noted that while existing learning theories guide pedagogy, there are also instructional designs for the modern age that are introduced to education by technology. For education to benefit from the instructional designs brought about by technology to education, modern technology must be compatible with the existing learning theories.

Another major challenge of technology in education is how the use of technology is evaluated within the educational sphere. Many scholars have argued that just because technology use may be justified in the contemporary theories of learning does not automatically indicate that technology use brings about effective teaching and learning (Atabek 2019; Jegede et al. 2021; Rapanta et al. 2021; Turugare and Rudhumbu 2020). Ideally, technology use within the context of teaching and learning pedagogy,

especially instructional design, is evaluated using specific, transparent empirical procedures. When a new instructional technology comes on board for instructors to use during their teaching, one effective way to examine its efficacy is to analyse the learners' behavioural dispositions and associated productivity. However, there is no definitive evaluation strategy to ascertain the effectiveness of technology within the instructional sphere for the different subjects and disciplines. Hence, for the effectiveness of technology in instruction, there ought to be a significant distinction between the acquisition of knowledge and the behavioural disposition of learners concerning its impact on instructors' motivation to use such instructional technology again.

2.3 Technology in Language Education

Technology is very significant to human existence as all human activities, including education, have been touched by the tentacles of technology. In this regard, Lenci (2020:2) states that technology in education, otherwise known as "Educational Technology", could be traced to the 1900-1910s and is "influenced by [...] the principles of mainstream language learning theories and teaching approaches". Similarly, Kurniawati (2018) accentuates that technology in language education has modified the language system tremendously, making teachers incorporate modern digital platforms into their teaching.

Therefore, technology in education has become an ordinary tool to support teaching and learning and an essential asset that the education system needs to embrace because of its unfathomable transformative tendencies and the fact that it has endured the test of time since its inception. By implication, the non-incorporation of technology in education may put teachers in a position where they would be considered out-of-date in their approaches to teaching.

The use of technology has also gained prominence in language teaching and learning. The use of technology in both language teaching and learning has been argued for some decades and, as such, has undergone a series of developmental phases. Hezili (2018) states that the preliminary introduction of technology into language teaching happened around the 1960s and 1970s and later was incorporated into language learning around the 1980s in the form of Computer Assisted Language Learning

(CALL). He points out that the use of technology in teaching and learning was evident with tape recorders, videos and language laboratories to support the existing traditional teaching and learning methods. Hezili (2018) describes the invention of digital technologies around the 1990s, such as the internet and many web-based tools that enhanced the use of other computer software in teaching and learning. Hence, the expression TELL (technology-enhanced language learning) was widely used by people to describe integrating the internet and other communication technologies for language teaching and learning. Ultimately, the use of technology in teaching and learning has grown over the years, from elementary tools to sophisticated tools that are now being used in teaching and learning.

In their study on Web 2.0, a technological tool for teaching and learning English as a Second Language (ESL), Halim and Hashim (2019) discovered that the use of Web 2.0 in teaching and learning English supports redefining the classroom as well as assists learners to have a better understanding of the language learning process that eventually could develop their proficiency in English learning. They, however, caution that unavailable and inadequate technological devices for teachers in institutions of learning, as well as insufficient practical and theoretical training for teachers, could adversely affect the incorporation of technology into the language classroom. Habeeb (2020), in another study, explores the enhancement of English language teaching and learning using technology. The study emphasises the role of using instructional technology by teachers to teach English as a First Language (EFL) and English as a Second Language (ESL). Thus, technology use in language teaching has become imperative to achieving the goals of language teaching and learning. The study also finds that technology is a powerful tool for timely communication among teachers and learners inside and outside the classroom. Habeeb (2020), therefore, states that while technology use in language teaching can provide authentic input and output for teachers and learners, it can also help them develop language skills using diverse instructional technologies. This suggests that the use of technology in language teaching and learning is not only beneficial to the students but also the instructors and the continuous effective use of technology depends on the training of the users (both students and instructors) in the use as well as provision of technological tools that will support them.

I believe language teaching and learning technology has undergone an extensive revolution since its inception. There is, therefore, no denying that the transformation technology has brought to education has resulted in various innovative approaches to language pedagogy. However, the above studies did not pay attention to users perceiving technology as beneficial to their language teaching and learning differently and how the extent to which users are exposed to technology can determine their inclination to use it. For instance, a user who has been exposed to technology but might not actively use it is more likely to use it later in the long term if there is a need; in other words, exposure could increase confidence in using technology. However, a user without prior exposure to technology may be hesitant and less likely to use it. As such, the extent of exposure to and past experiences of users with technology could be a determining factor in using or not using technology for language teaching.

The use of technology in language teaching and learning has not come without challenges. One challenge identified by Abukhattala (2016) is that of resistance. Abukhattala (2016:266) notes that teachers resist using technology in language teaching as they feel that “they are not convinced of its usefulness”. Another notable challenge is identified by Katemba (2020), who notes that despite the optimism of some teachers in some rural schools to technology for language teaching, there seems to be a lack of infrastructure, which seems to cut off their hope of using technology in their language teaching. The study, however, reiterates that technology in language teaching and learning has come to stay.

Nevertheless, technology cannot replace the human roles that teachers play in the lives of learners, such as comforting learners when they are sad and giving them emotional support when required. Kessler and Hubbard (2017) also note some setbacks confronting teachers regarding using technology for language teaching. According to Kessler and Hubbard (2017:285), these setbacks are “lack of standards, lack of established methodology, and insufficient infrastructure”. Other setbacks are the hectic schedules of teachers and insufficient or lack of teachers’ training workshops on technology (Jawaid and Tariq 2018) and “lack of training, lack of time, and lack of facilities” (Anggeraini 2020:163). These observations indicate that technology is not immune from setbacks, which have impacted its effectiveness, such as institutional, administrative, and financial setbacks.

The setbacks identified above only consider the institutional, administrative, and financial setbacks but barely mention the personal issues of language instructors. Instructors are human beings who are prone to be burdened by personal issues that might affect their use of technology in language teaching. Issues can range from personal biases against technology to personal training regarding technology, cultural perceptions of technology, etc. These personal issues and others could also impact instructors' use of technology in teaching. The decision to use or not to use technology cannot be investigated without exploring the individual factors influencing such decisions and the consequences of such decisions in the form of outputs.

2.4 The Use of Technology in Teaching and Learning African Languages

Research has highlighted the role of technology in teaching and learning African languages. Ndebele's (2014) discourse centres around the issues confronting technology in teaching African languages in higher education and the immense opportunities technology offers in promoting African languages. He, however, blames "the lack of discipline-specific terminolog[ies]" in some African languages as one of the main challenges facing technology use in teaching African languages (Ndebele 2014:110). The relevance of this assertion to this study is that it underscores the role of decolonisation in the development of African languages, and this development, by extension, could equip aspects of language teaching, including technology for teaching to be African relevant. As such, teachers are not only to be provided with technology in teaching but that which is peculiar to African languages.

2.4.1 Decolonisation and the use of technology

Research has emphasised the impact of decolonisation conversations on educational practices in higher education. These conversations have been ongoing for around three decades and are championed by prominent African scholars focusing on linguistic decolonisation's influence. These conversations indicate that decolonisation can be applied to different aspects of the people of Africa that Westernisation has profoundly influenced.

The writings of wa Thiong (1993) and Achebe (2000) point to the fact that language and culture are central points of Western subjugation and struggle in the world's developing nations, of which Africa is one. They argue that the ubiquity of Western

languages in Africa is the main motive behind the continuing agitation for decolonisation in all facets of African lives and, as such, clamour for authentic decolonisation to be put in place such that colonial languages, theories of knowledge, tales, literature and modes of living must be abolished and substituted with indigenous ways of living on the continent of Africa. I agree with wa Thiong's and Achebe's submission that all features of Africans' lives and living should be decolonised for true decolonisation, including educational settings.

The call to decolonise African languages, by implication, suggests that African language teaching must be conveyed using African languages. By extension, technology and teaching African languages must be designed to recognise the language and cultural perspectives of the indigenous people for whom it is designed.

Arnold (2005), however, argues that since technology is believed to be the invention of colonialism, this can lead to its failure if it conflicts with the language and the culture of the people it is designed to benefit. He states that technology is usually perceived as an innovation; however, it goes beyond innovation to adoption by people who co-exist with cultures, identities, beliefs and other aspects that interact. I contend that technology, just like language, is a form of communication that can trigger desirable or undesirable reactions from users in a particular social context that, in turn, affects the immediate and future adoption and use of technology.

Given that teaching takes place within a social context where actors (lecturers) are actively involved in the activities of higher education, I argue that the residual consequences of colonialism have profoundly shaped the formation and use of many African languages. During the colonial era, European languages were imposed as the languages of administration, education, and social mobility. This resulted in the suppression of indigenous African languages and the integration of foreign linguistic elements and structures. As a result, many African languages today retain vestiges of their colonial linguistic heritage. The continuing agitation for linguistic decolonization aims to reclaim and revitalize the authentic roots, structures, and expressions of African languages by purging them of imposed colonial influences. Within the higher education setting in Africa, this movement for linguistic decolonization could impact lecturers' effective use of technology for teaching African languages that have undergone colonial linguistic acculturation.

Ouane and Glanz (2010) espouse African countries' investment in multilingual education and African languages more than the Western languages that many still adopt as their official languages. By so doing, technology use in teaching and learning African languages is promoted and sustained. The sentiment highlights that the inability of African countries to develop and modernise their languages as would be done for Western languages could make it challenging to develop African languages and their components.

2.4.2 The roles of technology in teaching and learning African languages

Research has underscored technology's significant role in teaching and learning African languages. One such role is that it could influence and promote traditional teaching and learning activities, significantly affecting the learning outcomes. Jaffer et al. (2007) assert that technology offers African language pedagogy resolution to issues that could have been cumbersome, problematic and probably incredibly difficult to resolve using the traditional method of teaching and learning. They, however, caution that it is essential to identify aspects of African language pedagogy where the use of technology will be suitable so that the use of technology may not end up being ineffective.

Egbokhare (2003) also emphasises the role of technology in teaching and learning African languages. According to him, technology provides endless opportunities to tackle the issue of language endangerment, which has been plaguing African languages, while simultaneously creating a viable bridge between different languages, access between diverse cultures and a link between minds. This emphasis indicates that since technology is effective in sustaining the teaching and learning of African languages and, at the same time, it addresses challenges of language extinction in the African context, it is equally essential that technology is used for the proper purposes because this would significantly and positively impact learning outcomes.

On his part, Chima (2013:5) opines that the role of technology in teaching and learning African languages could contribute to radical changes to schools' teaching and learning systems by providing ample opportunities for schools to connect with communities. This observation suggests that technology could serve as a tool for social cohesion by providing shared knowledge and engagement with users within and outside educational institutions.

The use of technology in teaching African languages, according to Dalvitt et al. (2005), plays a vital role in bridging the digital divide that exists in higher education in Africa through equipping teaching and learning with tools whose development has undergone shaping by the teaching and learning needs of both instructors and students. Mohochi (2022) identifies 'collaboration' as an essential way of bridging the digital divide in African higher education. He states that universities across Africa need to improve the use of technology for teaching African languages through collaboration. This collaboration would aim to discuss and agree on procedures and processes to ensure appropriate technology is used in teaching and learning African languages. This collaborative approach could further assist the collaborating universities in developing culture and language-related technological tools for teaching different languages and different languages teaching aspects instead of language instructors relying solely on the ones provided by their institutions.

2.4.3 Factors affecting the use of technology in teaching and learning African languages

Despite the growing need for language instructors to engage with technology to teach African languages, research has identified several factors affecting the use of technology in teaching and learning African languages. Quane and Glandz (2010) laments the inadequate development of African languages to the status of instructional mediums in the classroom. According to Quane and Glandz (2010:15):

African languages cannot modernize themselves or develop or be developed, [as they have been rendered] inferior to the ex-colonial languages which have now been adopted as official languages. African languages are therefore not equipped to serve as the medium of instruction at tertiary [education] level.

Quane and Glandz's observation indicate that colonialism still affects the policies of African countries regarding language development and investment in language education. Notably, there have been many debates regarding technology development for African languages.

Most focus on general technology development and little on the development of educational technology for teaching and learning African languages. In line with this, Gudhlanga (2005:63) asserts that the breakthrough in the educational systems of

some Asian and European countries, such as Japan, China, Italy, Germany, France and Denmark, in their adoption of what he calls the "indigenization of technology and the translation of the processes [of technology] into terms that an ordinary [language speaker] could understand", emphasises the importance of localising technology, in other words, developing technology for African people, and that is to say, 'linguistic decolonisation'. Gudhlanga (2005), therefore, advises that African languages should be allowed to grow just like the Western languages grow over the years. Moreover, every language is dynamic, and technological terminologies can be developed over time and used in teaching and learning.

Other factors affecting the use of technology in teaching and learning African languages, according to Nyamekye et al. (2021:248), are insufficient knowledge regarding the execution of technological instructions, scarcity of relevant teaching software, and language instructors' reluctance to migrate from the traditional mode of teaching and learning to the modern technology-assisted mode. Some language instructors believe that technology use in teaching and learning should only happen in science courses and not African languages, hence their hesitation to use technology in teaching African languages.

A similar finding by Miima et al. (2013) reveals that language instructors hesitate to use technology in their teaching. They noted an instance in Kenya where Kenya's government provided multiple interventions to provide the necessary tools to assist language instructors. The study reports factors such as resistance to change, insufficient time, absence of confidence, and inadequate knowledge of the full use of technology (Miima et al. 2013:31) as affecting technology adoption in teaching Kiswahili in Kenya. These observations by Miima et al. (2013), particularly the factors of resistance to change, insufficient time, absence of confidence, and inadequate knowledge of technology usage, suggest that language instructors' hesitation to adopt technology in teaching is not only due to their individual biases but is also influenced by contextual factors such as social conditions, cultural settings, subjective norms, relationships, and childhood experiences.

The factors identified above suggest that the challenges regarding the use of technology in teaching and learning African languages are not only related to organisational and managerial challenges but also have to do with the instructors'

social context. What this study does differently from studies such as Miima et al. (2013) and Nyamekye et al. (2021) is that it captures the social contexts of language lecturers that influence their attitudes towards the use of technology in their teaching and how their social contexts shape and influence their responses to use of technology at the individual and institutional levels. Thus, this study intends to investigate the social factors of lecturers regarding the use of technology in teaching African languages to identify factors that may be responsible for the effective/ineffective use of technology in language lecturers' teaching.

A prevailing gap identified in the literature review on the use of technology in teaching is that many previous studies focus more on the institutional, administrative and financial aspects affecting lecturers' effective use of technology in teaching but neglect the social context of lecturers. This neglect affects the operational conditions of the teaching processes and can cause major setbacks that influence the use of technology in teaching. Research in language pedagogy of late has started to pay attention to the social context of lecturers in their use of technology in teaching different subjects (Johnson et al. 2009; Révai 2020) and given that the use of technology in pedagogy is an ongoing activity, there is a crucial need for research to explore the role that social context plays in lecturers' use of technology in teaching and learning African languages to contribute to the development of language pedagogy.

It is evident that there is still a great deal to be done in measuring lecturers' perceptions of the use of technology in their teaching, and for this to come to fruition, comprehensive and insightful research that pays specific attention to the study area would be necessary. I believe that the said attention to lecturers' perceptions of the use of technology in their teaching would feature the social contexts within which lecturers have traditionally functioned as guardians and conveyors of educational and cultural knowledge within society. As such, lecturers must adapt to the transformation technology has made possible in education to reflect these transformations in their teaching. This perspective of investigation would contribute to a better understanding of the intricacies between lecturer's practice (teaching) and their social contexts.

2.5 The Use of Technology in Teaching African Languages at South African Universities

The study earlier reports on *'massification and technology in education'*. Several factors influence the South African version of massification in higher education. According to Wolhuter et al. (2012), the first factor is the sharp increase in the number of learners enrolling in higher education and the demand (economic, demographic, political, social) to intensify further learners' enrolment. The second factor responsible for massification in higher education is the pressure on higher education institutions towards economic viability, for instance, a growth (qualitatively and quantitatively) in the production of graduates with a lesser cost of production. Teaching in crowded classes in South Africa has become a reality that higher education institutions continue to bear because of the pressure to multiply the size of the classes if higher education institutions want to stay profitable. Hence, it is no longer news that South African higher education instructors are plagued with teaching in crowded classrooms.

To deal with the magnitude of challenges that massification has caused to South African higher education and for it to stay productively relevant, higher education introduced technology into teaching and learning (Malan 1999; Masuku and Masuku 2021; Yende 2021). Incorporating technology into the South African higher education system is also a simple way to describe pedagogical methods, illustrated with terms such as multimodal, technology-assisted, hybrid, etc., approaches to teaching. These terms refer to the logical, systematic and insightful incorporation of different teaching methods to facilitate effective learning of learners (Chetri 2022). Different teaching methods are meant to mitigate uptimes and downtimes such that the objective function of teaching and learning is achieved, namely, developing and producing independent learners who have behavioural changes and can achieve the required standard of academic excellence.

Language teaching, especially African language teaching, is no exception to this technological incorporation in its pedagogical methods in an attempt to achieve the famous South African historical slogan of the 1955 Freedom Charter that says, "The doors of learning shall be opened to all" (Beckmann 2011), and fulfil the prestigious responsibility of South African higher education as a tool for the transformation and promotion of equality among South African languages. However, the use of technology

in South African universities is still in a developmental stage. Many South African universities are still *trying* to use technology to teach African languages. It is safe to say that South African universities are still struggling to incorporate technology into teaching African languages. The reason for this is not hard to find. A study by Mutasa (2015) laments that teaching African languages continues to face students' limited enrollment every year. As a result, some programmes and departments offering African languages have been redeploying staff, and some have had to close. These challenges suggest that in the event of a drop in learners' enrolment in African language programmes, which results in the battle for the survival of African language departments and programmes, it would be difficult to introduce technology. In other words, the timing may not allow the programme and department to think or recommend the use of technology – the priority would be to resuscitate the dwindling enrolment of learners in African language programmes.

Bagarukayo and Kalema (2015) submit that though some South African universities adopt technology in teaching and learning African languages, even assessment, there seems to be no standard method for its use across all South African universities. The implication of Bagarukayo and Kalema's submission raises a concern about the use of the full potential of technology as a result of South African universities' inability to adopt an even standard regarding the use of technology in teaching African indigenous languages. This might also seriously threaten the sustenance of technology in African language pedagogy.

Makalela and White (2021) adopt a rather humanistic approach to using technology in teaching and learning African languages in South African universities. They support multilingualism within the pedagogical approach to teaching and learning. Makalela and White's argument stems from their profound understanding of the fundamentals of the term 'Ubuntu' in the educational space, a South African word that means 'humanity'. The term is conveyed in the Bantu language as 'I am because you are'. The term embraces the concept of humans' inability to exist in seclusion. They advocate for Ubuntu in South African universities to support the development of linguistic and multilingualism technology in South African universities. This approach to teaching and learning is premised on promoting inclusiveness and harmony and sustaining the use of technology in the teaching and learning of African languages.

They reiterate that African language lecturers typically use African indigenous languages to support their teaching in the classroom. However, the Ubuntu approach to linguistic and multilingualism technology in African language teaching remains a nightmare in South African universities.

The implication of Makalela and White's (2021) argument is that while research has consistently pointed out the perpetual need for African language teaching to be promoted in all educational spheres, the approach to multilingualism technology pedagogy remains an illusion, and it is a fact that multilingualism technology pedagogy has been left behind in South African education development. The implication is that there continues to be a wide gap between the theory and practice of multilingualism pedagogy in South African universities.

Makalela and White (2021) weigh in on the intervention strategies that could rescue the dwindling rate of technology use in the teaching and learning of African languages by asserting that African languages will continue to be in danger in South Africa because of the domination ascribed to the Western and mainstream languages that also extend to technology. The indication is that the continuously increased use of Western languages as communication via technology in the classroom may result in the extinction of African indigenous languages from the classroom. Consequently, technology for African language purposes may remain undeveloped or underdeveloped.

Finally, Ndebele (2014) demonstrates how localisation of technology could improve the teaching and learning of African languages in South African universities. He emphasises that the challenges of using technology in teaching and learning African languages could be acknowledged within the framework of the different factors interacting side-by-side. He notes that such factors are education, politics, economics, society, language and technology. He asserts that these factors do not affect the use of technology in isolation: they function together to contribute and give a clear notion of the challenges facing technology use in teaching African indigenous languages in South African universities.

He also reiterates the need for language and technology specialists to build and sustain a culture of collaboration to achieve feats regarding using technology in

teaching and learning African languages in South African universities. The implication is that collaboration between technology and language professionals will further facilitate coherence and understanding of technology and language policies relevant to pedagogical decisions regarding the use of technology in teaching and learning African languages in South African universities.

The following aspects stand out from this section focused on the conversation about the use of technology in teaching African languages at South African universities: the aftermath effect of massification of higher education in South Africa, the pressure on South African universities to remain relevant by the aggressive enrolment of learners, the decreased registration of learners in/from the language departments/programmes across South Africa universities, the uneven, non-standardised method of technology use in teaching African language in South African universities; the humanistic approach to the adoption of technology in teaching and learning African languages in South African universities, multilingualism technology pedagogy, the dominant use of Western languages as the technology communication approach in South African language classrooms, and the relevance of localisation of technology as an improvement on the teaching and learning of African languages in South African universities. The integration of technology into the teaching of African languages at South African universities faces administrative and procedural challenges. A key question is whether these universities will actively promote the increased use of technology in language education, transforming the teaching of African languages into a more meaningful and humanizing experience.

While technology has the potential to revolutionize the teaching and learning of African languages, the social context and the role of educators cannot be overlooked. Educators' actions and decisions are crucial in facilitating the adoption and sustained use of technology in African language instruction. At the instructional level, greater emphasis should be placed on educators' attitudes as they engage in ongoing dialogue and accumulate new narratives through experiential learning. This emphasis highlights the importance of habits as the link between individuals and institutions (Bourdieu, 1990).

CHAPTER 3: Theoretical Framework

3.1 Introduction

This chapter is focused on Bourdieu's social theory, which is the theoretical framework for this study. Bourdieu's social theory has been widely applied in studies of education for many years now to investigate the interconnectedness between educators, their immediate environments, and the cultural features of their institutions and outside their institutions and how these features affect instructors' practices (Grenfell and Kelly 2003; Kirsten 2021; Lingard et al. 2005; Nash 1990; Yang 2014;). The primary conceptual constructs of Bourdieu's social theory are field, habitus, capital and *illusio*. These constructs provide a lens through which to understand the complex nature of the relationship between the practice of individuals and social structures (Dai 2018; Kilvington-Dowd and Robertson 2020), therefore offering "insights and understanding not readily visible in other approaches" (Eacott 2014:64). His theory is applied in this study to investigate the complexity surrounding language lecturers, which could predate their intention to use or not use technology in their teaching and which could also be socially context-dependent. The concepts of field, habitus, and capital allow me to examine how the habitus of lecturers shapes their practice (teaching), how the academic field in which they practice also limits their actions in the teaching process, and how consequent actions shape the field. In addition, Bourdieu's theory of practice has been extensively adopted in language education studies; it enables the juxtaposition of the theory with studies of other educational scholars. In the next section, the concepts of field, habitus and capital are expanded upon, and their suitability to lecturers' social contexts is assessed.

3.2 Bourdieu's Theory of Practice

Bourdieu's theory can be historically traced to the tail end of the 1950s and the 1960s when it was believed that scholastic thinking is based on either subjectivism or structuralism (Nash 1990). The concept of subjectivism, also known as agency, holds that humans are responsible for all their actions, while structuralism, also known as objectivism, holds that human actions are culturally and socially determined (Demirci 2019: 8-9; Dutta 2014:33). The seemingly conflicting views between these two notions is what Bourdieu sought to resolve by proposing a convergent social theory that would

take care of the frequently conflicting views of the world that are based on genetic structuralism, constructivist structuralism and structuralist constructivism (Frère 2011:248). Bourdieu's structure and agency have been argued to be a mutually inseparable pair and, therefore, an indication that the social world can be moral (McIntyre et al. 2018:70; Van Langenhove 2017:11). This suggests that although the agent's actions are governed by some sets of laid down rules governing social space, the agent can also perform conscious actions that modify their knowledge state and consequently shape the social space. Bourdieu (1977: 37), therefore, maintains that to understand agency is to recognise that it is dynamic, contextually delicate and primarily founded on a set of unconscious identities and attitudes embedded directly in the system of agents contained in a particular society. Bourdieu's theory of practice focuses on field, habitus, and capital. Bourdieu used these concepts to describe the generating forces of human actions and behaviours at a particular time (Shustennan 2000). Bourdieu (1984: 101), therefore, suggests the following formula to explain his theory:

$$[(\text{habitus}) (\text{capital})] + \text{field} = \text{practice}$$

The formula connects the three central concepts of Bourdieu's work. Habitus and capital as concepts interact with the field, which then leads to the production of practice (Horvat 2003:9). The following sections will delve into the concepts of field, habitus and capital as they have been adopted in language teaching and learning studies within the sociological purview.

3.2.1 The concept of field

Bourdieu developed the concept of field to actualise his epistemic approach to the study of relationships in the social space and as a response to the structuralist approach, which tends to view the actions and behaviours of social actors as controlled by forces beyond the control of the social actor (Dressler 2007; Singh 2019). Bourdieu thus believed that social actors, regardless of where they exist, are historical products and, as a result, control the situation that produces them. Bourdieu and Wacquant (1998:8-9) define a field as:

A structured space of positions, a force field that imposes its specific determinations upon all those who enter it ... and through which agents and

institutions seek to preserve or overturn the existing distribution of capital ... [and it is also] the bases [where] identity and hierarchy are endlessly disputed over.

This definition suggests that the field concept is an independently organised platform where agents have specific and specified roles determined by their hierarchical positioning in the platform. It is organised and functions on known guiding rules followed thoroughly, consistently and transparently by field residents who acknowledge and respect the rules (Golsorkhi et al. 2009). The collective knowledge of the rule of the field by the residents and the fact that it is worth playing is what Bourdieu termed “illusio” (Bourdieu 1996). He uses *illusio* to explain agents’ attraction to participate in field actions due to their conviction that it is beneficial (Awung 2021:248).

In this regard, Ghani (1999) identifies some independently organised fields, such as the cultural field, economic field, and field of power, and he argues that what differentiates these fields from one another are the control measures put in place to regulate the activities of such fields. Different agents are placed in different positions in the field, and the more elevated the position of the agents in the field, the higher their “symbolic power to assert relevant attributions of meaning and designations for the field” (Lüthje 2017:14). Symbolic power is a power that originates from esteem (Pellandini-Simányi 2014) and “is defined in and by a determinate relationship between those who exercise this power and those who undergo it – that is to say, in the very structure of the field in which belief is produced and reproduced” (Bourdieu 1977:117). Therefore, the field can be viewed as a ground on which agents contend for specific values particular to the field and their position in such field (Bourdieu and Wacquant 1992:17).

The implication is that a field is a place where hierarchy is constantly the hallmark of the agents, and the hierarchy structure is designed so that agents are inclined to gather as many resources as they can and proceed to another, higher level of influence in the field. Therefore, there is persistent conflict among agents, a process that then translates into agents’ attempts to conserve or transform the field’s structure (Bourdieu 1989:59). It is worth noting that the agent does not come empty-handed when entering the field; they bring along with them the appropriate resources and

dispositions that, first and foremost, determine what position they hold. In addition, it determines the influence they will have on the members of the field (Peillon 1998: 220). The influence that an agent takes along during the transition to another field is a function of their habitus and capital, which unintentionally has consequences by unconsciously creating a 'barrier of entry' for such an agent to join another field (Bhargava and Theunissen 2019:2; Bourdieu and Wacquant 1992:75; Day 2015: 62).

This suggests that the extent to which an agent shapes the structure of a field is a function of the habitus and capital that the agent takes along with them to the field and inadvertently depends on how influential the agent is in the field. So, although the field's structure restrains the agents' actions, the agent also modifies the field's structure through their actions. Bourdieu's theory of practice is founded on this mutual relationship between the field agents and the structure, and this relationship is what Bourdieu (1990:57) refers to as a 'dialectic relationship'. For this reason, I argue that the field concept is appropriate for a study investigating how the actions of lecturers of African languages can shape and are shaped by the social environment in which they work.

Drawing on Bourdieu's theory, language teaching is a field, hence the application of the field as one of the concepts in the present study. In this regard, language teaching is viewed as an established social practice that is woven around the sociocultural relationship between certain individuals (the lecturers) and their specific fields, which serve symbolically as the artist and co-artists, respectively (Gasser and Althof 2017; Piazzoli 2018; Stengel 2015).

By implication, agents that are involved in language teaching are confined to the language field where components of culture are taught (Dong 2011:69). The teaching of language, therefore, involves field agents such as language lecturers, heads of programmes, and heads of departments, some of whom have the academic rank of doctors and professors with various qualifications attached to their names and titles. It should be noted that the field of language teaching goes beyond the department. There are other agents external to the department; these include faculty management, university management, etc., and they influence departmental members' actions through adopted policies (assessment policies, remuneration policies, research policies, promotion policies, etc.).

The abovementioned set of agents belong to different hierarchical classes, and these hierarchies determine the function of each in the field. It should also be noted that the hierarchy of these agents can double; for example, the head of a programme can also be a language instructor and vice versa, and in some cases, the head of the department can also be the head of programme and a language instructor at the same time. However, this duplication of roles only happens in rare cases. The relative influence each of them has on the day-to-day events of the field is proportional to how much influence they have amassed to influence the events on the field to safeguard their interests. For example, going by hierarchy, university management is considered superior to faculty management, while departmental management is considered subordinate.

Inadvertently, there are often elements of struggle for power among these agents, and this power struggle arises out of an attempt to gain influence to exert dominance towards promoting their interests in the field. Agents' interests may vary, such as promotion, recognition, awards, professional qualifications, and factors they believe would enhance their existing positions (Cronin 1996; Özgör 2018; Sayce et al. 2021). For instance, at the departmental level, a department head may give curriculum advice that promotes certain personal philosophies to the academic head, which is then passed down to the language lecturers in the programme. I, therefore, argue that the relationship between agents and the field, the features of the field, and the agents' understanding of the field shows how the field is generative and survives through the interests of the agents that play within it.

The work of Bourdieu further suggests that a field may consist of other subfields of the main fields, and such subfields can also have restrictions that distinguish them from other subfields (Grenfell 2014:70–71). The field of medicine, for example, could consist of subfields such as surgery, emergency medicine, dermatology, pathology, psychiatry, preventive medicine and urology. Regarding language teaching, Zotzmann and Hernández-Zamora (2013:357) have this to say:

...the field of language teaching ... has emphasized the interplay between language, culture and identity and promotes both communicative and intercultural competencies ... and voice (the politics of recognition) at the

expense of socio-economic structures and relations (the politics of redistribution).

Hence, language teaching is a field. Byrnes (2000:491) has the following to say about language teaching as a field:

Language teaching has increasingly become ... multivoiced as the languages we teach and as multilayered as are the societies within which we practice, powerful unifying, centralizing, and standardizing moves notwithstanding.

Language teaching, therefore, is a field with its autonomy and rules, which all members (agents) are aware of and, of course, make an effort to uphold, and there is an existing institution responsible for protecting the autonomy of the field and enforcing rules on the members (agents) of such practice.

Pishghadam et al. (2012:894) argue that language teaching professionals endeavour to perform their respective duties according to the prescribed “rules” guiding the profession and are also trained to “reflect on, and be sensitive to, their own context-specific teaching practice”. The suggestion is that language teaching is a field where members are obliged to follow the rules of practice to thrive.

Language teaching is an autonomous field guided by specified rules that agents must follow to thrive in their practice. It should be noted that language could also function as a subfield in education. The agents not only abide by such rules but are also conscious of those specific to their field of practice. It is in this context that I analyse the use of technology within the field of language teaching, the specific part that the different agents play, such as the language instructor, head of programme, and the head of the department, and ask how the abovementioned factors influence the decisions of language lecturers to use or not to use technology in their teaching.

3.2.2 The concept of capital

The concept of capital was developed by Bourdieu (2011:81) to explain the field functions further. He defines capital as:

... accumulated labour (in its materialized form or its ‘incorporated,’ embodied form) which, when appropriated on a private, i.e., exclusive, basis by agents or

groups of agents, enables them to appropriate social energy in the form of reified or living labour.

This definition suggests that the success of the activities of the field is dependent on the agents' possession of some volume of resources. These resources are responsible for their overall participation in field activities, and their participation in the field is expected to accumulate additional resources. According to Painter (2000), capital should not be viewed only in terms of financial resources but related to resources such as position and knowledge. Bourdieu classifies capital into four forms: social, economic, cultural and symbolic. Social capital, according to Bourdieu (2018x:21), is:

... the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group – which provides each of its members with the backing of the collectivity owned capital, a 'credential' which entitles them to credit, in the various senses of the word.

This definition indicates that one's affiliations, such as institution(s) or individual(s), can influence the resources or benefits accrued if one's social capital is good. In other words, the extent to which an individual can tap into social capital is influenced by the size of their network and the combined financial, human, and cultural capital each member possesses within that network. One's political group, family name, professional affiliation or social status can influence the amount of social capital an individual would garner. For instance, a prominent and successful ex-coach of a national team, who is also a member of many professional bodies in sport and belongs to a prominent family in a specific country, is more likely to be nominated by FIFA for a position than someone unknown. Likewise, a language lecturer who belongs to language professional bodies and is also a member of the Senate is more likely to be acknowledged than one who does not belong to any professional body. I, therefore, argue that the use of technology for teaching African languages is not unconnected to the network of individuals and institutions responsible for teaching languages. In other words, the network that lecturers belong to can influence what they identify with and how they carry themselves. As a result of their mutual interaction within the network,

their shared values and beliefs are reinforced, which then influences the decisions and actions of the members. This study, therefore, investigates how social capital could influence language lecturers' use of technology in teaching African languages.

The second form of capital is the economic capital. Economic capital is centred around the field agent's command of and access to economic resources such as assets, money, and properties. Bourdieu (2011:91) acknowledges that economic capital is a significant mobilising capital in the field. A language lecturer, for instance, may use technology to teach language for economic gain; in the same manner, a language consultant who works privately can use technology to make profits. Their preconceived motivations, nevertheless, will influence their contributions to the field and how they relate to other field agents. Shin (2001:317) reports on some teachers in the Mathematics education profession who use technology in teaching mathematics because they feel it is financially profitable. This motivation indicates that their decisions to use technology in their teaching are premediated by economic capital rather than other forms, such as social, cultural and symbolic capital. It is important to note that each form of capital is 'convertible', meaning that forms of capital can be converted. Economic capital, for example, can be used in furthering education to acquire educational qualifications (cultural capital), which may be used to secure a well-paying job (economic capital). This study, therefore, investigates the motivation behind language lecturers' use of technology for teaching African languages.

Regarding the capital they have already accumulated as agents, that is, accumulated labour, which can also be viewed from the angle of habitus as a system of dispositions, the acquisition and accumulation of capital could influence the positions that individual agents occupy in the field. On the other hand, their actions in the field could also be influenced by the capital they have acquired and accumulated, and the various subsequent dispositions possessed by individual agents. The implication of the presence or absence of accumulated and acquired capital on individual agents in the field could be both immediate and long-term. For instance, because economic capital impacts the living conditions of individuals within a particular field, economic stability is sure to influence the social class of those individuals. In this case, a lecturer whose economic capital is impacted positively or otherwise may undergo attitudinal change towards their work, indicating that the potential accumulation of economic capital

through incentives from promotion or teaching awards will likely influence lecturers to use innovative methods in their practice, such as technology-based teaching. Also, lecturers with more financial resources are better positioned to acquire technological equipment in their practice. Therefore, this study will also discover whether financial profitability influences lecturers' use of technology for teaching African languages.

The third form of capital is the cultural capital. Cultural capital involves the skills, knowledge and resources an individual possesses because of belonging to a particular social group. Regarding cultural capital, Bourdieu (2011:83) has this to say:

Cultural capital can exist in three forms: in the *embodied* state, i.e., in the form of long-lasting dispositions of the mind and body; in the *objectified* state, in the form of cultural goods (pictures, books, dictionaries, instruments, machines, etc.), which are the trace or realization of theories or critiques of these theories, problematics, etc.; and in the *institutionalized* state, a form of objectification which must be set apart because, as will be seen in the case of educational qualifications, it confers entirely original properties on the cultural capital which it is presumed to guarantee.

The implication is that the intellectual and knowledge skills attained by language lecturers over time are not the only representation of their cultural capital. The various qualifications validated by awards of certificates of academic completion, certificates of recognition, and awards of excellence also constitute their cultural capital, especially the form of cultural capital referred to as the *institutionalised* state. The language lecturer, for example, after completing a doctoral degree, is awarded a certificate from the institution where he or she has completed the degree. Similarly, an institution may award a language lecturer a top published academic status, and a certificate accompanies this. Cultural capital can also be converted to another form of capital, for example, economic capital – a language lecturer can write and publish books regarding language teaching and learning using technology and sells the books after approval has been granted to his or her institution and others that might be interested as study material. On the other hand, because in an academic field, cultural capital/goods would be research outputs and academic qualifications, this suggests that academics possess varied amounts of cultural goods, and those who have achieved higher degrees of educational attainment are more probably to have more

cultural goods than the those with less educational attainment. It is thus safe to assume that in the academic field, a professor is more likely to possess more cultural goods than other academics, even more than a head of department who is not a professor.

As mentioned earlier, in an academic field, cultural capital/goods that academics could accrue, among others, are research outputs and other academic and professional qualifications. According to Rubtsova and Dowd (2004) and Dumais (2002), these cultural goods in the academic field could trigger some behaviours, actions and attitudes, which are indications of reward for the worthiness and competence of field agents. This suggests that as much as cultural capital symbolises attitudinal and behavioural cues broadly acknowledged to indicate more capital goods, it could also give the possessor more sway to act in a certain way within the field to which they belong. In the academic field, therefore, a professor or any other academic with more capital goods could have more sway in deciding to use or not to use technology in their teaching.

This study, therefore, investigates how cultural capital influences lecturers' use of technology for teaching African languages.

The last form of capital is symbolic capital. This form of capital describes agents' abilities to use the capital that they possess. According to Bourdieu (1998:47):

Symbolic capital is any property ... then it is perceived by social agents endowed with categories of perception which cause them to know it and to recognise it, to give it value ... More precisely, symbolic capital [takes the form of] any species of capital whenever it is perceived through categories of perception that are the product of the embodiment of divisions or of oppositions inscribed in the structure of the distribution of this species of capital

By implication, symbolic capital has more to do with agents' achievements and how they can 'sell' their capital. This form of capital is accrued subject to the validation or recognition that other field agents give to the other accrued form of capital (such as social, cultural or economic capital) acquired by a person or an organisation. That is to say that an academic with many outputs would be recognised and respected by his peers as an achiever, a professor recognised as knowledgeable, and an academic

with funds at their disposal recognised and respected. In the same vein, the actions or ideas of a lecturer would be acceptable or not by the department based on the symbolic capital of the lecturer in question.

Applying this form of capital to this study is crucial for analytical reasons. It also mediates practices by connecting institutionalised power relations and individuals and groups. In this study, therefore, I argue that an astute language lecturer's position depends on the recognition that society attaches to the cultural capital the lecturer has accrued over time. On the flip side, an institution of learning is conferred a certain status by society based on its recognised excellence in teaching and learning and the quality and amount of research from such an institution. This study, therefore, examines the role of status in the language lecturers' decision to use technology in teaching African languages.

3.2.3 The concept of habitus

Habitus describes the societal perceptions and belief systems that tend to impact an agent's actions in the field, and their relationships with the field cannot be severed. In other words, habitus is central to the field and field practice. According to Bourdieu (2013:78), habitus is:

... the durably installed generative principle of regulated improvisations, produces practices which tend to reproduce the regularities immanent in the objective conditions of the production of their generative principle, while adjusting to the demands inscribed as objective potentialities in the situation, as defined by the cognitive and motivating structures.

The suggestion is that habitus is an implicit underlying action devoid of human conditioning and decisions or deliberations and more of an intelligent deed. In other words, habitus is not a product of choice or regulated by structures but formed by the interaction between dispositions that are shaped by events of the past and structure as well as shaped by practices of the present and structure and that condition our actual perceptions of this habitus (Bourdieu 1984:170).

Bourdieu argues that habitus is the product of continuous practical actions embodying history that later metamorphose into a developing and natural skill in a specific environment of people. It also captures how people transport their history with them

into their current situations and afterwards make certain decisions to behave in a specific manner (Bourdieu 2013:82). This implies that habitus is a multifaceted concept that works at the societal level of individual and family and later manifests in the latter part of human by influencing their decisions and outlook on life. There are two stages, therefore, to how habitus is incarnated into human history. These are the primary and secondary stages.

The primary stage occurs early in an individual's life when they acquire character from interacting with their environment. For example, a child internalises the traits through experience and relationship with its environment and family. The second stage is a stage that is acquired through specialised skills and experiences such as education, which can be formal or informal, and other subsequent experiences.

The stages of habitus indicate that the way humans behave, react to situations, and look upon life are products of the accumulation of the history that they have come to know from when they were babies until the period they can observe, take action and be confident on their own. In other words, lifestyle judgements of people, things, interests and desires are not just products of conscious choices but products of the embodiment of history. The concept of habitus is relevant to this study in that it will be instrumental in examining and describing language teaching agents' preferences for technologies in their teaching practice. Some language lecturers, for instance, may decide not to use a specific technology because it goes against their principles and moral standards; these principles and moral standards are a function of their education and past experiences. Departmental heads can also choose to ratify or not the use of technology in teaching language in the departments they head for similar reasons.

It is also important to note that habitus can be distinctive and collective. In other words, people can own a different and similar habitus. By distinctive habitus, Bourdieu (1990) means that people can possess a particular habitus based on their past experiences, while the collective habitus is shared by people who share the same communal history and conventions. Relatives and offspring with similar experiences tend to exhibit the same behavioural patterns. A particular music genre can dominate in a specific society due to the past experiences of each society of that music genre. Similarly, a particular teaching method may be approved or disapproved due to collective historical and cultural knowledge of it being acceptable or unacceptable.

In light of globalization and its potential to create shared global experiences, the conceptualization of habitus needs to be revisited. Bourdieu's notion of habitus, which refers to the ingrained dispositions and practices that individuals acquire through their experiences within specific social and cultural contexts, may need to be expanded to account for the interconnectedness and cultural flows brought about by globalization.

While Flintoff's (2005) example illustrates how habitus can shape teachers' attitudes and decisions regarding the use of technology in teaching drama studies, globalization introduces new dynamics that challenge the traditional boundaries of habitus. With increased mobility, cultural exchanges, and the proliferation of digital technologies, individuals are exposed to diverse experiences and influences that transcend their immediate social and cultural milieus.

In this globalized context, habitus may no longer be solely determined by local or national contexts but also influenced by global currents and shared experiences facilitated by technological advancements and cross-cultural interactions. As people from different backgrounds engage with similar global phenomena, such as social media, popular culture, or global issues like climate change, they may develop shared dispositions and practices that cut across traditional cultural boundaries.

This raises questions about the formation and negotiation of habitus in an interconnected world. While local and cultural contexts remain important, global experiences and interactions may lead to the emergence of a "global habitus" that shapes individuals' perceptions, behaviors, and decision-making processes in various domains, including education and teaching.

In the context of teaching African languages, lecturers' past experiences with technology may not be solely rooted in their immediate cultural or educational contexts but also shaped by their exposure to global trends, best practices, and shared experiences within the broader academic community or through online platforms and resources.

Therefore, in studying the role of lecturers' past experiences in their use of technology for teaching African languages, it becomes essential to consider not only their local habitus but also the potential influence of global habitus, which may introduce new perspectives, practices, and dispositions that transcend traditional cultural boundaries.

In conclusion, Bourdieu's theory has not only maintained that agents of a field can move up and down in society over time based on the social, economic, cultural, and symbolic capital that they accrue over the years, but the forms of capital also act as pillars of strength for agents by creating unimaginable opportunities to better their lives socially and financially. It is also insightful to note that each capital form is convertible into economic capital.

Habitus is a concept that accounts for an individual's preferences, routine patterns and meaning-making, which are simultaneously represented by their practices and thoughts. The structuring aspect of habitus, which is responsible for lived experience, influences how an individual acts and thinks in a certain way consistent with the institutional, cultural and social norms through acculturation. The implication of habitus on an individual's perspectives and changing choices could be the following: (a) individuals perceive their actions as 'natural', but in the real sense, the actions are structured by programmed dispositions that they have nurtured and sociocultural knowledge and practices; (b) individuals acclimatise to the requirements of the social state of affairs; (c) individuals make an effort to improve their acquisition of different forms of capital. The implication is that the habitus of lecturers could have the ability to influence their decisions to use technology in their teaching.

I argue that if a lecturer has been exposed to technology use in teaching, they develop a habitus that makes them more inclined to use technology than a lecturer who does not have the same level of exposure and, therefore, does not have the same habitus. This study investigates the use of technology in teaching African languages at three universities in Kwazulu-Natal, South Africa. It explores how prior experiences of lecturers (vis-à-vis field, capital and habitus) affect their decisions to use or not to use technology in their teaching.

3.2.4 The concept of *Illusio*

Bourdieu later developed a concept called *illusio*, which bears no relation to the Greek's etymological version and origin of the word but was developed by Bourdieu to describe relations to agents and the field. The concept of *illusio* is crucial to understanding how social structures and systems of power are maintained and reproduced. Bourdieu and Wacquant (1992:98) argue that *illusio* is a form of collective or shared beliefs that individuals in the field possess to willingly participate in social

practices because they perceive them as legitimate and meaningful, and as such, such practices should not be questioned. Research has shown that the concept of *illusio* is seldom explored outside the works of Bourdieu, even though the concept is pivotal to Bourdieu's reasoning (Wacquant and Bourdieu 1992:97). It is only recently that attempts have been made by scholars to idealise the concept into workspace literature and are featured in higher education-related research (Kalfa and Taksa 2015; Threadgold 2018). *Illusio* remains crucial to understanding Bourdieu's articulation between the field's objective decisions and habitus's fraternal subjectivity and provides valuable insights into how emotions and ethics are connected to the logic of practice.

Bourdieu defines *illusio* as “the fundamental belief in the value of the stakes and of the game itself” (Bourdieu 2005a:9). Some quarters have erroneously translated *illusio* to mean “illusion” (Mellquist 2022); however, as used by Bourdieu, the concept of *illusio* asserts that humans are caught up in a game; they believe that the game is worth playing, are committed to it, and believe in the fact that they are joint stakeholders in its investment within the field (Bourdieu and Wacquant 1992). The implication is that *illusio* is more purposeful, clear, and deliberate than a common belief. It aligns with workplace theories emphasising a sense of belonging and shared identity in professional settings. It also supports a professional model that prioritises the interests of stakeholders. Furthermore, *illusio* involves a strong emotional connection and genuine concern for the happenings in the workplace.

Whitfield (2020) foregrounds some critical steps through which Bourdieu views *illusio* as taking shape between different field agents. The first step is to understand that the different classes of agents could bring considerable interests into the field, and some of these interests could dominate others. For instance, in the higher education institution, the dominant interest of the institution and policies may dominate the *illusio* of academic professionals. The second step is that it is essential to investigate beyond the usual rhetorical strategies for measuring the genuine stake that agents strive towards in the field. The third step is the evasive way the majority class disguises and promotes their real partisan interests within the field via rhetorical repudiation of interest. Such evasion is often the case in the civil service, which consistently avouches acting for the public's good, whereas often, they promote their own selfish interests (Bourdieu 2000; Lenoir 2006; Wacquant 2004). The implication is that

members/agents of a field are caught up by and in the game emanates from the confidence that the game benefits them as individuals. In this case, lecturers' interest in using technology stems from the belief that technology is beneficial and vital in language teaching. The degree of this belief is likely to influence lecturers' decisions to use technology in language teaching.

The above view portrays *illusio* as more agentic than communal, and, according to Colley (2012:324), it is instrumental in understanding the objective determinations of the field and the socialised subjectivity of habitus. By implication, if members or agents of a field differ in *illusio*, the game will not interest them and make no sense to them, and they will cease such members/agents' engagements in the game.

The concept of *illusio* is relevant to this study because it examines the field of higher education as inhabited by agents shaped by the teaching and research habitus. This field places prominence on producing knowledge and research and is interested in the state of the art and innovation instead of financial gain. Academics, generally, would pay more attention to intellectual conscientiousness, value dedication to knowledge, and reject anything regarded as 'common sense' but accept what is founded on rigorous investigation, objective analysis, and transparent findings. In the same way, the habitus of members of a field and the values of the field are different, so the production logic of different fields differs: the higher education field is focused on knowledge production. It operates under the purview of academic ethics and conduct.

Teaching and research, as indicated above, hinge on each other for support; for example, teaching depends on instructors' pedagogical content knowledge and subject matter knowledge (Posey et al. 2019:135), while research depends on scientific empirical inquiry and procedures to untangle research problems (Maramba 2020:28). This suggests that the former depends on the latter for evidential reasoning and results. The connecting point of both is the quest for innovation, and both seem less focused on pursuing economic rewards than symbolic rewards. Academics in higher education define rewards as valuing and acknowledging those who contribute to scholarship or knowledge.

The implication of the above 'sacrificial' willingness of members of the field of higher education to undertake and compete for what they feel might be economically

unrewarding could be likened to one of the essential characteristics of habitus, that is, it always brings out virtue from the necessary (Bourdieu 2018b). Furthermore, agents are disposed to do what they have to regardless and discard those things that would have been denied, a choice that is seemingly made unconsciously.

Furthermore, the unconscious choices and disposition of members of the field and how they function within their field is asserted by Bourdieu and Wacquant (1992:127) as 'fish in water'. This assertion implies that just as fish are unconscious of water being around them or feel its weight, members of a field are not disposed to conscious contemplation of why and how they function in it. In other words, they are unconscious of why and how they receive meagre or no financial reward for their laborious engagements in the field and continue to do their best.

The relevance of Bourdieu and Wacquant's (1992) analogy of *illusio* to this study is that it highlights the complementary relationship between the agents and the field. The field is a comfort zone for members of the field and permits them to survive the situations they encounter in the field. By implication, it is pertinent to examine the behavioural factors of field members as they relate to their contexts and how such contexts further contribute to their relationship with the field. In this regard, I argue that Bourdieu's conceptualisation of *illusio* is context-specific because different members bring different values into the field, making them susceptible to being captured by the game (that is, giving in to *illusio*). I further argue that academics who believe in the norms and practices of their profession tend to become stronger over time because they continue to internalise the habitus of the field. I argue that as academics become more proficient at navigating the norms and systems of academia (that is, playing the academic game), they find it increasingly difficult to step back and fundamentally question or critique that game.

3.3 Criticisms of Bourdieu's Theory of Practice

Despite the influence of Bourdieu's social theory of practice, his work is criticised. Bentem (2020:2) critiques Bourdieu's concept of habitus as reinforcing itself and favouring practices that have proved already successful. In other words, Bourdieu's subtle design validating domination through class relations in the field contributes to reproducing the intentional conditions. He further contests Bourdieu's deliberate

silence about whether habitus could be improved and shaped by the practices of individuals. Why should individuals be relegated to 'machines' that obey the commands of the operator and are not able to do otherwise (Bentem 2020:3)? Also, Goldthorpe (2007) and Adam (2006) accuse Bourdieu's habitus of being deterministic, that is, individuals are passive products of their social conditions and are unable to transcend or transform their habitus, thereby undermining individual agency, thus overlooking the potential for social change.

I beg to differ with Bentem (2020), Goldthorpe (2007) and Adam (2006). In as much as Bourdieu did not suggest that habitus is reinforcing itself, it is my view that when he described reinforcement of habitus on the agents' choices (Bourdieu 1990:116), he implies that habitus can be transformed and modified by new experiences and reveal itself in several forms in different social encounters and settings. Experience as a tool for predicting the future is what Bourdieu conceptualises in his theory.

Furthermore, while Bentem, Goldthorpe and Adam disagree with Bourdieu on other things, they do not disprove the reproduction of habitus, which occurs historically and could also be modified through the awareness of people and teaching and learning, otherwise known as pedagogy. Bentem, Goldthorpe and Adam did not deny that people's actions and inactions are products of habitus. I believe that Bourdieu's theory provides a valuable framework for understanding the influence of social and cultural environments on individuals. Moreover, individuals possess agency, reflexivity, and the potential for social change, all of which contribute to a more nuanced understanding of habitus and its role in shaping human behaviour.

Also, concerning Goldthorpe's (2007) and Adam's (2006) criticism of habitus being deterministic, Bourdieu has already addressed this unfounded assumption in an earlier work:

The habitus is not a fate, not a destiny. I must insist on this, as I have done many times before, against the interpretation which was proposed and imposed by some of the first reviews of my work and then constantly repeated by most of the English speaking commentators (as if they spent more time reading the previous exegeses – according to a scholastic tradition which dictates that every reviewer reviews all the previous reviews at the beginning of his or her

reviews). The model of the circle, the vicious cycle of structure producing habitus which reproduces structure and infinitum is a product of commentators (Bourdieu 2005b:45).

I believe habitus and field are mutually influential and not deterministic, meaning that a habitus only influences a field aligned with that particular habitus.

Bourdieu's symbolic capital has also been criticised by Jenkins (1982:278), who contends it promotes 'patterned domination'. Jenkins describes Bourdieu's symbolic capital as being weak as a result of Bourdieu's reliance on the "lumpen model of the working class, which ignores that class's internal differentiation and stratification and underestimates the importance of the possibility of mobility, limited in scale and scope, in the legitimization of patterned domination". As a result of this criticism, Bourdieu's concept of capital is labelled an advocate of historical suppression, which makes agents blind to the ethnography of the present and, therefore, unable to distinguish between the past and the future; hence, what the future holds for actors is a repetition of historical oppression. The theory of practice has also been criticised for its purported general application of universal approaches to emerging situations and practices (Schirato and Roberts 2020:19-20).

Bourdieu, however, made an effort to clarify the misunderstanding around symbolic capital as promoting 'patterned domination'. He clarifies this by emphasising that capital is an open inclination that continuously changes as the agents gain more experience and, by so doing, continuously influenced by agents either through reinforcing the inherent structures or changing them (Bourdieu and Wacquant 1992:127). The implication is that capital empowers agents to make informed decisions rather than confining them to a box devoid of domination by the structure of the field of practice.

On the other hand, Bourdieu resolves the misconception regarding capital as being a tool to suppress history by affirming that agents are not mere "particles" who are being mechanically tossed here and there by the system (Bourdieu and Wacquant 1992: 108-109); instead, agents are carriers of capitals and

Depending on their trajectory and on the position they occupy in the field by virtue of their endowment (volume and structure) in capital, they have a

propensity to orient themselves actively either toward the preservation of the distribution of capital or toward the subversion of this distribution.

This signifies that the underlying reason for an individual's choices in the present and the future is a function of the inclination to voluntary action that the individual has developed over time. In other words, an individual's lived experiences inform their choices.

I maintain that Bourdieu's theory is instrumental to achieving the aim of this study because there are agents who are language lecturers who also serve in different capacities under their institutional structures and whose personal and collective habitus impact their decisions when making informed decisions. In addition, my decision to choose the theory of practice by Bourdieu is because the theory has been widely used in the field of language teaching (Little 2018; Massey 2018; Thorne and May 2017; Pavlakis et al. 2019; Graham and Hearn 2001; Ndebele 2020), which suggests that the theory has endured the test of time and will be relevant in many years to come as an investigating instrument in the field language teaching.

3.4 Bourdieu's Theory in Education Research

Bourdieu's theory has been applied to studies in education to demonstrate the connection between education agents (educators) and their social contexts. This perspective focuses on educators as active members of social contexts whose actions are shaped by the contexts in which they function.

Taking the above into consideration, Giddens (1987), Wittgenstein (1980), and De Certeau (1984) assert that social theory is critical in the analysis of education and educators. Regarding teachers, they argue that the concept of Bourdieu's field considers the context within which teachers operate and how their behaviours are produced and structured in and by their social contexts. Bourdieu's social theory provides an avenue for analyzing individual teachers as producers of behaviour shaped by learning and civilisation. Given this, Warde (2004:4) argues that Bourdieu's social theory helps with rethinking education, especially as it relates to teachers, as built on the understanding that teachers' educational practices predate individuals, logically and historically. Regarding practice, Warde further argues that all practices that have ever been established are historic and mutual achievements.

In other words, educational practices evolve through professionals (teachers) who are members of the field of practice. Warde's assertion is important given that it foregrounds to what extent which social factors of teachers influence what they teach and how they teach what they teach. It emphasises the success of some teachings over others, which results from the social factors that prevail in such fields. Warde's argument is relevant to this study because it investigates the social factors that could lead to language lecturers' decisions to use technology for teaching.

Agbenyega (2017) also sees Bourdieu's habitus as playing an indispensable role in describing where an individual belongs in the field because it explains how an individual sees, interprets and acts in the social space in conformity with their position in the social space (field). Hence, a deficit in an individual does not place them in a position; instead, placement is a product of how other individuals classify others and themselves as part of or not part of a specific space due to the value and amount of their capital. The implication is that the teachers' positions, which are a function of their capital, play an essential role in their contribution to the field of education.

Wong and Liao (2022) argue that Bourdieu's theory has been applied in education to focus on the field agents, who, from different backgrounds, use their cultural capital and habitus to compete for more influential positions in the education field. They also assert that Bourdieu's theory is relevant to education studies because it has made education a field where members/agents engage in healthy competition. This healthy competition has transformed the subfield in which members/agents operate and the general education field (Wong and Liao 2022:778). They further foreground the fact that Bourdieu's theory has been a significant influence in the conceptualisation of education studies because, despite the healthy competition that occurs in the education field, the logic of practice that operates in the field promotes the potential of agency and capacities for accelerated social change, which by implication, transforms the configuration of the practice of individual agents in their fields. As such, this study investigates the role of agents involved in teaching African languages and examines the social factors that influence their attitudes towards using technology in teaching African languages and how their choices influence African language teaching.

Yoon (2020) has applied Bourdieu's social theory to examine the importance of Bourdieu's theoretical system in highlighting the ever-changing sociological fabrics of the choices in the education system. According to Yoon (2020: 194), Bourdieu's theory has been instrumental in understanding the choices made in and outside the education system and how these choices contribute to the reproduction of inequality in social structures. Using the concepts of habitus, field, and capital as a baseline, she asserts that these concepts are necessities in conceptualising the behavioural choices of individual agents in the field of education, and these serve as instruments for social reproduction. Yoon (2020) reiterates that the abovementioned concepts highlight how agents in the education field compete for positions that help them up the ladder of socio-economic prominence within the field. The implication of this to the field of education is that educators will be more productive when the field is open for competition and would promote the interests of agents within the field. At the same time, there would be less productivity when agents feel there is nothing to compete for on the field that would benefit them.

Threadgold (2018) foregrounds Bourdieu's social theory as one that unearths how the field struggles and game conquer agents in the education field as the result of envisaged rewards in the form of devotion to the field through personal investment to enhance their lives and self-development. He further argues that educators' *illusio* is birthed from the dominant doxa and habitus that are infused into agents, a series of beliefs and practices that develop into an uncontrollable and unthinking routine of work within the field (Threadgold 2018:39). He identifies two distinct facets of individual social life that the social theory of Bourdieu's *illusio* conceptualises. The first is that *illusio* exposes the 'hidden profits' that determine educators' actions in education. These can include but are not limited to the discursive facets of individual aspirations, where the motivation to attend a particular higher education institution or to get hired in a particular job is not the only means to attain existential security but also pertains to the types of status, excellence, economic benefits and credit. Second, *illusio* is formed to demonstrate how educators are moved by what he says Bourdieu refers to as 'social libido', which is a social gravity form that lauds an individual out of a realm of insouciance towards attaining their goals and desires (Threadgold 2018:40). This implies that Bourdieu's concept of *illusio* is relevant to the education field as it unpacks further components of individual educators that go

beyond the discursive. The significance of Threadgold's contribution to education is that it highlights the role of *illusio* in influencing educators' actions, which applies to this study as the intention is to investigate the role of *illusio* in the construction of the field of education and in maintaining the motivation of educators during times of crisis.

Thomson (2005) uses the social theory of Bourdieu to illustrate how the education field could be dominated by other fields, such as the economics and political fields, and the fact that when there seems to be a crisis among these fields, those agents belonging to more than one field and holding positions in such fields could attempt to play the same game between such fields. As a result, they also struggle over what Thomson (2005:749-750) refers to as the 'exchange rate' amongst such fields. This understanding is significant in that while educators in the education field can feel stuck in the game, Bourdieu's social theory offers transformative potential to them, which could improve the professional outcomes of educators and result in social and pedagogical transformation.

3.5 Conclusion

This chapter presents a theoretical outlook of Bourdieu's social theory. I argue that the decisions educators make during the teaching process are shaped by social factors that individual agents have encountered at one time or another, not only recent experiences. A sociological perspective, therefore, is necessary to reveal such factors that are responsible for actions in the education field. Regarding this, I attempted to present the historical perspective of the application of Bourdieu's education studies, which reveal the extent to which the theory has been used in conceptualising and analyzing different roles, social relationships and games in education. It is important to note that the aim was to establish and understand how Bourdieu's sociological approach has been applied to the studies in education as a host of not only intellectual practices but also political and economic practices, and these practices all combine to fuel the desire of educators to remain in the game within the field of education. Attempts have also been made to describe the concepts of field, capital, habitus and *illusio* and how they have transformed educational studies. The intention was to reveal the parallel dialectical nature of the relationship between educator agents and their social contexts, where the agents shape the context and, on the other hand, are shaped by the context. This dialectical

relationship further explains how education activities can be analysed by analysing the field in which education happens, the individual involved, the relative power they wield and how all these combine to influence the behaviour exhibited by educators during teaching and learning processes. This understanding offers a foundation for the assertion that Bourdieu's sociological theory is an education studies theory, and it can be instrumental in analysing the social factors influencing lecturers' attitudes towards the use of technology in teaching African languages. The next chapter will be devoted to the methodology of this study.

CHAPTER 4: Research Methodology

4.1 Introduction

This chapter provides an outline of the research methods adopted in this study. It gives information regarding the approaches used to examine individuals, contexts, and institutions included in this study. The data collection method adopted to achieve the objectives of this study and the rationale for the choice, as well as the data collection instrument used, are described. The research design of this study is also described, and the strategies applied to conduct this study are reported. The methods used for analysing the data are also reported. Finally, the ethical procedures used to guide the conduct of this study are discussed.

4.2 Research Design

This study adopted a qualitative approach to achieve the research objectives. This approach was chosen to identify the underlying dynamics in the context under investigation. Adopting the qualitative approach permitted a description of participants' varying social contexts when using technology to teach African languages instead of restricting the study focus to certain aspects of participants' social contexts for using technology in language teaching, unlike quantitative studies such as those by Luef et al. (2019) on smartphone-aided second language learning of African languages such as Swahili, Hausa and Zulu, and Naidoo and Gokool (2020) investigating the implementation of E-assessment of L2 IsiZulu instruction. These quantitative studies focused on specific aspects rather than exploring the broader social contexts influencing technology use in African language teaching. The qualitative approach captures expansive variable sets by investigating the social contexts of participants, which comprise the professional, cultural and historical settings that may impact their experiences (Creswell 2013).

The approach was used to understand how each lecturer cultivates their meaning towards using technology in teaching African languages. In light of this, it was anticipated that better comprehension of the unique social contexts of individual lecturers regarding the use of technology in teaching would arise. At the same time, possible factors influencing their decisions to use or not to use technology in teaching

could also be identified. This approach has been used extensively by studies in the field of language teaching (Biel 2017; Habyarimana 2015; Odrowaz-Coates 2018; Van Der Wildt et al. 2015; Yadamsuren 2010), which enabled the pursuit of a more all-encompassing view of the landscape of their research, viewing trends from different research perspectives (Shorten and Smith 2017:74). This implies that the qualitative approach allowed researchers to use rich data sources to improve their understanding of the phenomenon under study. According to Creswell (2017), the qualitative approach is important because it facilitates the connection between theory and research, allowing the study to be well understood and appropriately conceptualised. The qualitative approach was therefore adopted to explore, understand and explain agents' decisions to use technology for teaching African languages from diverse viewpoints, the contextual understanding of such decisions, and the factors influencing such decisions.

The qualitative approach has been criticised for its inability to explore a broad range of participants when gathering data and its weakness in meeting the established criteria of reliability and validity (Kristensen 2019; Raphael 2018). However, I believe that by investigating language lecturers from three universities in KwaZulu-Natal, rich data was gathered from a wide range of African language lecturers through semi-structured interviews to understand the lived experiences and use of technology in teaching. Applying such a method of inquiry can gather rich data from the target participants, but the ability to generalize the findings to entire populations remains a concern, as qualitative research typically aims for depth and understanding rather than broad generalizability.

4.2.1 Case study

Alongside the qualitative approach is the case study method adopted to gain an in-depth understanding of the contexts under investigation. Data were collected and analysed with a focus on specific agents with particular specialities and, in this case, language lecturers from the language departments/programmes at three universities. The case study is defined by Baxter (2010) as an approach where the researcher investigates a particular example of a specific phenomenon to examine the connection between the phenomenon and the context.

By implication, a case study allows a researcher to pay more attention to the contexts of the study, the complexity of the contexts, the specific problems associated with the contexts, and the history of the contexts, thereby allowing the drawing of inferences about other cases that follow (Litawa 2018). In this instance, the case study approach allowed exploration of the language lecturers' beliefs, feelings and lived experiences to understand their use of technology in teaching African languages in their pedagogical practices.

The case study approach has been critiqued for difficulties in generalising one case to other cases due to limitations in the number of cases investigated (Lakhal 2017:79). In this study, the generalisation of the results of the use of technology for teaching African languages may not be possible. However, the analysis can offer relevant information instrumental in studying the technology used for teaching different languages in other contexts similar to this study.

4.3 Research Population and Sampling

This research took place in the Kwazulu-Natal province of South Africa. Three out of four universities in Kwazulu-Natal were selected. The universities selected were the University of Kwazulu-Natal (UKZN), the University of Zululand (UNIZULU) and the Durban University of Technology (DUT). One other university was not included, namely, the Mangosuthu University of Technology (MUT), because there is no language department/programme at MUT. The research population is language lecturers from the language departments/programmes of the selected universities.

4.3.1 Sampling

Sampling is a statistical process by which a researcher selects a number from a group of people or a population to gain knowledge about the selected portion of the population for research purposes (Bhardwaj 2019) such as purposive sampling, quota sampling, snowball sampling, simple random sampling, systematic sampling, stratified random sampling, cluster sampling, and so forth (Berndt 2020). Berndt (2020) states that various factors, such as the aim and methodology adopted for a study, affect the choice of sampling method. This study adopted the purposive sampling method.

Participants were recruited by visiting the universities' websites to identify some lecturers who could be contacted and help gain access to other departmental

colleagues or give information that would facilitate access. Purposive sampling is a system by which a researcher identifies a particular subdivision of a population that is believed to yield the samples that will best estimate the parameter of the population of interest to the researcher (Bañez 2013). Purposive sampling, as adopted in this study, emanates from the intention to identify lecturers who specifically teach African languages in the language departments of the three universities identified for this study. Lecturers who belong to the language departments in these universities but do not teach African languages were not considered as the population for this study. This study focuses not on the technology used in teaching languages but on whether technology is used in teaching the content of African language disciplines.

According to Taherdoost (2017), sampling aims to ensure that a researcher can generalise the findings to the population. This study's sample was drawn from three public universities in KwaZulu-Natal, South Africa. These are the African language lecturers from the language departments/programmes of Durban University of Technology (DUT), University of KwaZulu-Natal (UKZN), and University of Zululand (UNIZULU).

4.3.2 Sample size

Sample size, according to Bujang et al. (2018), is the total number of participants involved in a study as a representative of the target population. Expanding on sample size, Johnston (2021) refers to sample size as a subdivision from the whole population under investigation that shows the characteristics of the sample population. As noted in the previous section, the purposive sampling method was used to recruit 12 participants for this study. The potential limitations of a small sample size of 12 are acknowledged; however, Lincoln and Guba (1985) suggest that a sample size of 10–15 participants is generally sufficient for achieving data saturation and generating comprehensive findings. Also, with a small sample size of 12, more resources and time could be devoted to each participant (Sandelowski 1995:189; Sim et al. 2018: 5). This allowed ample time to explore the uniqueness and richness of individual participant's experiences and delve into detailed narratives and subtle nuances from participants' perspective. A study by Guest et al. (2006) also highlights that even with a sample size as small as 12 participants, researchers can achieve data saturation and generate rich and diverse findings. They argue that the data quality is more

important than the quantity of participants. It should, therefore, be noted that from preliminary investigation, the sample size for African language lecturers is small, so all the African language lecturers from all three institutions were interviewed, and a semi-structured interview was used to gather data from the participants, as indicated later in this chapter. The representation of African language lecturers from the three universities and language departments/programmes was ensured.

In order to address the potential limitations of the small sample, such as reduced generalisability or increased risk of bias, four Doctoral colleagues in the researcher's department were provided opportunities to review and validate the study findings. They checked to ensure that participants' voices were accurately represented. Adopting this strategy contributed to the credibility and transferability of the study. In the same vein, rich and detailed descriptions of the study context, participants, and findings are provided to enhance the transferability of the study results to other similar populations and contexts.

4.4 Data Collection Method

This study employed the interview method as the data collection method. Interviews ranging from 30 to 60 minutes were conducted with each participant. The choice of this method was informed by the methodological nature of this study, which is a qualitative approach that required data collection from more than one source to enrich the study results. The interview method, according to Jain (2021), is a technique of gathering detailed information about a particular situation, subject and participants' lived experiences regarding a particular research topic.

Interviews allow for flexibility in the order of discussion the participants engage in with a researcher and structure the participants' explanations (Gysels et al. 2008). The interview method has been applauded for its ability to gather faster data, providing more detailed and deeper insight into the research topic (Hanggana et al. 2022). The interview allowed data collection that led to a direct discovery about the participants. In this regard, the interview method in this study assisted in achieving the research aim, which is to understand the views and opinions of language lecturers about using technology in teaching, practice and understanding of their settings.

The data collected for this study were mainly qualitative and from primary sources,

which came from the semi-structured interviews about the experience and attitude of African language lecturers towards using technology in teaching African languages. The semi-structured interview refers to an interview conducted to obtain a vivid account of the lived experience of the participants in an attempt to make sense of the described setting using open-ended questions (Brinkmann and Kvale 2018; Davis 2021).

Semi-structured interviews attempt to comprehend occurrences in daily living from the individual's viewpoint. They aim to obtain accounts of participants' lived experiences, thus offering the opportunity to present questions that may arise from participants' responses. The interview was structured to reflect everyday discussions with participants.

The use of semi-structured interviews has been criticised by Cohen et al. (2000), who believe that hidden agendas, subjectivity, biases and misrepresentation of participant responses can compromise the credibility of the semi-structured interview. Cohen et al. (2000:121) state, "Interviewers and interviewees alike bring their own, often unconscious experiential and biographical baggage with them into the interview". In short, it is difficult for an interview to be devoid of bias due to interpersonal interaction in which the process and the data collected will be influenced by either the participants or the researcher.

In order to address the issue of credibility raised by Cohen et al. (2000) and to enhance the credibility of the data collected for this study and, at the same time, not discourage personal interpretation, semi-structured questions were used to elicit responses from each participant. The rationale behind the semi-structured questions was to gather data that spoke to the perception of language lecturers on the use of technology in teaching African languages, the effect of their social context on the use of technology, and discover how their social context impacts their teaching and their organisations. The open-ended semi-structured questions allowed participants to respond with their perspectives and report on new significant insights during the interviews. Participants were allowed to comment on the veracity of the recorded data and confirm that the information captured was accurate to minimise the effect of researcher bias and incorrect interpretation during the interview. The interview was followed by analysing the complete data set from the perspective of a role boundary.

Last, it was confirmed that the critical events described were systematically analysed and reviewed.

4.4.1 Internet-aided interview

The internet-aided interview is an interview session that happens over the internet, without direct face-to-face interaction between participants and a researcher. Kazmer and Xie (2008) state that internet-aided interviews can happen using synchronous and asynchronous approaches. Synchronous interviews happen through real-time voice communication via telephone, Skype, MS Teams, Zoom, etc. In contrast, asynchronous interviews do not happen in real-time, for example, email, text message, and other social media messengers. The synchronous approach was used for this study: participants were interviewed in real-time through the Voice over Internet Protocol (VoIP) medium, and the application used was Microsoft Team (MS Team).

The VoIP interview synchronises scheduled interviews over the Internet with real-time interactions by phone and video. It allowed participants to respond to the questions during the interview (Hay-Gibson 2009). The VoIP interview has been praised for its ability to assist researchers in setting up interview sessions using less time than having to travel to the workplace or homes of participants. The flexibility and availability of scheduling VoIP interview sessions (whether at home or the participants' workplaces) is also an advantage of using such interview modes (Redlich-Amirav and Higginbottom 2014).

VoIP can reach a vast population quickly and is less stressful to administer; it was therefore considered suitable for this study. Interview questions were sent to the participants before the VoIP interview session via email so that the participants could prepare for the session beforehand. Participants then responded by suggesting dates they would be available to be interviewed. Reminder emails were sent days before the scheduled date to remind the participants of the interview sessions. My choice of the VoIP MS Teams interviews emanates from the fact that it practically allows a researcher to confirm the responses of participants, and second, the COVID-19 pandemic lockdowns did not allow travelling to meet participants to conduct face-to-face interviews. The approach is safe for both the researcher and the participants. Also, it has been argued that participants feel more comfortable responding to

sensitive issues in a virtual environment than face-to-face (Chia et al. 2020; Roulston and Choi 2018).

The advantage of this method for gathering data for this study is that it assisted in overcoming geographical and financial barriers and enabled the participants to receive questions ahead of the interview and adequately understand them before responding to them during the scheduled interview session. It also allowed participants to note their responses before the interview (Hawkins 2018). Using the synchronous method meant that the participants were free in their space and did not have to make provisions, such as interview space, catering, etc., for a face-to-face interview session. The scheduled interview questions were sent to the participants after they had shown interest in participating in the study.

Furthermore, sending the scheduled interview questions to the participants and allowing them to choose a time suitable for the interviews eliminated pressure on the interview participants. It also gave them enough time to comprehend the interview questions and helped them provide informative and comprehensive responses. Adopting the semi-structured questions also allowed participants to determine how to answer the questions and for variance and follow-up questions based on participants' responses (Djumrianti and Oseso-Asare 2021; Uddin et al. 2019).

The interview was divided into two sections: the demographics and social context, and the use of technology. The data collated by the interview were first checked for incomplete information. When there was incomplete information, follow-up emails were sent to the participant. After that, the responses to the interview's open-ended questions were arranged, followed by coding responses to understand the existing nuances. The interview design protected the participants' anonymity and the confidentiality of their participation.

4.4.2 Data analysis

The interview data was manually transcribed by a professional transcriber and then coded. Coding is a data analysis in which data are conceptualised and fractured to discover pertinent issues within a massive dataset (Moghaddam 2006). According to Jackson et al. (2018), coding aims to identify recurring themes and patterns to make meaning from the interview data. The data from the coding were collated with

descriptive data of the demographics and social context of lecturers regarding technology use to determine the relationship between the lecturers, their traits, organisational influences on their use of technology for teaching African languages, and the demographic pointers.

Thematic analysis, according to Braun and Clarke (2006), is a careful and thorough process of classifying, analysing and presenting themes that appear in qualitative research. Thematic analysis assisted in developing the organisation of the data about the phenomenon and simultaneously accounted for all cases in the study, ensuring that each important theme had been reported and related (Cassol et al. 2018). Several studies have used thematic analysis to analyse data and describe the formation of intentions and how an intention creates another intention for reorganisation (Bunting et al. 2021; Jantjies and Joy 2016; Rice et al. 2016).

Prominent are two approaches to thematic analysis, as identified by Bryman et al. (2005), used for data analysis in qualitative studies. They are the inductive and the deductive approaches to thematic analysis. The inductive thematic analysis approaches data analysis by ensuring only the data determine the themes of the study. In other words, a researcher engages the dataset only to produce meaning and interpretation. The deductive approach to thematic analysis, on the other hand, involves the production of themes by the research informed by the dataset, previous data, and existing theories to give a robust data analysis. In this study, the deductive approach to thematic data analysis was applied as it complemented the research questions by allowing for the socio-phenomenal perspectives of the participants to be an essential process in the deductive thematic analysis.

4.4.3 Trustworthiness of the study

The trustworthiness of this study was sustained using the following principles: *confirmability, credibility, dependability, and transferability*.

4.4.3.1 Confirmability

Confirmability describes the degree to which the study's outcomes replicate the participants' viewpoints unbiasedly, devoid of any influence from preconceived assumptions held by the researcher (Amir et al. 2021). The study achieved this by allowing the participants to confirm that the interview's contents captured their

thoughts adequately, and literature quotations were used to link the data to the study findings reflexively.

4.4.3.2 Credibility

Credibility is defined as the extent to which the results of a study are a suitable representation of the collected data (Herden et al. 2020). Credibility was implemented by deliberating and reviewing the summary of research by the interviewee and the study methodology that brought about the review of the codes by four independent Ph.D. researchers.

4.4.3.3 Dependability

Dependability describes the characteristic features of the whole research process of incorporation, especially the collection of data and data analysis methods, as well as the theory produced from the data (Masemola 2017). In other words, research dependability is concerned with the organisation of the internal procedures of the study and how a researcher gives an account of the different contexts of the phenomena. The dependability of this study was maintained by making a comprehensive description of the research methods used by properly recording each step in the execution of the methods used.

4.4.3.4 Transferability

Transferability describes the extent to which the findings of a study can be applied to other settings and populations (De Vrieze et al. 2020). The transferability of this study was achieved by performing an in-depth and robust descriptive recording of the research processes and the results so that the results and conclusions are transferable to other studies in a similar field. Hence, future academics could repeat this study.

4.5 Ethical Considerations

The ethical considerations of this study were determined before the data collection was conducted. This study ensured that the participants remained anonymous such that when reporting the results, identity clues of the participants were protected in their entirety. Aside from this, an informed consent form was sent to participants before the commencement of the interviews, where all the study procedures and aspects of the study that might impact participants were clarified. The participants filled in the forms

to indicate that they consented to the outlined procedures. Ethical clearance was sought from the Institutional Research Ethics Committee (IREC) at the Durban University of Technology with reference number **IREC 249/22** for permission to conduct this study. Gatekeepers' permissions were sought from and granted by the three institutions where data were collected for this study.

4.6 Limitations

This study is a case study that focused on only three universities in a province in South Africa. The finding, therefore, may not apply to broader contexts. A similar study in language education in which lecturers are involved may reveal supplementary information about language lecturers' attitudes. Also, a study on other lecturers in different contexts may produce findings that challenge the arguments of this study. In addition, the findings are restricted to the period in which this study was conducted, and a similar study in another historical period may offer alternative information regarding educators' attitudes. The methodological outline adopted guided the design of suitable data collection and analysis methods. Hence, they helped to gather and process information about language lecturers' attitudes effectively.

4.7 Conclusion

This chapter presented the research methods adopted by this study on the lecturers' social contexts and the use of technology in teaching African languages in KZN. The chapter started with a discussion of the research design. Description of the research population and sampling method used in this study to achieve its objectives followed. A description of the data analysis procedure was also presented, and the chapter was concluded with consideration of the ethical procedure that guided the study. The next chapter is devoted to analysing and discussing findings on lecturers' social contexts and the use of technology in teaching African languages.

CHAPTER 5: Analysing African Language Lecturers' Social Context and Their Use of Technology

5.1 Introduction

This chapter presents the thematic analysis of the interviews conducted for this study on the social context and the use of technology by African language lecturers, as described in the previous chapter. The chapter describes the thematic structure of the experiences of African language lecturers' technology use in their teaching. The thematic analysis offers a multi-pronged approach to understanding the relationships between the actions of language lecturers and the influencing factors of the field in which lecturers operate. The chapter begins with an overview of the process and approach used in the data collection and analysis before venturing into the data analysis.

5.2 Overview of Data Collection Process and Approach

The interviews were held at three public universities in KwaZulu-Natal, namely, the University of KwaZulu-Natal (UKZN), the University of Zululand (UNIZULU), and the Durban University of Technology (DUT). These universities were selected because of the functional language departments/programmes offering African languages. The data for this study were collected with the agreement of all the participating universities. They all provided gatekeeper permissions to research their institutions' language departments/programmes. These permissions made access to the target population seamless. The data sourced for this study were from interviews with African language lecturers and interview notes.

Regarding the internet-aided interviews, they were conducted using Microsoft Teams (MS Teams) and recorded using the same application with the express permission of all the participants, who had no issues being recorded. The recordings were transcribed and analysed. The analysis procedure will be discussed later in this chapter.

The guiding semi-structured interview questions can be found in Appendix 7 of this study. The interview guide is divided into two sections: Section 1 is the demographics, and Section 2 is focused on questions about a lecturer's social context and the use of

technology. The data collected were first checked for incomplete information. If there was incomplete information, a follow-up email was sent to the participant concerned. After the data collation was completed, the data was subjected to thematic analysis, after which the questions were coded to understand the nuances in the responses. The interview guide's design protected respondents' anonymity and the confidentiality of their participation.

5.2.1 Period of Interview

The request for gatekeepers' permission was sought from the three universities from which the participants were drawn after provisional approval to conduct research in such institutions was granted by the Durban University of Technology's Institutional Research and Ethics Committee (IREC) on 20 October 2022. The gatekeepers' permissions were received by 14 November 2022. The permission letters were then sent to the IREC for full approval to conduct research in the three institutions. The full approval to research human participants was received from IRIC on 17 November 2022 with Ethical Clearance number *IREC 249/22*. The participants from the three universities were contacted via their email addresses. The interviews were conducted between November 2022 and February 2023.

5.2.2 Descriptive outline of the participants

The interview data for this study collected across the three universities consisted of four female and four male participants of varied ethnicities who are language lecturers. Regarding ethnicity, six participants were Black Africans, and two were Coloured. The interviewer did not come across participants from other ethnicities, such as White and Indian participants. The participants also varied in their academic ranks: one junior lecturer, three lecturers, three senior lecturers and one full professor. Participants' language teaching aspects are spread across specialisations such as Afrikaans, isiZulu (first and second language), African Literature and Culture, Translation Studies, Linguistics, Onomastics, and English Language. Almost all participants are multilingual. Participants have different years of experience in language specialisation, ranging from five to over 35 years of language teaching experience. While some participants started as language teachers at other establishments, such as high school teachers, tutors in higher institutions and other private sectors as language

practitioners, a few started in other subject disciplines unrelated to languages, but ended in language teaching.

5.2.3 Review of data collection

This study used the purposive sampling technique to identify 12 lecturers who teach African languages in the language departments/programmes of the three universities identified for this study. However, only eight (8) lecturers were interviewed across the three universities identified for this study. The study could proceed with this number because the data collection reached saturation. A saturation point is when no additional or newer data can be extracted to shape or reinforce the thematic development of the study (Budiman and Smits 2018; Memon et al. 2021). In other words, additional data does not yield new information as new participants repeat the same information from previous participants.

5.3 Deductive Thematic Analysis of the Social Context and Lecturers' Use of Technology

This section is focused on the deductive thematic analysis of the data collected for this study on the social context and lecturers' use of technology. The section commences with a descriptive outline of the participants under investigation, followed by the thematic christening and interpretation of the interview data collected for the study, with a detailed description of how their field, capital and habitus influence the actions and strategies of lecturers.

5.3.1 Deductive analysis

In the context of thematic data analysis, the deductive approach refers to an approach where predetermined themes or theoretical frameworks are used to guide qualitative data analysis, such as interviews (Proudfoot 2022). In other words, analysis begins with pre-existing concepts or theories and applies them to the data to identify relevant themes. Deductive analysis enables a researcher to examine whether the data supports or contradicts these pre-defined theories and concepts. In contrast, the inductive approach involves a bottom-up technique where themes and patterns emerge directly from the data without prior theoretical frameworks (Humble and Mozellus 2022). In practice, inductive analysis is more exploratory and is typically used

when there is limited knowledge about a research topic. In other words, it allows for discovering new themes or concepts that may not have been anticipated beforehand.

The appropriateness of the deductive approach for analyzing interviews, such as for this study, is that it helps to ensure that the analysis stays focused and relevant to the objectives of this study (Dusi and Stevens 2022). Because of well-defined research questions and predetermined concepts and theories, a deductive analysis is more targeted and systematic than an inductive analysis. A deductive analysis facilitates the interpretation of the data against the research questions. In addition, the deductive approach provides a rigorous and transparent process for data analysis (Proudfoot 2022; Squires 2023). By using established theoretical frameworks, a researcher can maintain objectivity and reduce the risk of bias in the interpretation of the data, which is particularly important when conducting qualitative research, as subjective biases can influence the identification and interpretation of themes.

I chose to use the deductive approach to analysing this study's interviews because it allowed me to effectively examine the extent to which the data generated supports and challenges existing theories and concepts and thus contributes to the advancement of knowledge in the field of language teaching.

The deductive approach was implemented by first identifying the relevant themes from the dataset based on the research objectives. The research objectives of the study, as stated in Chapter 1, are (a) to examine the roles of technology in teaching African languages, (b) to identify the technologies available for the teaching of African languages, (c) to investigate the challenges of using technology in teaching African languages, (d) identify the social factors that influence lecturers' attitudes towards the use of technology in teaching African languages, and (e) propose a model to improve the use of technology by language lecturers. The interviews comprised ten questions carefully crafted based on the study's research questions.

The data were coded from the dataset. The coding process involves systematically reviewing the data (interview transcripts), identifying corresponding data segments, tagging the data accordingly and organising the codes into groups (Jowsey et al. 2021). These groups are what is referred to as themes. A careful reading and interpretation of the data ensured an accurate representation of the themes.

Transcripts of the interviews were then processed, and coloured highlighters were used to tag codes based on their relevance to the study's objectives, the existing literature and the theoretical framework. After that, the data were summarised and arranged under the relevant codes. This strategy enabled the generation of themes for the analysis. The themes that emerged from the coding were: (a) the professional journey into teaching African languages, (b) knowledge of institutional guidelines applicable to the use of technology in teaching, (c) acceptance and use of technology in teaching African languages, (d) language teaching aspects suitable for technology use, (e) internal and external factors as determinants of lecturers' use of technology in teaching African languages, and (f) technology as a conduit in teaching African languages – students' feedback. These themes are analysed below.

(a) The professional journey into teaching African languages

Professional journey accounts for the processes involved in individuals' development, growth and learning related to their work and career (Breslin 2014). The professional journey of language lecturers interviewed in African language teaching programmes represents the accumulation of teaching decisions and several adjustments that language lecturers have made in their work lives. The professional journey of lecturers is relevant to this study because language lecturers go through different experiences and learn many things to improve their jobs. Such experiences influence some decisions they make in their subsequent jobs or professions.

The journeys of the African language teachers interviewed for this study comprise career management engagement, such as the development of self-image, which results from participants moving from one career path to the other. It should be noted that the participants enjoyed unique professional journeys into teaching, which, in the long run, account for the different ranges of experience they bring into African language teaching. The participants had unique professional journeys of how they became language lecturers and engaged with African language teaching.

One of the lecturers revealed that they started as a schoolteacher in 1981 and became a lecturer in the late 1990s. Others revealed they became lecturers while studying for their honours degrees but started as tutors and teaching assistants (on contracts). Later, they were awarded substantive positions as permanent and full-time lecturers in their various institutional language departments. One of the lecturers surprisingly

did not have a background in a language-related field but in another unrelated discipline. According to them:

I did science at school. And so I was initially trying to follow the route of science, but I came at a time where Yeah, things were very different. It was during the apartheid era, so things were quite different. And so, I ended up choosing languages rather than the sciences. I was doing sciences and then changed direction, so it was not the plan at all. Definitely was not the plan. Ok. So that's an extra. So really, I was the science person that did the sciences at school and Maths and how I ended up in language is a kind of a shocker to everyone that listens to me, including me. (FP3)

Here, the lecturer begins by stating their engagement with sciences at school, indicating their initial inclination towards the field of science, suggesting a habitus that aligns with scientific pursuits at the beginning of their academic journey. However, the sentence then introduces the concept of the apartheid era, implying that external circumstances influenced the speaker's choices. The mention of the "apartheid era" serves as a disruption, as the lecturer states that "things were very different" during that time, suggesting that the social and political context significantly impacted their decision-making process.

This shift from sciences to languages could have been influenced by societal realities and constraints during the apartheid era. The apartheid regime enforced racial segregation and discrimination, likely hindering educational opportunities and career prospects for non-white individuals in scientific fields. External factors such as limited access to quality science education, lack of resources, or explicit barriers may have obstructed the lecturer's initial inclination towards scientific pursuits. Moreover, teaching languages may have been perceived as a more accessible or viable career path during that period, carrying less risk of facing discrimination compared to certain scientific disciplines potentially more heavily controlled or influenced by apartheid policies.

They continued by revealing a shift in their educational trajectory, stating how they ended up choosing languages instead of continuing with the sciences. This change in direction is presented as unexpected or contrary to the original plan, highlighting the

lecturer's surprise and the divergence from their habitus, which was likely shaped by the contextual realities of the apartheid era. They, however, acknowledge the contrast between their scientific background and their current engagement with languages, emphasising that this change is surprising to both them and others. This emphasises the discrepancy between their initial habitus and their current position in their work field, a divergence necessitated by the profound impact of societal structures and inequalities on individual choices, even when personal inclinations may have pointed in a different direction.

In the case of some of the lecturers, some revealed that they had to start from other unrelated fields to languages such as publishing, for instance. One of the lecturers revealed that they have been all over the fields, that is, language teaching/lecturing, then into publishing, and then back to language lecturing. According to them:

I worked there [as a lecturer] for five years. And then I got tired because I knew everything there, and I was still quite young then. So, I thought, I am sure there is something out there beyond just lecturing. So, I left. I went into publishing [before returning] to lecturing again after 20 years. (FP6)

Here, the lecturer initially started in their field, which was the field of education, where they worked as a lecturer for a significant period, indicating their participation and contribution to the field of education and teaching. However, their statement "And then I got tired because I knew everything there, and I was still quite young then" suggests that they may have found the field of language teaching to be lacking in dynamism or challenges, leading to a sense of stagnation or complacency after gaining extensive knowledge and experience within that field. The phrase "I knew everything there" could imply a perception of having exhausted the learning opportunities or reaching a plateau in their professional growth.

The lecturer's mention of being "still quite young then" further indicates a desire for exploration, new challenges, and personal development at that stage of their career. This hunger for growth and enrichment prompted them to transition into a different field – publishing, demonstrating their ability to navigate and adapt to different fields based on their accumulated capital and personal aspirations. Eventually, they returned to the field of lecturing again after 20 years. This re-engagement with their original field

could be driven by a renewed sense of purpose, a shift in perspectives gained from their experiences in publishing, or the accumulation of additional capital over time, enabling them to approach language teaching with fresh insights and motivations.

The professional journey of this lecturer represents a narrative of personal growth, questioning, and exploration within and across different fields. It highlights how their habitus, initially shaped by their experience as a lecturer, prompted them to seek challenges beyond their existing field, leading to a temporary migration into another field. However, their eventual return to lecturing suggests a continued connection to their roots and a willingness to re-engage with their original field armed with new perspectives and capital accumulated over time.

The revelations of the lecturers are testaments to their unique journeys into African language teaching, and the uniqueness of each lecturer's journey provides a professional journey that enables them to personalize their attitude towards technology use in the teaching of African languages in their institutions. The professional journeys of the interviewed language lecturers captured social mobility, inter-/intra-field migration, and personal investment and how they influenced the use of technology in the lecturers' teaching.

(b) Social mobility

According to Fields (2021), social mobility is the movement ability of people from one lower occupational or educational status to another higher economic class. Social mobility is an important feature of a working and developing society. The relevance of 'social mobility' to this study is that it offers insights into lecturers' attitudes, perspectives and decisions regarding the use of technology in their teaching. So, for instance, lecturers who have experienced social mobility during their professional journeys would have firsthand knowledge of the successes and challenges faced in their previous field(s) from different economic and social backgrounds. The awareness can make them more attuned to addressing the technology divide in their teaching, which may influence their decision to use or not to use technology in their teaching.

The lecturers interviewed revealed instances where they had to move from one social class to another. For instance, all of them had a background in language teaching; however, some started as high school language teachers before upward mobility

occurred, and they ended up as language lecturers in the higher institution of learning, which seems to be a more profitable, influential and rewarding profession. The ones who started as high school language teachers did so during the apartheid era (before 1994), which influenced their view of technology. During this period, the available technology was only used in privileged minority (white) schools due to the improper funding of black schools (non-white schools) (Smalley 2014:3). In the same vein, the lecturers' movement from one level of language teaching to another could be, among other things, a result of wanting to explore other sub-fields in language teaching. It could be argued that as much as each field has distinct requirements, opportunities and hierarchies, the movements of these lecturers from one field to the other show that understanding different social contexts is very important if agents navigate different fields. It could be argued further that apart from lecturers' experiences of social mobility, other factors such as socio-economic conditions and personal biases could also influence the use of technology by lecturers in their teaching.

Using a more dynamic approach to view the interaction between the field of language, I consider that the possibility of individuals broadening their outreach from one field or subfield to the other could be a result of seeking higher statutory ideas and a result of institutional mechanisms. For instance, FP6 mentioned that:

That was 2013, and I was like tired of the travelling that is involved in publishing because publishing involves a lot of travelling, and I had done it for close to 20 years.

A similar view was shared by MP4, who retorted that:

...Then, at some point, I just got tired of the subject's advisory service ... And then, I resigned and went to work in the publishing industry. And in the publishing industry, there was a lot of demand. Uh ..., but I enjoyed it because it was still ... You know ... I was still relatively new in it. But it wasn't a permanent post. It was on contract. And then when the contract ended, I joined the university on contract where I had done some contract work for them in the past...

It is clear from the above extracts that contingency situations can determine individuals' migration between and across fields. Similarly, migration from within and across fields

could also happen among individuals with the same socio-economic situation. These actions of individuals in a field could also result from a “feel for the game”, which is embedded in their habitus. As time goes on, individuals tend to devise strategies that would assist them to adapt to their needs before seeking alternative options. The individuals’ trajectory above suggests a form of social mobility as they transitioned from one field to the other and back. However, it is important to note that the temporary nature of their positions (contract-based), as in the case of MP4, may have implications for the sustainability of their social mobility, which could shape their belief about using technology in their teaching. For instance, because they worked in the publishing industry, these two above lecturers would be more attuned to the use of technology for teaching in their present profession (teaching).

(c) Inter-/Intra-field migration

Inter-/intra-field migration describes the movement of people from one occupation or industry to another related occupation or industry respectively. In other words, it involves individuals switching careers within a specific field or transitioning to a different one. This is relevant to this study as it sheds light on lecturers’ migration within or among fields and how these migration experiences influence their use of technology in their teaching. The embodiment of the lecturers’ experiences through their revelations in this study reveals that their migration journeys were dynamic and transformative.

The journeys of FP6 and MP4 into the language could be described as flexible because they moved in and out of one field to the other. For FP6:

I worked there for five years, that was in 1992. I worked there for five years. And then I got tired because I knew everything there, and I was still quite young then. So, I thought, I am sure there is something out there beyond just lecturing. So, I left. I went into publishing, so I was in publishing for over close to 20 years. And then in 2013, I decided to go back to university to do my Ph.D. I did my Ph.D. in translation studies and then as I was doing my Ph.D., they asked me to come lecture again. So, and that is how I went back to lecturing.

In the case of MP4:

...Then at some point I just got tired of the subject's advisory service... And then I resigned and went to work in the publishing industry. And in the publishing industry,

there was a lot of demand. Uh ..., but I enjoyed it because it was still ... You know ..., I was still relatively new in it. But it wasn't a permanent post. It was on contract. And then when the contract ended, then I joined the university on contract where I had done some contract work for them in the past.

The above extracts indicate that each of the two lecturers has their habitus hanging together in three fields (translation, publishing, and education) due to their attempts to straddle the boundary between education, publishing and translation. The two lecturers could be seen as crossing fields by moving from one field to another and acquiring new forms of capital. For instance, FP6 gained cultural capital by pursuing a Ph.D. in translation studies, which likely helped them return to lecturing at a later stage. Meanwhile, MP4 could have accumulated economic capital by working in the publishing industry, which helped them secure a contract position at a higher learning institution.

The professional journey of FP6 and MP4 illustrate how individuals can navigate different fields and acquire new forms of capital, which can help them move up the social hierarchy and achieve greater success in their professional careers. It could be argued that fields could be porous sometimes, permitting individuals on one field, under certain circumstances, to conveniently switch between different fields without feeling disconnection because they embody the features of those fields.

The journeys of these two lecturers in teaching African languages are not easy to portray in dyadic terms because each of them made reproductive and transformative decisions in how they fused their experiences and how these gave shape to their cognisance of the field. On an individual level, these two lecturers tend to contest and transform the field barriers, developing new meanings that infuse components of different fields, which, in the long run, had a significant impact on their survival in their new fields, producing blended and customised fields that match their present individual positions in their fields. On a structural level, the individual lecturers are, however, still within the precinct of the rules of their present field (education). Although they developed themselves to fit in the education field where they are now, the actual transformation of the field practices for other individuals beyond the personal level is a fundamental question begging for an answer.

(d) Personal investment

The professional journeys of the lecturers interviewed indicate their ongoing and long-term personal investment towards attaining the position they presently occupy in their field (education), specifically language teaching. The relevance of personal investment to this study is that educators who invest in continuous learning and professional development are likelier to embrace, integrate and use technology in their teaching practices. In this regard, some lecturers account for their cultural capital and how they upgraded themselves to fit into their present positions in teaching. For example, one of the lecturers revealed that:

I started in 2018. I started when I was doing my Honours degree with Wits University. So I started as a ... ehm ... as a ... what you call a teaching assistant, and when I registered for Masters, that was when I became a sessional lecturer for isiZulu and in 2020, I got my Masters, and then I got a contract job [...] where I was teaching isiZulu, and then later in 2021, and then I received a permanent job from [the same institution] where I currently teach isiZulu. (MP2)

Other lecturers shared similar experiences regarding their professional journeys. Regarding the accumulation of cultural capital, participants revealed how they invested in their professional journeys, which encompassed acquiring capital through higher degrees and scholarships, developing skills and expertise in specific fields, and establishing networks and relationships within their respective domains. It could be inferred that their habitus, shaped by their experiences and preferences, influenced their choices and motivations in pursuing academic careers, specifically language teaching. As indicated in their revelations above, their positive disposition toward personal development could have also propelled them to use technology in their teaching activities, given the contemporary education landscape and the potential use of technology in teaching and learning. This potential is supported by Dweck (2016), who argues that the commitment of educators fosters a growth mindset, which encourages them to view challenges as opportunities for learning and improvement. When faced with challenges, educators with a growth mindset are more likely to persist in finding solutions and exploring innovative ways to use technology effectively in their teaching.

The individual lecturers underwent some form of upgrade in their educational qualifications during their previous and current positions in the education field. In other words, they accumulated cultural capital in the form of advanced knowledge and skills, pursuing higher

qualifications and degrees. It should also be noted that they also recognise the importance of upskilling themselves to be eligible for more prominent positions in their field. For example, one of the lecturers recounted that:

I came to Natal and did my Masters and then my Ph.D. in African languages. That's how I shifted from being a commercial language teacher to become a lecturer in African languages because when I did my undergraduate degree, isiZulu and Psychology, as my two majors, and I opted for isiZulu as I saw that there is a future in isiZulu. (MP5)

Here, their knowledge in recognising upskilling themselves demonstrates their understanding of the cultural capital they require to succeed and thrive in the education field, including the use of technology in their teaching (though not expressly mentioned by the lecturers interviewed). It could, therefore, be said affirmatively that the field of education presents the importance of cultural capital and how the field residents can accumulate and leverage their knowledge, skills and experience to advance their careers. In other words, the professional journeys of the lecturers demonstrate how investing in and developing one's cultural capital can lead to increased opportunities for professional development and advancement (Nilsson and Nyström 2013), particularly in the fields that place a premium on cultural knowledge and practice.

In conclusion, the professional journeys of these lecturers in African language teaching are drawn from various forms of capital, which highlight the importance of social networks and relationships in determining an individual's access to resources and opportunities. In other words, their journeys in teaching African languages show how capital can be leveraged to advance in one's career and achieve success. Also, their journey in their present field enables them to gain access to certain positions of power and influence within their fields, impacting their opportunities and trajectories. The actions of most of the lecturers crossing fields were influenced by factors in the previous fields where they had worked. On the other hand, their decisions to use technology in teaching might have been shaped by their experiences and preferences. It likely influenced their choices and motivations in pursuing careers in language teaching, where instruction using technology is a requirement. The data, therefore, exposed the fact that other factors influenced their decisions more than social factors, indicating that the impetus of crossing fields by lecturers was quite unpredictable and complicated (Gelderblom 2014).

5.3.1.2 Knowledge of institutional guidelines applicable to the use of technology in teaching

Institutional guidelines refer to the laying down of appropriate practices by the higher education institutions (HEIs), which turn out to become the development of routines, which eventually become habitual and internalised as legitimately accepted behaviours (UNGGIM 2018) and in this case, these legitimately accepted behaviours relate to the use of technology in teaching. In recent years, using technology has become one of the prominent pedagogical responsibilities of educators in the HEIs (Fallatah 2019) to facilitate teaching and learning. Different HEIs have a set of peculiar guidelines regarding teaching and learning. As such, these guidelines form part of the cultural capital for educators in education. The lecturers interviewed demonstrated their awareness and knowledge of the institutional guidelines regarding using technology in teaching in their institutions. They are as follows:

Yes, such as the copyright laws or the plagiarism rules. These are very important. Yes, I familiarised myself with them, but I did not know that they are so real until something happened. [smiles] ... recently. (FP1)

Ehmmm... I think one that is more important is the copyright, you know, when you are going to use someone's intellectual property, you have to kind of like acknowledge them ... ehmmm ... so I think when using technology, that is more important to acknowledge, you know, other people's work. (MP2)

In the above extract by FP1 and MP2, the lecturers acknowledged their awareness and knowledge of the copyright laws and plagiarism rules while using technology for teaching in their institutions. These revelations suggest that they have been socialised into an institutional habitus that values intellectual property and recognises the need to respect it. This habitus reflects a broader cultural shift toward recognising the importance of intellectual property and respecting the rights of the creators. The use of the phrase 'you know' by MP2, which is a common linguistic marker of shared knowledge, could be influenced by the fact that the institutional habitus about the using technology in teaching in South African HEIs is an institutional concept that is shared and understood by education communities across South African HEIs. However, the fact that FP1 only became aware of the importance of the institutional guideline after experiencing an issue suggests that their habitus may not be fully internalised or may have been shaped more

by external factors than by a deep-rooted commitment to these values. This could also indicate that there may be gaps in their understanding of their institutional habitus, which may be due to a lack of reinforcement or training in these values within their institutions.

One could, therefore, argue that their responses arise out of institutionalised habitus rather than individual habitus, given that their experiences with technology in teaching were informed by their experience and knowledge of teaching in other HEIs in South Africa and served as contributing factors to the realities they faced during their teaching experiences.

Other lecturers also shared their thoughts regarding their institutional knowledge of the guidelines for using technology in teaching. Participants FF3 and MP5 shared their thoughts below:

I don't know if you can call them institutional guidelines regarding the use of technology, but I think more of the university pushing for us to get more and more familiar with the use of technology so the university creating different platforms where we can be taught how to use and incorporate technology in terms of the content that we are teaching. Dos and don'ts. I'm trying to think of in terms of guidelines, I mean. It's just sort of ... you... you know, what is acceptable in terms of what content you should be giving students, you know, what is prohibited content, etcetera. Those sorts of things, which I think are just standard practices, whether you are in an institution of higher learning or in a corporate ... uhmmm But in terms of teaching, yes, uh, the university pushing more and more for us to get as much exposure and training to use technology in different ways, not just during COVID but even prior to COVID. (FP3)

No. You see, we were just confronted by teaching using technology during COVID and that was the only time where we receive training on how to operate the Moodle and all the systems that we use to teach. But prior to that, there is no formal institutional guidelines that I have received in the use of even teaching myself how to use ... operate a computer, I did not receive any formal training for using a computer. I learned on the way on how to access and how to retrieve information, and search for information, so I did not receive any formal training for the use of technology in my teaching. But I have used it for the past three years (MP5)

In this case, FP3 acknowledged that their institution pushed for greater familiarity with technology, incorporating it into their teaching practices. Their mention of the terms “*dos and don'ts*” and “*acceptable*” versus “*prohibited content*” indicates that there are clear institutional guidelines in place for how technology should be used in their teaching. The participant’s knowledge that these guidelines are standard practices in HEIs and corporate settings suggests a broader societal habitus around the use of technology in education and other fields. FP3’s knowledge and awareness reflect an institutional habitus that values technology integration in teaching and provides clear guidance and training.

In the case of MP5, they revealed that they did not receive formal training in using technology for teaching or even basic skills. Their description of learning independently through trial and error suggests that there may be a habitus within their institution that values self-sufficiency and self-learning rather than formal training or support. One could say that the participant’s receipt of training regarding the use of technology by their institution only during external events such as a pandemic (COVID-19) indicates their institution’s habitus in prioritising reactive rather than proactive measures regarding the use of technology for teaching.

I would, therefore, argue that institutional guidelines around the use of technology in teaching can vary widely depending on the institution and the context and the fact that institutional habitus plays an indisputable role in shaping the behaviour and actions of individuals within an institution.

Regarding institutional knowledge about the guidelines applicable to the use of technology in teaching, lecturers FP6 and MP8 had these to say:

Just for teaching, it is mainly like we are using Moodle. And besides, Moodle what else? So, but everything is just around how we should use the platform, and because they, there's no... the assessment you also use it. Okay, it was Moodle before, but now it is Learn 21. So what you do, we get a lot of guidelines and a lot of workshops on how to use Learn 21, which is our platform. And that is the main platform that we use for teaching. (FP6)

I cannot mention any parts. One thing for sure is that the institution is sharing so much and is pushing so much to make sure that all of us, the lecturers in the institution, are familiar with technology, and we make sure we utilise technology to

enhance our teaching. To an extent, the institution is even offering programmes and they are willing to fund if for some of us want to take courses in terms of learning how to use technology and other learning management systems. (MP8)

The above responses from participants FP6 and MP8 regarding their knowledge and awareness of their institutional guidelines for using technology in their teaching give an overview of how they value the support offered. The mention of the LMS platform where participant FP6 uses technology to teach, such as Moodle (now Learn 21) and emphasis on ‘*everything is just around how we should use the platform*’ suggests that their institution places high value on the platform and is integral to the institutional habitus. In this case, the institutional habitus is centred around using the LMS for teaching. The fact that the institution has moved from Moodle to Learn 21 also reflects a change in institutional habitus and the influence of social forces, such as changes in technology and pedagogical approaches (Zheng et al. 2019). The facilitation of workshops where the academic community in their institution is updated regarding the institutional guidelines guiding the use of technology highlights the importance of social forces in shaping institutional practices.

In the case of MP8, they highlighted how their institution is actively promoting and encouraging the use of technology to enhance teaching, which suggests that the use of technology is also part of the institution's habitus. The fact that the institution offers programmes for staff regarding the use of technology for teaching and funding for such programmes further reinforces the importance of institutional habitus and its alignment with social forces, such as the increasing importance of technology in pedagogical advancement. Regarding their institutional knowledge, FP1 shared an exposition below on an incident when one of the institutional guidelines was violated regarding the use of technology in their institution.

Some students used some pictures ... ehm ... and videos without acknowledging them and then a certain company reacted by writing to the institution that they have realised that our students are uploading pictures that belong to them without acknowledging them, so this has also appeared in university information platform warning the students and the lecturers never to do that. So, yeah, I have experienced it, experienced it first-hand. (FP1)

The scenario presented above could be attributed to the lack of an understanding of the cultural norms regarding proper attribution and acknowledgement of intellectual property, implying that properly acknowledging and citing sources of information is considered a form of cultural capital highly valued in university academic settings. It could also be argued that the students' habitus could not have included a strong emphasis on proper attribution and citation practices in their academic engagement, leading them to use online materials without acknowledging their sources. The above revelation also indicates the importance of cultural capital and habitus in shaping individuals' (and, in this case, students') behaviours and practices (Rowlands and Gale 2016), particularly in academic settings where practices such as giving credit to sources of information are highly regarded. On the other hand, the lecturers, as authoritative figures within the institution that the above students represent, hold symbolic capital, which they can leverage to reinforce the significance of adhering to institutional guidelines regarding technology in teaching and learning. Addressing the issue in the classroom, which is their first point of contact with students, can emphasise the importance of respecting intellectual property rights and ethical practices.

It could be argued that lecturers, as the educators and mentors of students, hold significant cultural capital in the form of knowledge and expertise required to guide students on appropriate academic practices, including proper citation and acknowledgement. By fulfilling their role effectively, lecturers can help instil in students the cultural capital necessary for success in the academic context.

In conclusion, the awareness of lecturers about institutional guidelines regarding the use of technology in their teaching indicates that their institutional habitus influenced them. This habitus enables them to adhere to the cultural norms of their profession. They were also influenced by social factors, which affected the intervention of their institutional response to infringements of their beliefs and guidelines. This intervention aims to maintain the institution's reputation and uphold its cultural capital. The knowledge of lecturers of their institutional guidelines regarding the use of technology, either through experience or intuition, could influence their use of technology in their teaching.

5.3.1.4 Acceptance and use of technology in teaching African Languages

Acceptance of technology refers to the user's willingness to engage in supportive behaviour towards using technology for accomplishing a task (teaching African languages).

This involves individual's attitudes and behaviour towards the use of technology, including their motivation, intention, and perceived usefulness (Sari et al. 2021; Sobri et al. 2021) in teaching African languages. Using technology to teach indigenous languages, such as African languages, has been on the radar for some time. Over the past decade, there has been growing concern about how technology (being a foreign concept) can be localised and infused into the pedagogy of African languages (Byamugisha and Asingwire 2014; Ndebele 2014, 2022; Osborn 2010). This localisation will ensure that every aspect of the African languages, such as cultural perspectives, beliefs, ideologies and moral views, are incorporated into technology for pedagogical purposes. Below are the views of two African language lecturers (FP1 and MP2) on the acceptance of technology in teaching African languages in their departments:

I will say it's very welcome, but at first, when we first used it, it was not ... There were some fears, but now that we are used to it, it is very welcome. Of course, because of some advantages and yea ... Yeah, there was. It was not necessarily the resistance, but it was fear because more staff members in the department had never used and also students themselves, some of them, you know, had fears. They were not used to it, so ... plus the element of COVID, it ... COVID alone was causing uncertainty. Not sure that, you were not sure that you would live the following day, and now, you are here in front of the computer, you are to teach, and you are not yet sure where to touch and how to know. How to, for example, share material.
(FP1)

Yeah. So in the department, it is very much accepted because as we speak, you know, some lecturers had been continuing with teaching ... uhmmm ... their modules with, you know ... technology even post, you know, COVID lockdowns, they're still using technology, and even with me, there are some students who I had, you know, been teaching with, you know, Teams post COVID, so I think ... ehmm ... using technology in our department is ... you know ... is acceptable, and we are advised, you know, to ... ehm ... use both face to face and technology in our teaching which they call hybrid, you know, method, of learning. So, it is much acceptable, yeah.
(MP2)

In the extracts above, the participants reflected on the acceptance of technology in teaching African languages in their departments. In the case of FP1, who noted that

technology is now accepted, although there were some resistance elements at the beginning when COVID-19 hit the world. The initial resistance to technology by colleagues in the department may be influenced by the academic community's expectations (Bourdieu 1977). In this case, colleagues' behaviours can result from their previous experiences with and expectations of technology. These experiences and expectations are shaped by the individuals' social and cultural background.

This raises the question of why COVID had to motivate lecturers to accept and use technology in their teaching. One could argue that the pandemic represents a powerful social force that influenced lecturers to suddenly embrace technology for remote instruction despite their previous individual reluctance. This highlights the need to consider the forces beyond the individual that shape behaviour. While lecturers may have established teaching practices and agency over their methods, external social factors like COVID-19 may infringe on their choices, leading them to act contrary to their typical approach (Ababio-Donkor et al. 2020). It could be argued that, sometimes, while social factors are at play, there may be an unintentional override of an individual's agency while still acknowledging the significance of human agency.

The second participant (MP2) acknowledged the acceptance of technology in their department in teaching African languages, even though the pandemic was a significant catalyst and that some lecturers and students have continued to use it even after the institution has encouraged a hybrid approach to teaching and learning. This could be attributed to the social forces at play, including the influence of colleagues, institutional/departmental policies and guidelines, and the broader acceptance of technology in society. This view reinforces the critical role of social forces in shaping lecturers' attitudes towards the acceptance and use of technology and the importance of institutional support in promoting technology acceptance in teaching. Also, their mention of a '*hybrid*' method of learning, which combines face-to-face and technology-based teaching, highlights the importance of finding a balance between 'bonding and bridging' of a community of practice in terms of their social capital operating at different levels.

The reflection of FP1 and MP2 on the acceptance of technology by other colleagues in their departments highlights the complex interplay between individual attitudes and social forces in shaping technology acceptance and use in teaching African languages. In Bourdieu's words, the two language lecturers' reflections show how individuals' cultural

and social backgrounds shape their perceptions of technology. Meanwhile, the reference to pandemics such as COVID-19 highlights how social factors can evolve as attitudes and practices change.

On the acceptance and use of technology in teaching African Languages in their departments, participants FP3 and MP4 provided a new outlook into how technology is accepted by individuals within the departments where they teach. Participant FP3 described how the use of technology in a language course was more accessible and more acceptable by learners of a course for second language speakers because it was part of the institution-wide language policy. According to them, *“I think [technology] is accepted for the module that we have and teach”*. FP3’s distinction between courses for first and second-language learners highlights how education systems can create and reinforce social stratification based on language proficiency. Their observation that technology use was more acceptable in the university-wide course for second-language speakers further reflects this point. The differentiated course offerings and technology acceptance patterns reinforce divisions between native students and second-language learners. This stratification based on English ability exemplifies how social hierarchies can be perpetuated through education policies and practices. Therefore, it can be argued that technology use in education is not always accepted equally across all social groups. However, participant FP3 also indicated that the COVID-19 pandemic has made technology necessary and compelled everyone to use it, regardless of personal preference or acceptance. According to the participant, *“And then came COVID and with COVID it became, you know, technology became the rescuer for teaching online...”*. This suggests that technology acceptance may not fully apply in this situation, as external factors such as the pandemic forced individuals to use technology regardless of their beliefs about its usefulness or effectiveness.

In Bourdieusian terms, one could say that the participant’s reflection suggests that the use of technology in education is influenced by cultural capital and institutional power structures. The university-wide language policy, for instance, reflects the values and beliefs of the institution and those who hold power within it. The ability to use technology effectively is also related to cultural capital, or individuals’ social and educational resources (Dixon 2019). Those with greater access to technology and experience using it may be more comfortable with its acceptance and use, while others may struggle or resist it.

In the case of the participant MP4, they described how technology has evolved and become an indispensable asset for teaching and learning. According to them, technology was initially used for simple tasks such as record-keeping and projecting images. However, as it advanced, it became more interactive and helpful in engaging with students, delivering lessons, and supervising research. In their words:

I'm not sure if it came about at any specific point, but I think it's... it's just been generally, you know, technology has infiltrated teaching in all spheres, whether you are teaching in initial schooling, or whether you are at secondary schooling or whether you are at the tertiary level, I think for me, as a teacher in a high school, technology was very low key at first, it was very, you know, introductory level very primary kind of technology. The use of recordings, the use of radio, the use of CD players and tape recorders. (MP4)

From a technology-acceptance model perspective, the above reflection suggests that technology has gradually become more accepted and integrated into teaching and learning as it has become more accessible and valuable (Buana and Linarti 2021). This participant also alluded that technology is now an indispensable resource, and they cannot imagine teaching without it. The social causality of this attitude by this participant could be attributed to individuals' attitudes towards technology changing over time, given that individuals become more familiar with it and recognise its benefits. In Bourdieusian terms, the participant's reference to "*it is just part of evolution*" regarding technology in teaching indicates that cultural and social factors influence technology acceptance. For example, African language lecturers more comfortable with technology may be more likely to incorporate it into their teaching practice. In contrast, those who are less comfortable may be more hesitant to do so. In addition, the participant pointed out that:

So, technology has, you know, sort of started off very minimally, but now I think it has become indispensable that I don't think I can quite comfortably go and teach without technology because I need access to internet, I need access to YouTube. (MP4)

This statement suggests that technology acceptance in teaching is also influenced by access to technology resources. In other words, lecturers with greater access to

technology and its resources may be more likely to accept and use technology in their teaching. In contrast, those with limited access may be more reluctant to do so.

Participants MP5 and FP6 also shared their unique historic stride into how technology was accepted by their colleagues in the department where they teach. For MP5, they shared that:

You see, even when we started teaching, there were no cellular phones and stuff. Technology was very slow at the time when we started. It is only now that we utilise technology. Even for our classes we have WhatsApp group and all those things, which was not the case before COVID, but it was acceptable, but it was not used. It is acceptable because, like when you have a material that you want your students to access, then you use technology for them to access any information that you need. So, it is widely and openly acceptable. (MP5)

The above extract reveals that technology was not widely accepted or used in education. However, remote teaching became more accepted and necessary during the COVID-19 pandemic, demonstrating a shift in attitudes toward technology acceptance and use in education. Bourdieu (1986) explains this shift as a function of the accumulation of cultural capital, where technology expertise in teaching has become a valued form of capital in education, and those possessing this capital have an advantage over those lacking it. The pandemic prompted technology skills to rapidly gain value as cultural capital within the MP5's department for teaching African languages. Where technology was once resisted, it suddenly became an essential and esteemed asset. Technology's newfound acceptance and ubiquity in teaching shows that it has become a form of valued cultural capital, conferring advantage to faculty with technological skills.

In the case of FP6, they reflected on a wide range of attitudes towards technology acceptance and use in the department where they are teaching, ranging from individual lecturers who use technology minimally to those who are highly proficient in using it. The below extract captures their revelation:

You know, there were ... there was no other way to avoid technology, but then we do have those who use it to the minimal. You know, they just post notes, and that is it. And then you have those that go beyond extreme, you know, that they know every tool that is available. So, there is quite a wide spectrum; you have got those

ones who are more traditional; they just use it because it is there. It has to be used, and then you have got the ones that use almost every tool, and then you also find those that are in between. And so, I will say that we have got a mix. It also depends, you know; with experience, you will find that those who have been here like a long time, they are not that keen into the use of technology and the older ones as well, they are not that keen, but then you find the young ones, the ones who on their own are experienced. But you also do get older people that are into technology who are just, you know, sailing through this technology that don't have a problem. So, it's quite a mix. It's a mixed bag. (FP6)

In Bourdieusian terms, one could say that the different individual dispositions towards technology acceptance and use captured above are based on participants' social and cultural backgrounds. More traditional people are less likely to adopt technology, while younger and more experienced individuals are more open to adopting it (Adedokun and Zulu 2022). One could argue that the variation in habitus can create tensions and conflicts around adopting and using technology in education. The participant's acknowledgement that there is "*quite a wide spectrum*" of technology use among their colleagues reflects the idea of innovation diffusion, which suggests that the acceptance of technology can vary widely among individuals and groups (Adedokun 2020) and the fact that individuals' acceptance and use of technology reflects their position within the social hierarchy and their access to cultural capital.

For Participant FP7, the revelation regarding the acceptance and use of technology in their department brings some flexibility into the discussion on how individual lecturers accept and use technology in their teaching. According to them:

I can't really say there is an extent to which it is expected to use technology in our teaching department. I think each and every individual gets to determine how much they want to use technology because there are some people, even those who are in the language department but whom also have knowledge of technology. So, those people can go to any extent they wish to use technology as long as it is within the guidelines of our institution, and also it enables the process of teaching and learning to run smoothly and effectively. (FP7)

The revelation above regarding the acceptance and use of technology in teaching African languages in their department suggests that using technology in their teaching is not expected, suggesting a certain level of flexibility on how much technology is used. In other words, there seems to be a lack of consensus on the extent to which technology should be used in teaching, and there may not be a clear policy or guidelines in place. This could be seen as an example of agency, as individuals can determine their level of engagement with technology.

In Bourdieu's terms, this would suggest that the lack of consensus would create a "field of struggle" in which individuals compete to establish their own positions and practices regarding the use of technology in their teaching (Piotrowska 2019). The participant mentioned that some individuals in the department have knowledge of technology and may be more inclined to use it, while others may prefer more traditional teaching methods. This could be seen as an example of Bourdieu's cultural capital concept, where individuals possess different types of knowledge and skills that can be used to gain social status (Wang 2023), thereby impacting the distribution of power and influence among staff members.

One of the participants, MP8, also made a revelation similar to that of FP7 above. They revealed that the department where they teach welcomed new ideas and was open to the use of technology, which indicates that technology is accepted – a more positive attitude towards technology acceptance from the department, thus a higher level of technology acceptance. According to them:

To be honest, the department I come from the management itself because I think they are the ones who are in charge of authorising in terms of accepting and everything; the management is very welcoming and open to new ideas and new stuff. So, they are okay with it, and actually, they embrace it if we use technology to enhance our teaching and learning. However, I should be honest that some of us from the department have been relaxing when it comes to technology. But then I understand because people, they prefer the traditional teaching methods and stuff so, but the department itself it is okay. It accepts the use of technology. (MP8)

Their above revelation also highlights the agency's role in shaping individual practices and attitudes, suggesting that individual lecturers can incorporate technology in their teaching

as long as it aligns with institutional policies and facilitates learning. However, MP8 noted resistance to technology use among some staff within their department. This reluctance could be an example of '*cultural inertia*' – a persistent commitment to existing norms and resistance to changing practices, potentially present within the departmental culture. While lecturers may have latitude in their teaching methods, this inertia around technology adoption indicates entrenched perspectives that individual agency alone cannot always overcome. The tensions between institutional acceptance, individual agency, and departmental inertia highlight the complex interplay of factors influencing technology use in teaching.

This presence of '*cultural inertia*' could also have been influenced by the function of social forces that the said individuals perceived, thereby suggesting a lower level of technology acceptance among individuals in the department, possibly due to their habitus and personal preferences. This view also aligns with Bourdieu's view on the role of habitus in shaping individual practices and dispositions. The reference to '*some of us from the department...*' suggests competing habitus within the department, which could create tensions around technology acceptance, adoption and use in their department.

In conclusion, the revelations of all participants above regarding the acceptance and use of technology in their department for teaching highlight the complex interplay between cultural capital, agency and technology acceptance in the context of African language teaching departments. Their attitudes suggest that while there may be resistance to change in terms of accepting technology in teaching, there also exist individuals who are more inclined to accept and use technology. It is worth noting that the attitudes and beliefs of departmental management and institutional guidelines can significantly shape the extent to which technology is accepted and used in teaching.

5.3.1.5 Language teaching aspects suitable for technology use

The aspects of language teaching are the different components or elements involved in teaching a language to students (Idris et al. 2020). All aspects of language teaching require specific teaching strategies and techniques and different materials and resources for their effectiveness during teaching (Mohan 2019). Thus, effective language teaching involves a balanced approach that covers all these aspects comprehensively and engagingly (Chattaraj 2020). Language teaching encompasses various essential aspects such as grammar, vocabulary, pronunciation, listening, speaking, reading, writing, and cultural

aspects (Dadvand and Behzadpoor 2020). The language instructors themselves teach the different aspects of the language depending on the goals and needs of the learners, bearing in mind that all aspects are often interrelated (Wallen and Tormey 2019). The above-identified aspects of language teaching and the goals and needs of each learner are argued to influence how language instructors use technology (Brenneman 2022). In the responses of the African language lecturers interviewed, there are two categories of responses on their views on what aspects of language teaching they think are suitable to teach using technology.

One category feels it can be used to teach ‘all aspects of language teaching’ while the other thinks it can teach specific aspects. Examples of the first category – those who feel technology can be used for all aspects of language teaching are analysed below:

I think all the aspects of language teaching are suitable to teach with technology. I say this because using technology to teach language ... it enables learners to actually get to know how to pronounce, and it also makes it easy for learners to access the information very easily, unlike when you have to be in the classroom with them and writing on the board. It usually happens that you write something, and they mistake it as something else. So, with technology, everything becomes clearer. I think it is suitable for every aspect of language teaching (FP7)

The above response of Participant FP7 expressed the idea of technology as a form of cultural capital. In Bourdieusian terms, technology in language teaching is seen as a tool that can enhance students’ cultural capital by providing access to fresh learning models and new forms of knowledge and skills. The participant’s response above also reflects the power dynamics in the language teaching field, in which the language lecturer is equipped with the power to shape the distribution of cultural capital among the students. When the speaker goes on to say that “*with technology, everything becomes clearer,*” they reiterate the role of technology as a transformative tool for language teaching for all educational practices and expand “*access [to] information*”, which potentially disrupts traditional power dynamics in the classroom setting.

This lecturer's response also indicates a positive and enthusiastic attitude toward using technology in teaching African languages. They portray it as clearly superior to traditional classroom teaching, able to provide clarity and overcome previous teaching challenges.

The tone of their response indicates a belief that technology should be embraced in all domains of language instruction to best equip students with valued cultural and linguistic capital. Therefore, I argue that while this lecturer's positive and enthusiastic attitude may aim at empowering the students they teach, it risks overlooking the complexities of educational technology from an equitable perspective. Thus, greater reflexivity is encouraged about the complexities and potential exclusion of foregrounding technology over accessible teaching methods.

Participant MP4 also shared a similar but distinct view with FP7 about the suitable aspects of language teaching where technology can be used. According to them:

I think everything because I use technology to teach. I am teaching research, not just research in language but research in education. I use it to teach academic literacy; I teach sociolinguistics, I teach everything, you know ... all aspects of language are taught when doing methodology, especially when I am teaching aspects such as how teachers would teach a lesson on listening and speaking or reading or writing. Then, I am using technology to demonstrate that it comes in the way you teach. So we are using technology so that students are able to see because my teaching is then modelling for students what they are going to do, and the use of technology is just part of it. (MP4)

In the same manner, the revelation of Participant MP4 emphasises the indispensable roles of lecturers and technology in the language teaching classroom. First, they indicate that lecturers have a crucial role as models for students who shape the distribution of cultural capital by transmitting their skills and knowledge to students. However, the lecturer implied that technology is integrated into their pedagogy, not replacing other methods. This balanced approach fits Bourdieu's (1977) caution about not allowing tools like technology to become social dividers. The lecturer sees technology as a "part of" teaching, not its entirety. Here, the lecturer has an open yet measured attitude toward technology. They appreciate its capabilities and actively integrate and use it into their teaching, yet they balance this with varied methods to avoid technology becoming a barrier. Their attitude recognises technology's value alongside its limitations, aligning with Bourdieu et al.'s (1996) nuanced take on reproducing capital without exclusion. A nuanced take like this lecturer's views allows for maximising technology's benefits through an inclusive, multifaceted teaching approach.

A similar yet balanced view regarding the suitable aspects of language teaching where technology can be used is shared by Participant FP3:

I think you can use technology for anything. And not because ... I am saying that just because I think that it is a nice thing to say 'No'. We are currently working on a project that is funded by government. That is a human language technology project, and we are actually working on our current basic isiZulu, which is for second-language speakers to become a fully online module. And so, right now we are tackling and battling and fighting with aspects that we thought were not teachable by technology, but we are finding out that things like gamification etcetera can be used because we have obviously partnered with people that are techno pros, you know. And so, that partnership has worked very well in terms of what we can do with language. And so, I don't think there's anything that you can't teach with language. And, in fact, there are elements that we thought initially. For example, if the student doesn't hear the language being spoken often enough or the student doesn't get to practice often enough, there are ways to get around that. So, technology can do almost anything that you wanted to do for you. (FP3)

The personal experience of FP3 above reflects the notion of technology as a tool for democratising access to cultural capital. In Bourdieu's view, the distribution of cultural capital is frequently determined by social structures and power dynamics rather than being evenly spread (Marques 2015). This implies that technology in language teaching could help level the playing field by providing access to new forms of cultural capital, such as the "gamification" of online modules. The expressions such as, "*We are currently working on a project that is funded by government*" and "*because we have obviously partnered with people that are techno pros, you know,*" also demonstrate the idea of partnership and collaboration, which are essential for the creation of new forms of cultural capital. The lecturer's acknowledgement of partnerships with technical experts also suggests recognising the limitations of their technological capital. It demonstrates an openness to collaboration to enhance pedagogy rather than rigid adherence to solely technology-focused teaching.

The lecturer has an enthusiastic yet balanced attitude toward technology integration, just like Participant MP4. They are eager to leverage technology affordances, believing it can "do almost anything" to aid language teaching and learning. However, they temper this with

awareness of its limitations and willingness to gain knowledge from partners. This nuanced perspective aligns with Bourdieu's view of judiciously reproducing valued capital without exclusion.

One could, therefore, argue that the lecturer's action regarding the use of technology at multimodal levels in teaching African languages could be influenced by their possession of cultural capital, which, in a manner, could be a result of how their institutional partnership and collaboration had shaped their perceptions of what was acceptable and not acceptable regarding technology.

A personal experience regarding the suitable aspects of language teaching where technology can be used was also shared by Participant FP3. They shared the following thoughts:

I think all aspects of language can be taught because I have used it ... ehm. I was never hindered in any aspect as long as you know you are able to share the material and you can project your voice correctly... yeah, you can teach anything, any aspect. That is my opinion. (FP1)

The revelation of Participant FP1 above emphasises their personal experience of successfully using technology to teach all aspects of language. The statement, "*I think all aspects of language can be taught because I have used it...*" highlights the critical role of reflexivity and self-awareness in educational practices, which can help lecturers understand and respond to their student's diverse needs and interests when using technology in their teaching.

The lecturer's expression of total confidence that "all aspects" of language can be taught with technology, based on their experience, aligns with Bourdieu's concept of embodied cultural capital – the lecturer's practical mastery of teaching language with technology is a form of specialised knowledge and skills. However, their prerequisites of sharing material and projecting voice suggest an awareness of potential limitations. While enthusiastic, the lecturer implies that technology still requires effective pedagogy and technical competence. This tempers their stance by acknowledging that teaching effectiveness involves more than technology access.

It can, therefore, be inferred that this lecturer has a positive attitude toward using technology in language teaching, and this attitude is grounded in first-hand experience. However, their perspective is balanced by an understanding that successful technology integration requires embodied lecturer capital, such as pedagogical knowledge and technical skills.

I, therefore, argue that the lecturer's recognition of their background, training, and expertise was influenced by their views on the effectiveness and suitability of technology for language learning. On the other hand, it could also be argued that acknowledging one's subjective perspectives can make one more aware of one's position within the social hierarchy and the cultural norms and expectations that influence one's actions.

All the above participants (FP7, MP4, FP3, and FP1) shared similar but distinct views that all aspects of language teaching can be taught using technology. Their use of the personal pronoun "I" in their responses reflects their individual opinions and experiences, which is a crucial element in Bourdieu's concept of habitus – "I" highlights the individual habitus of the lecturers and how it has shaped their beliefs about the use of technology in language teaching and their positionality within the field of language teaching.

In conclusion, the perspectives shared by participants FP7, MP4, FP3, and FP1 regarding language teaching aspects suitable for technology use reveal the influence of cultural capital and individual habitus. Their positive outlooks toward educational technology are enabled by the cultural capital they possess, giving them familiarity and comfort with technology. However, their specific views on ideal technology applications also stem from their individual experiences and dispositions (habitus), reflecting that unique perspectives are shaped within the broader field. The multidimensional integration of technology in language instruction can thus be seen as a complex phenomenon, impacted by societal digital divides and individual positions within the field. Therefore, I argue that the personalisation of experiences regarding the use of technology indicates the assertion of individuals' authority and expertise in the language teaching field, the cruciality of their views, and the social and cultural factors that shape those views.

The second category of responses from African language lecturers focused on their views on the language teaching aspects suitable for technology use are those who think it can be used to teach specific aspects of language teaching. These participants believe that

some aspects of language teaching are better taught using technology while some are not. All of them commented based on their experiences using technology for those mentioned aspects. Examples of this category are analysed below:

I think it depends. You know, it depends on the modules that we are teaching because some other modules are, you know, Uhm ... Uhm ... would accept technology easily, but some modules, they would need, you know, some sort of a face-to-face kind of a teaching and learning situation. So, it depends with the modules, yeah, because even teaching isiZulu depends on what I'm teaching at the particular time because some sections they would, you know, need face to face. OK. So, you know, what it is that you are teaching non-mother tongue speakers to speak isiZulu, I think not suitable for me specifically. It's not suitable for me to teach them, you know, like online using technology. I prefer to do face to face....uhmmm....lectures but with the theoretical aspect of isiZulu like teaching the advanced isiZulu to the mother tongue students where we learn your morphology, your phonetics, your semantics and all other elements of linguistics. I can teach online. But teaching the second ... or like teaching the non-mother tongue, it's very difficult online, yeah. When I teach, you know, the applied language now. Where the theoretical aspect, you know, is being taught, uhm ... like your linguistics where we do like phonetics and other aspects of linguistics, and that's when you are able to uhmm ... sort of like teach them online but with the non-mother tongue, it is not, yeah. (MP2)

The above lecturer expressed a nuanced, context-dependent view on using technology for language teaching. They differentiate between theoretical modules, which they feel works online using technology, and applied non-native speaker instruction if isiZulu (a language spoken in South Africa), which they believe requires in-person teaching. One could, therefore, argue that their preference in this case could be influenced by their cultural background or personal experience, which shaped their perceptions of the effective teaching methods for the different aspects of language teaching. It could also be argued that their differentiation demonstrates an understanding of embodied cultural capital – that effective language instruction requires tacit knowledge and skills developed through an immersive experience. From a Bourdieusian lens, exclusively online teaching using technology risks lacking the embodied cultural transmission that occurs face-to-face.

Similarly, one could argue that the language teaching field is not homogeneous but contains sub-fields with different requirements and practices. The field of language teaching, as described by Participant MP2, is portrayed as one where agents (lecturers) compete for valued forms of cultural capital, such as expertise in linguistics and mastery of effective teaching methods. Their specific reference to their preference for a face-to-face teaching mode for second-language speakers could be seen as a way to differentiate themselves from other second-language lecturers and gain an advantage in this field of language teaching.

However, the lecturer's openness to technology to teach certain modules (courses) shows they do not entirely reject its value. Their attitude recognises technology's affordances in some contexts but not as universally appropriate. This balanced perspective aligns with Bourdieu's (2018a) caution about fetishising any single educational approach. Their nuanced view aligns with Bourdieu's rejection of monolithic solutions, recognising cultural transmission's situated, embodied nature. It could, therefore, be argued that participants' perceptions and practices in the field of language teaching are shaped by their habitus, which is, in turn, influenced by their linguistic background and previous experiences.

MP5 expressed a similar but more context-based view about the aspect of language teaching they think is suitable to teach using technology. Below are their thoughts:

You see the technical part of linguistics, subject of linguistics, that we teach and needs technology, like when you teach phonetics. Phonetics depends heavily on technology. But when you teach literature, you just deal with the content of the book, and you don't need any technology. But when you teach Phonetics, you need to use technology. You see, there are aspects of the linguistics that we teach at the university that rely on technology, like lexicography; when you are compiling dictionaries, you really have to go to the lab. When you teach a translation and interpreting, you have to use the lab. So, that is why I, technology is used mainly but for other aspects of linguistics you really ...You can get away without using technology. You see even for the teaching of basic isiZulu, we used to use technology in the language laboratory where we take our students with language lab. But it is not happening anymore because most of the lectures were online, but maybe we will have to revive that and take the students to practice sounds and do

exercises in the language laboratory. Yes, it is very important for teaching language.
(MP5)

The participant above distinguished between more technical aspects of linguistics that rely on technology, like phonetics, lexicography and translation, and more theoretical areas, like literature, where technology is less needed. This aligns with Bourdieu's concept of embodied cultural capital, that is, some fields require specialised technical skills and dispositions cultivated through hands-on experience. This lecturer displays a pragmatic attitude, recognising technology as crucial for developing technological capital in certain applied, technologically mediated aspects of language education. However, they balance this by acknowledging that other areas, like literature analysis, do not require extensive technology use. This nuanced perspective values technology's affordances without overstating its universal necessity. In Bourdieusian terms, one could say that this represents an instance of the intersectionality of habitus and cultural capital in the field of language teaching, where the use of technology in some aspect of the field indicates a form of cultural capital, which is valued in the field, and require specialised teaching and research.

Furthermore, Participant MP5 reflected on their habitus, where they were exposed to and trained in the technology used for certain aspects of linguistics. According to them, varied availability of technology exists across the different aspects of language teaching. One can, therefore, argue that the social capital an individual can access through their social network, in this case, depends on the connections and resources to which their language department and institution have access. Their exposition also reflects how the field of language teaching has evolved, with technology becoming increasingly essential for certain aspects of language teaching. This lecturer also confirmed in the interview that there had been a decline in the use of language laboratories in the teaching of 'basic isiZulu'. This decline may reflect the extensive revolution in the language teaching field and the acceptance and adoption of technology, which can affect the status and reputation of a particular field and the individuals within such fields. It could, therefore, be argued that the choice of the lecturer to use technology, in this case, is influenced by the diminishing need of the target audience (students) in the language field in which they operate and the increased relevance of technology to language teaching.

In Bourdieusian terms, the lecturer views technology as enhancing linguistic capital but requires judicious application based on the lecturer's embodied expertise, not just abstract enthusiasm. Their balanced attitude eschews technocentrism and encompasses a contextual, capital-focused analysis. Their observations demonstrate how Bourdieu's theory can inform technology integration. This lecturer provides a model for technology adoption that is neither Luddite nor evangelical but constructively focused on lecturer and student capital development.

In response to the aspect of language teaching they think is suitable to teach using technology, Participant FP6 stated that technology "*actually articulates the sounds for you*", which helps students "*describe it correctly and able to teach*" pronunciation. This demonstrates their firsthand experience that technology enhances their embodied cultural capital in linguistics. Reference to creating 'exciting activities' with technology in their teaching also indicates their creativity regarding the provision of valuable resources for students to engage with their teaching, and using a programme by another institution, "*The University of Antwerp in Belgium*", they are tapping into the prestige associated with that institution. In Bourdieusian terms, by associating with a foreign university, it could be said that technology is a form of cultural capital that allows the lecturer and their students to access resources that might not be otherwise available to them in their institution and department.

Furthermore, the lecturer's comment on how they "*divide students into groups*" reflects what, in Bourdieu, is referred to as "social stratification"; students are grouped based on different levels of competence. In the traditional classroom, therefore, the students of different levels of competence could be grouped, which could be frustrating for students who are more advanced and, at the same time, hinder the progress of those struggling to catch up. The lecturer, however, hinted that their institution is on its way to dealing with "social stratification" and a system where students of different levels of competence could be catered to at the same time, thus "leaving no one behind" (United Nations 2015) regarding the use of technology, which allows the students to progress at their own pace and thereby improves their outcomes and abilities to access cultural capital in the future (Mendoza 2015).

Participant MP5 is enthusiastic about technology as it dramatically empowers their teaching competence and practice. They consistently emphasise how technology

improves their ability to foster student learning, amplifies their pedagogical capabilities, and provides extensive resources not possible otherwise. From a Bourdieusian perspective, this lecturer deeply values technology to enhance their cultural capital and better reproduce valuable linguistic capital for their students. Another participant, MP8, also shared their thoughts on the aspect(s) of language teaching they think is suitable to teach using technology. According to them:

Maybe I think it is the linguistics part because especially you can start using videos to show maybe the specific parts of the lesson. So yeah, stuff like phonetics. You can use videos if you want to show maybe where certain sounds come from the mouth. So yeah, although some. Yeah, I think it would be for phonetics because that is when it requires you to show you, at least maybe by using a video accessing pictures. By using videos, they make it simple for you to explain or even for them to see... Okay, this certain sound comes from this part of my mouth, this certain sound comes from this part rather than having to explain without them seeing. You know. In that sense. (MP8)

In this above response, the lecturer based their response on one aspect of language teaching (linguistics) and a sub-aspect of linguistics (phonetics) and how technology is used in their teaching. They mentioned how technological tools such as pictures and videos enhance the understanding and presentation of sound when teaching phonetics. This indicates that the interviewee recognised the importance of presenting information in an understandable and accessible manner and the role of technology in achieving this goal. Their understanding of technology as a means of achieving such goals in their teaching practice, in Bourdieusian terms, demonstrates the lecturer's possession of cultural capital, which can be used to gain social advantage, such as through promotion in their field or employment in other similar fields and could also lead to increased social status within their field. In addition, using videos and pictures in language teaching could be an example of how cultural capital is transmitted through habitus or the internalised dispositions that shape an individual's behaviour and understanding of the world. It could, therefore, be argued that individuals whose habitus includes specific doxic notions, in this case, could have been influenced by the likelihood of an expectation that such resources will be available in other similar fields or educational settings, while those who had no access to such resources may not have the same expectation.

In conclusion, I argue that the use of technology by lecturers was influenced by the aspect of language teaching they teach, as their choice of the appropriate technology for such aspect(s) enabled them to sincerely represent their symbolic view of the world in their teaching.

5.3.1.6 Internal and external factors as determinants of lecturers' use of technology in teaching African languages

This section explores the decision-making process behind the use of technology in teaching African languages, including who decides on the use, what motivates the use, and whether there was any discussion regarding the use of technology with the individual, department, or institution.

I started using technology in 2020. It was during COVID. Before 2020, I did not use it. So, I was forced by circumstances. We were not allowed to teach face-to-face because of COVID rules. First of all, the institution was closed. Everybody had to stay home...ehm, but then, teaching and learning were supposed to continue. So, there was no other way other than using technology in order to reach to them. Let me say before COVID, I would never use it. I would see people using it, and I even went for the training in the CELT lab, but I found it very difficult and annoying. Exercises that we were doing there, I just felt I....no...this is not for me. So until I was forced by COVID, I am sorry to repeat this.... until I had no other alternative, then I had to use it, and now that I am using it.... right now, we are using it now as I am talking to you. So, I am now free because I know how to use it. So, in a way, it was ignorance and fear of technology that demotivated me initially.... but now that I know how to use it, I am free, I am very motivated. I can now choose to work from home and not go to the office. (FP1)

The response of the lecturer above captured what motivated them to use technology. Their shared experience highlights one of the crucial moments when, for the first time, the world was in one accord regarding an issue. The participant's exposition about when they took the use of technology seriously for the first time is an instance of how external factors, such as social and economic circumstances, can impact an individual's use of technology. They noted they were "forced by circumstances" to use technology, suggesting they had no pre-existing disposition towards it. In Bourdieu's terms, in this case, they seemed to

lack habitus, which is required for technology use in their teaching and therefore seemed to look at the “game” of using technology from a distance.

Furthermore, the participant’s reference to not using technology before 2020 and only starting to use it at the outset of the COVID-19 pandemic suggests that they lack cultural capital in such a domain. In other words, they may not have had the skills or knowledge necessary to use technology in their teaching prior to the pandemic, which, in this case, contributed to the difficulty they encountered during the emergency use of technology in their teaching. The effect of the pandemic, which resulted in lockdown, made teaching face-to-face impossible; however, their institutional guidelines require that ‘teaching and learning were supposed to continue’, and the only way this would be possible was to adopt technology to reach students. This is an example of how external factors can create a need for technology adoption, in this case, even for individuals who may not have had a prior disposition towards it, thus highlighting the role of external factors such as COVID-19 and internal factors such as institutional guidelines in shaping individual’s adoption and use of technology (Montes Garcés 2022).

It could be argued, therefore, that this lecturer, in this case, lacked the necessary cultural capital required by the social field of technology; hence, their feelings of frustration and annoyance during the training in the ‘CELT lab’, as they felt the exercises being taught required a level of capital that they did not possess at that time. Last, the lecturer’s comment when they said, *“First of all, the institution was closed. Everybody had to stay home...ehm, but then, teaching and learning were supposed to continue. So there was no other way other than using technology in order to reach [the students]”* highlights the potential of technology for dealing with massification in the HEI landscape, and in this case, the closure of the institution and the need to use technology to continue teaching and learning activities (Pillay 2020). By leveraging technology, the institution continued to reach a wider audience of students and provide learning opportunities to them, even those who may not have had access to them otherwise. Participant FP1, who decided for them to use technology, shared the thoughts below:

Actually, the decision to use technology was a top-down approach – from the institution down to the departmental level, the varsity was encouraging the use of technology in our teaching. At some point, some questions were sent to us, and, you know, asking us whether we were teaching 100% face-to-face.....you

know...questions like that. And if there are any modules that we were teaching using technology? So we were somehow....somehow it was mandatory for us to go for training because otherwise we would not implement the blended teaching and learning...yea, so...yes...there were discussions from the institution, also within the department, and we did see some young academics who were using technology to teach and telling us about the advantages of the use, yea...so there were discussions, departmentally and institution wise. (FP1)

It could be gathered from their comment above that the decision happened to be "...a top-down approach", which reflects the dominant habitus of the institution, which placed importance on integrating technology into teaching and learning. It can be argued that the lecturer's habitus, in this case, to use technology, is shaped by institutional and departmental expectations and requirements regarding using technology in teaching and learning. The fact that their institution also encouraged technology use reflects how the field of practice where they work operates and that the field highly valued and encouraged technology use in teaching. This further indicates the dominant position of technology in the field, which confers a certain dose of symbolic capital to those who can effectively use it in their teaching practice. As a result, lecturers who can effectively integrate and use technology in their teaching are likely to be recognised and rewarded within the field, while those who are unable or unwilling to do so may be at a disadvantage. The lecturer's revelation that "*there were discussions from the institution, also within the department*" regarding how technology is being used in their teaching reflects the importance of social capital in understating the decision to use technology and the fact that the lecturers who were able to establish a social network and collaborate with other colleagues were able to acquire the necessary social capital for them to be successful in their field.

On the flip side, this lecturer's reference to the decision to use technology as a "top-down approach" from the institution and department encouraging technology use, with questions probing their teaching methods and the fact that "it was mandatory for [them] to go for training" otherwise blended learning implementation would not occur, indicates that the decision to adopt technology in their teaching was driven by institutional policies imposed upon lecturers, rather than autonomous choice. As Bourdieu argued, this external approach risks viewing lecturers as "passive receptacles" rather than agents actively embodying capital (Reay 2004:60). While potentially increasing use, mandated technology

integration and use may foster resentment or disengagement if lecturers feel devoid of agency. Alternatively, voluntary development of technological capital can empower lecturers with a sense of investment in technology, not just obligation. As Bourdieu emphasised, durable transformation requires individual capital cultivation through intrinsic motivation (Bourdieu 2001). It could, therefore, be argued that a top-down decision-making approach that compels agents' compliance through institutional authority will not result in a feasible change in attitude; sustainable change and equitable outcomes rely on lecturers developing positive attitudes and technological capital through agentic adoption. On who decided to use technology for lecturers, Participant MP2 shared a similar but more agentic view than Participant FP1. According to them:

OK, so during COVID, obviously it was the institution's decision, you know, to say everyone should, you know, try and use this route, but post, you know, lockdown ... ehmmmm ... so, it's really ... mmmm ... on the lecturer and now if they want to use hybrid way, if they want face-to-face, if they want to use technology only, so it really has to do with the lecturer we decide, or I decide if I want to see them face-to-face or I want to do it online. So, but as I've said, it depends on what ... who I am teaching, so if I teach, you know, non-mother tongue students, you know, I am like, I would have to see them face-to-face, but I wouldn't mind teaching using technology at the theoretical aspects to the mother tongues ... Yeah. (MP2)

The lecturer above revealed how, during the COVID-19 pandemic, the institution used mainly technology in their teaching; however, the individual lecturer decided to use hybrid teaching (combining face-to-face and technology). This indicates that the pandemic influenced the social field of higher education and that the institution influenced the habitus of lecturers in choosing the teaching approach. This lecturer also revealed how they would prefer to teach non-mother tongue students face-to-face because they believe it would be more effective; however, they use technology for theoretical aspects of the course with native speakers. This shows how their habitus, in this case, is shaped by their experiences as an African language educator and the perceived needs of their students. It could, therefore, be argued that the exposure of this lecturer to native and second-language students has bestowed on them a habitus that influenced their approach to language proficiency issues in their teaching practice. Their preference for a teaching mode could also have been influenced by their habitus, which is likely shaped by their own experiences

as a once-upon-a-time language learner, which further highlights the role that habitus plays in shaping an individual's decision-making and approach to teaching. I argue that granting educators more discretion over technology recognises their pedagogical expertise in evaluating its affordances versus constraints across contexts. This empowerment through decision-making latitude aligns with Bourdieu's view of agentic capital accumulation rather than passive reception of policies (Bourdieu and Wacquant 1992). The response of MP2 below brings a new perspective into the narrative of who decides they use technology in their teaching.

So yes, I was bound by, you know, the rules of the government to teach using technology, but now it is, I think, of our, you know, daily lives, you know, as I am speaking to you through, you know, teams, that is part of technology, so I think uhmm ... being introduced into the space of technology has helped me to, you know, uhmm ... to integrate my teaching with technology and even currently I do have classes that I teach online, so I think the lockdown was a good motivator for me to use technology because I believe that if it wasn't for COVID, I would still be doing things, you know, traditionally, and if it wasn't for technology, we wouldn't do this interview. If it wasn't for COVID, we wouldn't do this interview online and, you know. Yeah. So I think ... uhmmm ... lockdown is a good motivator. (MP2)

The above lecturer states they were initially "bound by" government rules during COVID-19 to use technology. However, they now indicated that technology is "part of" daily life and has helped "integrate my teaching with technology". This claim demonstrates that an initial external impetus compelled technology adoption and use, but the lecturer has since developed intrinsic motivation and investment, now voluntarily integrating technology into their pedagogy. As Bourdieu contends, lasting change requires agents to embed new practices within their habitus through internally driven capital cultivation (Bourdieu 1977).

The lecturer gained embodied capital through the initial mandatory adoption, allowing appreciation of affordances that now drive continued, voluntary use. This represents a shift from passive compliance to policy to lecturers actively leveraging technology as beneficial to them and their teaching. In terms of the pandemic motivating this lecturer to embrace technology in their teaching, one could say that larger social forces, such as the pandemic and government regulations, can influence individuals' practices and decisions. The

lecturer's eventual adoption of technology in their teaching can be seen as an accumulation of cultural capital, as they now possess knowledge and skills valued in a technology-driven educational setting. In the case of Participant MP4, on who decides on their use of technology for their teaching, they shared the thoughts below:

The extent to which technology is accepted in the department or in our cluster, I think anybody who doesn't use technology is not in the cluster because we all ... So, I mean, we are almost contractually bound to use technology because of teaching asynchronously and synchronously via Zoom and via Teams. It has just been a way of life, you know; it is not as if you have a choice anymore. If you needed to get to students, it was the only way you could do your work. (MP4)

The above response by participant MP4 brings a new outlook into who decides on their use of technology in their teaching and whether they had a choice. This lecturer hinted that the use of technology had become a norm to the extent that individuals who do not use it are not considered part of the cluster; in their words, using technology has become a “way of life”. This indicates that technology has become an ingrained habitus within their field of practice, becoming a defining characteristic of the field, and those who do not use it may develop a feeling of alienation. In addition, technology appeared to have significant symbolic power, as it is a requirement for participation in the group, suggesting that technology use is a cultural marker that defines membership in such a group. The lecturer also clarified that they felt “*almost contractually bound to use technology because of teaching*”, indicating that individual members of their department have deeply internalised the habitus of technology use. Another lecturer, Participant MP5, shared a new insight into how their decision to use technology came by.

Discussion regarding the use of technology. I don't think there was any real discussion about the use of technology. I think the discussion was more about how to use it for maximum benefits. It was more of training in the technology. As lecturers, I think we accepted that we are going to ... have to access our students in some way. Otherwise, students would drop out, or students would be failing in droves. So, to get to those students, technology was almost a given, and the only thing that we engaged with the university was on how best to use the technology or how to use the technology. What was best practice? And I think there was a great effort made on the part of universities to empower lecturers to be able to use the

technology to use things such as Zoom and Teams. And how to present lectures in a way that would engage students rather than have them just sit and watch a movie playing in front of them where the lecturer is just presenting. So how to make the teaching engaging? How to get students to engage with the material rather than just be passive recipients? So, the discussion was more about how to use technology effectively rather than whether you are going to use it or not. (MP5)

In the transcript above, the lecturer considered whether there was any discussion with them regarding using technology in their teaching as lecturers teaching in their department and how they have come to accept it as a necessary aspect of their profession. The lecturer also discussed the role of the institutions in South Africa in empowering lecturers to use technology to teach effectively, which reflects the role of the institutions' expectation in having a certain level of cultural and social capital that they can use to shape the expectations and practices of their lecturers and to provide them with the necessary tools and training to function in their field effectively. Furthermore, the above lecturer espouses the importance of using technology that engages students and encourages active participation in learning, reflecting how individuals compete for power and resources in a social field. In HEIs, the field comprises various actors and institutions that shape the educational system. Using technology effectively, lecturers can engage students and compete effectively in the field.

Overall, the revelations of the above lecturer regarding the discussion with them regarding the use of technology in their teaching as lecturers can be seen as reflecting the distribution and acquisition of cultural capital in the field of education. Recognising the importance of technology skills and the efforts to empower lecturers in using technology effectively can also be seen as reflecting the institutional strategies used to maintain cultural capital and reputation in education and language teaching. The below transcript is a sequel to the revelation of MP5 on who decided to use technology in their teaching and if there was any discussion whatsoever with them.

It is the lecturer who takes a decision whether he or she would like to use technology. As I said, it is acceptable by the institution, and the responsibility and the decision lies with the lecturer's consent if they would like to use technology in their teaching. (MP5)

It was the need because of the era of technology that we live in, and we felt that we are compelled to utilise technology and also the nature of the quality of students that we teach. We mainly teach youngsters who are ... The time dictates that we penetrate technology because we are in that technological era. (MP5)

There was no discussion. You take a unilateral decision whether you want to use it or not. And it also ... it is informed by the nature of your type of assessment. So, we use continuous assessment. So, when you give an assignment then this when you decide whether you want them to submit their assignment online or you want them to write and give you hard copies and, and... becomes easier for you to mark hard copies. So, it is entirely upon you; you use your own discretion. (MP5)

The lecturer above describing who decides on their use of technology suggests that individual lecturers' habitus does not solely determine the decision to use technology in teaching but is also influenced by the institutional field in which they operate. On the other hand, the acceptance of technology by the institution created a space in which lecturers can exercise their agency and make decisions based on their habitus. However, the decision may still be influenced by the field's constraints, such as the availability of resources, institutional policies, and the expectations of students and other colleagues.

On what motivated this lecturer to use technology in their teaching, they initially acknowledged the importance of technology in today's society, reflecting the idea of dominant capital, which, in Bourdieusian terms, are the resources and knowledge valued and rewarded by the dominant group. For instance, in today's society, the dominant group values technological proficiency and knowledge, and this lecturer's recognition of this indicates their acceptance and adoption of the dominant culture.

Furthermore, they mentioned that they teach mainly young people, who, according to Bourdieu, are more likely to possess embodied cultural capital (Bourdieu 1986) in the form of knowledge and skills acquired through socialisation and upbringing. In this case, the lecturer could be suggesting that their students have grown up in a world heavily influenced by technology, and therefore, their knowledge of technology is a form of embodied cultural capital that they can bring to the classroom. This underscores the fact that the integration and use of technology in education is not solely a matter of individual choice and

preference but rather a reflection of broader social and cultural forces that shape perceptions of what is necessary or desirable in education today.

In the final response of Participant MP5, they indicated that in terms of whether there was any discussion with them regarding the use of technology, they described such discussion as a '*unilateral decision*' made by the lecturers, and as such, the decision was informed by the nature of assessment, such as continuous assessment, which influences whether the assessment will be submitted online or as hard copy. The observation suggests that the lecturers' decisions are at their discretion and not up for discussion. From a Bourdieusian perspective, the lecturer's decision to use or not to use technology in assessments was influenced by their habitus, which is shaped by their social environment, such as their class, culture, history, and beliefs about technology and its role in education. For example, a lecturer from a privileged background may have greater access to and familiarity with technology, making them more likely to incorporate it into their teaching practices. On their view on who decides to use technology in their teaching, Participant FP6 alluded to a broader contextual perspective. Below are their thoughts:

I think the main reason behind the use of technology was to assist lecturers, maybe because it's a lot of work and, you know, to do the assessments and everything and also some of us, we find that they have a problem in terms of putting records. So, when you have everything put in this platform, you know that the records are there because whatever you post will stay in there. Also, in terms of, you know, the 4th Industrial Revolution, we just had to also, you know, move with the times. But then, when COVID struck, then the two that was there, the time when we thought, okay, now we are going to up the use of technology. But then it was easy because we had already used this platform. It was then a matter of being trained in more tools that the platform offers because you will find that we are not using those many tools, and we are just using like to post, and notes and, you know, to do assessments. But then, when COVID struck, then, we learnt how to ... you know, to use almost all the tools like teaching, posting the videos and, you know, compressing whatever file you have and then posting it and different types of assessments, you know, assessments that can be marked by the use of technology. So, it just broadened the scope of the way we are using technology. (FP6)

The lecturer above reflected on who decides on their use of technology in teaching and if there was a choice for them to use it or not. Their reflection started with them highlighting “*the reason behind the use of technology*” in education, and that is to assist lecturers, which implies that technology is a tool for maintaining and enhancing the power of lecturers in the academic field. The lecturer’s workload is framed as a primary concern, and technology is seen as a solution to reducing the burden of administrative tasks such as assessments and record-keeping. In addition, they mentioned that some lecturers have difficulties with record-keeping, implying that there are power struggles within the academic field relating to the organisation and management of academic records. By using technology to centralise and standardise record-keeping (an extension of teaching), the power dynamics around academic records are potentially shifted towards those who are more technologically proficient or have greater access to technology. This lecturer also indicated that the use of technology is driven by the 4th Industrial Revolution, which refers to a broader societal shift towards increased automation and digitalisation of work processes. These observations highlight the influence of external social forces on the academic field and its members’ use of technology in teaching and learning.

Furthermore, their discussion reiterated the impact of the COVID-19 pandemic on the use of technology in education, representing an external factor that further drove the adoption of technology. The pandemic created an urgency to move towards remote teaching and learning, and the platform mentioned by the participant was already in place, facilitating the transition. However, they noted that the lecturers needed to be trained in more technological tools that the platform offers, implying that technology is not equally accessible to all actors in the academic field, which, in this case, could be a result of unequal access to cultural capital regarding technology for teaching.

In closing, during the pandemic, participants revealed that technology “broadened the scope of the way we use technology”, suggesting that adopting technology in teaching may have shifted power dynamics within the academic field. However, it is essential to recognize that the participant suggested that the adoption of technology during COVID-19 resulted more from external pressures than a deliberate shift of power dynamics within the academia.

On whether there was any discussion with them before using technology in their teaching, Participant FP7 shared a historical perspective on their training in the use of technology,

which served as their institutional empowerment for them to learn how to use technology in their teaching. Below captures their thoughts:

They had to train us on how to use things like Microsoft Teams, Moodle.... because some of us were not ... I, for one, was not even aware that I could use Microsoft Teams to actually conduct my classes and do everything there with regard to my teaching. So before that could happen, like the Head of Department and the Dean, I think they had a meeting before they included these stuff, and they had to tell us that during that time we are supposed to conduct our teachings through these platforms and how were we going to get training on how to use those platforms. So, definitely, there was a discussion with regards to using technology. (FP7)

The above response of Participant FP7 regarding their knowledge of any discussion with them prior to their use of technology in their teaching started by them recounting how the lecturers were trained in using MS Teams, Moodle, and so forth, suggesting that the knowledge and the ability to use technology is an example of a form of social capital. In this case, individuals who are familiar with and proficient in using these technological tools have an advantage over those who cannot conduct their teaching effectively in the context of language-teaching technology. However, they noted that they were not aware of the full potential of MS Teams and needed to be trained in its use, highlighting the importance of having access to social capital in the form of technological knowledge and skills to function effectively in the field of education. Getting trained and becoming proficient in these tools indicates a disruption to the lecturer's habitus (system of dispositions) within their field of language teaching and aligning with changes in the broader university setting. This further demonstrates the mutual relationship between agents and structures.

In conclusion, I argue that the lecturers' unique journey into using technology indicates that they were influenced by both internal and external factors, which enabled them to make informed decisions about the use of technology in their teaching and by their habitus, which influenced their intervention mode in the classroom and adaptation to the different classroom diversities.

5.3.1.7 Technology as a conduit in teaching African languages – students' feedback
Using technology as a conduit in teaching ensures that technology is interactive between the lecturer, students, and the teaching materials (Yamamoto et al. 2010). The teaching

and learning cycle are said to be complete only when the students benefit from the purpose of the teaching, which is guided by direct instruction, guided practice, autonomous practice, and the competencies required for effective character development (Nelson and Tarabochia 2018; Selby and Wang 2018). In the following extract, the lecturers interviewed described how their students responded to the use of technology in their teaching:

I would go back to the fact that it was during COVID when I first used technology, and some students, you know, they were not happy; they were not free because they were used to face-to-face. You remember that COVID came in full force in April when we have been teaching them face-to-face.... now they had to go home, and then we had to meet online, and some even expressed it that eh, no... so wish we could go back because this is strange to us, we don't know what we are doing. Some, you will think they are there when they were not there. They will simply open and then disappear. So, well ... to some, those who were already used ... because they are not the same, you know, they are not at the same level, they just enjoy it. I remember language teaching in the Library Information Studies. Those students.... you know, they were just used because their lecturers were using the blended learning, so, there was nothing, you know, special about online learning. But for the language students themselves ... I mean, in the language programme, most of them they were not happy. They were afraid, they were.... You know, there was this anxiety, but as time went on, they got used to it.... Yeah, because there was no alternative. There were instances where, you know, students, where they were learning using technology, they were with other parents or their siblings asking, 'Where is this person teaching you?' where? So, they were just hearing voices, and to them also, it was strange that they were hearing these voices and they were told there is learning taking place. (FP1)

Here, the lecturer above recounted the experience of their students after COVID-19 hit the global and educational world, which forced both students and lecturers to take teaching and learning online with the use of mainly technology. The COVID-19 response disrupted their habitus because it was a new experience for many. This shift to this new mode of teaching and learning can be understood in terms of their habitus – their internalised cultural and social norms and values around learning, which were developed through years of face-to-face instruction. The disruption of their existing habitus was recounted to have

created anxiety and resistance. However, it is important to note that this shift did not affect all students equally. The lecturer above indicated that some students with prior experience with technology, who had access to greater amounts of cultural and social capital, found it easier to adapt to the new teaching and learning environment. For example, the language students in the Library Information Studies (LIS) programme who were already familiar with technology were better equipped to handle the transition to the exclusive use of technology in their learning. It can, therefore, be argued that the students' habitus, in this case, influenced their responses to different social situations, and it can take time for individuals to adjust to new ways of doing things.

In this above lecturer's exposition, it could be seen that students' experiences of learning through technology are influenced by their social context, specifically the presence of parents and siblings who were curious about the source of the voices they were hearing. This observation highlights the role of social structures and cultural norms in shaping how students understand and engage with educational technology (Jantrasakul 2012; Zepke 2021). On the other hand, students' familiarity with technology and ability to navigate it effectively could be influenced by their access to cultural capital. For example, students from households with greater access to technology and digital resources are better equipped to learn effectively using technology in their learning, further highlighting the role of understanding the social context and cultural capital in shaping the educational experiences of students (Cheng et al. 2022; Zhang et al. 2022). By considering these factors, educators can design more effective learning experiences that take into account their students' diverse backgrounds and resources.

Furthermore, another lecturer shared how their students responded to the use of technology in their teaching. Their response gives another perspective on students' participation when technology is used in teaching. Below captures their experience:

The response is not always positive, you know, so. You'd end up having, you know. Maybe two students who would always participated or responded to your questions, you know, in the past, you know, maybe on Teams, you would have lack of participation. And I think that is problematic with using technology because students tend not to participate, and I would call out their names and get more responses, which means maybe, I don't know, possibly is that they just login and go and do other things, you know. But yeah, one thing that is bad about technology is the lack

of participation. If there is participation, you would find that is always the same students who participate. Sometimes they would answer, but sometimes they will just disappear, you know. Sometimes, they would not respond at all. So yeah, but, you know, face-to-face, it's a different situation. (MP2)

In the response provided by Participant MP2, great concern about the lack of participation and engagement from students when using technology in the language classroom, specifically during online classes, is expressed. This lack of participation can be seen as a form of capital, where students who are accustomed to and possess the necessary skills and knowledge to navigate online environments may have an advantage over those who do not. In this case, the students more comfortable with technology participated in online classes using technology and engaged with the learning materials. Furthermore, the lecturer mentioned that it was often the same students who participated and that some students may simply log in and then engage in activities unrelated to the lesson, which could be seen as a form of resistance to technology in the classroom. This resistance, which may stem from a lack of prior familiarity with technology or a lack of cultural capital, as indicated above, may disproportionately affect students from disadvantaged backgrounds and could potentially limit their opportunities in the future.

Furthermore, the lack of participation among some students could be attributed to their habitus, particularly their expectations and norms around online classroom participation with technology. Some students may be more accustomed to face-to-face interactions, where classroom participation is more visible and immediate. In contrast, teaching using technology may present new challenges and norms with which students are unfamiliar, leading to a lack of participation. Moreover, the lack of participation among some students may also be attributed to the digital divide, where students from disadvantaged backgrounds may lack the digital skills and literacy needed to effectively participate in classes where technology is used (Kvasny 2005; McConnell and Straubhaar 2016). This lack of digital skills and literacy may lead to frustration, anxiety, and disengagement, further perpetuating the lack of participation.

It could, therefore, be argued that students' participation in classes where technology is used is a multifaceted issue that can be understood by examining how individuals' cultural capital and habitus shape their perceptions and experiences of using technology in education. By understanding these factors, stakeholders in education can design a more

inclusive and supportive technology environment that promotes active participation and engagement for all students and their lecturers, regardless of their backgrounds.

A similar view was shared by participant MP3, who also raised concerns about their students' socio-economic backgrounds and how this affected how they engage with technology in the classroom.

The kind response from students that we have depends on whether they come from this particular school background or that particular school background. So, you are talking about are they, ... Did they have access to computers prior to this? Et cetera, etcetera. So, depending on the module, those students that are probably have been more familiar with using the idea of a computer or little on a laptop or phone, a smartphone would be more prone to enjoying this kind of teaching without necessarily ... uhmmm ... or be participant ... will be willing to participate in this kind of context where you are using technology in the classroom, whereas the child who has had no exposure to that obviously it's a ... it's a ... it's a ... they are literally in a ... in a ... in a ... you ... you have thrown him in the deep end of a pool where they either sink or they swim. (MP3)

The concern of the above lecturer reiterates the Bourdieusian term that argues that social class and cultural background shape an individual's access to cultural and educational resources. Factors such as students' access to computers, familiarity with technology, and learning styles influence their responses to a lecturer's use of technology in the language classroom.

Furthermore, the lecturer noted that the type of learners being taught, whether introverted or extroverted and their motivation levels also impact their responses to technology-based teaching. From a Bourdieusian perspective, an individual's habitus shapes their learning styles, work ethic, and overall educational approach. Thus, students' habitus may influence lecturers' motivation to use technology-based teaching. The lecturer also indicated that the lecturer's approach to technology can impact students' responses. In this case, a lecturer with greater cultural capital may be better equipped to design and implement effective technology-based teaching methods, thereby improving students' engagement and learning outcomes. Therefore, one could contend that students' responses, in this case,

are influenced by complex asymmetrical social interaction between their habitus and the existential motivating factors in the social context of the classroom.

The response of MP4 below captures a mixed response from students to the use of technology in the language classroom:

In the beginning, it was not a good response; it was intimidating to them. But as students became more empowered as they became more confident, then using the technology was almost to them ... this is my way of saving my degree or saving me from spending extra 3, 4,5 years. So, the students, especially when the COVID rules were slightly relaxed. But you still did not have the permission to have everybody on campus. Students used the opportunity of accessing teaching via technology, so it meant that even though they couldn't be on campus physically, they still had access to the lectures, to the lecturers, to teaching materials. And they could work either synchronously with the lecturer or they worked asynchronously when they would download material and then upload it for the lecturer to comment on, to assess, and to give them feedback. So, it was for them ... it was ... they responded. They really got They got working with technology. But initially it was difficult because not all of them had access to the technology, and once access was broadened, it was almost as if the students embraced it as something that has always been present. (MP4)

The above revelation regarding students' responses to the use of technology shows how students' habitus and the broader field of education were shaped by the COVID-19 pandemic and the need to use technology to continue teaching and learning. Initially, the students felt intimidated and unsure about using technology, which reflects that their habitus may not have previously emphasised using technology in their learning. However, as they became more confident and empowered, they could adapt to the new learning mode and use technology effectively. This observation suggests a transformation of their habitus. Furthermore, as the field of education was being shaped by the pandemic and the need to adapt to new modes of teaching and learning, the pandemic created a new field where access to technology and the ability to use it effectively became an important form of capital for both students and educators. In Bourdieusian terms, one could say that students' responses in the language classroom were influenced by external factors and

reshaped by their habitus, field, and capital of education and how individuals have had to adapt to the new changes in the field of education to succeed.

The discussion around students' responses to the use of technology in the language classroom continued with participant MP5 raising concern about monitoring feedback of students' assessments. MP5 noted that:

It depends, like, the nature of the modules that I teach for 3rd years, which is social linguistics; it encourages people to speak more than using technology. And like ... I said ... Students' response to technology is only by demand. If there is a need of using technology, then the students will respond positively to technology. And we have noticed that the level of plagiarism since we started using technology increased and that is bad feedback when you use a technology because you can't monitor when you do assess your students, but when students are physically within the university, we can monitor them when they write to invigilate. So that is the shortcoming of the technology. But in this case, they enjoy technology because it gives them a leeway to be independent, like you teach some people that you have never seen physically, so it is easy to cheat the system. If you don't know the person you are teaching. (MP5)

The above feedback from students, as shared by MP5, on the use of technology, as recounted, touched on the use of technology in teaching and its impact on student behavioural tendencies. The lecturer first noted that they teach courses encouraging students to speak more than use technology. The course's emphasis on oral communication suggests that the habitus of this particular academic context values face-to-face interaction and verbal communication rather than the use of technology. In other words, the habitus of this academic field prioritises certain types of knowledge and practices over others. They also suggested that students' responses to technology are contingent on their perceived need for it, indicating that the student population's habitus may not prioritise using technology for learning. In Bourdieusian terms, one could say that the social space in which individuals compete for resources and recognition is based on their possession of certain forms of capital. In this case, the field of education may not place a high value on technological capital, and thus, students may not feel the need to acquire or develop this type of capital to succeed in their academic pursuits.

In addition, the lecturer lamented the fact that the level of plagiarism had increased since the use of technology in teaching, which could be seen as a reflection of the habitus of the students' population, which values independence and individuality, but also the field of education, which prioritises originality and authenticity in academic work. The use of technology may be seen as a threat to these values because it can facilitate cheating and undermine the integrity of the academic processes. It could be argued, therefore, that the lecturer's revelation of the student's responses to the use of technology, in this case, highlights the complexities and trade-offs involved in using technology in the classroom, including the potential for increased independence and flexibility, but also the risk of eroding social capital and academic integrity.

The implications for lecturers are that the effectiveness of using technology in their teaching depends on their students' existing technological capital and dispositions. This experience of MP5 confirms that Bourdieu's sociological theory, in this case, emphasises how the successful integration of technology into pedagogy relies on lecturers and students possessing the requisite cultural capital and habitus.

The response of FP6 below also touched on how the use of technology in language teaching is creating new power dynamics and social structures that are influencing students' experiences and behaviours:

The response is mixed. Initially, the students didn't like technology because they complain about their laptops malfunctioning, their cell phones... You know, the usual data, etcetera, etcetera. But one thing that I know the students like, number one is the fact that, you know, when they learn through technology, they can go in anytime. They don't have to go in at that time of the lecture, because what you do is that you post, you know, that according ... So even if they are away during the day at night, they can then know when the data is cheaper than they can download, and they can follow. So, that made them, you know, kind of like technology. And then the fact that they could hide behind load shedding and data issues and then have continuous assessments until they pass. They like that because it worked for them. You know, a student will just say I had load shedding and then you cannot just, you know, throw this student out. You have to prepare another assessment for the student and another one and another one. This is a period where students, you know, can't actually fail, but now I am just talking around COVID. But right now, we

have load shedding. If a student has issues with load shedding, you cannot fail the student. You have to give the student another chance to do that assessment. So it actually works better for them in the sense that they get multiple chances during assessment, and then one actually told me that, you know, I like this technology because we don't fail, but I don't know what that means actually because in my case students did fail when I was teaching phonetics ... they did fail. But now I do not know really what she meant by that, but she's doing law and she was quite excited that, you know. You don't really fail when you are using technology. (FP6)

An important aspect that the lecturer touched on was how technology allows students to learn on their own schedule without being tied to specific lecture times, reflecting a shift in power dynamics because students can take control of their learning experience to a greater degree. However, it is important to note that this dynamic is not necessarily egalitarian, as some students may have better access to technology than others, which could create further inequalities in educational opportunities. Participant MP6 further noted that technology is allowing the students to hide behind load-shedding and data issues, and this has been leading to an increase in the number of times lecturers conduct continuous assessments. These excuses indicate another shift in power dynamics, as students can use technology to manipulate their educational experience and avoid failure. Questions about the validity and reliability of these continuous assessments are also raised because assessments may not accurately reflect students' abilities.

Last, the lecturer described a comment by one of their students who expressed excitement about the fact that *"you don't really fail when you are using technology"*, which reflects a broader cultural shift in which failure is increasingly stigmatised, and students are being given more opportunities to avoid it. The implication of this could have positive and negative effects on students' learning experiences, as it may encourage them to take risks and learn from their mistakes, but it may also make them more risk-averse and less willing to challenge themselves. Therefore, I contend that students' responses to the use of technology, in this case, are aligned with the role of technology in shaping the field of education, and students are empowered and provided new learning opportunities. It can also be argued that using technology in language teaching could create new power dynamics and social structures that could exacerbate existing inequalities.

The implication of the experience shared by participant MP6 on lecturers is that technology, on the one hand, may disrupt traditional expectations around assessment and enable new forms of “academic gamesmanship” in teaching and learning (Laird et al. 2009), and on the other hand, lecturers should be aware of the students' socio-economic backgrounds and how these factors influence their responses to technology and the learning process. Lectures should also strive to provide alternative means of accessing course material and assessments to accommodate students facing technology-related challenges while maintaining academic standards and the integrity of the teaching and learning process.

5.4 Discussion

In this section, I intend to illustrate the implications of this study's analysis on the use of technology in teaching African languages for lecturers in a KwaZulu-Natal social context and language education in general. The analysis for this study was conducted because of the decision made in teaching regarding the use of technology and explored the influence of that decision on lecturers' habitus, procured in the field of education, as well as their habitus, which they possessed before entering the field (Clark and Zukas 2016; Verevi 2021; Webb 2019). I use the expression ‘habitus’ to refer to the personal habitus of lecturers, ‘field’ to refer to the collected habitus of language lecturers and “capital” to refer to the resources, knowledge, and skills lecturers possess. Because language lecturers work in the language field, it does not automatically mean they share similar social contexts (Emrah 2019; Iyer 2012); their actions may differ because their collective habitus is not their sole habitus. Their personal habitus also influence them. On the other hand, habitus and field shape how lecturers' capital is applied. I, therefore, applied capital, habitus and field as a helpful lens for analysing how social dynamics shape lecturers' technology use for teaching because their access to resources, ingrained habitus, and field contexts interact to enable or constrain technology use in their African language teaching.

The analysis revealed that factors within the language teaching field constrain technology adoption in language teaching. This is evident when preparing for teaching and practically using technology in their teaching. Lecturers' decision-making around technology applies to personal and institutional stages of using technology in their teaching practice (Greenwood 2000; Litchfield 2016). Individual lecturers' concerns become apparent at the personal stage as they are uncertain about the challenges of implementing technology in their teaching practice.

In this regard, Donnelly et al. (2011) contested that the personal stage is a natural phase where lecturers are focused on self-learning with technology. This stage could limit technology's effective integration into teaching until lecturers gain more competence and comfort through this personal exploration. The success of moving beyond this stage requires support in various forms that enable lecturers to see the technology's value in improving their teaching and learning outcomes. The insight suggests that the actions lecturers take during the personal stage are pivotal to influencing and creating social constructs (Vannoy and Palvia 2010) because it is through the lecturers that technology in teaching and learning is presented to the target audience (the students) (Bourdieu 2003; Lefebvre 200). The implication is that lecturers' actions are crucial at the personal stage as they serve as mediators in shaping the use of technology for teaching African languages based on their personal preferences and choices. Their decision-making can ultimately influence broader social perspectives on this technology integration and eventual use.

When it comes to the use of technology by KwaZulu-Nata universities' language lecturers in teaching African languages, it could be contended that their action was influenced by the habitus that they have accumulated from the education field and other associated fields such as commercial publishing all in the African context. This implies that for the lecturers to be intimately familiar with technology and its dynamics in teaching African languages, many had to engage in various professional journeys, which assisted them in circumventing some inherent challenges in using technology in their classrooms. Therefore, they required a habitus consistent with the modern use of technology in their existing classrooms.

The professional journeys that the vast majority of the lecturers embarked upon before they are where they are now (African language teaching) and the period they spent as primary school teachers, high school teachers, commercial publishers, tutors, and in subject advisory roles seem to give them exposure to how technology works at different levels, and this equipped them with the habitus gave meaning and understanding to different students' backgrounds regarding technology competence level in their classrooms. It could be argued that the exposures of lecturers influenced their responses and recognition of students from different socio-economic backgrounds. Their experiences also gave them a sense of what intervention strategies could be adopted to address their own challenges with using technology in their teaching.

I would therefore argue that while the lecturers' exposition shows instances of their movements from one field to the other as a result of wanting to broaden their horizons and other wanting to deepen their knowledge, the time they spent in fields such as publishing, translation and others aided their exposure to the practices of such fields and equipped them with the habitus that made adjusting to using technology in emergencies possible. Therefore, the lecturers' actions were constrained by the institutional guidelines regarding the use of technology for teaching in their field and the responsiveness of their students to their teaching using technology. This restricted the lecturers' ability to fully leverage technology in their teaching as they may have wanted (Hamilton 2022) and placed them in the dual role of constructing and being constructed (Henretty 2013) by the African language teaching field.

The analysis of the social context and the use of technology in teaching African languages also revealed how lecturers' habitus was misaligned with the new requirement of the field, and for them to realign it, they had to develop new capital and disposition through training consciously. An instance of this was seen when some lecturers were called upon by their heads to inform them that technology would then be used in teaching, and not only that but the lecturers were also trained in the use of the required technology tools to be used. This alignment regarding the lecturers' decision-making indicates that apart from the impact of the personal habitus and field on individuals' decision-making, other external forces may impact language lecturers' decision(s). The relationship between lecturers and the field of education is complex, with various internal and external forces in the broader field shaping lecturers' practices and decisions (Byrd 2019). In this regard, Saracho (2001) argued that some of the actions in teaching are done based on their instincts as opposed to natural replicative action, and Badwan (2021) contended that the actions and decisions of language lecturers during teaching are a function of both their habitus and other external influences. A complex relationship exists between teaching actions and decision-making processes for language lecturers, and as such, educational studies consider the complexity paradigm (Pipere 2016) to explore the decisions and actions of lecturers in teaching regarding the use of technology.

5.5 Conclusion

The purpose of this chapter was to analyse the use of technology by African language lecturers from a social context perspective. Using the concepts of Bourdieu – habitus and

capital, I paid attention to the manifestation of the struggle for survival and distinction within the field of education and the influence of lecturers' actions on the use of technology in teaching African languages. The analysis indicates that lecturers' actions and behaviours were influenced by the habitus they have accumulated during their professional lives in the academic field of education and career fields of translation and publishing, in addition to the individual habitus they came within their present field. Other revelations from the analysis suggest that other external influencing factors are responsible for some of the decisions lecturers make while teaching African languages using technology, indicating the complexity of the factors influencing lecturers' use of technology in their teaching. The next chapter will provide a general conclusion to this study and recommend future studies in educational technology.

Chapter 6: Conclusion

6.1 Introduction

This chapter summarises the fundamental ideas this study has attempted to address. The research questions are revisited to reflect on how they have been answered in the research. This study's contributions to education and language studies research are also underscored. Finally, suggestions for future research interests are made.

6.2 Synopsis of the Study

The present study has applied the theoretical architecture of Bourdieu to analyse lecturers' social context and their use of technology in teaching African languages in KZN. The analysis of the social factors that influenced the action of African language lecturers at the organisational level was conducted, and how their actions, in turn, have contributed to shaping the education field in which they operated. I argue that a mutually significant relationship exists between the field in which agents operate and language academics' actions. The theoretical framework of Bourdieu has permitted examination of how the education field was shaped and has shaped higher education lecturers teaching African Languages.

The study commenced by positioning the concept of technology as it pertains to education. After that, I looked at how technology has been used in education and then discussed how language education has benefited from the transformational effects of technology. The reviews of the revolutions that have distinguished the field, bringing about transformation, were then addressed, and the challenges associated with using technology in language education were discussed. This background helped contextualise technology use in teaching African languages in South African universities. It also revealed how the transformative potential of technology could benefit African language teaching.

Chapter 1 provided an overview of the structure of the study, a qualitative study investigating university lecturers' social contexts and the contexts' influence on lecturers' use of technology in teaching African languages in South Africa. The findings provided insights into how lecturers' habitus and capital affect their technology use, and I propose strategies to enhance technology use in African language pedagogy.

Chapter 2 presented a literature review on the role of technology in education and language pedagogy, specifically examining technology use in teaching and learning African languages. It outlined technology's transformation of global education and language instruction, while ineffective use persists in African language teaching due to institutional and teacher-related factors. The chapter discussed research on technology's impacts on South African higher education and African language instruction, including uneven standardised adoption, challenges like declining enrollments, and arguments for localising and collaborating on technology development. The discussion highlighted a gap in understanding lecturers' social contexts and their influence on technology use in African language teaching.

Chapter 3 focused on the sociological purview of language teaching using technology within the transforming field of education studies. This chapter achieved this aim by exploring the sociological theory of Bourdieu, which has been applied mainly to educational studies to look into the connection between educators (lecturers), their social environments and cultural emblems, and their effect on their practice. A look at Bourdieu's sociological theory birthed three constructs essential in analysing the actions of individuals in a field. These constructs are field, habitus, capital and *illusio*. These constructs provided an analytical lens to understand the nature of the complexity in the relationship between social structure and the practice of individuals. I then used literature to establish that Bourdieu's social theory and its constructs are logical and sound tools to explore lecturers' practices in the education field.

Chapter 4 outlined the methodology used in the study. It provided information about the approaches adopted to investigate the contexts, individuals and institutions presented in the study. The data collection method employed was described, as well as what brought about the choice of such a method and how such a method has helped achieve the objectives of this study. An outline of the research design and the strategies applied in conducting this study were also presented. I reported on the method used in the analysis of the data collected for this study, and finally, the ethical procedures that guided the conduct of this study were outlined.

Chapter 5 focused on the thematic analysis of the qualitative data of this study. It focused on the social context and the use of technology by African language lecturers in the KwaZulu-Natal province of South Africa. The chapter commenced with an overview of the

data collection process and the data collection approach applied in the study. The interview period was described, starting from when the study was approved for data collection until the time data collection was concluded. The review of the data collection was also described, the approach used in identifying the study participants was explained, and an overview of participants interviewed for the study was discussed. I also illustrated why Bourdieu's concepts are sound analytical and interpretive tools for agents' actions because they emphasise how language lecturers' group and personal decisions heavily influence the pedagogical process and determine its success, integrity, and effectiveness.

6.3 Revisiting Research Questions

The study has achieved its aim in that the findings have demonstrated an interdependent relationship between the actions of language lecturers and the influencing factors of the field where lecturers operate. The aim has been achieved by answering the research questions that guided this study:

1. What are the roles of technology in teaching African languages?

In the context of teaching African languages, Bourdieu's theory provided approaches to understanding social behaviours. Teaching is a social endeavour, and the factors reinforcing its practice are socially constructed. Bourdieu's theory presents a holistic approach to understanding the interdependent relationship between individual agents and the field where they work and their use of technology in such fields. Therefore, this study has used the theory to illustrate that technology use in African language teaching played a significant role in acquiring and disseminating capital. The aim was achieved by using Bourdieu's concepts of habitus, capital, and field to explain that the actions and behaviours of language lecturers are shaped by the structure of the field, which contributes to the reproduction of the field by reproducing the norms and values of the field.

In light of this, this study has identified and analysed the various positions that characterised the language teaching field in which African language teaching is taught using technology. It also examined the educator agents responsible for teaching and how their interactions with one another affected their teaching practices at both institutional and social levels. The findings showed that the configurations of the language teaching field consisted of, on the one hand, the language classroom and teaching content/materials, and on the other hand, the individuals filling various positions in the language field,

including the lecturers, institutional management, heads of departments, students, and parents and family members of students.

2. What are the available technologies for teaching African languages?

Technology use in language teaching generally falls under teaching aids but has developed over the years to serve as language learners' instructors. Given the nature of the evolution of technology in teaching, many available technologies exist for teaching African languages, and these are usually dependent on the language teaching and the level of proficiency desired. In the context of this study, this question was answered by the lecturers interviewed. Their responses identified three categories of technologies available for teaching African languages. The first category is the LMSs, such as MS Teams, Moodle and Learn 21. This category offers functionality that can support teaching African languages in higher education contexts. These systems provide tools for creating and delivering course content, assessing students, facilitating communication and collaboration, and managing grades and records.

The second category offers educational resources such as pictures, videos, recordings, corpora, and texts in different formats, which could all be delivered through their incorporation into the first category (LMSs) for effectively teaching African languages. The third category are computers, voice recorders, smartphones, overhead projectors, and tablets. These tools are designed to help lecturers deliver their teaching to students in synchronous and asynchronous manners. It should be noted that this study reported on the technologies identified by the lecturers interviewed for teaching African languages in their own contexts. However, it is acknowledged that there are other available technologies for teaching African languages in contexts outside this study. The available technologies identified by the lecturers in this study in teaching African languages reflect technology's continuing evolution and improvement, offering lecturers and students an ever-expanding range of language teaching and learning options.

3. What are the challenges of using technology in teaching African languages?

Like any other field, The African language teaching field is not immune from challenges. The challenges have been explained through the lens of Bourdieu's sociological theory. A recurring challenge identified by this study was the lack of access to technology in many African language classrooms in HEIs by both language lecturers and their language

students. This lack of access resulted in limited exposure to technological tools and resources, which hindered the development of technological skills and proficiency in using them, which is a form of cultural capital deprivation, where individual lecturers and students lack access to the resources and skills that are valued in a modern society characterised by technological advancement. The study also identified the challenge associated with the dominance of colonial language in the language classroom systems where indigenous African languages were being taught, which could be seen as a form of symbolic violence, where dominant languages are privileged over indigenous languages and cultures. This symbolic violence also perpetuates a cycle of cultural capital deprivation, where individuals and communities who speak African languages are disadvantaged in accessing education resources that have been localised for teaching and learning their languages. A related challenge is that the lack of standardised and widely recognised orthographies for many African languages makes it challenging to develop and use technology-based language learning resources. This lack of standardisation and recognition is a form of linguistic capital deprivation. African languages are not given the same status and value as other languages, resulting in limited investment in developing technology-based language learning resources for African languages, further perpetuating the pattern of cultural capital deprivation.

4. What are the social factors that influence lecturers' attitudes towards the use of technology in teaching African languages?

The social factors that influenced lecturers' attitudes towards technology in teaching African languages were explained in this study using Bourdieu's concepts of habitus, capital, and field. Lecturers' attitudes towards using technology in their teaching have been described in this study as connected to the influence of their experiences from the previous field they have worked in, which enables them to gain access to certain positions of power and influence within their fields, impacting their opportunities and trajectories. Some of the lecturers' attitudes towards the use of technology in their teaching have also been credited to the habitus that they have amassed in other fields before entering into the language field and through personal experiences. This was the case when some preferred to use technology to teach some aspects of language teaching for non-mother tongue students and another for mother-tongue speakers. Consideration for students from different linguistics and socio-cultural groups has been used as a basis for using technology in their

teaching. The norms of the field where the lecturers work also influence the attitudes of lecturers towards using technology in their teaching. External factors in the field, such as the COVID-19 pandemic and loadshedding, also impacted attitude formation or changed attitudes toward using technology in teaching.

5. What model can be proposed to improve the use of technology by language lecturers?

The findings of this study indicate that the suitable model is the TPACK (Technological Pedagogical Content Knowledge) model for HEIs. This model proposes that effective teaching with technology involves the intersection of three types of knowledge: content knowledge, pedagogical knowledge, and technological knowledge (Mishra et al. 2022). Content knowledge refers to the subject matter the lecturer is teaching, while pedagogical knowledge refers to how to teach that subject matter. Technological knowledge refers to how to use technology to support teaching and learning. The TPACK model suggests that effective technology integration in teaching and learning requires a combination of all three knowledge areas and the ability to apply that knowledge meaningfully.

From the findings of this study, the TPACK model could be used to systematically improve how lecturers accumulated professional experiences and habitus in various fields and how these shape their technological pedagogical content knowledge. This model could provide greater insight into how their diverse backgrounds inform their use of technology in teaching. Similarly, the model could help lecturers who showed deficiencies in using instructional technology identify areas they need to develop to strengthen their knowledge of teaching African languages with technology. The model provides targeted training that could then focus on building capacity in those deficient areas.

Furthermore, the TPACK model could be used to improve how contextual factors such as infrastructure, social norms, and institutional policies intersect with lecturers' decision-making around the use of technology in their teaching and pedagogical practices. This model could provide an understanding that could inform context-specific integration and use of technology in teaching African languages. Applying the TPACK model also could provide insights into how lecturers can best leverage their individual and collective habitus, experiences, and contexts to continue developing their technology integration and use competences.

In summary, using the TPACK model can systematically strengthen the analysis of the complex factors shaping lecturers' use of educational technology and its integration practices in teaching African languages. I, therefore, propose TPACK as a suitable and helpful model for improving the use of technology by African language lecturers in their teaching. By developing their content, pedagogical, and technological knowledge, lecturers can effectively integrate and use technology in their teaching practice and improve the learning outcomes of teaching African languages.

6.3 Study Contribution

This study has contributed to the growth of studies in the sociological context of teaching by using the theory of Bourdieu as a theoretical lens for the pragmatic study of language teaching. To the best of my knowledge, no research has been conducted that uses Bourdieu's theory to analyse the use of technology in teaching, specifically in African language teaching. It is then pertinent to examine the factors that shape African language pedagogy, the individuals involved in the pedagogical process, and the factors that impact the attitudes of teaching agents.

This study contributes to language teaching in several ways. One of the ways that it contributes is understanding the concept of migration between and within fields and how that contributes to how individuals accumulate capital and habitus. In this regard, individuals move between different positions within the same field, i.e., vertically, or laterally from one field to another, and in the process, acquire new skills, knowledge, and experiences that help them advance in their careers and social status in their present or future fields. The knowledge of the concept of inter-/intra-field migration of agents helps with understanding social mobility and cultural capital brought in by agents from different fields. By understanding this concept, one better understands how individuals and groups navigate different social and cultural contexts and how they can use their resources to the advantage of their fields. This study, therefore, underscores the essentiality of widening the horizons of language teaching studies to discover a range of contexts for language instructors to inhabit to have a holistic perspective.

In addition, this study contributes to improving the understanding of agentic attempts in shaping their existing practice and embracing new approaches to doing things by subtly

resisting external regulations and laws that negate their classroom situations, students' learning styles, and institutionally acceptable field practices.

Furthermore, this study also contributes to the fact that Bourdieu's theory is a validated sociological theory for investigating social contexts. Validation was achieved by viewing language teaching as a social construct and describing the behaviours of the individuals involved in teaching and how they are connected to the social contexts where the individuals work.

This study also contributes to the pedagogy of African languages by examining the context of the lecturers involved in teaching. Although extensive work has been done on the contexts of students, there is insufficient study regarding the context of language educators, who play a crucial role in imparting knowledge.

It is also worth noting that this study contributes to the knowledge of the diverse capitals that language educators and their audience come with as contributing factors to their attitudes. What makes this study unique and its original contributions to knowledge are: (i) It views these diverse capitals as helping to explain the underlying structures and operations within the field of language education, offering a fresh perspective on understanding the dynamics of this field, and (ii) It provides insights into the inequalities that may originate from factors beyond just economic inequality, such as cultural, social, and symbolic capitals, thus broadening the understanding of the sources of inequalities in language education. By viewing these capitals as contributing factors, the study not only highlights their influence on attitudes but also offers perspectives to look at the inequalities that may originate from factors beyond just economic inequality.

6.4 Suggestions for Future Research

Knowing full well that this study has limitations regarding what it has covered, future research may apply the sociological perspective to other aspects of language pedagogy. Concerning this, since this study has applied the social theory of Bourdieu to the use of technology in teaching African languages, it would be helpful for future studies to apply the same approach to other areas of African language study. For instance, Bourdieu's sociological approach could be applied to technology for specific aspects of language teaching, such as phonology, syntax or culture studies, to unearth the social phenomenon

in which they are taught, and the distinctive actions of individual language instructors involved in teaching.

In addition, this study has applied a sociological perspective to the study of African language teaching, with particular attention to Bourdieusian's approach. I would like to suggest that other studies of this nature could apply other sociological approaches, for example, Karl Mannheim's relationism theory, Durkheim functionalist theory, John Law's Actor-Network theory, or Du Bois's Double Consciousness theory, to the language teaching studies in the African continent.

Also, this study has adopted a case study approach to investigate the attitudes of African language lecturers, focusing on lecturers at three universities in KwaZulu-Natal. I would like to suggest that other similar studies be conducted at universities across multiple provinces and regions in South Africa to determine the availability of technology-assisted teaching in African language pedagogy to facilitate comparisons and synthesis across diverse contexts.

Similarly, this study used the interview as the sole data collection method. I would suggest that other similar studies use multiple data collection methods; observations and document analysis could reveal different perspectives and corroborate the interview data through triangulation.

Finally, I recommend that policymakers on language development work with relevant stakeholders, such as community members, government, education institutions' managements and the lecturers themselves, such that technology development for teaching and learning African languages brings desirable results. Also, it would be helpful if African countries create an enabling environment for African languages to thrive in Africa to achieve the desired result in using technology in teaching and learning African languages. In conclusion, to address other factors apart from social factors that could influence the action of educators toward the use of technology, I recommend that future research use an integrated approach that looks at how a range of different factors influence the use of technology in language teaching.

References

- Ababio-Donkor, A., Saleh, W. and Fonzone, A. 2020. The role of personal norms in the choice of mode for commuting. *Research in Transportation Economics*, 83: 1–12.
- Abukhattala, I. 2016. The use of technology in language classrooms in Libya. *International Journal of Social Science and Humanity*, 6(4): 262–267.
- Achebe, C. 2000. Africa's tarnished name. *Multiculturalism and Hybridity in African Literatures: Annual Selected Papers of the A.L.A.*, 7: 13–24.
- Adam, M. 2006. Hybridizing habitus and reflexivity: Towards an understanding of contemporary identity? *Sociology*, 40(3): 511–528.
- Adedokun, T. A. 2020. *Surveying KwaZulu-Natal universities' language academics for the modelling of factors affecting their attitudes towards computer assisted language learning tools for African indigenous languages*. M.Tech., Durban University of Technology.
- Adedokun, T. A. and Zulu, S.P. 2022. Towards digital inclusion in South Africa: the role of public libraries and the way forward. *Interdisciplinary Journal of Economics and Business Law*, 11(4): 127–154.
- Adedokun, T.A., Zulu, S.P., Awung, F.N. and Usadolo, S.E., 2023. Sustainable Lessons Learnt from the Attitudes of Language Instructors toward Computer-Assisted Language Teaching. *Research in Social Sciences and Technology*, 8(4): 216-236.
- Adetimirin, A. 2016. Female lecturers' perception of I.C.T. integration for teaching and learning in University of Ibadan, Nigeria. *International Journal of Information and Communication Technology Education (IJICTE)*, 12(1): 11–21.
- Agbenyega, J. S. 2017. When belonging becomes belonging: a Bourdieusian theorisation. *International Journal of Whole Schooling*, 13(1): 5–16.
- Agbevivi, S. L. G. 2018. The use of PowerPoint in teaching and learning English in the University of Education, Winneba. *African Journal of Interdisciplinary Studies*, 11: 74–86.
- Ajewole, T. O. 2021. *Assessment of the effectiveness of e-learning in Nigerian secondary schools during COVID-19 lockdown: A case study of Ife-East local government area of Osun State*. PGDE, National Teachers' Institute Kaduna.
- Almalki, A. 2020. Integration of technology among Saudi EFL teachers. *English language teaching*, 13(8):160–167.

- Amir, N., McCarthy, H. J. and Tong, A. 2021. Qualitative research in nephrology: an introduction to methods and critical appraisal. *Kidney360*, 2(4): 737–741.
- Anggeraini, Y. 2020. Language teaching in the digital age: teachers' views and its challenges. *Research and Innovation in Language Learning*, 3(3): 163–172.
- Arko, A. B., Owusu, B. A. and Kwadzo, G. 2019. Bridging the digital divide through Korea cooperation: the case of Ghana-Korea information access centre. *African and Asian Studies*, 18(1–2): 63–92.
- Arnold, D., 2005. Europe, technology, and colonialism in the 20th century. *History and Technology*, 21(1): 85–106.
- Atabek, O. 2019. Challenges in integrating technology into education. *Turkish Studies – Information Technologies and Applied Sciences*, 14(1): 1–19.
- Awung, F. 2021. Translating *une vie de boy*: a Bourdieusian study of agency in literary translation. New York: Routledge.
- Badwan, K. 2021. Agency in educational language planning: perspectives from higher education in Tunisia. *Current Issues in Language Planning*, 22(1–2): 99–116.
- Bagarukayo, E. and Kalema, B. 2015. Evaluation of eLearning usage in South African universities: a critical review. *International Journal of Education and Development using ICT*, 11(2): 168–183.
- Balchin, K. and Wild, C. 2020. Exploring the role of context and collaboration in normalising technology use in English language teaching in secondary schools in Malaysia. *Computer Assisted Language Learning*, 49(1): 1–21.
- Bañez, J. E. 2013 Estimation under purposive sampling with auxiliary variable. *The Philippine Statistician*, 62(1): 51–57.
- Baran, E. and AlZoubi, D., 2020. Human-centered design as a frame for transition to remote teaching during the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 28(2): 365–372.
- Baxter, J. 2010. Case studies in qualitative research. *Qualitative Research Methods in Human Geography*, 3, 81–98.
- Beckmann, J. 2011. Education in South Africa from 1961 to 2011: between two paradigms and elusive ideals. *Journal of the Humanities*, 51(4): 507–532.
- Bentem, J. 2020. The reproduction of practice in habitus and its implications for social mobility. *Erasmus*, 9: 1–17.
- Berndt, A.E. 2020. Sampling methods. *Journal of Human Lactation*, 36(2): 224–226.

- Bhardwaj, P. 2019. Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, 5(3): 157–163.
- Bhargava, D. and Theunissen, P. 2019. The future of P.R. is ‘fantastic’, ‘friendly’ and ‘funny’: occupational stereotypes and symbolic capital in entry-level job advertisements. *Public Relations Review*, 45(4): 1–12.
- Biel, Ł. 2017. Researching legal translation: a multi-perspective and mixed-method framework for legal translation. *Revista de Llengua i Dret, Journal of Language and Law*, 68, 76–88.
- Boatman, A. 2021. *Setting students up for success: the need for 21st century skills*. D. Tech., Texas A&M University.
- Bourdieu, P. 1977. *A theory of practice*. Massachusetts: Cambridge.
- Bourdieu, P. 1984. A social critique of the judgement of taste. In: *Traducido del francés por R. Nice*. London: Routledge.
- Bourdieu, P. 1986. Forms of capital. In: *Richardson, J.G. ed. Handbook of theory and research for sociology of education*. New York: Greenwood Press, 241–258.
- Bourdieu, P. 1989. Social space and symbolic power. *Sociological theory*, 7(1): 14–25.
- Bourdieu, P. 1990. *The logic of practice*. California: Stanford University Press.
- Bourdieu, P. 1996. *The rules of art: genesis and structure of the literary field*. Cambridge: Polity Press.
- Bourdieu, P. 1997. *Cultural capital, school, and social space*. Mexico: Siglo XXI Editores.
- Bourdieu, P. 1998. *Practical reason*. California: Stanford University Press.
- Bourdieu, P. 2000. For a scholarship with commitment. *Profession*, 40–45.
- Bourdieu, P. 2001. *Masculine domination*. California: Stanford University Press.
- Bourdieu, P. 2003. *Firing back: against the tyranny of the market 2* (Vol. 2). London: Verso.
- Bourdieu, P. 2005a. *The social structures of the economy*. Cambridge: Polity Press.
- Bourdieu, P. 2005b. Habitus. In: Hillier, J. and Rooksby, E. eds. *Habitus: A Sense of Place*, 2nd ed. Ashgate: Aldershot, 43–49.
- Bourdieu, P. 2011. The forms of capital. *Cultural theory: An Anthology*, 1, 81–93.
- Bourdieu, P. 2013. *Outline of a theory of practice*. Cambridge University Press.

- Bourdieu, P. 2018a. Distinction: a social critique of the judgment of taste. In: *Social Stratification*, 982–1003. Ney York: Routledge.
- Bourdieu, P. 2018b. The forms of capital. In: *The sociology of Economic Life*. New York: Routledge.
- Bourdieu, P. and Wacquant, L., 1992. *An invitation to reflexive sociology*. Cambridge: Polity Press.
- Bourdieu, P., and Wacquant, L. 1998. Pierre Bourdieu. In: *Stones, R. (eds) Key sociological thinkers*. London: Palgrave.
- Bourdieu, P., Passeron, J.C. and de Saint Martin, M. 1996. *Academic discourse: linguistic misunderstanding and professorial power*. California: Stanford University Press.
- Brady, M., Devitt, A. and Kiersey, R.A. 2019. Academic staff perspectives on technology for assessment (TfA) in higher education: A systematic literature review. *British Journal of Educational Technology*, 50(6): 3080–3098.
- Braun, V. and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2): 77-101.
- Brenneman, L. 2022. *Factors intensive English program instructors perceive as playing a role in facilitating communicative language teaching activities in the emergency remote teaching environment*. D. Ed., University of Florida.
- Breslin, R. S. 2014. *Exploring the professional journeys of exemplary expatriate field leaders in the international aid sector: a collective case study*. D. Mgt, University of Edinburgh.
- Brinkmann, S. and Kvale, S. 2018. *Doing interviews*. London: Sage.
- Bruer, J.T. 2003. Learning and technology: A view from cognitive science. In: *Technology applications in education: A learning view*, 159-172. New York: Taylor & Francis.
- Bryman, A., Teevan, J. and Bell, E. 2005. Qualitative data analysis. In: *Social research methods*, 282-308. London: Oxford University Press.
- Buana, A. and Linarti, U. 2021. Measurement of technology acceptance model (T.A.M.) in using e-learning in higher education. *Jurnal Teknologi Informasi dan Pendidikan*, 14(2): 165–171.
- Budiman, H. and Ramdhani, S. 2017. Development of high school mathematics teaching materials based on Geogebra Android version. *Proceeding of ICMSE*, 4(1): 121–126.
- Budiman, I. and Smits, M. M. 2018. *The tangled thread: Fragmentation of biogas governance in Indonesia*. M. Sci, Wageningen University.

- Bujang, M. A., Sa'at, N., and Bakar, T. M. I. T.A. 2018. Sample size guidelines for logistic regression from observational studies with large population: emphasis on the accuracy between statistics and parameters based on real life clinical data. *The Malaysian Journal of Medical Sciences*, 25(4): 122–130.
- Bunting, L., Segerstad, Y. H., and Barendregt, W. 2021. Swedish teachers' views on the use of personalised learning technologies for teaching children reading in the English classroom. *International Journal of Child-Computer Interaction*, 27: 1–9.
- Byamugisha, J. and Asingwire, P. 2014. Localization of Android content in Runyakitara. *Caribbean Journal of Sciences and Technology*, 2(1): 611–620.
- Byrd, D. 2019. Uncovering hegemony in higher education: a critical appraisal of the use of “institutional habitus” in empirical scholarship. *Review of Educational Research*, 89(2): 171–210.
- Byrnes, H. 2000. Shaping the discourse of a practice: the role of linguistics and psychology in language teaching and learning. *The Modern Language Journal*, 84(4): 472–494.
- Camacho Freire, G. K. 2019. *Analysis of the use of role play to improve speaking skill at Primer año de Bachillerato, at unidad educativa “miguel ángel león pontón” in the city of Riobamba, Chimborazo province, during the academic period 2018–2019*. B. Tech., Universidad Nacional de Chimborazo.
- Cassol, H., Pétré, B., Degrange, S., Martial, C., Charland-Verville, V., Lallier, F., Bragard, I., Guillaume, M. and Laureys, S. 2018. Qualitative thematic analysis of the phenomenology of near-death experiences. *PloS one*, 13(2): 1–14.
- Chakravorti, B. and Chaturvedi, R.S. 2019. How technology could promote growth in 6 African countries. *Harvard Business Review*, 1–15. Available: <https://www.wita.org/wp-content/uploads/2019/12/Research-How-Technology-Could-Promote-Growth-in-6-African-Countries.pdf> (Accessed 20 April 2022).
- Chattaraj, D. 2020. Strategies for facilitating listening skills among foreign language learners in U.S. universities. *International Journal of Learning, Teaching and Educational Research*, 19(4): 150–169.
- Cheng, M., Chen, L. and Yuen, A.H. 2022. Exploring the use of technology among newly arrived children in Hong Kong: from an e-sports and cultural capital perspective. *Educational technology research and development*, 70(5): 1931–1949.
- Chetri, G. 2022. Technology skilled teachers in promoting quality education. *Journal of Positive School Psychology*, 6(2): 3352–3357.
- Chia, C. K., Ghavifekr, S. and Razak, A. Z. A. 2020. Online interview tools for qualitative data collection during Covid-19 pandemic; review of web conferencing platforms'

functionality. *Malaysian Journal of Qualitative Research*, 7(1): 95–106.

Chima, A.N.E. 2013. Towards assessing the capability of information and communications technology (ICT) in the teaching and learning of Nigerian languages. *Journal of Qualitative Education*, 9(3): 1–7.

Chinangure, F. and Mapaire, L. 2018. The integration of technology in teaching and learning of mathematics: the missing link. *Journal of Applied Science and Technology*, 23(6): 1–13.

Clark, M. and Zukas, M. 2016. Understanding successful sandwich placements: a Bourdieusian approach. *Studies in Higher Education*, 41(7): 1281–1295.

Cleveland-Innes, M., Gauvreau, S., Richardson, G., Mishra, S. and Ostashewski, N. 2019. Benefits and challenges of technology-enabled learning using the community of inquiry theoretical framework. *International Journal of E-Learning & Distance Education*, 34(1): 1–18.

Cloete, A. L. 2017. Technology and education: challenges and opportunities. *H.T.S. Theological Studies*, 73(4): 1–7.

Cohen, L., Manion, L. and Morrison, K. 2000. *Research methods in education*. 5th ed. London: Routledge Falmer.

Colley, H. 2012. Not learning in the workplace: austerity and the shattering of illusion in public service work. *Journal of workplace learning*, 24(5): 317–337.

CPADA, n.d., Inequalities and development in Portugal: Portugal's contribution to implementing S.D.G. 10. *Portuguese NGDO Platform*. Available: <https://www.sdgwatcheurope.org/wp-content/uploads/2019/06/12.3.a-report-PT.pdf> (Accessed 14 October 2022).

Creswell, J. W. 2013. *Steps in conducting a scholarly mixed methods study*. DBER Speaker series. University of Nebraska Discipline-Based Education Research Group. Available: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1047&context=dberspeakers>. (Accessed 4 April 2022).

Creswell, J. W. and Creswell, J. D. 2017. *Research design: qualitative, quantitative, and mixed methods approach*. London: Sage.

Cronin, C. 1996. Bourdieu and Foucault on power and modernity. *Philosophy & social criticism*, 22(6): 55–85.

Dadvand, B. and Behzadpoor, F. 2020. Pedagogical knowledge in English language teaching: A lifelong-learning, complex-system perspective. *London Review of Education*, 18(1):107–125.

Dai, X. 2018. *The role of social capital: subjective well-being of older Chinese immigrants in the Netherlands*. M. Mgt., University of Groningen.

Dalvitt, L., Murray, S., Terzoli, A., Zhao, X. and Mini, B. 2005. Providing increased access to English L2 students of computer science at a South African university. *US-China Education Review*, 2(9): 72–75.

Davis, B. J. 2021. *How do challenging classroom behaviors in a simulated reality environment affect self-reported stress and psychological responses of pre-service teachers with low and high teacher self-efficacy*. D. Ed., Miami University.

Day, J. K. 2015. *Everyday indivisibility: how exclusive religious practices explain variation in subnational violence outcomes*. D. Tech., University of Denver.

De Certeau, M. 1984. *The practice of everyday life*. Minneapolis: University of Minnesota Press.

de Lima, L., Loureiro, R. C. and de Aguiar, B. C. 2020. Understanding the use of digital resources in the planning of teaching practice: the case of undergraduate students. In: *14th International Technology, Education and Development Conference 2013*, Valencia, Spain, 2–4 March 2020. Spain: IATED Digital Library.

De Vrieze, T., Nevelsteen, I., Thomis, S., De Groef, A., Tjalma, W. A., Gebruers, N. and Devoogdt, N. 2020. What are the economic burden and costs associated with the treatment of breast cancer-related lymphoedema? A systematic review. *Supportive Care in Cancer*, 28(2): 439–449.

Demirci, A. E. 2019. Aristotelian foundations of business ethics: the possibility of moral judgment in organizations. *Is Ahlakı Dergisi*, 12(2): 1–14.

Demirok, M. S. and Baglama, B. 2018. Examining technological and pedagogical content knowledge of special education teachers based on various variables. *T.E.M. Journal*, 7(3): 507–512.

Dixon, K. 2019. Access, capital, and the digital divide in a rural South African primary school. In: *Stories from Inequity to Justice in Literacy Education: Confronting Digital Divides*. New York: Routledge.

Djumrianti, D. and Oseso-Asare, A. E. 2021. Asian women's roles in family holiday. *Atlantis Highlights in Social Sciences, Education and Humanities*, 1, 56–62.

Dong, D. 2011. Concepts with the four prefixes 'trans-' 'post-' 'inter-' and ' 'cross-' in the context of translation studies: A comparison of Taiwanese and international academic papers. *The International Journal for Translation & Interpreting Research*, 3(2): 67–83.

Donnelly, D., McGarr, O. and O'Reilly, J. 2011. A framework for teachers' integration of ICT into their classroom practice. *Computers & Education*, 57(2): 1469–1483.

- Dressler, W. 2007. Meaning and structure in research in medical anthropology. *Anthropology in Action*, 14(3): 30–43.
- Dumais, S.A. 2002. Cultural capital, gender, and school success: The role of habitus. *Sociology of education*, 75(1): 44-68.
- Dusi, D. and Stevens, P.A. 2022. Thematic analysis: an analytical method in its own right. In: *Qualitative Data Analysis: Key Approaches*. London: Sage.
- Dutta, D. 2014. Convergence of structuralism and institutionalism in development economics and studies – revisited. In: *Inclusive growth and development in 21st century – A structural and institutional analysis of China and India*, 9: 3–33.
- Dweck, C. 2016. *Mindset: the new psychology of success*. Random House.
- Eacott, S. 2014. Administration, policy, and education: mobilizing the firm. *EAF Journal: Journal of Educational Administration and Foundations*, 24(1): 58– 66.
- Eaton, S. E. 2018. The impact of technology on how instructors teach and how students learn. In: *The Use of Technology in Teaching and Learning: Society for the Teaching of Psychology*, 74–80. Available: <https://teachpsych.org/ebooks/useoftech>. (Accessed 24 May 2021).
- Egbokhare, F. 2003. Local content and African information society. *iConnect Africa*, 1(5): 2–4.
- Emrah, E.R.I.S. 2019. Habitus and translators: Orhan Pamuk’s my name is red. *Çeviribilim ve Uygulamaları Dergisi*, (27), 132–151.
- Englund, C., Olofsson, A.D. and Price, L., 2017. Teaching with technology in higher education: understanding conceptual change and development in practice. *Higher Education Research & Development*, 36(1): 73-87.
- Ertmer, P.A. and Ottenbreit-Leftwich, A., 2013. Removing obstacles to the pedagogical changes required by Jonassen's vision of authentic technology-enabled learning. *Computers & Education*, 64, 175-182.
- Fallatah, A. I. 2019. *Investigating the relationship between faculty perception of educational technology and the level of technology integration into teaching and learning*. D. Ed., University of Kansas.
- Farris, M. 2021. *Improvisation-based curriculum for nutrition and dietetics undergraduate students: an examination in alternative education methods*. D. Ed., Northern Illinois University.
- Fields, G. S. 2021. Exploring concepts of social mobility. In: *Social mobility in developing countries*. U.K.: Oxford University Press, 54–74.

Flintoff, K. 2005. *Drama and technology: teacher attitudes and perceptions*. M. Ed., Edith Cowan University.

Fouche, I. Dison, L., Andrews, G. and Prozesky, M. 2021. Pedagogical and decolonial affordances of group portfolio assessments for learning in South African universities. *Critical Studies in Teaching and Learning*, 9(S.I.): 76–98.

Frère, B. 2011. Bourdieu's sociological fiction: a phenomenological reading of habitus. In: *The legacy of Pierre Bourdieu: Critical essays*, 247–270. U.K. and U.S.: Anthem Press.

Gasser, L. and Althof, W. 2017. Developing teachers' cognitive strategies of promoting moral reasoning and behavior in teacher education. In: *International handbook of research on teacher education*, 387–402. London: Sage.

Gelderblom, D. 2014. Conversations with Bourdieu. The Johannesburg moment. *South African Review of Sociology*, 45(3): 122–126.

Ghani, A. M. 1999. *A sociological study of the British independent film field: the case of British-Asian film production 1976–1996*. D. Ed., London School of Economics and Political Science.

Giddens, A. 1987. *Social theory and modern sociology*. California: Stanford University Press.

Gold, S. S. 2004. *An analysis of the relationship between software-facilitated communication and student outcomes in online education*. D. Tech., Northcentral University.

Goldthorpe, J. 2007. Cultural capital: some critical observations. *Sociologica*, 2, 1–23.

Golsorkhi, D., Leca, B., Lounsbury, M. and Ramirez, C. 2009. Analysing, accounting for and unmasking domination: on our role as scholars of practice, practitioners of social science and public intellectuals. *Organization*, 16(6): 779–797.

Gorgoretti, B. 2019. The use of technology in music education in North Cyprus according to student music teachers. *South African Journal of Education*, 39(1): 1–10.

Graham, P. and Hearn, G. 2001. The coming of post-reflexive society: Commodification and language in digital capitalism. *Media International Australia*, 98(1): 79–90.

Greenwood, T.M. 2000. *Computer technology and teaching methods in higher education: An examination and analysis of change*. D. Tech., The University of North Carolina at Greensboro.

Grenfell, M. 2009. Applying Bourdieu's field theory: the case of social capital and education. *Education, Knowledge & Economy*, 3(1):17–34.

- Grenfell, M. 2014 (ed). *Pierre Bourdieu: key concepts*. 2nd ed. London: Routledge.
- Grenfell, M. and Kelly, M. 2003. *Pierre Bourdieu: language, culture and education: theory into practice*. Oxford: Peter Land.
- Gudhlanga, E. S. 2005. Promoting the use and teaching of African languages in Zimbabwe. *Zimbabwe Journal of Educational Research*, 17(1): 54–68.
- Guest, G., Bunce, A. and Johnson, L. 2006. How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1): 59–82.
- Gülbahar, Y., Madran, R.O. and Kalelioglu, F. 2010. Development and evaluation of an interactive WebQuest environment: “Web Macerasi”. *Journal of Educational Technology & Society*, 13(3): 139–150.
- Gysels, M., Shipman, C. and Higginson, I.J. 2008. Is the qualitative research interview an acceptable medium for research with palliative care patients and carers? *B.M.C. medical ethics*, 9(1): 1–6.
- Habeeb, M.H. 2020. Technology-assisted English language learning and teaching. *Journal of Critical Reviews*, 7(15): 5176–5180.
- Habyarimana, H. 2015. *Investigation of attitudes and classroom practices of educators and learners in relation to English as the medium of instruction at four primary schools in Rwanda*. D. Ed., University of the Witwatersrand.
- Halim, M. S. A. A. and Hashim, H. 2019. Integrating web 2.0 technology in E.S.L. classroom: a review on the benefits and barriers. *Journal of Counselling and Educational Technology*, 2: 1–8.
- Hamilton, B. 2022. *Integrating technology in the classroom: tools to meet the needs of every student*. U.S.A.: International Society for Technology in Education.
- Hanggana, S., Suwanto, S., Bandi, B. and Anantanyu, S. 2022. Characteristics of effectively farmer groups to manage agricultural machinery rental business: a multi-case study approach. *The Qualitative Report*, 27(4): 1133–1154.
- Hanzl, R. 2019. *Ways of expression: the impact of VFX technology on modern storytelling in film and interactive media production*. B. Tech., Inland Norway University of Applied Sciences.
- Hawkins, J. E. 2018. The practical utility and suitability of email interviews in qualitative research. *The Qualitative Report*, 23(2): 493–501.
- Hay-Gibson, N. 2009. Interviews via VoIP: Benefits and disadvantages within a PhD study of SMEs. *Library and Information Research*, 33(105): 1756-1086.

- Henretty, C. 2013. *Computer-assisted language learning (CALL): instructing native and non-native English speakers in a mixed classroom environment*. M. Ed., University of Wisconsin.
- Herden, T. T., Nitsche, B. and Gerlach, B. 2020. Overcoming barriers in supply chain analytics – investigating measures in LSCM organizations. *Logistics*, 4(1): 1–27.
- Hermagustiana, I. and Rusmawaty, D. 2018. The use of technology for vocabulary instruction in EFL classrooms: support and challenges. *Advances in Intelligence Systems Research (AISR)*, 144, 137–143.
- Hezili, Y. 2018. *Teachers' and students' attitudes towards the role of using technology beyond the classroom in enhancing the speaking skill*. M. Ed., University of Guelma.
- Hornsby, D. J. and Osman, R. 2014. Massification in higher education: large classes and student learning. *Higher Education*, 67(6): 711–719.
- Horvat, E.M. 2003. The interactive effects of race and class in educational research: theoretical insights from the work of Pierre Bourdieu. *Penn GSE Perspectives on Urban Education*, 2(1): 1–25.
- Humble, N. and Mozelius, P. 2022. Content analysis or thematic analysis: similarities, differences and applications in qualitative research. *Research Methodology for Business and Management Studies*, 21(1): 76–81.
- Idris, A. M. S., Adliah, A. and Alfina, S. 2020. Multilingual interaction in classroom context. *ETERNAL (English, Teaching, Learning, and Research Journal)*, 6(2): 381–393.
- Ismara, K. I. and Saputri, Y. A. R. 2022. Ubiquitous learning in occupational health and safety learning media based on android with augmented reality technology for vocational education. *Specialusis Ugdymas*, 1(43): 824–838.
- Iyer, P. 2021. *Social and cultural capital and its influence on graduate employability: An exploratory study of student experiences at a higher education institution in Botswana*. D. Ed., Thesis, The University of Liverpool.
- Jackson, K. T., Burgess, S., Toms, F. and Cuthbertson, E. L. 2018. Community engagement: using feedback loops to empower residents and influence systemic change in culturally diverse communities. *Global Journal of Community Psychology Practice*, 9(2): 1–21.
- Jaffer, S., Ng'ambi, D. and Czerniewicz, L. 2007. The role of ICTs in higher education in South Africa: one strategy for addressing teaching and learning challenges. *International journal of Education and Development using ICT*, 3(4): 131–142.
- Jain, N. 2021. Survey versus interviews: comparing data collection tools for exploratory research. *The Qualitative Report*, 26(2): 541–554.

Jamal, M., Syed, S.A. and Metwally, A.A. 2022. Investigating realities and misconceptions about multimedia learning. *International Journal of Science and Research*, 11(4): 673–677.

Jantjies, M. and Joy, M. 2016. Lessons learnt from teachers' perspectives on mobile learning in South Africa with cultural and linguistic constraints. *South African Journal of Education*, 36(3): 1–10.

Jantrasakul, P. 2012. Utilizing critical thinking-based EFL lessons: a means to improve language skills and encourage student engagement in Thai EFL classes. *Journal of Education and Practice*, 3(6): 22–32.

Jawaid, F. Y. N. A. A. and Tariq, H. J. J. 2018. Challenges to computer assisted language teaching at university level. *International Journal of Language and Literature*, 6(2): 188–197.

Jegede, D., Diaka, R. P. E. and Jacob, O. N. 2021. Challenges preventing the use of information and communication technology for the teaching and learning of Christian religious studies in F.C.T., Abuja, Nigeria *Central Asian Journal of Literature, Philosophy and Culture*, 2(8): 10–21.

Jenkins, R. 1982. Pierre Bourdieu and the reproduction of determinism. *Sociology*, 16(2): 270–281.

Johnson, M., Griffiths, D. and Hanslot, Z. 2009. Positioning learning design: learner experience and the challenges of transforming teaching practice. In *Proceedings of the 6th TENCompetence Open Workshop*. Manchester, U.K., 19 – 20 November 2009. England: The Institute for Educational Cybernetics.

Johnston, S. E. 2021. *Two-stage adaptive design with data-driven subgroup identification and expected utility*. D. Tech., The University of Oklahoma Health Sciences Center.

Jowsey, T., Deng, C. and Weller, J. 2021. General-purpose thematic analysis: a useful qualitative method for anaesthesia research. *BJA education*, 21(12): 472–478.

Kahl, L. J., 2018. *The digital classroom in the 21st century: a study of K-12 physical educators use of instructional technology*. D. Ed., St. John's University.

Kalam, M.A. 2020. Using technology to teach speaking in the higher secondary students of Bangladesh. *International Journal of all Leading Research*, 1(1): 1–6.

Kalfa, S., and Taksa, L. 2015. Cultural capital in business higher education: reconsidering the graduate attributes movement and the focus on employability. *Studies in Higher Education*, 40(4): 580–595.

Karakaya, K. 2010. *An investigation of English language teachers' attitudes toward computer technology and their use of technology in language teaching*. M. Ed., Middle East Technical University.

- Katamba, C. V. 2020. Teachers' perceptions in implementing technologies in language teaching and learning in Indonesia. *Acuity. Journal of English Language Pedagogy, Literature and Culture*, 5(2): 123–136.
- Kazmer, M. M. and Xie, B. 2008. Qualitative interviewing in internet studies: Playing with the media, playing with the method. *Information, community and society*, 11(2): 257–278.
- Kessler, G. 2018. Technology and the future of language teaching. *Foreign language annals*, 51(1): 205–218.
- Kessler, G. 2020. Professionalizing your use of technology in English language teaching. In: *Professionalizing your English Language Teaching*, 163–173. Switzerland: Springer Cham.
- Kessler, G. and Hubbard, P. 2017. Language teacher education and technology. In: *The handbook of technology and second language teaching and learning*, 278–292. United States: John Wiley & Sons, Inc. Available: <https://doi.org/10.1002/9781118914069.ch19> (Accessed 13 May 2023).
- Kilvington-Dowd, L. and Robertson, S. 2020. “Let’s duck out of the wind”: operationalising intersectionality to understand elderly men’s caregiving experiences. *International Journal of Mens Social and Community Health*, 3(2): 19–31.
- Kirsten, R. 2021. Review of the paradox of creativity in art education: Bourdieu and socio-cultural practice. *Studies in Art Education*, 62(1): 100–104.
- Kristensen, M. 2019. *Understanding the choice of Brexit: a case of disintegration*. M. DIR., Aalborg University.
- Kronenfeld, B. J. and Brunskill, J. C., Gaurav S. 2015. Toward democratization of geographic information: G.I.S., remote sensing, and GNSS applications in everyday life. In: *Remote Sensing Handbook – Three Volume Set*, 457–478. United States: C.R.C. Press.
- Kurniawati, N. 2018. Bridging technological gap among English teachers through digital squad project. *English Review: Journal of English Education*, 7(1): 41–50.
- Kuziboyevich, A. Z. 2021. The use of computer technology in the study of Physics. *Middle European Scientific Bulletin*, 11: 88–92.
- Kvasny, L. 2005. The role of the habitus in shaping discourses about the digital divide. *Journal of Computer-Mediated Communication*, 10(2). Available: <https://doi.org/10.1111/j.1083-6101.2005.tb00242.x> (Accessed 10 July 2023).
- Lai, C.L., 2021. Exploring Taiwanese Teachers' Preferences for STEM Teaching in Relation to their Perceptions of STEM Learning. *Educational Technology & Society*, 24(4): 123-135.

- Laird, T.F.N., Smallwood, R., Niskodé-Dossett, A.S. and Garver, A.K. 2009. Effectively involving faculty in the assessment of student engagement. In *New Directions for Institutional Research*, 2009(141): 71–81. Available: <https://doi.org/10.1002/ir.287> (Accessed 5 June 2023).
- Lakhal, S. Y. 2017. Towards a framework for a resilient supply chain in a turbulent environment: a review of its drivers. *International Journal of Automation and Logistics*, 3(1): 70–87.
- Lefebvre, R.C. 2007. The new technology: the consumer as participant rather than target audience. *Social Marketing Quarterly*, 13(3): 31–42.
- Lenci, S. 2020. *Technology and language learning: from CALL to MALL*. M. Ed., Università di Padova.
- Lenoir, R. 2006. Scientific habitus: Pierre Bourdieu and the collective intellectual theory. *Culture and Society*, 23(6): 25–43.
- Lincoln, Y. S., & Guba, E. G. 1985. *Naturalistic inquiry*. Canada: Sage.
- Lingard, B., Rawolle, S. and Taylor, S. 2005. Globalizing policy sociology in education: working with Bourdieu. *Journal of Education Policy*, 20(6): 759–777.
- Litawa, A. 2018. Amateur choral singing and its implications for the emotional sphere of adult life—a case study. *Leisure Studies*, 37(4): 466–472.
- Litchfield, J.M. 2016. Faculty experiences with technology, millennials versus baby boomers. *On-Line Journal of Nursing Informatics*, 20(1). Available: <https://www.proquest.com/openview/e47dbe39cea42d19f29fc4ea1ab17c7f/1?pg-origsite=gscholar&cbl=2034896> (Accessed 22 July 2023).
- Little, S. 2018. Drawn in all directions: Heritage language families' use of technology. In: *Digital Parenting: The Challenges for Families in the Digital Age*, 61–68. Göteborg: Nordicom.
- Luef, E.M., Ghebru, B. and Ilon, L., 2019. Language Proficiency and Smartphone-aided Second Language Learning: A look at English, German, Swahili, Hausa and Zulu. *Electronic Journal of E-Learning*, 17(1): 25-37.
- Lumsdaine, A. A. 1963. *Instruments and media of instruction: handbook of research on teaching*. Chicago: American Education Association.
- Lüthje, C. 2017. Field-specific mediatization: testing the combination of social theory and mediatization theory using the example of scientific communication. *Mediatization Studies*, 1(1): 1–28.

Lyublinskaya, I. and Kaplon-Schilis, A. 2022. analysis of differences in the levels of TPACK: unpacking performance indicators in the TPACK levels rubric. *Education Sciences*, 12(2): 1–20.

Mahboobi, S.A., 2021. Success factors for e-learning implementation in Afghan Higher Education institutions. *Technium Social Science Journal*, 18: 101–116.

Makalela, L. and White, G. eds. 2021. *Rethinking language use in digital Africa: technology and communication in Sub-Saharan Africa*. Bristol: Multilingual Matters.

Malan, S. P. T. 1999. Imperatives for technology-enhanced delivery systems for providing education in South Africa. *South African Journal of Higher Education*, 13(1): 59–64.

Maphalala, M. C. and Adigun, O. T. 2021. Academics' experience of implementing e-learning in a South African Higher Education institution. *International Journal of Higher Education*, 10(1): 1–13.

Maramba, G. 2020. *Towards a framework for implementing a computer-based knowledge management system in healthcare organisations*. D. Tech., University of Pretoria.

Marques, E.C.L. 2015. In search of a forgotten object: politics and urban policies in Brazil. Paper presented at the *RC21 International Conference on "The Ideal City: between myth and reality. Representations, policies, contradictions and challenges for tomorrow's urban life"*. Urbino, Italy, 27–29 August 2015. Available: <http://www.rc21.org/en/conferences/urbino2015/> (Accessed 10 May 2023).

Masemola, S. 2017. *An exploratory and descriptive study on how Jacob Zuma is represented as a toxic leader in visual text: The Sunday Times Case Study*. D. Tech., Independent Institute of Education.

Massey, G. 2018. Exploring the processes and practices of translation in the workplace. In: *Young Linguists' Meeting in Poznań*, Zurich Universities of Applied Sciences and Arts, Poland, 23–25 November 2018. Available: <https://digitalcollection.zhaw.ch/handle/11475/13342> (Accessed 12 April 2023).

Masuku, M. M. and Masuku, D. Z. 2021. A critical analysis of the readiness of institutions of higher education to enhancing learning through the integration of E-Learning. *Journal of Educational Studies*, 20(2): 5–18.

Maulana, H.A., 2021. Psychological impact of online learning during the COVID-19 pandemic: A case study on vocational higher education. *Indonesian Journal of Learning Education and Counseling*, 3(2): 130-139.

Mayhew, E., Holmes, V., Davies, M. and Dimitriadi, Y. 2022. Online submission, feedback and grading of assessment: what do academic staff really think? *Research in Learning Technology*, 30: 1–14.

- McAllister, C. P., Ellen, B. P. and Ferris, G. R. 2018. Social influence opportunity recognition, evaluation, and capitalization: increased theoretical specification through political skill's dimensional dynamics. *Journal of Management*, 44(5): 1926–1952.
- McConnell, C. and Straubhaar, J. 2016. Why the institutional access digital divide might be more significant than the home broadband divide. In *Handbook of Research on comparative approaches to the digital age revolution in Europe and the Americas*, 56–75. I.G.I. Global. Available: <https://doi.org/10.4018/978-1-4666-8740-0.ch005> (Accessed 12 May 2023).
- McIntyre, P., Fulton, J., Paton, E., Kerrigan, S. and Meany, M., 2018. Towards a sociology of creativity. In: *Educating for Creativity within Higher Education*, 67–78. Switzerland: Palgrave Macmillan, Cham.
- Mellati, M. and Khademi, M. 2019. Technology-based education: Challenges of blended educational technology. In: *Advanced online education and training technologies*, 48–62. I.G.I. Global. Available: <https://doi.org/10.4018/978-1-5225-7010-3.ch003> (Accessed 3 April 2023).
- Mellquist, J. 2022. The game of influence: policy professional capital in civil society. *Journal of Civil Society*, 18(1): 105–123.
- Memon, M., Aqil, M., Soomro, K. A. and Adeel, A. 2021. Perceived determinants and barriers of recruitment process outsourcing in service sector of Pakistan: a qualitative approach. *International Journal of Applied Management Science*, 13(3): 200–225.
- Mendoza, A.V. 2015. *Imagined communities, symbolic capital, and the mobilization of individual linguistic resources*. D. Ed., University of British Columbia.
- Miima, F., Ondigi, S., and Mavisi, R. 2013. Teachers' perception about integration of ICT in teaching and learning of Kiswahili language in secondary schools in Kenya. *International Journal of Arts and Commerce*, 2(3): 27–32.
- Mirawati, M. and Amri, Z. 2013. Improving students' speaking ability through PMI (plus, minus, and interesting) strategy at junior high school. *Journal of English Language Teaching*, 1(2): 216–223.
- Mishra, M., Gorakhnath, I., Lata, P., Rani, R., and Chopra, P. 2022. Integration of technological pedagogical content knowledge (TPACK) in classrooms through a teacher's lens. *International Journal of Health Sciences*, 6(S3): 12505–12512.
- Modise, M.E.P., 2022. The potentiality of MOOCs as a tool for widening access to higher education in the African context: A systematic review. *International Journal of Learning, Teaching and Educational Research*, 21(5): 84-103.

- Moghaddam, A. 2006. Coding issues in grounded theory. *Issues in Educational Research*, 16(1): 52–66.
- Mohamedbhai, G. 2014. Massification in higher education institutions in Africa: causes, consequences and responses. *International Journal of African Higher Education*, 1(1): 59–83.
- Mohan, R. 2019. *Teacher education*. Delhi: PHI Learning.
- Mohanasundaram, K., 2018. Curriculum design and development. *Journal of Applied and Advanced Research*, 3(1): 4–6.
- Mohochi, E. S. 2022. Working towards collaborations in the teaching and development of African Languages for harnessing indigenous knowledge. *E.A.S. Journal of Humanities and Cultural Studies*, 4(2): 40–48.
- Montes Garcés, J. 2022. *EFL students' perceptions of the influence of their socio-economic background on agency skills to learn English*. D. Ed., Universidad Andrés Bello.
- Morgan, M. 2008. More productive use of technology in the ESL/EFL classroom. *The Internet TESL Journal*, 14(7): 133–158.
- Mutasa, D. E. 2015. Language policy implementation in South African universities vis-à-vis the speakers of indigenous African languages' perception. *Per Linguam: A Journal of Language Learning*, 31(1): 46–59.
- Naidoo, S. and Gokool, R., 2020. Towards the implementation of E-assessment in L2 IsiZulu: An examination of four listening comprehension tests. In *ICT-based assessment, methods, and programs in tertiary education* (149-168). IGI Global.
- Nash, R. 1990. Bourdieu on education and social and cultural reproduction. *British Journal of Sociology of Education*, 11(4): 431–447.
- Ndebele, H. 2014. Promoting indigenous African languages through information and communication technology localisation: a language management approach. *Alternation*, 13: 102–127.
- Ndebele, H. 2020. Exploring the challenges of information and communication technology localization in South African higher education: a language management approach. *International Journal of Multilingualism*, 19(3): 368–382.
- Nelson, M.D. and Tarabochia, D.S. 2018. Application of character development with students on the autism spectrum. *Journal of School Counselling*, 16(27): 1–27.
- Nilsson, S. and Nyström, S. 2013. Adult learning, education, and the labour market in the employability regime. *European Journal for Research on the Education and Learning of Adults*, 4(2): 171–187.

Njoka, J. N., Githui, P. and Ndegwa, L. W. 2020. Analysis of challenges facing ICT integration in managing public secondary schools: a comparative study of day and boarding secondary schools in the South Rift Region, Kenya. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 3(1): 58–66.

Novitasari, N. F. 2019. Measuring the use of technology in teaching-learning processes: lecturers' perception and implementation. In: *International Seminar on Language, Education, and Culture*. Mahameru, Indonesia, September 14–15, 2019. Available: <http://repository.unars.ac.id/id/eprint/250/> (Accessed 3 March 2023).

Nyamekye, E., Baffour-Koduah, D. and Asare, E. 2021. Exploring the perspectives of basic school Ghanaian language teachers on the integration of ICTs in teaching and learning. *African Journal of Teacher Education*, 10(1): 242–264.

Odrowaz-Coates, A. 2018. Soft power of language in social inclusion and exclusion and the unintended research outcomes. *Language, Discourse & Society*, 6(2): 15–30.

Oke, A. and Fernandes, F.A.P. 2020. Innovations in teaching and learning: exploring the perceptions of the education sector on the 4th industrial revolution (4IR). *Journal of Open Innovation: Technology, Market, and Complexity*, 6(2): 1–22.

Osborn, D. 2010. *African languages in a digital age: challenges and opportunities for indigenous language computing*. Cape Town: HSRC Press.

Ouane, A. and Glanz, C. 2010. Why and how Africa should invest in African languages and multilingual education: an evidence-and practice-based policy advocacy brief. Hamburg: UNESCO Institute for Lifelong Learning. Available: <https://unesdoc.unesco.org/ark:/48223/pf0000188642> (Accessed 10 April 2022).

Özgör, Ö. 2018. *Bourdieu and international relations: a structural constructivist analysis for rethinking state identity*. D. Phil., Bielefeld University.

Özişik, B.Z., Yeşilyurt, S. and Demiröz, H., 2019. Developing intercultural awareness in language teaching: Insights from EFL lecturers in Turkey. *Journal of Language and Linguistic Studies*, 15(4): 1436-1458.

Padayachee, K. 2017. A snapshot survey of ICT integration in South African schools. *South African Computer Journal*, 29(2): 36–65.

Painter, J. 2000. Pierre Bourdieu. In *Thinking Space*, 239–259. London: Routledge.

Pavlakakis, A. E., Conry, J. M. and del Rosal, K. 2019. Virtual and physical interactions in school-based spaces: Latinx parent engagement in a high-tech urban elementary school. *Urban Education*, 1–36. Available: <https://doi.org/10.1177/0042085919894036> (Accessed 12 November 2022).

- Peillon, M. 1998. Bourdieu's field and the sociology of welfare. *Journal of Social Policy*, 27(2): 213–229.
- Pellandini-Simányi, L. 2014. Bourdieu, ethics and symbolic power. *The Sociological Review*, 62(4): 651–674.
- Piazzoli, E. 2018. *Embodying language in action: the artistry of process drama in second language education*. Switzerland: Springer.
- Pillay, P. 2020. Massification at universities of higher learning in South Africa. *Gender & Behaviour*, 18(1): 14784–14799.
- Piotrowska, M. 2019. Pierre Bourdieu on art as social practice. the defence of the concept of the autonomous field of cultural production. *Art Inquiry*, XXI (21): 69–83.
- Pipere, A. 2016. Envisioning complexity: towards a new conceptualization of educational research for sustainability. *Discourse and Communication for Sustainable Education*, 7(2): 68–91.
- Pishghadam, R., Zabihi, R. and Norouz Kermanshahi, P. 2012. Educational language teaching: a new movement beyond reflective/critical teaching. *Life Science Journal*, 9(1): 892–899.
- Posey, L. A., Bieda, K. N., Mosley, P. L., Fessler, C. J. and Kuechle, V. A. 2019. Mathematical knowledge for teaching in Chemistry: identifying opportunities to advance instruction. In: *It's Just Math: Research on Students' Understanding of Chemistry and Mathematics*, 135–155. American Chemical Society: A.C.S.
- Prasetyo, T. and Putri, A. A. 2022. Challenges in the implementation of instructional strategy model based on the brain natural learning systems for inclusive classroom. *International Journal of Teaching, Education and Learning*, 5(3): 112–128.
- Prideaux, D. 2003. Curriculum design. *British Medical Journal*, 326(7383): 268–270.
- Proudfoot, K. 2022. Inductive/deductive hybrid thematic analysis in mixed methods research. *Journal of Mixed Methods Research*, 7(3): 231–329.
- Pun, M. 2013. The use of multimedia technology in English language teaching: A global perspective. *Crossing the border: International Journal of Interdisciplinary Studies*, 1(1): 29–38.
- Quane, A. and Glandz, C. 2010. Why and How Africa should invest in African languages and Multilingual Education. Hamburg: UNESCO Institute for lifelong learning.
- Raja, R. and Nagasubramani, P. C. 2018. Impact of modern technology in education. *Journal of Applied and Advanced Research*, 3(1): 33–35.

Ramokgopa, M. K. 2010. *Subtractive bilingualism in teaching and learning through the medium of English without the support of the mother tongue*. M. Ed., University of Limpopo.

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L. and Koole, M. 2021. Balancing technology, pedagogy and the new normal: post-pandemic challenges for higher education. *Post Digital Science and Education*, 3(3): 715–742.

Raphael, D. 2018. Understanding the promotion of health equity at the local level requires far more than quantitative analyses of yes-no survey data: comment on” health promotion at local level in Norway: the use of public health coordinators and health overviews to promote fair distribution among social groups. *International Journal of Health Policy and Management*, 7(10): 964–967.

Rasheed, R. A., Kamsin, A. and Abdullah, N. A. 2020. Challenges in the online component of blended learning: A systematic review. *Computers & Education*, 144: 1–17.

Rasheed, R.A., Kamsin, A. and Abdullah, N.A., 2020. Challenges in the online component of blended learning: A systematic review. *Computers & Education*, 144, 1-17.

Reay, D. 2004. Gendering Bourdieu’s concepts of capitals? Emotional capital, women and social class. *The Sociological Review*, 52(2): 57–74.

Redlich-Amirav, D. and Higginbottom, G. 2014. New emerging technologies in qualitative research. *The Qualitative Report*, 19(26): 1-14.

Révai, N. 2020. What difference do networks make to teachers’ knowledge? Literature review and case descriptions. In: *OECD Education Working Papers*. Paris: OECD Publishing. Available: <https://doi.org/10.1787/75f11091-en> (Accessed 3 January 2022).

Rice, E. S., Haynes, E., Royce, P. and Thompson, S.C. 2016. Social media and digital technology use among Indigenous young people in Australia: a literature review. *International Journal for Equity in Health*, 15(1): 1–16.

Roulston, K. and Choi, M. 2018. Qualitative interviews. In: *The SAGE Handbook of Qualitative Data Collection*, 233–249. London: Sage.

Rowlands, J. and Gale, T. 2016. Shaping and being shaped: extending the relationship between habitus and practice. In: *Practice Theory and Education*, 105–121. London: Taylor and Francis.

Rubtsova, A. and Dowd, T.J. 2004. Cultural capital as a multi-level concept: the case of an advertising agency. In: *Legitimacy Processes in Organizations*, 117-146. Bingley: Emerald Group Publishing Limited.

Sabzian, F., Gilakjani, A.P. and Sodouri, S. 2013. Use of technology in classroom for professional development. *Journal of Language Teaching and Research*, 4(4): 684–692.

- Sailer, M., Murböck, J. and Fischer, F. 2021. Digital learning in schools: what does it take beyond digital technology? *Teaching and Teacher Education*, 103, 1–13.
- Salaberry, M. R. 2001. The use of technology for second language learning and teaching: A retrospective. *The Modern Language Journal*, 85(1): 39–56.
- Sandelowski, M. 1995. Sample size in qualitative research. *Research in Nursing & Health*, 18(1): 179–183.
- Sanga, P. L. 2011. Challenges of institutional reform in African higher education: The case of three public universities in East Africa. *Makerere Journal of Higher Education*, 3(2): 1–18.
- Saracho, O.N. 2001. Teachers' perceptions of their roles in promoting literacy in the context of play in a Spanish-speaking kindergarten. *International Journal of Early Childhood*, 33(2):18–31.
- Sari, D. N., Suprayogi, M. and Azwar, M. 2021. Analysis of the technology acceptance model on the union catalogue server based the Senayan Library Management System within the Library of the Ministry of Marine Affairs and Fisheries of Indonesia. *Library Philosophy and Practice (e-journal)*, 5246: 1–18.
- Sari, F. P., Subroto, S. H. and Haroky, F. 2022. Development of audio-visual physics animation media to improve students' understanding of concepts and creativity. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, 8(1): 125–134.
- Sayce, S., Ta'Amnha, M. and Tregaskis, O. 2021. Converting capital? A Bourdieu perspective of Wasta in careers in the insurance sector in Jordan and the implications for symbolic power. In: *Pierre Bourdieu in Studies of Organization and Management*, 79–97. New York: Routledge.
- Schirato, T. and Roberts, M. 2020. *Bourdieu: a critical introduction*. London: Routledge.
- Selby, K. L. and Wang, J. 2018. *Developing the connection between embedded teacher researchers' instruction using the Teachers College Reading and Writing Project and Northwest Evaluation Association's Measures of Academic Progress*. Michigan: National Center of Special Education Research.
- Sengupta, E. and Blessinger, P. 2022. Introduction to ICT and innovation in teaching–learning methods in higher education. *ICT and Innovation in Teaching Learning Methods in Higher Education*. Emerald, 45: 3–9.
- Shelton, C., 2017. Giving up technology and social media: why university lecturers stop using technology in teaching. *Technology, Pedagogy and Education*, 26(3): 303-321.
- Shin, H. Y. 2001. Technology in Mathematics education – for better or for worse. *Communications of Mathematical Education*, 12, 317–329.

- Shorten, A. and Smith, J. 2017. Mixed methods research: expanding the evidence base. *Evidence-Based Nursing*, 20(3): 74–75.
- Shubina, I. and Kulakli, A. 2019. Pervasive learning and technology usage for creativity development in education. *International Journal of Emerging Technologies in Learning*, 14(1): 95–109.
- Shustennan, R. 2000. *Bourdieu a critical reader*. Massachusetts: Blackwell.
- Shyamlee, S. D. and Phil, M. 2012. Use of technology in English language teaching and learning: An analysis. In: *International Conference on Language, Medias and Culture*, 33(1): 150–156. Singapore: IACSIT Press,
- Sim, J., Saunders, B., Waterfield, J. and Kingstone, T. 2018. Can sample size in qualitative research be determined *a priori*? *International journal of social research methodology*, 21(5): 619–634.
- Singh, S. 2019. How should we study relational structure? Critically comparing the epistemological positions of social network analysis and field theory. *Sociology*, 53(4): 762–778.
- Smalley, E. 2014. *Fighting for equality in education: student activism in post-apartheid South Africa*. New York: Case Consortium Columbia and the Global Association of M.D.P. Programs.
- Sobri, N. H. M., Ismail, I. Z., Hassan, F., Nadal, I. P., Forbes, A., Ching, S. M., Ali, H., Goldsmith, K., Murphy, H., Guess, N. and Yusof, B. N. M. 2021. Protocol for a qualitative study exploring the perception of need, importance and acceptability of a digital diabetes prevention intervention for women with gestational diabetes mellitus during and after pregnancy in Malaysia. *BMJ open*, 11(8): 1-10.
- Squires, V. 2023. Thematic analysis. In: *Varieties of qualitative research methods: selected contextual perspectives*, 463–468. Cham: Springer International.
- Stefaniak, J. E. 2019. Instructional design theory. In: *Open and Distance Education Theory Revisited*, 89–94. Singapore: Springer.
- Stengel, B. S. 2015. Teaching moral responsibility: practical reasoning in a pedagogical “wonderland. In: *The moral work of teaching and teacher education: preparing and supporting practitioners*, 44–59. New York: Teacher College Press.
- Taghizadeh, M. and Hasani Yourdshahi, Z. 2020. Integrating technology into young learners’ classes: language teachers’ perceptions. *Computer Assisted Language Learning*, 33(8): 982–1006.
- Taherdoost, H. 2017. Determining sample size; how to calculate survey sample size. *International Journal of Economics and Management Systems*, 2, 236–239.

Tezer, M. and Ertarkan, Z. 2010. Teachers' proficiency and infrastructural problems of using technology during the process of technology integration in pre-school education institutions of North Cyprus. *Procedia-Social and Behavioral Sciences*, 9, 960–1968.

Thomson, P. 2005. Bringing Bourdieu to policy sociology: codification, misrecognition and exchange value in the U.K. context. *Journal of Education Policy*, 20(6): 741–758.

Thornburg, D. D. 1999. Technology in K-12 education: envisioning a new future. Available: <http://www.air.org/forum/abthornburg.html> (Accessed 5 September 2022).

Thornburg, D. D. 2000. Renaissance 2000. Available: <https://files.eric.ed.gov/fulltext/ED452839.pdf> (Accessed 5 September 2022).

Thorne, S. L. and May, S. 2017. *Language, education and technology*. Switzerland: Springer.

Threadgold, S. 2018. *Bourdieu is not a determinist: illusio, aspiration, reflexivity and affect*. London and New York: Bloomsbury Academic.

Tlali, N., Mukurunge, T. and Bhila, T. 2019. Examining the implications of massification of education on quality assurance and assessment in higher institutions in Lesotho. *International Journal of Trend in Scientific Research and Development*, 3(3):1561–1568.

Turugare, M. and Rudhumbu, N. 2020. Integrating technology in teaching and learning in universities in Lesotho: opportunities and challenges. *Education and Information Technologies*, 25(5): 3593–3612.

Uddin, S. J., Prajapati, J. and Pradhananga, N. 2019. Worker health and safety during post-disaster reconstruction: a case study in Bhaktapur. In: *2nd International Conference on Earthquake Engineering and Post Disaster Reconstruction Planning*. Bhaktapur, 25 – 27 April 2019. Nepal: Edu Sanjal Pvt. Ltd, 450–457.

UNGGIM, N. 2018. UN-GGIM: National institutional arrangements: instruments, principles and guidelines. In: *UNGGIM Working Group on NIA*. Available: <https://ggim.un.org/meetings/GGIM-committee/7th-Session/documents/Agenda%207%20NIA%20Instruments,%20Principles%20and%20Guidelines.pdf> (Accessed 27 March 2023).

United Nations. 2015. *Sustainable development goals*. Available: <https://www.un.org/sustainabledevelopment/sustainabledevelopment-goals/> (Accessed 10 April 2023).

Van der Merwe, J. 2021. *Lecturers' Adoption of Blackboard as a Learning Management System at a South African Higher Education Institution*. M. Ed. University of Johannesburg.

Van Der Wildt, A., Van Avermaet, P. and Van Houtte, M. 2015. Do birds singing the same song flock together? A mixed-method study on language as a tool for changing social

homophily in primary schools in Flanders (Belgium). *International Journal of Intercultural Relations*, 49, 168–182.

Van Langenhove, L. 2017. Varieties of moral orders and the dual structure of society: a perspective from positioning theory. *Frontiers in Sociology*, 2(9): 1–13.

Vannoy, S.A. and Palvia, P. 2010. The social influence model of technology adoption. *Communications of the A.C.M.*, 53(6): 149–153.

Verevi, A. 2021. Understanding teachers through their life journey, their ambitions and their practices. *S.N. Social Sciences*, 1(3): 1–24.

Vijayakumar, P. and Lawrence, A. 2021. Virtual reality–how real is the Indian education field? (preprint). Available: <https://easychair.org/publications/preprint/k3j2> (Accessed 25 April 2023).

Wa Thiong'o, N. 1992. *Decolonising the mind: the politics of language in African literature*. Harare: East African Publishers.

Wacquant, L. J. 2004. Pointers on Pierre Bourdieu and democratic politics. *Constellations*, 11(1): 3–15.

Wacquant, L. J. and Bourdieu, P. 1992. *An invitation to reflexive sociology*. London: University of Chicago Press.

Wallen, M. and Tormey, R. 2019. Developing teacher agency through dialogue. *Teaching and Teacher Education*, 82: 129–139.

Wang, W. N. 2023. Comparing theory of Bourdieu on cultural capital and field and theory of nussbaum on capabilities approach to understand higher education. *EDP Sciences*, 158, 1–6.

Warde, A. 2004. Theories of practice as an approach to consumption. In: *Cultures of consumption, and ESRC-AHRB Research Program* (Working Paper Series 6). London: Birkbeck College. Available: http://www.consume.bbk.ac.uk/working_papers/Warde%20work%20paper%201.doc (Accessed 12 March 2022).

Webb, A. 2019. Getting there and staying in: first-generation indigenous students' educational pathways into Chilean higher education. *International Journal of Qualitative Studies in Education*, 32(5): 529–546.

Whitfield, E. 2020. *A study of the relationship between reflexivity and habitus over the life course: exploring the roles of emotion, recognition and generation*. D. Ed., Cardiff University.

- Wittgenstein, L. 1980. *Vermischte bemerkungen/culture and value*. Oxford: Basil Blackwell.
- Wolhuter, C. C., Steyn, H. J., Mentz, E. and Potgieter, F. J. 2012. Innovative learning support for teaching large classes. In: *Post-Secondary Education and Technology*, 83–109. New York: Palgrave Macmillan.
- Wong, Y. L. and Liao, Q. 2022. Cultural capital and habitus in the field of higher education: academic and social adaptation of rural students in four elite universities in Shanghai, China. *Cambridge Journal of Education*, 52(6): 1–19.
- Xiao, J., Sun-Lin, H. Z., Lin, T. H., Li, M., Pan, Z. and Cheng, H. C. 2020. What makes learners a good fit for hybrid learning? Learning competences as predictors of experience and satisfaction in hybrid learning space. *British Journal of Educational Technology*, 51(4): 1203–1219.
- Yadamsuren, B. 2010. *Incidental exposure to online news in everyday life information seeking context: mixed method study*. D. Tech., University of Missouri-Columbia.
- Yade, L., Gueye, A., Gueye, B. and Lishou, C. 2020. Video conferencing solution for synchronous follow-up of cloud-based I.T. practical work. *International Journal of Online and Biomedical Engineering*, 16(4): 30–41.
- Yamamoto, J., Kush, J. C., Lombard, R. and Hertzog, C. J. 2010. *Technology implementation and teacher education: reflective models: reflective models*. New York; I.G.I. Global.
- Yan, Y. and He, C. 2022. Humanities education in China: in search of social harmony and Chinese nationalism. *International Journal of Management and Education in Human Development*, 2(1): 315–319.
- Yang, Y. 2014. Bourdieu, practice and change: beyond the criticism of determinism. *Educational Philosophy and Theory*, 46(14): 522–1540.
- Yende, S. J. 2021. A transition towards the fourth industrial revolution (4IR) in the South African Education sector: a perspective from rural-based higher education. *African Journal of Development Studies*, 11(2): 55–75.
- Yilmaz, Y., Lal, S., Tong, X. C., Howard, M., Bal, S., Bayer, I., Monteiro, S. and Chan, T. M. 2020. Technology-enhanced faculty development: future trends and possibilities for health sciences education. *Medical Science Educator*, 30(4): 1787–1796.
- Yoon, E. S. 2020. School choice research and politics with Pierre Bourdieu: New possibilities. *Educational Policy*, 34(1): 193–210.
- Zakirova, F. M. and Qarshieva, D. U. 2020. Quest for pedagogical technology and its use in education systems. *International Journal on Integrated Education*, 3(5): 12–16.

- Zepke, N. 2021. Mapping student engagement using a theoretical lens. *Teaching in Higher Education*, 1–18. Available: <https://doi.org/10.1080/13562517.2021.1973406> (Accessed 13 May 2021).
- Zhai, X., Li, M. and Chen, S. 2019. Examining the uses of student-led, teacher-led, and collaborative functions of mobile technology and their impacts on physics achievement and interest. *Journal of Science Education and Technology*, 28, 310–320.
- Zhang, M., Matthews, K. and Liu, S. 2022. Recognising cultural capital through shared meaning-making in cross-cultural partnership practices. *International Journal for Students as Partners*, 6(1): 64–80.
- Zhang, P. 1998. A case study on technology use in distance learning. *Journal of Research on Computing in Education*, 30(4): 398–419.
- Zheng, L., Zhang, X. and Gyasi, J.F. 2019. A literature review of features and trends of technology-supported collaborative learning in informal learning settings from 2007 to 2018. *Journal of Computers in Education*, 6, 529–561. Available: <https://doi.org/10.1007/s40692-019-00148-2> (Accessed 10 June 2022).
- Zhu, C., 2015. Organisational culture and technology-enhanced innovation in higher education. *Technology, Pedagogy and Education*, 24(1): 65-79.
- Zotzmann, K. and Hernández-Zamora, G. 2013. Beyond the ‘cultural turn’: the politics of recognition versus the politics of redistribution in the field of intercultural communication. *The Language Learning Journal*, 41(3): 357–369.

APPENDIX 1: Ethics Clearance



Institutional Research Ethics Committee

Research and Postgraduate Support Directorate
2nd Floor, Berwyn Court

Gate I, Steve Biko Campus

Durban University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375 Email: lavishad@dut.ac.za

http://www.dut.ac.za/research/institutional_research_ethics
www.dut.ac.za

17 November 2022

Mr T A Adedokun
30 Youngs Avenue
Berea
Durban

Dear Mr Adedokun

Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal **Ethical Clearance number IREC 249/22**

The DUT-Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the DUT-IREC according to the DUT-IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the DUT-IREC as outlined in the DUT-IREC SOP's.

■

Yours Sincerely ■

Dr K Padayachy ■

Deputy Chairperson: DUT-IREC

APPENDIX 2: Requests for Permission to Conduct Research

University of KwaZulu-Natal

7 October 2022

Attention: Professor Pholoho Morojele
Dean of Research
University of KwaZulu-Natal, South Africa.

Dear Professor Morojele,

RE: PERMISSION TO CONDUCT INTERVIEW AMONG LECTURERS OF LANGUAGE AND MEDIA CLUSTER

My name is Theophilus Adedayo Adedokun, I am a Language Practice Doctoral student at Durban University of Technology.

I would like to obtain permission to conduct a *virtual empirical interview* among the lecturers of the Language and Media Cluster, University of KwaZulu-Natal.

My thesis is entitled "***Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal***".

A study of this nature is deemed necessary in the era of penetration of technology into all sphere of human endeavour including education (teaching and learning) and especially teaching and learning of African languages. However, it seems the social context of African language lecturers affect their effective use of technology for their teaching and this study intends to unravel the social context factors. Thereafter, this study would offer practical and viable strategies to improve the use of technology by language lecturers.

This study would not only benefit language academics, but students, parents, educators, and others education stakeholders by bringing new insights into the use of technology in the teaching and learning and especially teaching of African languages.

The scheduled interview is of confidential nature, which is designed to elicit response from lecturers regarding their social context and their use of technology for teaching African languages.

Thank you in anticipation of your favourable response.

Yours faithfully,

Theophilus Adedokun

Doctoral Candidate

Durban University of Technology

Durban University of Technology

7 October 2022

Attention: Ms Relebohile Ramakatsa
Gatekeeper
Directorate for Research and Postgraduate Support
Durban University of Technology

Dear Ms Ramakatsa

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is Theophilus Adedokun, a Doctoral candidate registered for Language Practice at the Durban University of Technology. My thesis title is **“Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal”**.

I would, hereby like to obtain permission to conduct an MS Teams interviews regarding my study among lecturers with lecturers in the department of Media, Language and Communication at the Durban University of Technology.

Herewith in this email is attached a copy of my proposal which includes copies of the data collection tools and consent and/ or assent forms to be used in the research process, as well as a copy of the approval letter which I received from the Institutional Research Ethics Committee (IREC).

If you require any further information, please do not hesitate to contact me on theoday88@gmail.com and or 0616152580. Thank you for your time and consideration in this matter.

Yours sincerely,
Theophilus Adedokun
Durban University of Technology

University of Zululand

7 October 2022

Attention: Mr Siyanda Manqele
Manager
Research Ethics & Postgraduate Studies
University of Zululand

Dear Mr Manqele,

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is Theophilus Adedokun, a Doctoral candidate registered for Language Practice at the Durban University of Technology. My thesis title is **“Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal”**.

I, hereby like to obtain permission to conduct an MS Teams interviews regarding my study among lecturers in the department of African Languages and Culture at the University of Zululand.

Herewith in this email is attached a copy of my proposal which includes copies of the data collection tools and consent and/ or assent forms to be used in the research process, as well as a copy of the approval letter which I received from the Institutional Research Ethics Committee (IREC), Durban University of Technology.

If you require any further information, please do not hesitate to contact me on theoday88@gmail.com and or 0616152580. Thank you for your time and consideration in this matter.

Yours sincerely,
Theophilus Adedokun
Durban University of Technology

APPENDIX 3: Gatekeeper Permissions to Conduct Research

31 October 2022

Theophilus Adedayo Adedokun
Faculty of Arts and Design
Department of Media, Language and Communication
Durban University of Technology
Email: theoday88@gmail.com

Dear Theophilus

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate degree, provided Ethical clearance has been obtained. We note the title of your research project is:

"Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal."

It is noted that you will be constituting your sample as follows:

- With a request for responses on the website. The questionnaire must be placed on the notice system <http://notices.ukzn.ac.za>. A copy of this letter (Gatekeeper's approval) must be simultaneously sent to (govenderlog@ukzn.ac.za) or (ramkissoob@ukzn.ac.za).

Please ensure that the following appears on your notice/questionnaire:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using the 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the Protection of Public Information Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

Dr KE CLELAND: REGISTRAR

Office of the Registrar

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 7971 Email: registrar@ukzn.ac.za Website: www.ukzn.ac.za

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville



**UNIVERSITY OF
ZULULAND**

University of Zululand, Private Bag X1001, KwaDlangezwa, 3886
W: www.unizulu.ac.za

T: +27 35 902 6434

E: MothilalID@unizulu.ac.za

Office of the Registrar

Our ref: Permit: 39/2022

4 November 2022

Your ref:

PERMIT TO COLLECT DATA

The University of Zululand hereby permits T A Adedokun to conduct research and collect data in accordance with his Ethics Clearance Certificate IREC 249/22 issued by the Durban University of Technology dated 20 October 2022, and UNIZULU's POPI Declaration and Indemnity form dated 28 October 2022.

The Researcher may commence with data collection from the date of this Permit. This permit is valid for 12 months from the date of issue.

UNIZULU retains the right to withdraw or amend this permit if:

- Any unethical conduct is revealed or suspected.
- Relevant information has been withheld or misrepresented.
- Regulatory changes of whatsoever nature so require.
- The conditions contained in the Declaration have not been adhered to.

**D MOTHILALL
REGISTRAR**



*Directorate for Research and Postgraduate Support
Durban University of Technology
Open House
P.O. Box 1334, Durban 4000
Tel.: 031-3732576/7
Fax: 031-3732946*

14 November 2022

Mr Theophilus Adedokun
c/o Department of Media, Language and Communication
Faculty of Arts and Design
Durban University of Technology

Dear Mr Adedokun

PERMISSION TO CONDUCT RESEARCH AT THE DUT

Your email correspondence in respect of the above refers. I am pleased to inform you that the Institutional Research and Innovation Committee (IRIC) has granted **Gatekeeper Permission** for you to conduct your research "Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal" at the Durban University of Technology. **Kindly note that this letter must be issued to the IREC for approval before you commence data collection.**

The DUT may impose any other condition it deems appropriate in the circumstances having regard to nature and extent of access to and use of information requested.

We would be grateful if a summary of your key research findings would be submitted to the IRIC on completion of your studies.

Kind regards.

Yours sincerely

MS V GOVENDER
ACTING-DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT DIRECTORATE

APPENDIX 4: Letter of Information



LETTER OF INFORMATION

Title of the Research Study: Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal

Principal Investigator/s/researcher: Theophilus Adedayo Adedokun, Dip Data Processing (ST), BA Ed in English (OAU), B. Ed. Hon in Language and Media Studies (UKZN), MA in Language Practice (DUT).

Co-Investigator/s/supervisor/s: Felix Awung, PhD; Sam Usadolo, PhD.

Good day,

How are you? I am Theophilus Adedayo Adedokun, a PhD Candidate doing my research for my Doctoral degree in Language Practice. I would like to invite you to participate in the study that I am conducting on the "*Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal*".

The aim of my study is to critically investigate how language lecturers' social context influences their efficient use of technology in teaching African languages using Bourdieu's theory of practice as a lens. The specific objectives of the study are to:

1. Examine the roles of technology in teaching African languages.
2. Identify the technologies available for the teaching of African languages.
3. Investigate the challenges of using technology in teaching African languages.
4. Identify the social factors that influence lecturers' attitudes towards the use of technology in teaching African languages.
5. Propose practical and viable strategies to improve the use of technology by language lecturers.

Your responsibility as one of the research participants is assist me in responding to some interview questions which will be sent to you *via email* and returned through the same means. What qualifies you to participate in this study are the following:

1. You are a lecturer in the language department/disciplines of the universities selected for this study.
2. You teach African language(s) or some aspect(s) of African language(s).

The interview will take you about 20 minutes of your time to complete. Please be advised that participation in this study is completely voluntary. If you agree to participate in this study, the interview questions would be sent to you. The interview questions consist of questions about how your social context impacts on your use of technology in teaching African languages in the university where you teach.

Kindly note that there are no foreseeable risks of participating in this study, however in any event of any, the researcher and the co-investigators may be reached on the contact details that is provided at the end of this document. Participating in this study may not benefit you directly, but it will help us learn about how your social context impact on your use of technology for teaching and practical and provide you with viable strategies to improve your use of technology for teaching. You may find answering some of the questions disturbing, but we expect that this would not be different from the kinds of discussions you do have with your family and friends. You may skip any questions you are not comfortable responding to, and you may end the interview at any time you so wish.

The information that you will share with us if you participate in this study will be kept completely confidential to the full extent of the law and according to the Protection of Personal Information Act (POPIA) of South Africa. The information you provide will be assigned a unique code number assigned by this study. The list connecting your identity to such code will be kept in a secured file and only the researcher will have access to it. As soon as the study has been completed and the analysis of the data finalized, the list connecting the participant's identity to the study codes will be destroyed. The findings of the study will be presented in form of summary and the report would not carry your identity in any way or form.

There are no benefits associated with participating in this study - both during and after the research and there are no remuneration in any form for participating in this study. However, the study will help you better understand how your social context impact on your use of technology for teaching and provide you with practical and viable strategies to improve your use of technology for teaching your chosen aspect of African language(s). The results and findings of this study will be shared with you via email if you require them after the publication of the study.

Please the following persons may be contacted in the event of any problems or queries: the researcher (061 615 2580.), my supervisor (083 582 4035) or the Institutional Research Ethics Administrator (031 373 2375). Complaints can be reported to the Acting Director: Research and Postgraduate Support on researchdirector@dut.ac.za

APPENDIX 5: Informed Consent



CONSENT

Full Title of the Study: Social context and the use of technology in teaching African languages: a case study of public universities in KwaZulu-Natal

Names of Researcher/s: Theophilus Adedayo Adedokun

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, TA, Adedokun, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: IREC 249/22,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_____	_____	_____	_____
Full Name of Participant Thumbprint	Date	Time	Signature/Right

I , _____ (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

_____	_____	_____
Full Name of Researcher	Date	Signature
_____	_____	_____
Full Name of Witness (If applicable)	Date	Signature
_____	_____	_____
Full Name of Legal Guardian (If applicable)	Date	Signature

APPENDIX 6: Interview Questions

SOCIAL CONTEXT AND THE USE OF TECHNOLOGY

- Q1. Give me a general view of how and when you became a language lecturer?
- Q2. Are there institutional rules or ethics guiding your profession that you know about?
- Q3. Are you aware of any institutional guidelines regarding the use of technology in your teaching?
- Q4. How did using technology in your teaching come about and what do you think are the rationale behind it?
- Q5. To what extent is the use of technology accepted in your department in teaching?
- Q6. What aspect of language teaching do you think is suitable to teach with technology?
- Q7. Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?
- Q8. How would you describe what motivated you to use technology in your teaching?
- Q9. Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?
- Q10. How would you describe the response of your audience (students) to the use of technology in your teaching?

APPENDIX 7: Interview Questions and Responses

NB: Some names have been withheld for the purpose of anonymity.

FP1, November 2022

Q1: Give me a general view of how and when you became a language lecturer?

Ans: I became a language lecturer in 1981, I am not sure you were not yet born, but anyway.....yea, that was when I started teaching and ehm.....it was given to me as my workload by my school principal because when he looked at all the subjects that I had passed., ehm.....the language was quite exceptional....yea. Otherwise, I would have taught geography or something else which were my other subjects.

Q: You said you excelled in isiZulu and Afrikaans, right?

Ans: Yes

Q: So you are saying you became a lecturer or language lecturer because of your excellent performance in isiZulu and Afrikaans

Ans: Let me correct my statement, ehm, ehm.....1981 was when I became a school teacher...yea. When I became a lecturer....what year was that? Ehm....It think it was in, yea it was in the90s...yea late 90s.

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Ans: You mean rules guiding the rules of technology or the teaching?

Q: We are still going to the rules of technology. We are on B2 now. They are the institutional rules or ethics guiding your profession. That is lecturing, as a language lecturer. So, are there rules or ethics that you are aware of?

Ans: Yea...may be they may be too general but yea, there are. Like ehm...., I can't write a paper for a student and you know, ehm....pretend I am a student. You know there are people who are...who get tempted, who write some subjects for their students. Yea...that I cannot do, ethics does not allow me to do that. A student has to produce their own work.

Q: Meaning that you must allow the student, no matter how you think they should be helped. You shouldn't help them in writing, not that you shouldn't help them at all, or a paper or assignment and ehm.....to make it look like it is the student who attempted the paper or assignment, whereas it is you.

Ans: Yea, they must produce their own work for marks.

Q3: Are you aware of any institutional guidelines regarding the use of technology in your teaching?

Ans: No, it was very recent when I started with technology.

Q: Okay, so when you started using technology, are there any institutional guidelines regarding the use of technology in your teaching?

Ans: Yes, such as the copyright laws or the plagiarism rules. These are very important.

Q: Okay, you would say those are the first guidelines that you picked up when you started using technology or let us say you quickly familiarised yourself with?

Ans: Yes, I familiarized myself with....but I did not know that they are so real until something happened. Smiles.....recently.

Q: Okay, I am not sure if it is okay if you can.....but you don't need to mention names, may be you just share that experience, probably it can help in this study?

Ans: Some students used some pictures.....ehm.....and videos without acknowledging them and then a certain company reacted by writing to the institution that they have realized that our students are uploading pictures that belong to them without acknowledging the, so this has also appeared in pin board of the university warning the students and the lecturers never to do that. So yea, I have experienced it experienced it first hand.

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

Ans: I started using technology in 2020. It was during COVID. Before 2020, I did not use it. So I was forced by circumstances. We were not allowed to teach face to face because of COVID rules

Q: And ehm, if I should ask, what do you think are the rationale behind it? You have said it is because of COVID and we know COVID, obviously people cannot come face to face and there needs to be another way around it because teaching and learning were supposed to continue regardless.

Ans: Yes, first of all, the institution was closed. Everybody had to stay home...ehm, but now, teaching and learning were supposed to continue as you said. So there was no other way other than using technology in order to reach to them.

Q5: To what extent is the use of technology accepted in your department in teaching?

Ans: I will say its very welcome, but at first, when we first used it, it wasn't ...There were some fears, but now that we are used to it, it is very welcome. Of course because of some advantages and yea.....

Q: I just want to get it clear. So when it was introduced in 2020 according to you because of COVID-19 pandemic, will you say there was resistance to it when it was first introduced?

Ans: Yea, there was. It was not necessarily the resistance but it was fear because more staff members in the department had never used and also students themselves, some of them, you know had fears. They were not used to it, so...plus the element of COVID, it.... COVID alone was causing uncertainty. Not sure that, you were not sure that you would live the following day and now you are here in front of the computer, you are to teach and you are not yet sure where to touch and how to know. How to for example share material. So, I know you are my witness to this because you were of great assistance.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

I think all aspects of language can be taught because I have used it....ehm, I was never hindered in any aspect as long as you know, you are able to share the material and you can project your voice correctly...yea, you can teach anything, any aspect. That is my opinion

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

Yea, in my context, I will say the institution decided because it was during COVID. So there was no other way than to use technology. Otherwise, if I would refer to the times before COVID, there were lecturers using technology out of their free will because they knew how to...you know...yea. So partly, is the institution partly, you know before COVID, it was because people were...already....they already had the ability to use technology. So out of their free will, they did, they decided

Q: The second part of the question is was there a choice for lecturers to decide to use or not to use technology in their teaching?

Ans: Before COVID, yes there was a choice, but during COVID, there was no choice. Yes, because some lecturers were using blended learning prior to COVID but then when there was COVID, it was completely the use of technology. Technology during COVID was 100 per cent because there was no way to meet your students.

Q8: How would you describe what motivated you to use technology in your teaching?

Let me say before COVID, I would never use it. I would see people using it and I even went for the training in the CELT lab but I found it very difficult and annoying. Exercises that we were doing there, I just felt I....no...this is not for me. So until I was forced by COVID, I am sorry to repeating this,....until I had no other alternative, then I had to use it and now that I am using it....right now, we are using it now as I am talking to you. So I am now free because I know how to use it. So in a way, it was ignorance and fear of technology that demotivated me.....but now that I know how to use it, I am free, I am very motivated. I can now choose to work from home and not go the office or to meet other people.

Q9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Ans: Yea, actually it was top down from the institution that the varsity will encourage the use of blended learning. So we even answered some questionnaires and you know asking us whether we were teaching 100 per cent face to face.....you know...questions like that. Are there any module that we were teaching online? So we were somehow....somehow it was mandatory for us to go for training because otherwise we would not implement the blended learning...yea, so...yes...there were discussions from the institution, also within the department and we did see some young academics who were using this online teaching telling us about the advantages of blended learning, yea...so there were discussions, departmentally and institution wise, yes.

Q: Thank you, so I just want to confirm your response. So you said there was discussion with you and you said it is a top-down from the management. It was sent to everyone about the fact that you have to use technology in the teaching because the situation on ground demands that you have to use it and for you to use it, these are the steps and you even mentioned that there were questionnaires sent to staff members...teaching staff especially to them to ask how....what aspect of their teaching or...they need to use technology and probably the management used that knowing...say the number of the people who uses technology, whether they are using it 100 per cent or they are using it blended....partly...saying blended....face to face or part online....

Ans: May be to add, there were already some staff members who were doing some research on blended learning and you know they would make us uncomfortable...giving us some questionnaires.....you know asking....are you using e-learning? And we did not even know what is this e-learning. Sometimes we would tell lies and say 'yes'....but then when the questions develop further asking for details, then you will take an eraser and say 'No'because now you see that no, you can't go on telling lies because you cannot give the details. Such questionnaires were making us very uncomfortable....we could see that you know.....especially....we as old staff members we could see that no, the train is running fast now....we need to catch up.

Q: So if I would understand you, so you are saying when they were asking those questions, so you....initially you were like okay, let us just follow the trail and see.....we say yea we know it and at some point, you see that oh we don't tell the truth....then we would get help....

Ans: Yea, you can't give the details now of something you profess to say you know it.....so you are like a fool now...fooling who?.....fooling yourself

Q10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: I would go back to the fact that it was during COVID when I first used technology and some students, you know, they were not happy, they were not free because they were used to face to face. You remember that COVID came in full force in April when we have been teaching them face to face.....now they had to go home and then we had to meet online and some even expressed it that eh, no....so wish we could go back because this is strange to us, we don't know what we are doing. Some, you will think they are there when they were not there. They will simply open and then disappear. So, well.....to some, those who were already used....because they are not the same, you know, they are not at the same level, they just enjoy it. I remembered teaching language in another department. Those students....you know they were just used because their lecturers were using the blended learning, so, there was nothing, you know special about online learning. But for the language students themselves.....I mean in the language programme, most of them, they were not happy. They were afraid, they were....you know, there was this anxiety, but as time went on, they got used to it.....yea, because there was no alternative.

Q: I just want to confirm your response now. I will just go through everything from the beginning and then confirm the last answer you gave to the last question. So, you said you started using technology for teaching just immediately after COVID struck and going back to ten now when I asked about how you describe the response of your audience because when it comes to your audience now, they are your students. You said initially that they were not happy, they were not free, even some will just keep quiet throughout the lesson. Not as if they can't talk but they are not sure, may be they are not sure may be you could even hear them or you would.....so, just this anxiety

about what is going on, some don't understand, they just feel may be.....I am just saying may be they just feel may be the person behind the computer is not even real....possibly, one robot.....

Ans: There were instances where, you know students where they were, they were with other parents or their siblings asking, 'where is this person teaching you?' where?. So they were just hearing voices and to them also, it was strange that they were hearing these voice and they were told there is learning taking place.

Q: Again you said some wish they could may be just go back to the traditional method of teaching where we just meet and I know this is my lecturer and these are my colleagues, not seeing people, just seeing them by their first name and their initial and their surname. And sometimes, especially for those first years, they are people they have not even met face to face before, they are just meeting online. They don't even know them. So, some wish that they could go back to the traditional way that they are used to, especially those just coming straight from high school and whereas you also confirmed that there are some of the students especially students who are outside the language department and you said those one from LIS, you made mention of LIS that probably because the probably have a proper training in the use of technology before, they had no issue using it and they were even interacting and they were okay with it.. Would I describe the response from your audience who are your students as mixed reaction because some were enjoying it and some were not enjoying it this probably was due to the fact that some were using it before and I just want to note.....I just want to ask this that those from LIS that you mention, are they also first years or they are second years, third years.

Ans: No, they were second years...yea....we teach language there in the second year.

Q/Remarks: So that probably would have impacted on how they use technology because they have been using it, they have been in the system and they have been using it and I want to believe that LIS, they have computer labs, functioning one. So, that could have impacted on how they use technology because they have been using it before, so is like okay, we have been using it before, probably pre COVID and they were used to it, they just.....because if it is student from another department, so one

way or the other, they have been using it before, so that probably explains the difference.

MP2, December 2022

Q1: Give me a general view of how and when you became a language lecturer?

Ans: I started in 2018. I started when I was doing my Honours degree with Wits University. So I started as a...ehm....as a...what you call a teaching assistant and when I registered for Masters, that was when I became a sessional lecturer for isiZulu and in 2020, I got my Masters and then I got a contract job with [name withheld] where I was teaching isiZulu and then later in 2021 and then I received a permanent job at [name withheld] where I currently teach isiZulu, so that has been my journey.

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Ans: Not that I know that has to do with teaching languages, more particularly isiZulu. I wouldn't say there are any guiding rules and ethics with regards to that that I know of at the moment.

Q: What about teaching generally at [name withheld] as a lecturer may be there is this ethics that you know or rules that you know about?

Ans: I will have to pass this one because honestly, I wouldn't say there are some that I specifically know.

Q3: Are you aware of any institutional guidelines regarding the use of technology in your teaching?

Ans: Ehm....I think one that is more important is the copyright. You know when you are going to use someone's intellectual property, you have to kind of like acknowledge them...ehm...so I think when using technology, that is more important to acknowledge, you know, other people's work.

Q: So, that will be like the only one that you know.

Ans: Yea, that comes to my mind right now

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

Ans: OK, so you know, before COVID we were doing everything.....you know....face to face teaching but during COVID, we were to adopt the style of using technology in our teaching like having our classes on Teams, you know, using Moodle more often. So, I think uhmmm.... COVID introduced me particularly to the technology teaching. You know the lockdowns and the rules and regulations where we did not have to see, you know uhmmm....the students face to face.

Q: OK, so so so you would say before COVID, you don't really get to use technology?

Ans: Yes, for yeah, before COVID, I didn't use technology, but during the COVID times and post COVID that's when we are using the technology we have to we have to integrate you know teaching face to face with the technology part, yeah.

Q: Hmm. So during COVID a lot of technology they were into integrated into your teaching?

Ans: Yes, yes. Yeah

Q: And I'm not sure if you've answered this, but the second part of that question says what do you think are the rationale or the reason behind you using technology for teaching?

Ans: Yeah, I think I've answered the question by saying the reason for being introduced into technology was during the COVID time where we had lock down, we were unable to see our students face to face. So we had to use technology to, for our teaching and learning.

Q5: To what extent is the use of technology accepted in your department in teaching?

Ans: Yeah. So in the department is very much accepted because as we speak, you know, some lecturers had been continuing with teaching....uhmmm.....their modules with, you know.....technology even post, you know, COVID lockdowns, they're still using technology and even with me, there are some students who I had, you know,

been teaching with, you know, Teams post COVID, so I think....ehmm.... using technology in our department is.....you know.....is acceptable and we are advised you know to....ehm.....use both face to face and technology in our teaching which they call hybrid, you know method of learning. So it is much acceptable, yeah.

Q: Umm, I just want to add to that question to say in as much as you have, you have confirmed that that it's been accepted. Probably because of COVID came and then people get used to it and COVID left not as not.....it has not gone completely. But you still continue to blend both technology,..ehm... technology and then the.... the.....what you call hybrid that is the combination of face to face and technology. So would you say that this acceptance of technology, so would you say there is nothing like a people not wanting to use it?

Ans: Umm, you know? Uh... Umm.... I think it depends. You know it depends with the modules that we are teaching because some other modules are you know, Uhm.... Uhm....would accept technology easily, but some modules, they would need, you know, some sort of a face to face kind of a teaching and learning situation. So, it depends with the modules, yeah, because even teaching isiZulu depends on what I'm teaching at the particular time because some sections they would, you know, need face to face.

Q: Ohh OK so if I understand you correctly, now you're saying when it comes to this little language teaching, there are some aspects of the teaching that technology can work better and there are some parts that face to face is the key. No matter how you like it, you just have to meet the student face to face?

Ans: Yeah. Yes, yes. Definitely.

Q: OK, so that's where your hybrid comes in that you still use both in teaching.

Ans: Yes.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

Ans: Yeah. OK. So you know what I what you are teaching non mother tongues speakers to speak isiZulu, I think not suitable for me specifically. It's not suitable for

me to teach them, you know like online using technology. I prefer to do face to face....uhmmm....lectures but with the theoretical aspect of isiZulu like teaching the advanced isiZulu to the mother tongue students where we learn your morphology, your phonetics, your semantics and all other elements of linguistics. I can teach online. But teaching the second.....or like teaching the non mother tongue, it's very difficult online, yeah.

Q: OK, so you.....you are saying that when it comes to teaching, especially teaching of isiZulu and when it comes to second, let, let me say second language speaker now who are not the Like the main Zulu speakers technology would not really work.

Ans: Yeah, it's not suitable.

Q: But when it comes to other aspects, may be comes to.....I think you mentioned is it theoretical or?

Ans: Yeah, what what.....when I teach, you know, the applied language now. Where the theoretical aspect, you know is being taught, uhm.....like your linguistics where we do like phonetics and other aspects of linguistics, and that's when you are able to uhmm.....sort of like teach them online but with the non mother tongue, it is not, yeah.

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

Ans: OK, so during COVID, obviously it was the institution's decision, you know to say everyone should, you know try and use this route, but post you know lock down.....ehmmmm.... so it's really.....ummmm.... on the lecturer and now if they want to use hybrid way, if they want face to face, if they want to use technology only, so it's really has to do with the lecturer we decide or I decide if I want to see them face to face or I want to do it online. So, but as I've said, it depends on what.....who I am teaching, so if I teach you know non mother tongue students, you know, I am like, I would have to see them face to face, but I wouldn't mind teaching using technology at the theoretical aspects to the mother tongues because.... yeah.

Q: OK, OK. OK. Thank you for that. And was there a choice for lecturers to decide to use or not to use technology in their teaching?

Ans: So as I've said, I think I have answered this question, but I am just going to expand. Hmm.....Umm yeah at the beginning of COVID, Umm.....lockdowns, uhm.....we didn't have a choice, honestly. But post lockdown, now we do have a choice where you you, you, you, you, you see what is more relevant to teach face to face and where to teach online you know it's.... It's it's all on us, yeah. Yeah. Thanks.

Q8: How would you describe what motivated you to use technology in your teaching?

Ans: How I would say what motivated me to use technology parts. The COVID situation just put us in the position where we have to use technology in our teaching and learning so I wouldn't say I was motivated by something, but I was put in a position where I have to use it.

Q: So in short, the COVID situation forced the motivation is not as if you were motivated, but COVID just came and you had to be motivated whether you like it or not.

Ans: Yeah, definitely. If it's wasn't for COVID, I don't think we could have been using, you know, technology in our education since my institution is more.....is more or less like you always.....has adopted the residential way of doing things. I don't think we could have been using technology, but because of COVID. And you know post COVID now we do have a choice you know of using. So I would say lockdown motivated us to use technology, yes.

Q: OK, now you have you have confirmed that COVID forced the motivation of using technology on you somehow. Now I am saying, would you now say the motivation.....which is which I would say is whether it is a good motivation. You know, we don't know what you call that, but you were one.....at the end of the day you were you, you are motivated. Would you say that technology is now helping you in your teaching?

Ans: So yes, I was bound by, you know, the rules of the government to teach using technology but now It is, I think, of our, you know, daily lives, you know, as I am speaking to you through, you know, Teams, that is part of technology, so I think uhmm.....being introduced into the space of technology has helped me to, you

know.uhmm.....to integrate my teaching with technology and even currently I do have classes that I teach online, so I think the lockdown was a good motivator for me to use technology because I believe that if it wasn't for COVID, I would still be doing things, you know traditionally, and if it wasn't for technology, we wouldn't do this interview. If it wasn't for COVID we wouldn't do this interview online and, you know. Yeah. So I think...uhmmm.....lockdown as a good motivator.

Q9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Ans: Umm,.....not really, but it was an already taken decision. We just had to comply.

B10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: Uhm.....you know. The response is not always positive, you know so. You'd end up having, you know. Maybe two students who would always participate or respond to your questions, you know, in the past, you know, maybe on Teams you would have lack of participation. And I think that is problematic with using technology because students tend not to participate and would call out their names and get more response, which means maybe, I don't know, possibly is that they just login and go and do other things, you know. But yeah, one thing that is bad about technology is the lack of participation.

Q: So lack of participation on the part of the student.

Ans: Yes, yes. Yeah, if there is participation, you would find that is always the same students who participate.

Q: So would you now say that some students are more we don't know,....but you are saying that it is only few students who usually participate, and until you call them out. To say oh, so so....person, answer this question.

Ans: Yeah, sometimes they would answer, but sometimes they will just disappear, you know. Sometimes they would not respond at all. So. Yeah, but, you know, face to face, it's a different situation. Yeah.

Q/Remarks: Thank you. Thank you so much for your time. Thank you for I don't know if you still you want to say something before, we end the session.

Ans: No. Uh, no, actually, thank you very much for this interview, you know, maybe I have to go and, you know, do some research on some questions that you have asked me, you know. Uh, based on some? Uh, questions like question one and two so. Yeah.

FP3, February 2023

Q1: Give me a general view of how and when you became a language lecturer?

Ans: Umm.....how do I explain that? So when and how was the question? No, I didn't start off by teaching elsewhere, etcetera. I was a student and then started tutoring as a student and then after tutoring then started to.....I got a contract is a lecturer and the rest is history.

Q: Oh, great. Great, great. Yeah, that's the kind of, you know, the the background of actually what the question is about, you know, how you became your journey into.....Into being a lecturer.

Ans: But let me just say that when I came to university, the intention was not to be a language lecturer. I did science at school. And so I was initially trying to follow the route of science, but I came at a time where.....yeah, things were very different. It was during the apartheid era, so things were quite different. And so I ended up choosing languages rather than the sciences. I was doing sciences and then changed direction, so it was not the plan at all. Definitely was not the plan. OK. So that's an extra. So really I was the science person that did the sciences at school and Maths and how I ended up in language is a kind of a shocker to everyone that listens to me, including me.

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Ans: I think in terms of institutional rules or ethics, I think there are certain. Uh, I would call it code of conduct. It's expected of you as a lecturer, whether you're teaching a language or whether you're teaching whatever whatever discipline or discourse, it doesn't matter. But they are particular rules that guide how you behave, how you treat

students. The sorts of code of conduct kind of things as well as just a principles on the whole in terms of your role as an educator, even though you are not the normal educator like a school educator, but you are in an institution of higher learning, so yes. And not necessarily written down per say, but also rules that have been passed on by the people that have mentored you, etcetera

Q: OK. OK, thank you. Can you just mention some of those rules or ethics? Maybe one or two.

Ans: Uhm.....for example, as a lecturer, you're not allowed to have any kind of.....uhmmm.....you should declare firstly if you have any family that is connected to you in terms of the institution you should declare. For example, if your husband works there or your daughter or your child or whatever. You can't have.....you can't have any kind of relations with students as a staff member. Uhmmm....., you.....I am trying to think what other rules? I am thinking on the top of my head here. Uhmmm.....your, your, your, your, your, your your work in terms of what.....what,.....what hours you are expected to work. You terms of employment that you are supposed to work, you are employed basically 365 days of the year, but obviously you have leave and you are accessible. And in terms of the university wanting to contact you, if you are going to be out of the country, for example, then you need to inform your line manager or you head of department or whatever. But if you are local then you are accessible in terms of if there is an emergency to do with students, whatever, whatever, whatever. Yeah, so lots of different uhmmm.....I mean things such as you don't bend, you don't bad mouth a colleague, for example, in the presence of students, even if students are complaining about the colleague, so those kinds of ethical practices as well. I don't know if this is making sense. I probably could go on and on.

Q3: Are you aware of any institutional guidelines regarding the use of technology in your teaching?

Ans: I know that well, I don't know if you can call them institutional guidelines regarding the use of technology, but I think more of the university pushing for us to get more and more familiar with the use of technology so the university creating different platforms where we can be taught how to use and incorporate technology in terms of the content

that we are teaching. Dos and don'ts. I'm trying to think of in terms of guidelines, I mean. It's just sort of.....you.....you know what is acceptable in terms of what content you should be giving students you know what is prohibited content, etcetera. Those sorts of things which I think are just standard practices, whether you are in an institution of higher learning or in a corporate.....uhmmm.....But in terms of teaching, yes, uh, the university pushing more and more for us to get as much exposure and training to use technology in different ways, not just not just during COVID but even prior to COVID.

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

Well, for us technology kind of came in when we were introduced to the use of Moodle. Which is the system we use, the platform that we use and which was initially when we moved away from printing of notes etcetera. So the cost of.....it was a cost factor I think for the institution in terms of cutting down costs for students being charged for notes, for example, what we'd call be notes (not clear. Kindly check around 14th minute) removing that completely and then replacing that with the technology advancement in terms of students being able to access their materials online and then by the time COVID came, we had already started using this particular platform. And so we then just literally got steeped or literally went on a very sharp learning curve of how to do a lot more with technology in terms of the platform we already had access to.

Q: Ohh thank you so much. So it was actually, you know, this general notion of you saving the trees. You know, so.

Ans: Yes, and also saving students money and going paperless and all of those, all of those things.

Q5: To what extent is the use of technology accepted in your department in teaching?

Ans: Umm, I think for the for the module that we have. OK. Because we run two streams, so we have first language speakers and we have second language speakers and the second language speakers, that module is the one that is university wide

because it is part of the language policy and your student audience there is much broader. And so to use technology in that instance was probably a lot easier and more acceptable than within the other stream, but I think it has...It has.....I don't think there's anybody in the department that would necessarily not want to accept it. It's almost had reached a point with COVID that it was a necessity. There was no other way. There was no alternative. And so everybody just had to use it. In terms of accepting the use, it wasn't a choice. If you understand what I am saying. It's a matter of it's there and we have to do it. There's no alternative.

Q: And just to, I don't know if this is like a like an addition to what you have said like the, the, the, the coming of COVID actually makes it like compulsory for you to use?

Ans: Yes. It kind of compelled everybody or propelled everybody into going with technology, either you did or you didn't. And if you didn't, you got left behind. Yeah.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

Ans: Umm, I think you can use technology for anything. And not because.....I am saying that just because I think that it is a nice thing to say 'No'. We are currently working on a project that is funded by government. That is a human language technology project and we are actually working on our current basic isiZulu, which is for second language speakers to become a fully online module. And so right now we are tackling and battling and fighting with aspects that we thought were not teachable by technology, but we are finding out that things like gamification etcetera can be used because we have obviously partnered with people that are techno pros, you know. And so that partnership has worked very well in terms of what we can do with language. And so I don't think there's anything that you can't teach with language. And in fact there are elements that we thought initially. For example, if the student doesn't hear the language being spoken often enough or the student doesn't get to practice often enough, there are ways to get around that. So technology can do almost anything that you wanted to do for you.

Q: So you think you as a lecturer at this point you can't do without the use of technology in your teaching?

Ans: No, I can't do without, but I can do with it as well. What I'm saying is that I don't think technology is negative or is necessarily bad. But at the same time, I don't think face to face is bad for me. Either one can work or both can work. In combining the two you can actually do a fantastic job. Or with one you can do a fantastic job or you can do with the other a fantastic job, but one doesn't necessarily cancel out the other. If you know what I mean.

Q: So you're saying. whether the use of technology or face to face that both can still work for you? Yeah, you can. You can use both.

Ans: Yes

Q: And so you would say, if I would ask, you would say that you think combining both would be fine, you know, face to face and use of technology.

Ans: Yes

Q: So we don't rely on one more than the other?

Ans: I am just thinking now in the face to face, we were talking about it today. We are going back face to face come two weeks time. When there is load shedding, what do we do? That's a real challenge in the South African context. You have a class of 200 students in a lecture room that goes pitch black. What do you do? At least you can put that stuff on to learn or onto Moodle, whatever the platform is. And some of the stuff they can still access because you can't keep playing catch up with lights going out every second day or every day or every time you have that lecture. Unfortunately, because it is in that block of that time that you, you, you, your time out. Load shedding happens exactly when you have your double session of whatever module. Do you understand what I'm saying? So having technology as a support then would be really useful over and above the fact that you can at least when you meet the students again you can review quickly what you have already given them access to. That they can access in their own time without the the, the, the the clutch, the crippling clutch of load shedding.

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

Ans: I think it wasn't a departmental choice. It was an institutional choice in this instance. Especially with COVID, it was a decision that came because of the circumstances. There was no alternative but to go online and so it was not a choice made by lecturers and many lecturers were not happy with that because they weren't able to deal with it or were not ready. As I said, it was a very steep learning curve in a space of weeks. We had to learn everything we needed to know in order to be online, literally plug in. So it was not a decision that was made by staff, it was a decision that was made at an institutional level and I think it was actually probably higher up at government level because simply in terms of higher education, there was no other way. For us.

Q: And they want, probably they want universities to also have more students, they still want student enrolment despite COVID, that learning must continue. Whether you should want it or not.

Ans: Yes. Yes. Learning had to continue. Yes, learning had to continue in whatever platform, learning had to continue because money had to be made. Obviously fees have to be paid.

Q: You were saying that It wasn't like it..... There was a like a choice. It was like a government way of saying.....

Ans: It was forced. Yeah, it was forced in many ways.

Q8: How would you describe what motivated you to use technology in your teaching?

Ans: I think in the instance where it became an institutional decision, that's what motivated you. It was, it was either you, you, you, you learn to use technology in your teaching or you stop working. And some staff did end up leaving because they couldn't. They couldn't teach and there was just too much to learn, so I am not talking just out of.....out of just saying that, that's that's something that may have, no, there are people that actually stopped working because they just couldn't do the technology thing. So what motivates you to use the technology in your teaching? What I found is that once I started to use it and I am more and more interested in finding new and interesting things to do with it. So it is kind of..... When you see that the action of how

students are interacting with what you've given them, it makes you want to find new and different and interesting ways of bringing your content across.

Q9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Ans: Umm.....pre COVID there was no real discussion to say. I think there was more of an instruction that this is what we have to do because there is no other way. Post COVID is kind of Umm.... The discussions that have happened have happened at different levels, but the final outcome is that there will be kind of a moving back to face to face, but still some aspects that we can use technology to support the teaching. So, pre-COVID not really post-COVID not really in the sense that maybe I can say I was involved in the discussions directly, but obviously the discussions have happened at different levels and predominantly in certain sections of the institution that deals specifically with teaching and learning.

Q: OK, OK, OK. So just to recap on what we we.....no just a follow up on one of the questions. So it was actually during COVID that there was discussion let's say from the state level that is the government level and then the institution then coming to the department to say you have to use it?

Ans: I think it....I think it didn't.....It didn't cascade down. It's like that I have a suspicion my thoughts or that it probably started from institutions of higher learning because remember the use of technology has been used in other institutions across the world prior to COVID. Teaching online has been a norm in many other countries. Your first world countries that that we just can't compare with when, when, when you talk about us as a country and a continent. So the idea of what do we do I think was probably started by the academics rather than by the politicians. I suspect. I don't think politicians really cared about what you do and how you do it. Just probably from within the institutions that the notion of we moved to online more and then discussion with government and then back to the institutions kind of thing you understand what I mean. I don't think politicians would have.....Personally, I just don't think they would have known what to do. Not in a derogatory way, but just yeah, that's not what they do. Would have been the people that are that are doing this as a living that would know how best to keep doing what we do.

Q10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: That's a difficult question to answer because. Umm..... Because of the kinds of students that we have, depending on whether they come from this particular school background or that particular school background. So you are talking about are they, are they.....Did they have access to computers prior to this? Et cetera, et cetera So, depending on the module, those students that are probably have been more familiar with using the idea of a computer or little on a laptop or phone, a smartphone would be more prone to enjoying this kind of teaching without necessarily...uhmmm..... or or or be participant....will be willing to participate in this kind of context where you are using technology in the classroom, whereas the child who has had no exposure to that obviously it's a.....it's a.....it's a.....they are literally in a.....in a.....in a.....you....you have thrown him in the deep end of a pool where they either sink or they swim. So, I think students for me these responses were always quite mixed depending on...and I wouldn't know for sure unless you actually ask students, but I think that many students that came to class, that is what told you where the students were able to access what you were teaching them and were able to participate fully in the class by the numbers that pitched up for the sessions whether it was a Zoom session or whether it was a Team session. Depending on what platform you are using would tell you how they felt. For some students, obviously, yeah you have got to talk about many other factors that would come into play like the type of learners you are dealing with, are they introverts, are they extroverts, is it easy for them to work, you know, context where they don't see your face, they just see a screen and all they are hearing is a voice in the background and the amount of time that they are spending in front of the screen. How does that affect them? Are they learners who are highly motivated, are they learners.....? So what kind of style do they use for learning? All, all of those factors, the characteristics that make up a learner, etcetera, all of those things would come into play in terms of how they respond to what you are doing and obviously also the person that is doing the teaching. Do I just show slide after slide with my voice over? Or do I try and make whatever I am doing as interactive as possible with using technology? So it is not just like how we have now, I am looking at the screen and you are looking at the screen, you don't even know who you are talking to. Do you know what I mean? So that sort of thing is is, is, is making it

more..... What is the word I am looking for that that your student gets more than just sort of a screen, but rather there is a face behind that screen behind that voice. There is some sort of actual interaction with your learners and that would help for them to be able to kind of move from this face to face to this technological online space of learning. But again, all those other factors would come into play. Some learners don't like to talk in groups, and at the same time, this allows you the space where you can talk, and nobody really knows what you look like or who you are. You know whereas in a classroom face to face context, there is no hiding who you are. Everybody sees you when you speak. If you have to speak, you know. Or other learners may find it easier to type and answer rather than speak and answer. So the platform of technology allowed all of those sorts of things to kind of come to the fore. But again, only students would really be able to tell you what they thought about us using technology in our teaching, their responses would probably be the best reflection of that.

MP4, February 2023

Q1: Give me a general view of how and when you became a language lecturer?

Ans: Do you make a specific distinction between being a teacher and being a lecturer?

Q: Uh, you can give an overview of maybe when you became a teacher first to and then your transition to lecturer.

Ans: I started off as a language teacher teaching in a high school. And where I taught in the FET band for probably 9 1/2 years and then I became a subject advisor, got a promotion to the subject advisory where I was in essence quality assuring the work of language teachers across the province and then at some time, I also became involved with the external marking of matric, you know the matric exam. Then at some point I just got tired of the subject's advisory service. It was just too much, the travelling and there was safety issues involved with travelling through the province and going to rural areas and traveling to remote areas.....Started off in the early part of 96, subject advisors were generally traveling in groups of two and three or two....yeah, two and more. But from about mid 97/98 when we were, because the workload had increased so much, you were essentially traveling alone. So. I was traveling alone to some really remote areas and then I just decided, well, I can't do this. After number of hijackings of colleagues, I started OK too much pressure on me. I just can't deal with it. And then

I resigned and went to work in the publishing industry. And in the publishing industry, there was a lot of demand. Uh....., but I enjoyed it cause it was still.....You know.....I was still relatively new in it. But it wasn't a permanent post. It was on contract. And then when the contract ended, then I joined the university on contract where I had done some contract work for them in the past and they needed somebody to teach methodology. So I then in 2005 joined the university where then.....That's when the transition from teacher to lecturer became, you know that was the terminology changed. I am no longer a teacher subject advisor, I am now lecturer. And because of my exposure and my experience with the subjects advisory, I was teaching a lot of linguistics, a lot of methodology, linguistics, applied linguistics. And from there it just grew and I grew as a person because I started initially teaching mostly Afrikaans methodology and teaching linguistics in English. And then at some point we.....they also discovered that I could teach Zulu to non mother tongue speakers because that was part of my teaching qualification. So I taught that for a while. And then later on just did exclusively of Afrikaans at undergrad level and taught English at the postgrad level, supervising Honours, Masters and, yeah. So that was how I got into becoming a lecturer and it's since 2005, it's just been going

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Institutional rules and ethics governing the profession, yes, as teachers we are governed by the SEIS Act (it is an Act which I didn't get the pronunciation very well), but also as a lecturer you have institutional rules and guidelines and ethic....ethical principles, and then all the ethics of doing research apply to your general life anyway. Institutional guidelines about technology. What's you exactly what you require there...? but, there is the ethics of doing research. The ethics of teaching.....Somehow move from face-to-face teaching to technology the same rules apply. You know the same ethical principles, the ethical considerations, and then recently with the POPIA Act. Ethical considerations are sort of taken up into POPIA as well. So, part of your ethics is then also to observe the POPIA Act. And then with the ethics there is, you know, all the whole do no harm, freedom of choice. There is no like be.....whatever you are doing must benefit somebody. Don't pay for information. Don't pay for research subjects or research respondents so that there is

no compulsion on them to say or do something because they are benefiting financially or otherwise. So those ethical considerations I think go through into you.....into the way you teach. When you engage with students those ethical rules somehow come into play. They somehow are required to be observed in your engaging with students. It is always going to be with the ethics born in mind, so you can't just engage without thinking about if I was doing this, if this is research, how does it turn out in terms of ethics? Am I behaving ethically morally? Those are just general, not just specifically from the institutional ethics policy, but also from the SEIS (it is about the same Act but I didn't get the pronunciation very well) policy, because as a teacher you are governed by SEIS (it is about the same Act but I didn't get the pronunciation very well), even though at the university level we are not considered teachers, but we still abide by those principles.

Q3: Are you aware of any institutional guidelines regarding the use of technology in your teaching?

I'm not sure if it came about at any specific point, but I think it's....it's just been generally, you know, technology has infiltrated teaching in all spheres, whether you are teaching in initial schooling, or whether you are at secondary schooling or whether you are at the tertiary level, I think for me, as a teacher in a high school, technology was very low key at first it was very, you know, introductory level very primary kind of technology. The use of recordings, the use of radio, the use of CD players and tape recorders. That was because of it's part of the teaching of what I was doing. The things I was teaching required recording of music or recording of voices or something. So that was just in there but also computers initially were just a way of keeping records. Your MacBook was computerized, so initially it started like that. Then even at the university level, the use of technology was minimal AV kind of technology. Then it sort of moved in and as I became more comfortable with different types of technology, I then used my laptop as a way of projecting images and projecting teaching material. It later on became an indispensable resource because the teaching material was there and it was fairly interactive at that stage, but not really massively interactive because I could stand in front of a class, project an image and then make notes on the PowerPoint or on Word and project that for students. So, as we would be discussing in literature or if we were.....when I am teaching methodology, for example, I would

upload student lessons, the lesson plans that the students present, project those, discuss those and make amendments as we are discussing what should be in the Lesson plan or how things should be done. And then came COVID and with COVID it became, you know, technology became the rescuer for teaching online. So, using of the LMS. It is now called Learn. It used to be called Moodle. Other people use Blackboard. But it is the same thing. To that became a way of engaging with students. So, you are teaching online. You are delivering virtual lessons, or you are recording lectures so that you could upload it where students could then download and listen or view at their leisure. It also became a way of interacting with students, uh..... the research students. So, where I am supervising research, then we would have used Zoom and Teams in order to engage and to do the supervision. So, technology has, you know, sort of started off very minimally but now I think it has become indispensable that I don't think I can quite comfortably go and teach without technology because I need access to internet, I need access to YouTube. I need access to stuff that I have stored and it's there, easily accessible. So using technology is.....it's just been nothing.....uh.....how teaching and how pedagogy has developed. So, while initially the technology was not available.....as technology has improved, it has become more easily and more readily accessible. You know, at one point in my method classes I was teaching via Zoom, but then having access to WhatsApp as a way of interacting with students who couldn't access the Zoom. Then, if I couldn't access.....also had access to me via WhatsApp. You know it is just for students who didn't have access to a laptop. Like they could also use their cell phones, but they also had WhatsApp that we could communicate with. So, yeah, it is just part of evolution, I think.

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

(Answer has been addressed in the immediate response)

Q5: To what extent is the use of technology accepted in your department in teaching?

The extent to which technology is accepted in the department or in our cluster, I think anybody who doesn't use technology is not in the cluster because we all..... So, I mean we are almost contractually bound to use technology because of teaching,

asynchronously and synchronously via Zoom and via Teams. It has just been a way of life, you know, it is not as if you have a choice anymore. If you need to get to students, it was the only way you could do your work.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

I think everything because I use technology to teach. I am teaching research, not just research in language but research in education. I use it to teach academic literacy, I teach sociolinguistics, I teach everything you know.....all aspects of language are taught and when doing methodology, especially when I am teaching aspects such as how teachers would teach, a lesson on listening and speaking or reading or writing. Then I am using technology to demonstrate that it comes in the way you teach. So we are using technology so that students are able to see because my teaching is then modeling for students what they are going to do and the use of technology is just part of it.

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

I think it was just something that was accepted that that is the way we are going to interact with our students, especially during the COVID pandemic where that was the way we were going to go and that was.....it almost was not a choice because you would not be able to teach. You wouldn't be able to use. Anything to get to students cause you.....there was.....physical contact was just not possible. And many of our students were not physically present on campus. In the latter part of the COVID pandemic, when things became a little bit more relaxed, the students, some were on campus, but some were still at home. Not everybody was allowed back on campus because they had to control the number of people on campus so.....And it was easier to just use technology to reach all students, whether they were physically on campus or whether they were away from campus because even the students on campus, you didn't have physical access to them, there was no face to face teaching. So technology was the only option for us that we use technology to ensure that the students got the lectures. So yeah, it was almost a given that we were going to agree to technology or that we saw technology as the only way around the limitations

imposed by COVID. So, really it wasn't a choice of whether you want to use it or not. It was just given that you would have to use it if you were going to get into contact with students. It wasn't always the best way because of various issues such as students not having the physical technology to get on it. They didn't have the laptops they or the laptops were not as up to date as they should be. They also had issues with data procurement. There were also issues of where the student was was there connectivity? And sometimes even though there was connectivity, we then had issues with electricity in some areas that it was not accessible to students that had their times of electricity blackouts. Either due to load shedding or through other malfunction. So, it was like the only way you could reach those students was by using technology so that you could record lectures of those students, when they were able to connect to the Internet, they could then access the teaching material.

Q8: How would you describe what motivated you to use technology in your teaching?

It was either technology or I wasn't going to get to the students and technology just made it easier to do certain things especially when you knew that students were probably not able to access the teaching or the lectures during synchronous teaching time but technology made it possible that they could get access to the lecture at a later stage when either they had data or they had access to the Internet because of electricity issues or such. It also meant that for some students where there was no mobile connectivity, they could move to spaces where they could then download the material and then access it at their leisure. So the motivation to use technology was basically to ensure that students were getting access to teaching materials. Students were able to contact me. You know, whether it was during the Zoom session, during a Team session or whether it was via WhatsApp and there's another App that we used at one point because WhatsApp was proving to be a bit expensive for some, so there was another app that we could use which was zero rated so that they didn't need data to access that.

Q9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Discussion regarding the use of technology. I don't think there was any real discussion about the use of technology. I think the discussion was more about how to use it for maximum benefits. It was more of training in the technology. As lecturers, I think we accepted that we are going to.....have to access our students in some way, otherwise students would drop out or students would be failing in droves. So to get to those students, technology was almost a given and the only thing that we engaged with the university was on how best to use the technology or how to use the technology. What was best practice? And I think there was a great effort made on the part of universities to empower lecturers to be able to use the technology to use things such as Zoom and Teams. And how to present lectures in a way that would engage students rather than have them just sit and watch a movie playing in front of them where the lecturer is just presenting. So how to make the teaching engaging. How to get students to engage with the material rather than just be passive recipients. So, the discussion was more about how to use technology effectively rather than whether you are going to use it or not.

Q10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: In the beginning it was not a good response, it was intimidating to them. But as students became more empowered as they became more confident, then using the technology was almost to them.....this is my way of saving my degree or saving me from spending extra 3,4,5 years. So, the students especially when the COVID rules were slightly relaxed. But you still did not have the permission to have everybody on campus. Students used the opportunity of accessing teaching via technology, so it meant that even though they couldn't be on campus physically, they still had access to the lectures, to the lecturers, to teaching materials. And they could work either synchronously with the lecturer or they worked asynchronously when they would download material and then upload it for the lecturer to comment on to assess and to give them feedback. So it was for them.....it was.....they responded. They really got.....They got working with technology. But initially it was difficult because. Not all of them had access to the technology, and once access was broadened, it was almost as if the students embraced it as something that has always been present.

Q: Maybe you will still want to. Maybe any discussion which are outside.....the questions

Ans: What I probably would say is that while we have technology, I think we still have issues where I don't think all lecturers are equally empowered. I do think that some people have been open to technology, while others are skeptical that technology, especially if you are dealing with language education for educators that if we use technology, we are going to lose that human interaction and it is not going to empower students to go into an interactive situation with their students or with their learners. So the technology might just take away that their ability to interact with humans because they are not seeing it modeled to them. Students are not seeing that interaction modeled and so they might not be able to cope in a real classroom where they have got to interact with their learners.

Q: Thank you sir. So basically you are saying that one-on-one relationship with students. You know, if there is a student in front of you, they can.....You know, sometimes student also can say, OK, this is, you know, this is this is what.....You know, relate, you know, talking of, I mean when student will say ohh this is what I am passing through when it comes to studying. But when it comes to technology, maybe it would.....Students might not be able to communicate such concerns. You know, it's just your online class and that is it. And then student will not be able to have that, you know, and even lecturers, they wouldn't have that one-on-one relationship with students which most of us educators will usually like would say ohh no student will come, they will discuss this and so on. So yeah. I think I get that, yeah....

Ans: Technology has been wonderful but we need as educators.....you need to see students' body language to interpret what they are saying, because sometimes they might say to you, yes, I understand but when you see the body language, the body language clearly says. I am not quite sure what you are talking about. I am not quite sure what I am doing here. And so I think that has become a concern for me that if we are only teaching asynchronously, where you are not seeing the students or where students choose not to be seen in that online session, then it becomes difficult to judge whether the student is really understanding what you are teaching.

MP5 February 2023.

Q1: Give me a general view of how and when you became a language lecturer?

I became a language lecturer 33 years ago when I joined the University of Natal in 1989. That was when I started teaching isiZulu at the former University of Natal. To date, I am still teaching the language I am teaching social linguistics and onomastic at the moment.

Q: Is it that you you.....before you got to the University of Natal then so is it that you have work as a language maybe.....as a language teacher or language specialist or language practitioner somewhere before.

Ans: No. In fact I entered this field by default because I am a trained educator for commercial subjects. I did typing, accounting, business, economics and economics. Yeah, that's what I'm trained.....I was trained to be a commission language teacher and then I thought briefly for four years before I completed my Honors degree in African languages. Then from there I came to Natal and did my Masters and then my PhD in African languages. That's how I shifted from being a commercial language teacher to become a lecturer in African language because when I did my undergraduate degree, isiZulu and Psychology, as my two majors and I opted for isiZulu as I saw that there is a future in isiZulu. That's how I happen to be a lecturer at the university. I have never practiced, but I am a translator. I am accredited by South African Translators Institute.

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Not really. But you know, when you are a translator, you have to observe some confidentiality and also ethical considerations, but there is nothing that is laid down formally, which is a guiding principle for the profession, because, as I said, I was.....I am doing translation as a freelancer. It is not that I am doing it full time. My full time job is to teach before the class and then.....I think yeah. That is how I can respond to this question.

Q: OK, so so you are saying as as as a trained educator and translator. Those things you. It's like you already.....they are part of your training.

Ans: Yes, yes.

Q: So even as you're entering you, you didn't have to wait for someone or for your institution to say no. This what you must follow as.

Ans: No, no, no.

Q3: Are you aware of any institutional guidelines regarding the use of technology in your teaching?

No. You see, we were just confronted by the online teaching during COVID and that was the only time where we receive training on how to operate the Moodle and all the systems that we use to teach. But prior to that, there is no formal institutional guidelines that I have received in the use of.....even teaching myself how to use.....operate a computer, I did not receive any formal training for using a computer. I learned on the way on how to access and how to retrieve information and search for information so I did not receive any formal training for the use of technology in my teaching. But I have used it for the past three years.

Q: OK, OK, that that means prior to COVID you were not really using it too much, it's just probably just for e-mail and then to store document?

Ans: Yeah. It was face to face interaction with students. Going to lecture hall and teach and do assessment and that was it. May be the only technological aspect that you.....it was the overhead projector if there is a need, but usually I really did not use the overhead projector that much.

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

Ans: I said in my response is that I did not use technology at all because what we do in preparation for our lectures, we prepare information. We write it down and we prepare notes for students and we go to the lecture hall and we teach, so there is very limited extent of technology in the manner how we taught our classes.

Q5: To what extent is the use of technology accepted in your department in teaching?

Ans: It is acceptable because like when you have a material that you want your students to access, then you use technology for them to access any information that you need. So it is widely and openly acceptable.

Q: Thank you. Thank you. So everyone, everyone in your department they accept the use though as you have said in your previous discussion that prior to COVID it was it was, it was just.....you know retrieval of information and send information. It wasn't so, so.....so prior to that. Or let it prior to that can we say that it was not really accepted like that?

Ans: Not really. It wasn't used, but no one was against it. It was acceptable, but no one was against it. You see, even when we started teaching, there were no cellular phones and stuff. Technology was very slow at the time when we started. It is only now that we utilise technology. Even for our classes we have WhatsApp group and all those things which was not the case before COVID but it was acceptable, but it was not used.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

Ans: You see the technical part of linguistics, subject of linguistics that we teach and needs technology like when you teach phonetics. Phonetics depend heavily on technology. But when you teach literature, you just deal with the content of the book and you don't need any technology. But when you teach. Phonetics. You need to use technology.

Q: OK, OK. Phonetics especially. You have to use some technology because it's, it's that that technical aspect of.....

Ans: It is very technical, yes.

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

Ans: It is the lecturer who take a decision whether he or she would like to use technology. As I said, it is acceptable by the institution and the responsibility, and the

decision lies with the lecturer consent if they would like to use technology in their teaching.

Q8: How would you describe what motivated you to use technology in your teaching?

Ans: It was the need because of the era of technology that we live in and we felt that we are compelled to utilise technology and also the nature of the quality of students that we teach. We mainly teach youngsters who are.....The time dictates that we penetrate technology because we are in that technological era.

Q9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Ans: No, no. There was no discussion. You take a unilateral decision whether you want to use it or not. And it also.....it is informed by the nature of your type of assessment. So we use continuous assessment. So when you give an assignment then this when you decide whether you want them to submit their assignment online or you want them to write and give you hard copies and and.....becomes easier for you to mark had copies. So it is entirely upon you, you use your own discretion.

Q10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: It depends. Like the nature of the modules that I teach for Third years which is social linguistics, it encourage people to speak more than using technology. And like....I said.....Students' response to technology is only by demand. If there is a need of using technology, then the students will respond positively to technology. And we have noticed that the level of plagiarism since we started using technology increased and that is a bad feedback when you use a technology because you can't monitor when you do assess your students, but when students are physically within the university, we can monitor them when they write to invigilate. So that's the shortcoming of the technology. But in this case they enjoy technology because it gives them a leeway to be independent, like you teach some people that you have never seen physically, so it is easy to cheat the system. If you don't know the person you are teaching.

Q: Thank you. Thank you, Sir. So that's the interview. I don't know. Maybe there is anything you would like to discuss outside this questions.

Ans: Not really. You see, there are aspects of the linguistics that we teach at the university that rely on technology like lexicography when you are compiling dictionaries, you really have to go to the lab. When you teach a translation and interpreting you have to use the lab. So, that is why I technology is used mainly but for other aspects of linguistics you really.....You can get away without using technology.

Q: Thank you for adding that to it. So from our discussion and from what you just added now, so it's not all aspect of language teaching that encourages or that using of technology can be used or use of technology is.....

Ans: Yes. You see even for the teaching of basic isiZulu, we used to use technology in the language laboratory where we take our students with language lab. But it is not happening anymore because most of the lectures were online, but maybe we will have to revive that and take the students to practice sounds and do exercises in the language laboratory. Yes, it is very important for teaching language.

Q: Thank you so much. We hope that the face to face comes. Fully back to our universities?

Ans: Exactly, absolutely.

FP6, February 2023

Q1: Give me a general view of how and when you became a language lecturer?

Ans: I have been all over. It was by default Okay. How I became a language lecturer. It was actually by default. I just got a scholarship after my junior degree, I got a scholarship to study further. Then I studied father and then another scholarship for Honours and then for Master's and after this then I was recruited by UNISA and then that is where I started to lecture as a language lecturer at UNISA. I worked there for five years, that was in 1992. I worked there for five years. And then I got tired because I knew everything there and I was still quite young then. So I thought, I am sure there is something out there beyond just lecturing. So I left. I went into publishing, so I wasn't

publishing for over close to 20 years. And then in 2013, I decided to go back to university to do my PhD. I did my PhD in translation studies and then as I was doing my PhD they asked me to come lecture again. So and that is how I went back to lecturing. That was 2013 and I was like tired of the traveling that is involved in publishing because publishing involves a lot of traveling and I have done it for close to 20 years.

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Ans: A profession as a language lecturer or just a lecturer.

Q: Language lecturer.

Ans: In terms of language lecturing the only policy that I know of here is the language policy that stipulates that isiZulu and English are the official languages for my institution. But other than this, there isn't anything really that guides specifically language lecturers.

Q3: Are you aware of any institutional guidelines regarding the use of technology in your teaching?

Ans: Guiding technology.....regarding the use of technology in your teaching. There are not specifically for language teaching, but they are just guidelines for using technology in teaching. And it is teaching any of the modules.

Q: So can you just give me maybe some of those Institutional guidelines? If you can?

Ans: Just for teaching, it is mainly like we are using Moodle. And besides, Moodle what else? So, but everything is just around how we should use the platform, and because they there's no.....the assessment you also use it. Okay, it was Moodle before, but now it is Learn 21. So what you do, we get a lot of guidelines and a lot of workshops on how to use Learn 21, which is our platform. And that is the main platform that we use for teaching.

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

Ans: I think the main reason behind the use of technology was to assist lecturers, maybe because it's a lot of work and you know to do the assessments and everything and also some of us we find that they have a problem in terms of putting records. So when you have everything put in this platform, you know that the records are there because whatever you post will stay in there. Also, in terms of you know the 4th Industrial Revolution, we just had to also you know move with the times. But then when COVID struck, then the two that was there, the time when we thought okay, now we are going to up the use of technology. But then it was easy because we had already used this platform. It was then a matter of being trained in more tools that the platform offers, because you will find that we are not using those many tools and we are just using like to post and notes and you know to do assessments. But then when COVID struck, then we learnt how to.....you know to use almost all the tools like teaching posting the videos and you know, compressing whatever file you have and then posting it and different types of assessments, you know, assessments that can be marked by the use of technology. So it just broadened the scope of the way we are using technology.

Q5: To what extent is the use of technology accepted in your department in teaching?

Ans: That is quite a difficult one because we were kind of thrown into it. know, there were.....there was no other way to avoid technology, but then we do have those who use it to the minimal. You know they just post notes and that is it. And then you have those that go beyond extreme. You know that know every tool that is available. So, there is quite a wide spectrum, you have got those ones who are more traditional, they just use it because it is there, it has to be used and then you have got the ones that use almost every tool and then you also find those that are in between. And so, I will say that we have got a mix. It also depends you know with experience you will find that those who have been here like a long time, they are not that keen into the use of technology and the older ones as well, they are not that keen, but then you find the young ones, the ones who on their own are experienced. But you also do get older people that are into technology who are just, you know, sailing through this technology that don't have a problem. So, it's quite a mix. It's a mixed bag.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

Ans: Well, my focus has been on phonetics. And I liked using technology when teaching phonetics, because you will find that there is a program that I was using which is used by a university, University of Antwerp in Belgium. So, what we do here is that it actually articulates the sounds for you. So that was quite helpful because once the sound is articulated correctly then you are able to describe it correctly and able to teach, you know, maybe a second language speaker on how to articulate it correctly. So that was quite useful for me teaching phonetics and also in terms of teaching the second language. And it is also quite suitable, because you find that there is so much activities that you want to introduce when teaching is a second language, so it is better to put some of the stuff in the platform, and then you allow the students to work with the material that you have put in there. Whereas if you are teaching the traditional way, you might not be able to get through all the stuff that you want to go through.

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

Ans: Well before COVID it just depended on how advanced the lecturer wants to go in terms of the use of technology because we find that there is a platform like Moodle platform that has introduced. Some lecture was used it and others did not. And also with regards to the use, some would use it at the minimum level you know intermediate and even advanced level but there was no one like who was pushing everyone to use it, but then when COVID struck like we were all kind of forced to use technology to teach, because there was no other way. Yeah. So what I can say is that it is the circumstances that actually forced lecturers to go all out into technology. Is the COVID and that forced everyone, but then the levels of use it depended on each individual lecturer on how far he or she wants to go.

Q: Thank you. The second part of that question says, was there a choice for lecturers to decide to use or not to use technology?

Ans: Before, before COVID it....., I would say it was a choice even though Moodle was there as a platform, there was no one who was like running behind the lecturers, checking that they're using the platform. We had people who are still using the

traditional method. But then when COVID struck, everyone had to, so it was not a choice. It was like a must.

Q8: How would you describe what motivated you to use technology in your teaching?

Prior to COVID, I used it because you know I am always on the lookout for new things. Yeah, and I always like to be in the forefront. So that is why you know when module was introduced, I jumped in, and I used it. There are those of us that kind of..... I am not sure if that's what I do with it but get obsessed something and they go way beyond. I am moderate, so I used it the way you know in a moderate way, in the way that it helped me function smartly. For example, when you introduce multiple choice, it was very easy to use Moodle, so it made me work smarter. So, they just one of the reasons that actually motivated me and..... I like things that are professional. So, I saw that if I use technology, you know my teaching would be more professional, would be more in with the times and, you know, will make me work smarter. And then during COVID, obviously I was forced by the circumstances, I just had to push and workshops almost every week on different aspects or on different tools, so no one was pushed to attend those workshops. So I attended those workshops and I ended up in the team that was assisting other people who were still struggling, but then you still find that other people didn't even bother to attend those workshops. And you have those that attended those workshops multiple times, even more than me. And now, because we understand the benefits of using technology, then why go back to the traditional method if this works smarter and you know it, it serves the purpose.

B9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Well, prior COVID, we just received a notification that you know.....there's this platform. Everyone is encouraged to use this platform and if you need to know how it works, you can go to Teaching and Learning website and you click, you look at the video and this is how you use it. That was it. But then during COVID. And again here there was not really a discussion because it was just the only option for us to carry on with teaching. So we were just told that this is how we are going to teach from now going forward and we are going to have continuous workshops that are going to

support us on how to teach better and how to utilize all the tools in the program that you are using. And now, it depends on how far you want to go and whether you want to keep on reminding yourself because all the videos they are there in the teaching and learning website. It is a matter of going there and checking and then you know better.....making yourself.....understand technology and use it better. But I do know because I was the academic leader, the way.....people who actually just refused to use technology even though, we were kind of forced by the circumstances to use it. And one thing that I noticed is that when you use technology, you cannot hide behind anyone and say you are teaching or you are not teaching, so technology is also an excellent tool for monitoring whether teaching is actually happening, assessment is actually happening because for you to follow up, you don't even have to like go to each class and check if the teacher, I mean the lecturer is in class. You just ask for access, you know, as a leader you ask for access into that course, that module and then you can just, you know skim through and see what has been posted, what activities are going on, and then from there you can gauge you know the use of technology for each individual and lecturer that is within your team.

Q: Thank you. Thank you. Thank you, Doug, for that. So you said it is good as a monitoring tool to know whether teaching actually take place. And you.....

Ans: Whether teaching takes place and also to gauge the level of use by the individual lecturers, because one will just teach and post, the other will, you know use the assessment tool, use videos and use.....so you can actually from there.....you can gauge the level of use for each individual lecturer.

B10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: The response is mixed. Initially the students didn't like technology because they complain about their laptops malfunctioning, their cell phones.....You know, the usual data, et cetera, et cetera. But one thing that I know the students like Number one is the fact that you know when they learn through technology, they can go in anytime. They don't have to go in at that time of the lecture, because what you do is that you post, you know that according..... So even if they are away during the day at night, they can then know when the data is cheaper than they can download and they can

follow. So that made them, you know, kind of like technology. And then the fact that they could hide behind load shedding and data issues and then have continuous assessments until they pass. They like that because it worked for them. You know, a student will just say I had load shedding and then you cannot just you know throw this student out. You have to prepare another assessment for the student and another one and another one. This is a period where students, you know can't actually fail, but now I am just talking around COVID. But right now we have load shedding. If a student has issues with load shedding, you cannot fail the student. You have to give the student another chance to do that assessment. So it actually works better for them in the sense that they get multiple chances during assessment and then one actually told me that, you know, I like this technology because we don't fail but I don't know what that means actually because in my case students did fail when I was teaching phonetics.....they did fail. But now I do not know really what she meant by that but she's doing law and she was quite excited that you know. You don't really fail when you are using technology.

Q: I don't know if you have maybe any discussion outside this questions that you would want to discuss? Maybe just a word.....

Ans: I will just like to share with you that here are two cases that you know we are teaching isiZulu. Uh then? What's the word now? The compulsory isiZulu module for every non isiZulu speaker. So, the use of technology actually kind of helped us, you know, work out a plan on improving the teaching of isiZulu as a second language actually teaching this module. As a result now, we are working on a fully online module for teaching isiZulu language because we found that, you know, if we use this technology we could have multiple sources, we could have engaging resources and we could also cater for students that are in different levels of competence in terms of the language because in a traditional classroom it is very difficult to, you know.....we do, try and divide students into groups, but then we find those that say, ah, no, I don't know how.....I don't know any word. And yet they do just because they are lazy, they want to be with a group that is just going to do the basics. But now when it comes to technology. And you know the activities are there, the student can just keep on pushing, keep on pushing and if the activities are engaging, they are exciting, then the student will just learn and we could bring in as many things like the puzzles, the games.

You know exciting stuffs, stuffs that sometimes you cannot do traditionally. The songs, the culture, everything is there in the platform at the students' disposal, so technology really works best in terms of language learning because it covers a bigger, bigger, bigger ground that you cannot cover traditionally.

FP7, February 2023

Q1: Give me a general view of how and when you became a language lecturer?

Ans: Before I became a language lecturer, I started by being.....when I was an undergraduate student, I used to be a tutor, a language tutor for that matter and I used to tutor English and isiZulu. I then also went further to go and work for the Matric Excellence where I used to teach isiZulu to Grade 12 learners and then since I was already doing my Diploma in Language Practice, that gave me an experience and also a platform to know and how to teach learners languages. So, after that, I got an opportunity to be a junior lecturer at the department where I now work which I lectured the learners from another department, isiZulu and... I think I did that for two years. So that is how I became a language lecturer.

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Ans: With regards to the ethics, I got to know them while I was doing the job because as a lecturer, you need to allow yourself to find out more about your profession while you are at it. So, some of the ethics that I know about is that as a lecturer, you are supposed to act noble according to your profession to educate and train learners and also acknowledge that the attitude, dedication, self-discipline, and ideas; training and conduct of the lecturing profession determine the quality of education of this country and also that committing ourselves therefore to do all within our power in exercising of our professional duties to act according with the ideas of our profession as expressed in the my institution Code of Conduct because I only got to know about it after I started teaching.

Q: That means you got to know about these institutional rules while on the job. Right?

Ans: Yes, while on the job.

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

Ans: With the use of technology in my profession, I think it came about during the COVID 19 lockdown when we were supposed to work from home and since we are in the teaching department, we are supposed to interact with our students. So we were introduced to things like Microsoft Teams, Moodle and so forth to be able to pass the information to our learners. I think that was actually the first time I got to use technology in teaching.

Q: So, are you saying that prior to COVID, you didn't use technology or the rate at which you used technology was not as much as you used during COVID.

Ans: Yes, that is exactly what I am saying. The rate that we used technology during the lockdown was not as before we actually experienced lockdown. It was just the basic technology that we were using before that which is like sending emails, being able to access your portal and stuff like that and also Moodle but in terms of lecturers and even myself, I was not too much into that but during the COVID 19 lockdown, it was enforced upon us to use those platforms when interacting with students. So that was when we actually got to use more of technology. The situation forced us to use it because there was no way we could be able to get hold of our students and teach them.....actually we were working remotely, so it is the situation that forced us to use the platforms that I have stated.

Q: So what do you think are the rationale behind the use of technology in your teaching?

Ans: It was simply because we needed to interact and pass information to our students. They needed to write exams in order for us or for all of us to get the year done because there was no way we could just sit for the whole year because I think the we had lockdown for about eight months. So during that time, there was supposed to be teaching and learning happening. So I think that's the reason why they had to train us on how to use platforms like Microsoft Teams, Moodle and stuff.

Q5: To what extent is the use of technology accepted in your department in teaching?

Ans: I can't really say there is an extent to which it is expected to use technology in our teaching department. I think each and every individual get to determine how much they want to use technology because there are some people even though who are in the language department but whom also have knowledge of technology. So, those people can go to any extent they wish to use technology as long as it is within the guidelines of our institution and also it enables the process of teaching and learning to run smoothly and effectively.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

Ans: I think all the aspects of language teaching are suitable to teach with technology. I say this because using technology to teach language.....it enables learners to actually get to know how to pronounce and it also makes it easy for learners to access the information very easily unlike when you have to be in the classroom with them and writing on the board. It usually happens that you write something and they mistake it as something else. So, with technology, everything becomes clearer. I think it is suitable for every aspect of language teaching.

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

Like I have said with the issue of technology. Yes, it was there before the lockdown and the COVID. But then I think we have now gained the momentum of using technology in teaching like more than before because right now most lecturers choose to work remotely or conduct their classes online because of the training we got during the beginning of the lockdown. So, right now, I think it is the matter of a lecturer's choice whether they want to conduct their classes online or not because we don't have COVID anymore.

Q: Just to confirm what you said. You said prior to COVID and post COVID. It is now a matter of choice but during COVID, it was not a matter of choice because that is the only way to get across to students. Right?

Ans: That is exactly what I am saying.

Q8: How would you describe what motivated you to use technology in your teaching?

Ans: Firstly, to me technology made grading the students very easily because everything would be just in front of you. You don't have to mark the pile of papers.....everything just becomes smooth when you use technology to teach. I don't think there will be anyone who would choose to use the manual approach when there is a more efficient approach to teach. That actually makes your work easier and more efficient. So that is what motivated me.

Q9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Ans: Definitely there was. They had to train us on how to use things like Microsoft Teams, Moodle.... because some of us were not.....I for one was not even aware that I could use Microsoft Teams to actually conduct my classes and do everything there with regard to my teaching. So before that could happen like the Head of Department and the Dean, I think they had a meeting before they included these stuff and they had to tell us that during that time we are supposed to conduct our teachings through these platforms and how were we going to get training on how to use those platforms. So, definitely, there was a discussion with regards to using technology.

Q: Do you think those discussions that you are now to use technology....there was training concerning that.....Do you think the training actually assisted you eventually to use technology?

Ans: yes, it did and a lot. Like I am saying even right now, there are still people who work remotely because they are now used to using these platforms to teach and carry on with their duties. So it has actually like made us to gain more knowledge of how to use such platforms, including myself.

Q10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: I think I would say about 80 per cent of my students actually enjoy or prefer the use of technology. The other 20 per cent not that they do not take it or they don't regard

it as a good approach but because remember we do come from different homes or different backgrounds, you will find that there is a student who is from far far...in deep rural areas who will experience network problems now and then. So, you would find that such students would not actually enjoy or be able to use Moodle or Microsoft Teams to learn and to submit assessments and stuff like that. But in general, I think they appreciate it more because it also makes their life easier in every aspect of it, no matter how you look at it. It just makes life easier because it is more efficient

Q: I do not know if you have any....maybe another discussion that is outside of these questions or something that you want to add.

Ans: What I would like to add is that in my institution we only got to indulge in this technology when COVID 19 started and now that it seems as if we are slowly but surely getting there, I don't think they are putting more emphasis on using technology anymore. Even though the outcome did prove that using technology to teach is actually more efficient for both learners and lecturers. So, I think it is something they should not let go off, it is something they should actually condone. It should be something that is on our daily life basis. For instance if a lecturer can wake up to say 'today, I just want to conduct my classes online because I have got this and this situation'. They should be able to do that not because they are forced but because they know it is an efficient thing to do. Unlike before because the situation forced us to actually use technology but during that period, we did see that it was actually working. So, if they could just provide more training to the new staff and also the old staff as well because there are some people who still need some training to actually promote the use of technology in teaching, especially languages. That will really help because, remember, we are evolving as well. So, we should also look at it in that perspective.

MP8, February 2023

Q1: Give me a general view of how and when you became a language lecturer?

Ans: It is a long story, but I will try to keep it short. Since I was doing a degree in language practices then I fell in love with isiZulu to an extent that I was performing very well and then my then lecturer appointed me as a tutor from a very early stage, so I was tutoring when I was doing my final year which was the third year then. So, after being a tutor, I had to do my Honors. While I was doing my Honors, my then

lecturer for the.... language lecturer she left. I think she was on sabbatical leave in the UK. So, she recommended that I take over as replacement lecturer, since it was vacant post, I mean.... So, after that I decided to do my Masters in the meantime because I was told I need to have a Masters. So that I will be eligible to be a full-time lecturer then after obtaining my Masters. Then I started looking for a job. Fortunately, I managed to secure one then that's how I became a lecturer. Language lecturer to be specific.

Q: Thank you so much for sharing that so you are saying you started as a tutor when you were doing your degrees, and that being your final year, you said the third year. And from there still things that are falling in place. And then. That got you to where you had today.

Ans: To be honest, I can confirm that me being appointed as a tutor motivated me and mainly fall in love with the whole teaching in the higher education institutions. And that's how I manage to enroll for Masters and then become a lecturer.

Q2: Are there institutional rules or ethics guiding your profession that you know about?

Ans: I cannot mention any better. I am specific or like you mean my profession as a lecturer of my profession, as a language lecturer or linguist?

Q: As a language lecturer or let's say lecturer generally.

Ans: Yeah, I get it. I cannot say or mention specific institutional rules or ethics guiding me as a lecturer. That I know about, however, there are those that I am assuming they exist and although I have never seen them written anywhere that I shouldn't.....I should always make sure that I keep it professional and I make sure that the I represent the institution very well either inside campus and outside campus and yeah, yeah, yeah.

Q3: Are you aware of any institutional guidelines regarding the use of technology in your teaching?

Ans: I cannot mention any parts. One thing for sure is that the institution is sharing so much and is pushing so much to make sure that all of us, the lecturers in the institution,

are familiar with technology and we make sure we utilize technology to enhance our teaching. To an extent, the institution is even offering programmes and they are willing to fund if for some of us want to take courses in terms of learning how to use technology and other learning management systems

Q4: How did using technology in your teaching come about and what do you think are the rationale behind it?

Ans: I think it was because of COVID. Although we were using.....some lecturers were using technology in their teaching parts during COVID and post COVID. Then that's where most of us started to use technology more in our teaching and realised a lot of things like I have mentioned before; stuff like learning management systems where you can just install all your teaching and learning material both you and the student can access it without being face to face or at the same place at the same time. So I think it is useful and it is very important for lecturers.....us as lecturers to familiarise ourselves because these are very convenient. And yeah, even stuff like MS Teams, most of us didn't know....some of us didn't know about it and we didn't know how effective it is because you can see even now we are having a meeting here without being face to face and you are able to share the material from your side and I am also able to share material from my side. Even with large numbers, even if you have 300 or more students, it is easy because you can just.....So it is easy to engage if you feel like the numbers are huge, you can just split the students into groups and then you keep checking. So it has been very useful and I think it should be a way to go. If I should say.

Q: OK. OK. Thank you for that. Just to just to confirm what you have said. So you are saying technology existed in your teaching before. I mean before COVID, but it's not like used so much?

Ans: Yes, yes, yes, yes, yes, yes, yes.

Q: But when COVID came, then it's now what is being used more and more and Post COVID also is now being used as an aid for teaching?

Ans: Yes, yes, yes, I think it is because before COVID most of us didn't know about such tools like MS Teams and stuff we only.....at my institution to be specific. We

only knew about Blackboard and stuff and most of us were not like accessing it often but during COVID we had less of a choice. So that's when we started to delve into such teaching and learning technologies.

Q5: To what extent is the use of technology accepted in your department in teaching?

Ans: To be honest, the department I come from, the management itself because I think they are the ones who are in charge of authorizing in terms of accepting and everything, the management is very welcoming and open to new ideas and new stuff. So, they are okay with and actually they embrace if we use technology to enhance our teaching and learning. However, I should be honest that some of us from some of the staff in the department have been relaxing when it comes to technology. But then I understand because people, they prefer the traditional teaching methods and stuff so but the department itself it is okay. It accepts the use of technology.

Q6: What aspect of language teaching do you think is suitable to teach with technology?

Maybe, I think it is the linguistics part because especially you can start using videos to show maybe the specific parts of the lesson. So yeah, stuff like phonetics. You can use videos if you want to show maybe where certain sounds come from the mouth. So yeah, although some. Yeah, I think it would be for phonetics because that is when it requires you to at least maybe show you by using a video accessing pictures.

Q: So like according to you know, you said linguistics and that part of linguistic, we have phonetics that is very suitable to teach using technology, because they involve, you know videos where your students need to learn to say and then to pronounce words and yeah, and so on.

Ans: Yeah, and by using videos they make it simple for you to explain or even for them to see..... Okay, this certain sound come from this part of my mouth, this certain sound comes from this part rather than having to explain without them seeing. You know. In that sense.

Q7: Who decides on lecturers' use of technology in their teaching and was there a choice for lecturers to decide to use or not to use technology in their teaching?

Ans: I think it is a message that comes from the Dean at faculty level. It gets decided that faculty level and yeah then we got an instruction from the Dean that okay now.....lecture should be.....We should use technology or we should not, and so and so forth and or it should be hybrid and stuff. It is an instruction from the team at faculty level. Yes.

Q: OK. And then the second part now which you will still expand on, I know you have said it that the faculty through the Dean gives the instruction on the use of technology. So was there a choice for lecturers to decide or not to use or not to use technology in their teaching?

Ans: I cannot say there was a choice or there was no choice. But even when the institution or the Dean herself, because she is the one who decides and has too much of a say during hiring process, so they always encourage that lecturers or the staff they hire are familiar with the teaching and learning technology. So they always encourage that we use that. So in terms of having a choice or not, the only time I can confirm was when we came back face to face after COVID, that the instruction from the Dean was strictly that all the lectures should be hybrid if possible, so yeah.

Q: OK, OK. So just to confirm something you have said. Are you saying during your hiring because you would know what happened..... what happened during when you were being hired. Are you saying that knowing how to use technology was a requirement?

Ans: I would say because is one of the major questions they asked. If I am able to use technology in my teaching. And after responding they asked me some sort of stuff if I am aware of any learning management systems and stuff and which are the teaching technologies I use, let's say maybe for distance learning and stuff. So I had to mention stuff like MS Teams and. What is this thing? LMS, Google Classroom stuff like that.

Q8: How would you describe what motivated you to use technology in your teaching?

I think after using it. Because at first I was not familiar, I struggled a lot because I was hired during COVID. I was in a way of a lot of stuff, but then some of my staff who were already familiar with these teaching and learning technologies they took me step by step and then I was happy because I managed.....I discovered many things. That okay, so it is possible to have lectures while I am in my office, I am in my comfortable space. Maybe in my house and the students are in there dormitories and stuff then, and I also discovered that it is possible that we don't have to be face to face with the students in order for me to give them assignments or task, I can just upload on MS Teams, they can access it whenever they want and they can submit the stuff and I am able to mark and give comments online. So that's how I got motivated to an extent. Now I prefer technology than the traditional teaching and learning stuff.

Q: Yeah, just to confirm what you have said, so you are saying the convenience of use is one of the things that motivated you to use technology in your teaching?

Ans: Yeah. Yeah it is very convenient to an extent that you see now we are having an interview and it is being recorded even after a week or a month we can still able to come back to the recording. And then yeah, even for students, if they missed a lecture, they can always come back and then access that lecture if they need the study guide, they come, they log in and then they access it. So yeah, it is very convenient.

Q9: Was there any discussion with you, your department, or your institution regarding the use of technology in your teaching?

Ans: To be honest, there was no discussion. We did not have any discussion except during the interview. Like I mentioned, the Dean asked me if I'm able to use technology in my teaching and I said yes. That was the only time

Q10: How would you describe the response of your audience (students) to the use of technology in your teaching?

Ans: There's both positive and negative when it comes to the response of the audience because some students they to some extent they find it positive and they embrace the use of technology in our learning process. But then again, there's also some negative stuff like you know, unlike in persons when using technology for instance maybe having class on MS Teams, some students will just log in and then they forget about

the PC, they go outside, you call someone. They do not respond and stuff like that. You ask a question you don't get any response because they know you cannot see them and stuff like that. That has been the negative part of it. Unlike in person, when having face to face interviews. So people they know, they are there.....All of you are in the same venue. So if you ask a question they don't have a choice they have to respond unlike on MS Teams you can just ask a question and then the whole class goes silent. And you try to call a student using their student number, they do not respond, so you're not sure if he or she just looked in and then fell asleep. Yeah, that has been the challenge, not only for us my institution because when I was engaging with lecturers from other institutions, [name withheld], for instance, they are encountering the same challenges.

Q: OK, OK. So just to confirm your response you are saying the response differs when it comes to students. So some, it is okay for them and they engage when you use technology to teach them. Whereas some of them, they don't engage and this might be..... What is responsible for this might differ and then you mentioned some of them and some of them we don't even know what is happening maybe network but most of the time. Maybe we assume that the student just decide to just ignore the teaching, ignore the lecturer ignore.....because they know that there's no one watching them like face to face when they're in your front, you see them, you know their names and you can point at them oh.....answer my question....so so person answer my question. So that is one of the negative aspects that you have encountered and also because you experience this so much because you were employed during COVID according to you.

Ans: Yes, yes, yes. And then just to add on, there are other factors that also affects you know stuff like load shedding, you know in South Africa we are..... you know you find that you are supposed to have a lecture, then the students will tell you they are not available at that certain time because there will be load shedding. They don't have enough data. The institution did not provide them and stuff like that. So those are the negative part that affect the use of technology in teaching some of the stuff.

Q: Thank you so much for your time. I think this is the end of the session. I don't know if you would like to add anything outside of the questions here?

Ans: Not really. Maybe my suggestion would be the government, especially the Department of Basic Education, they should start introducing technology maybe from Grade Ten, Grade 11 and Grade 12. So that when students they come to the institution of higher learning, they are already familiar with some of the stuff because you cannot be introducing somebody to MS Teams, Moodle and Blackboard but to find that person can't even open a computer, even MS Word. So already you are introducing the person to advanced stuff like the use of MS Teams how to share screen so yeah.....

Q: So you are suggesting that the Department of Basic Education should introduce pupils of technology very early.

Ans: Yeah, the basic use of technology very early, yeah, from high school. So that when students when they come to varsity, they are already familiar with the basic stuff. So we just enhance on that because now I don't think there will be going back or stopping using technology especially with the 4R in place.

NB: Names of institutions and academic departments have been redacted for the purpose of anonymity.