



**Exploring Lecturers' Experiences of e-learning Resources in the Teaching of History at
Universities in South Africa**

By

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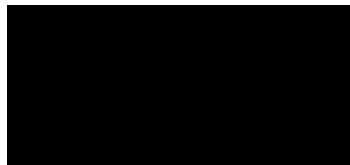
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Supervisor (Prof SB Khoza): _____  _____ **(28/08/2022)**

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Dedication

Most importantly, I dedicate this piece of work to God Almighty. I also dedicate it to my late wife Nkosing'phile Tshabalala, my late mother Evelina Tshabalala, and my late father-in-law Absolom Mthethwa

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Abstract

A call for 21st century teaching and learning places History among the critical disciplines of the century. In response to this call, the teaching and learning of History becomes critically placed in a trajectory discourse of connectivity, affordability, most importantly pedagogical contextual dichotomy. The contextual dichotomy between the traditional conventional pedagogic context and the e-learning pedagogic context is exacerbated by various contextual issues.

The advent of globalisation, massification, the Fourth Industrial Revolution and currently COVID-19 pandemic all have a bearing on pedagogic implications. This study explored lecturers' experiences of e-learning resources, since they bear the brunt of the above. The study consulted prominent international and local scholars' contributions to the topic to fuse the horizons of conceptualisation. The literature suggested three reflective representations of lecturers' experiences: the personal, social, and professional. The study connects e-learning experiences to the three reflective experiences, as well as to e-specialisation (professional), e-generalisation (social) and e-connection (personal).

An interpretive paradigm is employed, as it is appropriate for interpreting the phenomenon of experiences. A qualitative research methodological design is employed with hermeneutic phenomenological strategies. Semi-structured interviews, observation, and document analysis are the data generation methods used. Non-probability sampling methods were employed with purposive sampling of six participants from two universities in South Africa. Ethical protocols were followed in conducting the study.

Participants responded to three main research questions: What e-learning resources do lecturers use in the teaching of History?; How do lecturers use e-learning resources in the teaching of History?; and Why do lecturers use e-learning resources in the way they do? Three themes emerged from participants' responses: the expository (exposure) to e-learning resources,

empirical (practical) experiences, and scientific (disciplinary) experiences with e-learning resources.

Three more themes emerged from the philosophical thinking of participants, which involve subjectivisation (personal), socialisation (social) institutionalisation (professional). Findings were theorised employing the unified theory of acceptance and use of technology (UTAUT) and UTAUT2 extension. Participants reflected six variables of the UTAUT and UTAUT2 theory: performance expectancy, effort expectancy, behavioural intention, facilitating conditions, technology use, and social influence. The study shows that lecturers do not apply an e-learning pedagogic theoretical analysis in the use of e-learning resources.

Key words:

Lecturers' experiences; e-learning resources; e-specialisation experiences, e-generalisation experiences; e-connection experiences; unified theory of acceptance and use of technology

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CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Candidate statement

It all started the day I first set foot on a university campus as a first-year undergraduate student. First, I had to come to my senses about what had just happened to me, given my historical background. I had to understand that now I am starting a new journey, and opening a new chapter of my life. It was the beginning of an academic chapter of my life that I had thought is not meant for me. It challenged my perceptions and thinking about life and its possibilities. I started off not knowing what the next day will be like. All that mattered was to be in that lecture hall where my passion for education would come to fruition. My doubts and scepticism about education opening the doors for those with an underprivileged, disadvantaged working-class background were challenged. My perceptions of universities being a space preserved and reserved for the privileged middle class changed. So first, I had to deal with that experience and process of change in my life. Since then, I never looked back. My depressing and suppressing mental background became a source of strength in believing in my abilities and myself. The new dawn set in when I saw myself graduating. It started to sink in that I am not dreaming, but it is happening, and it is happening because I have done something leading to what I was experiencing, and I have done it so well as to defy the disempowering structural confinement of my background. The new dawn had just set in.

I was eager to learn more and understand my new life as a university student. I had to think and reflect on this new identity and its meaning. It set new challenges to unshackle the imaginary shackles and free myself from the invisible mental confinement that arises from the solidified stigmatisation, labelling, stereotyping and all the negatives that the- ‘other’ can throw at you. It said reconceptualise, reconstruct your role and its meaning to fit the new dawn. It meant one thing: repeat what you did when you took the first step to be a university student. It said carry on and be a lifelong learner. After completing a Bachelor of Arts (BA) degree, it said choose your path and I responded by enrolling for the Higher Education Diploma (HED) postgraduate. I chose the path in education because it taught me to challenge my own thoughts about categories of mental confinement working counter to the freedom of choice, mental strength, and resilience to oppressive and suppressive environments. I chose the path of education because I wanted to contribute, multiplying my new dawn experiences for those learners who may think as I did before my new dawn thinking. I wanted to see many new dawns for many new faces from the same background as mine.

It taught me to keep on learning because there is always so much to learn in life. I got promoted to an office-based post in the KwaZulu-Natal (KZN) Provincial Department of Basic Education. I was fascinated by the use of e-learning resources such as e-learning textbooks, e-filing, e-lesson plans, and many more e-learning resources used by teachers, especially young teachers from universities. I became interested in understanding how these e-learning resources are used in the teaching of History, as my position is in Social Sciences. My History background in qualification and teaching at a high school where I was appointed as a teacher made me curious about understanding the use of e-learning resources in the teaching of History. I remembered what my life had taught me, and I just went back to continue doing what I did from the first step, now to enrol for the Bachelor of Education Honours degree (BEd Hon) in Curriculum Studies. I found much more inspiration from the School of Education Curriculum Studies team. This inspired me to go further and enrol for Master of Education (MEd) Curriculum Studies. This is where my fascination with e-learning resources was pursued. I conducted case study research exploring the mediating of Grade 12 History teaching and learning through the use of internet-based resources. This is a case study which was carried out in one of the high schools using e-learning resources.

After completing my MEd in Curriculum Studies and conducting case study research with a high school, I saw a need to find out how History teachers are trained to use e-learning resources in the teaching and learning of History. The only place to find out was at universities where teachers are trained to become teachers. I enrolled for a Doctor of Philosophy in Education (PhD) degree with my thesis to be on finding out about the use of e-learning resources in the teaching of History. As a PhD candidate I conducted research on the lecturers' experiences of e-learning resources in the teaching of History. The purpose of the study is to understand from lecturers' point of view experiences of e-learning resources. The study was going to give me more clear understanding of the use of e-learning resources in the teaching of History. My questions are more focused on the lecturers' experiences because I wanted more in-depth descriptions of their experiences to deepen my understanding of lecturers' experiences of e-learning resources. At this stage of my new dawn, I hope more will follow from my humble beginning as a first-year student who never dreamed or thought to see this new dawn taking me this far.

1.2 Introduction

This chapter gives a brief overview of the study by providing a roadmap to navigate the contents through different subsections that form parts of the whole. The table is Exploring lecturers'

experiences of e-learning resources in the teaching of History at universities in South Africa, and it gives a brief understanding of lecturers' experiences of e-learning resources in the geographic context of the study.

This chapter briefly gives the background and motivation for the study. It delivers an insight into literature preparatory to a tour of lecturers' reflections on the personal, the social and the professional experiences of e-learning resources. The significance of the findings in relation to their contribution to the body of knowledge is briefly covered. The research objectives and questions are announced. The chapter gives a window into the research paradigm followed by the research methodological design and approach. The criteria of selecting participants and data generation methods are brought to the attention of the reader. The chapter briefly elaborates on its trustworthiness and rigour, with a brief clarification of ethical issues. A brief overview of the study is provided and last but not least the chapter presents its conclusion.

1.3 The Title of the Study

The title of the study is:

Exploring lecturers' experiences of e-learning resources in the teaching of History at universities in South Africa.

1.4 The Purpose of the Study

The use of e-learning resources in the teaching of History changed the way History has been taught to student teachers aspiring to enter the professional space of History teaching. The study sought to find out lecturers' experiences of e-learning resources in the teaching of History. A focus on lecturers is appropriate because they train and prepare students to teach History when they become professional teachers in schools. The purpose of this study was to understand the lecturers' everyday experiences of e-learning resources, how they use them and why they use them in the way they do in the teaching of History. The study seeks to understand the experiences from lecturers' own accounts of their experiences of e-learning resources.

1.5 The geographic context of the Study

The study was conducted at two universities in the province of KZN. One university is in the South of KZN and the other is in the North of KZN, and teaching of History is offered at both. All possible attempts were made to cover as many as possible of the universities in South Africa – the initial target

was six universities, if six participants could not be attained at the above two universities of KZN. However, there was no need to go further as the required number of six participants was met. Participants were selected from two well known and highly respected universities in one of the Provinces of South Africa to describe their experiences of e-learning resources in the teaching of History. Moreover, it could have been difficult to get to other provinces for the study during COVID-19 lockdown regulations. Despite of all the challenges brought about by the pandemic, the study was completed.

1.6 Background and motivation for the study

My personal interest in the teaching of History as a high school History teacher motivated me to study further and develop myself in the subject. I taught History and Social Sciences at a high school, then I was appointed as a Senior Education Specialist in Social Sciences in one of the Districts in the Province of KZN. In this position I give support and advice to teachers in schools regarding teaching and learning in Social Sciences. Social Sciences involves History and Geography, and my strength and passion lie in History while I assist and provide support on the Geography-related aspects of Social Sciences. In my experience interacting with teachers, I observed that some teachers were using e-learning resources in the teaching of History. They used search engines, websites, PowerPoint presentations, YouTube, and so on. I realised that they designed and developed e-filing systems for record keeping, downloading lesson plans, and accessing the portals of the Department of Basic Education. They retrieve information for discussions, support, and advice. They also referred their learners to some of the e-learning resources for more information to enrich themselves on topics they were learning about at school.

I found some interesting discrepancies among teachers in terms of the use of teaching and learning resources. There were those teachers with outdated hard copy documents and those with the latest developed documents, especially with the introduction of the new curriculum replacing the old curriculum. Some teachers were struggling with printing out hard copies for their learners, while others were just downloading them without problems. I saw classrooms in those schools that were using e-learning resources changing their teaching materials, by phasing out chalks and chalkboards and introducing white boards and white board markers. This caught my interest to find out and understand how they use these e-learning resources in the teaching and learning of History. I observed that most of the teachers using e-learning resources were younger and still new in their appointments, while those

who were using hard copies and chalkboards were mostly older and had been in the system for longer. I became curious to find out more about these latest developments.

I enrolled for an MEd degree to conduct an empirical case study to find out more about these developments as they were observed mostly among new and young teachers. In my research I had a case study at one of the high schools in Durban where e-learning resources were being used in the teaching of History. The study was driven by three research questions: the first was what internet-based resources teachers use to mediate the teaching and learning of History in a high school, and the second and third research questions respectively were how and why teachers mediate the use of the internet-based resources in the way they do. The findings of the study showed that teachers used Google, You Tube, Wikipedia, and DVD to teach History in a high school in KZN, South Africa. They further showed that teachers used these internet-based resources in an integrative way with traditional chalk-and-talk didactic methods. The reason why they used the internet-based resources was to mitigate against the boring content in the teaching of History. The study recommended for the need to fuse entertainment with curricula principles in the form of the Entertainment Education Theory (Tshabalala, 2013). The suggestions made in my study were similar to those made by a study based on preliminary analysis and document analysis in the United States of America (USA), Korea, and Malaysia in 2002 to 2005. The latter study recommended a Digital Game Based Learning-Instructional Model with the fusing of pedagogy and digital games for History teaching and learning (Zin, Jafaar & Yue, 2009).

There is a need to further explore the use of e-learning resources in the teaching and learning of History at higher education institutions where teachers are trained to become professional qualified/certificated teachers. An assumption could be made that teachers are trained by lecturers in different universities to become professionally qualified to teach History in schools. Therefore, I saw a need to explore what e-learning resources are used by lecturers in the teaching and learning of History, and how and why they use those resources in the way they do. This study will be different to my previous study as it seeks to explore the use of e-learning resources by university lecturers in the teaching of History at university level. Sibanda and Donnelly (2014) claim that in a comparative study of two institutions of higher education in South Africa, information and communication technology (ICT) is fast becoming a common driving force behind teaching and learning methods worldwide.

The focus of Sibanda and Donnelly (2014) study was on the impact of assessment of performance in the use of e-learning platforms for 2013 and 2012 entry level module students in Bachelor of

Administration and Bachelor of Business Administration. The study's approach is quantitative with measures of central tendency to secondary data analysis. This makes this study different and critical as it focuses on lecturers' experiences of e-learning resources in the teaching of History using qualitative approaches with primary data analysis. Its analysis is informed by the hermeneutic circle phenomenal and qualitative guided analysis.

Moll, Adam, Backhouse and Mhlanga (2015) view ICT and e-learning in relation to the purposes of their document reporting on the status of ICTs in higher education in South Africa. They used the Department of Education concept before the formal separation of education departments in South Africa into two departments, one for Basic Education and the other for Higher Education.

Moll et al. (2015, p. 2) define ICT in terms of the South Africa's 2004 White Paper on e-Education. It is defined as a "convergence of information technology and communication technology through the combination of networks, hardware and software to communication, collaboration and engagement..." (Moll et al., 2015, p. 2). This is done "... in order to enable the processing, management and exchange of data, information and knowledge" (Moll et al., 2015, p. 2). Moll et al. (2015, p. 2) defines e-learning as "flexible learning using ICT resources, tools and application...for accessing information, interaction among [lecturers], [students]". They continue defining e-learning as "... and the online environment, collaborative learning, and production of materials, resources and learning experiences" (Moll et al., 2015, p. 2). Bagarukayo and Kalema (2015, p. 168) claim that e-learning is "an ICT enhanced practice...ranging from email provision, online journals and networked libraries to development of creative software solutions...". e-learning is "...for information management tasks in teaching, research and administration systems" (Bagarukayo & Kalema, 2015, p. 168). This implies that more needs to be explored about these concepts, beyond the definition used in South Africa's White Paper on e-Education. Therefore, more definitions of e-learning by different authors need to be considered to enhance a broader understanding of the concept.

A focus on History is important as it is one of the nine core subjects of 21st century learning (Partnership for 21st Century Learning, 2015). The 21st century learning involve generic skills of communication, critical thinking, collaboration, and problem solving which should be integral to teaching and learning (Partnership for 21st Century Learning, 2015). To consider the generic skills of teaching and learning in History, it is important to understand the meaning of History as conceptualised by historians and academics. On the one hand Weiner (1995, p. 5) defines History as "everything with which people have been involved...", including music or inventions, while on the other hand,

Salevouris (2000, p. 2) defines History in two ways, first as “the sum total of everything that has actually happened in the past... every thought, every action, every event” and secondly, and broadly, as “encompasses the entire scope of the human experience on this planet” (Salevouris, 2000, p. 2). The implication is that History is about complex life experience of human beings and anything they encountered in their entire existence in life. This may extend beyond this planet ‘Earth’ as human endeavours and footprints may also be found on other planets.

Salevouris (2000, p. 7) argues that “History is a living and evolving dialogue about... the human experience”, and “all of ‘us’ are capable of taking part in that dialogue” by learning to think like historians and “by sharpening the analytical and communication skills”. These are essential for success in college and professional life (Salevouris, 2000). In their interaction, students engage with scholars in the discipline in the form of a written or spoken dialogue that leads from one set of questions to another (Harding & Ingraham, 2007). This suggests that History contributes to facilitating a dialogue that could bridge everyday life experiences and the academic/professional discourse. Through collaboration that could promote communication and critical thinking among ordinary citizens and professional practitioners. Martin (2009, p. 104) asserts that aspects of critical thinking include “reasoning, logical thinking, integrating, developing insights, and finding relationships”. This suggests that experience in disciplines influences integration of activities in teaching and learning.

1.7 Review of related literature

Since the study explores the phenomenon of experiences, it became critical to read about the concept of ‘experiences’, as they may mean different things to different people and in various contexts in terms of conceptualisation and definition. Sayer (2000) argues that experiences are not only about knowing something, but also about knowing how to do something, such as physical behaviour or successfully communicating with someone. To understand the concept of ‘experiences’ different studies are consulted on their conceptualisation thereof in different definitions. In several studies in the literature, reference is made to ‘practice’ rather than ‘experiences’, as student teachers are given exposure to the ‘real life world or lived experience’ of teaching in a ‘real’ school situation. They are trained on using the theoretical background they encountered from interactions with their lecturers in lecture sessions. Marais and Meier (2004, p. 220) define teaching experience as a “range of experiences” of a student teacher. Tshuma and Shumba (2014, p. 373) describe teaching experience as “... continuous improvement of teaching skills and competences of student teachers in ... teaching practice”.

Kiggundu and Nayimuli, (2009, p. 347) describe teaching experiences as “a form of work-integrated learning that is described as a period of time when students are working in the relevant industry to receive specific in-service training in order to apply theory in practice”. Some authors such as Chimhenga (2016), Koross ((2016), Du Plessis (2013) and Ngwaru (2013) define or describe teaching experiences within the same lens as those mentioned above as something to do with student teacher training. Chimhenga (2016, p. 406), defines teaching experience as “...the stage in which student teachers face the real world of their professional career and the moment in which they become aware of theory put in practice”. Koross (2016, p. 78) defines it as “meant to provide for the authentic context within which student teachers are exposed to experience the complexities and richness of the reality of being a teacher”. Du Plessis (2013, p. 2) defines it as “School-based education or internships...mode of learning programmes in education in such a way that theoretical knowledge is combined with practical experience”.

Teaching practice was an “integral component of teacher preparation that served as an important link between theory and practice and that entailed the inculcation of professional practice and conduct” (Ngwaru, 2013, p. 310). These definitions suggest that in education teaching experience is one common activity that takes place in relation to student training. It is informed by a theoretical approach to practical application by student teachers in their training and preparation to enter the profession of teaching. It could be assumed that these programmes or projects of preparing student teachers in their teaching experiences are monitored and supervised by university lecturers at university level. Therefore, this makes it important to explore what lecturers’ experiences of e-learning resource are. Lecturers’ experiences relate to the identified educational setting or teaching environment that can be referred to, as “where you are, who you are with and what resources are nearby” (Schilit et al., 1994, p. 1). They can also be referred to as any information used to characterise the situation of an entity; an entity such as interaction between a person, place, and object, and between the application and the user of the object (Dey, 2001).

Literature that was consulted suggests that educational experience reflects the multiple continuous flow of teaching and learning actions or events that promote teaching and learning. Such events are connected to the actual present action or activity taking place and reflect activities that took place in the past and the thoughts stimulated in the process of action. On the one hand, the understanding is that the thinking process reflects what is happening at present and what happened in the past and the imagination of possible ways of dealing with or facing those activities (Zhou & Brown, 2017); Di Stefano et al., 2016; Khoza, 2019). On the other hand, the meaning of thinking about what happened

in the past takes place at the time of thinking about it in a way that translates into an unbroken chain of experiences (Waeraas & Solbakk, 2013); Teichler, 2017). Teaching and learning at universities reflect a higher education institution or university setting. University teaching and learning relates to an ongoing state of self-defining of institutional own essential values, characteristics, and perceptions (Waeraas & Solbakk, 2013). Teichler, (2017, p. 1), agrees with this view, arguing that teaching and learning are some of the key activities in a university and are undertaken under a “diverse institutional setting”.

Teichler (2017) refers to a diverse university setting in the form of a vertical (formal) discourse and a form of horizontal (informal) discourse. Khoza (2019) supports this view, claiming that vertical and horizontal factors reflect the personal, professional and social aspects of lecturers in the utilisation of the Curricular Spider Web in the teaching and supervising of students. Zhou and Brown (2017) corroborate this view, arguing that cognitive development in teaching and learning promotes a variety of experiences consistent with the level of learners’ development. Di Stefano et al. (2016) concur that the cognitive aspect enhances task understanding while the emotional aspect enhances self-efficacy. Both the cognitive aspect and emotional aspect contribute to articulating and codifying previous experiences, and adding to the present experiences (Di Stefano et al., 2016). This suggests that the vertical discourse is differentiated in linear a pattern from the basic lower level to the advanced higher-level cognitively.

This also implies that the horizontal discourse is divided into various lateral segments or configurations that are interconnected and interrelated representing multi-lateral layers of contexts or settings that constitute experiences. The understanding is that vertical and horizontal discourses are continuous simultaneous transaction of values in the process of teaching and learning activities. The process of content teaching and learning is characterised by vertical processes while interaction between individuals in that context is characterised by horizontal processes. They involve interpersonal relations that reflect diversity in embracing and affirming ethical representation of multi-dimensional experiences. Budden (2017), Crippen and Antonento (2018), Khoza (2017), Khoza (2018), 2019), Khoza and Mpungose (2017), Kohen and Kramarski (2018) and, Mpungose (2017) support this view on the needs of students, arguing that cognitive development of teaching and learning is based on the needs of students. Mpungose (2017) concurs with this view that reflection on and in, in the use of teaching and learning activities produces success in students’ learning. Biesta (2015), Budden (2017), Khoza (2017), Khoza and Mpungose (2017), Zhou and Brown (2017) agree that reflection on and in teaching and learning address the needs of students in a personal, professional, and societal capacity.

Most of the literature consulted with regard to the conceptual understanding of teacher experiences focuses on students' experiences of teaching and learning. In this study further engagement with literature show that teacher experiences involve personal, professional, and social aspects of related experiences. In this study literature conceptualises lecturers' experiences of e-learning resources according to three aspects: this involves professional (lecturer's specialisation experiences), social (lecturers' generalisation extension experiences) and personal (lecturers' connection experiences) being addressed in simultaneous continuation of teaching and learning experiences. The discussion addresses the configuration of lecturers' experiences as a means of enhancing the continuous comprehensive understanding of the three aspects of teaching and learning at the same time. The discussion links this configuration of lecturers' experiences to the use of e-learning resources for teaching and learning as a construct of lecturers' experiences of e-learning resources.

1.8 Objectives of the study

The objectives of the study are as follows:

- **Establish** what e-learning resources lecturers use in the teaching of History at universities in South Africa;
- Understand how lecturers use e-learning resources in the teaching of History at universities in South Africa;
- Understand why lecturers use e-learning resources in particular ways in the teaching of History at universities in South Africa.

1.9 Key research questions

The key research questions of the study are the following:

- What e-learning resources do lecturers use in the teaching of History at universities in South Africa?
- How do lecturers use e-learning resources in the teaching of History at universities in South Africa?
- Why do lecturers use e-learning resources in particular ways in the teaching of History at universities in South Africa?

1.10 Research paradigm

Understanding requires making sense of meaning that can be understood when it involves subjective interpretation of meaning of social contexts by individuals or groups of individuals. The interpretive paradigm is appropriate for this study as it seeks to understand lecturers' experiences. It applies subjective understanding about the construction of meaning that relates to social contexts involving the feelings and experiences of those that are affected by the phenomena under study. An interpretive paradigm in this study constitutes responding to the three main research questions about lecturers' experiences of e-learning resources. Creswell and Creswell (2018) support this view, claiming that the interpretive paradigm bases its understanding on multiple participants' subjective meanings which are negotiated socially and historically. Denzin and Lincoln (2018) claim that interpretive paradigm includes questions that are asked and the interpretation that comes with them. Creswell and Creswell (2018) assert that the interpretive paradigm is a social constructivist paradigm where the goal of research is to rely as much as possible on the participants' views of the situation being studied.

1.10.1 Research Methodology and Design

This study employs a qualitative approach because it resonates with its philosophical grounding on a constructivist philosophical worldview. In its approach this study finds it important to critically reflect upon lecturers' experiences of e-learning resources, guided by three main research questions. In so doing, the study seeks to understand what lecturers' experiences of e-learning resources are, how they experience e-learning resources and why they experience e-learning resources in the way they do. Purpose, process, and procedure in undertaking qualitative research is used to measure its quality. Quality in qualitative research is in its purpose to understand human life experiences (Tuffour, 2017; Erickson, 2018). The process needs to comply with the philosophical thinking within social sciences or human sciences. There are procedures that are in place to ensure quality in the application of strategies and techniques to understand issues, or phenomenon under study. The criteria need to meet certain principles within the qualitative research approach.

The ability of qualitative research to adapt to new situations and its flexibility to accommodate diversity enhances its quality. Human life experiences evolve with time, unfolding experiences enrich understanding in qualitative research (Denzin & Lincoln, 2018). Mechanisms of exploring in qualitative research creates new knowledge and new perspectives on issues or phenomena under study (Tuffour, 2017). The process of exploring involves different qualitative strategies and techniques, among which is description and interpretation. The goal to ensure quality in qualitative research is to

systematically describe and interpret issues or phenomena from the point of view of an individual or group of individuals (Mohajan ,2018); (Tuffour, 2017). Description and interpretation of a social phenomenon by an individual or group of individuals is complex. It provides the reader with deep understanding of the process and procedure involved in the analysis of the data generated (Denzin & Lincoln, 2011), making research open to critical understanding.

1.10.2 Research approach

An interpreted meaning has a hermeneutic element or interpretive understanding (*verstehen*) (Sayer, 2000, p. 17). “*Verstehen*” is a German word with the literal meaning of to understand (Aliyu, et al., 2015, p. 21). Guba and Lincoln (1994) assert that hermeneutical methodology is connected to the constructivist ontology with subjectivist epistemology of constructed findings. Subjective direct personal and collective experiences are the focus of the study. They reflect the hermeneutic phenomenology in their interpretation to describe experiences; description of the phenomenon is in the interpretation process (Kafle, 2011). This suggests that a hermeneutic interpretive paradigm provides for both descriptive and interpretive understanding of lecturers’ experiences of e-learning resources, and is suitable for this study to respond to the three main research questions.

1.10.3 Selection of participants

This study employs a non-probability sampling method with purposive sampling techniques to understand lecturers’ experiences of e-learning resources. In purposive sampling research participants are selected by a researcher on the basis of their ability, and willingness to respond to the research questions (Farrokhi & Mahmoudi-Hamidabad, 2012). The number of participants depends on the nature of study and the type of data generated (Laverty, 2003). Polkinghorne (1989) recommends five to 25 participants in studies of a phenomenological nature. Padilla-Diaz (2015) recommends between three and 15 participants. Creswell and Creswell (2018) recommend three to ten participants for a study of phenomenology. In Knapik’s (2006) study four participants were interviewed to find out about participants’ accounts of past research interviews and their implications in Canada. Hogue (2012) selected three participants for a study on mathematics phenomenological experience via educators’ experiences related to perceptions of statistics in a university in America. However, Holroyd (2001) selected two participants for phenomenological research in investigating the phenomenon of Being-in-Community as experienced by participants in Australia. This study sampled six participants from two universities in South Africa who represent detailed and rich e-learning experiences in the teaching of History at universities in South Africa.

1.10.4 Data Generation Methods

Data generation in purposive sampling is critical in facilitating better understanding (Farrokhi & Mahmoudi-Hamidabad, 2012). In qualitative research, data are used to support findings in response to research questions by addressing meaning of experiences from participants' point of view (Hammerberg et al., 2016). Description of lived experiences in professional fields such as education can be acquired through interviews, observations, including description accounts of the lifeworld for lived experiences need to be searched everywhere (Van Manen & Van Manen, 2014). Cohen, Manion and Morrison (2011) state that the use of two methods or more in research is known as triangulation. This study seeks to enhance understanding of the phenomenon from the point of view of participants. It is critical for this study to employ triangulation of three data generation methods involving semi-structured interviews, observation, and document analysis, to promote deeper understanding. This study employed all three of these data generation methods.

However, contact observation and document analysis could not be applied in the case of all six participants due to COVID-19 restrictions and the time frame to conduct the study. Interviews are the most common method of data generation in the human and social sciences currently (Brinkmann, 2018). Warren (2001) postulates that in interviews data are generated from the unfolding social contexts. Lived experiences in the hermeneutic phenomenology narratives are gathered and explored through interviews (Ajjawi & Higgs, 2007; Williams, 2007). This suggests that data can be generated from participants as sources through interviews as techniques or strategies for data generation. This study employs semi-structured interviews as the main strategy for data generation. Adhabi and Anozie (2017) claim that there is no rigid adherence to a specific sequence in interviewing participants using semi-structured interviews.

1.11 Trustworthiness and rigour

This study employed the principles of rigour involving credibility, confirmability, dependability, transferability, and authenticity. Johnson and Rasulova (2016) claim that rigour principles of four involve credibility, confirmability, dependability, transferability, and authenticity. Noble and Smith (2015) assert that credibility is enhanced by the truth value of reflexivity and reflection with presentation of the findings. This facilitates consistency that achieves auditability in a transparent

description of the entire research process (Noble & Smith, 2015). Johnson and Rasulova (2016) claim that: credibility ensures that the truth about the findings of the study builds confidence in the researcher about the context of the study and selection of participants. They claim that confirmability enhances the presence of reflexivity to ensure that the research process and findings conform to ethical issues. These authors assert that dependability enables the study to trace sources of data to ensure consistency in the data generation process throughout the research. They postulate that transferability enhances the provision of rich detailed description of information that can be applicable in another similar contexts. They proceed to claim that authenticity helps to promote understanding of diversity of values and constructions that enhance a process of learning, changing, negotiating, and finally acting on new understandings.

This study was cautious in its approach to data analysis; hard data were analysed for description purposes and soft data for interpretation purposes. Morse (2018) asserts that rigour in qualitative research currently relies on the representation of data as hard data or soft data. Hard data involves concrete or permanent evidence of the phenomena suitable for description, and soft data involve experiential evidence of the phenomena suitable for interpretation (Morse, 2018). Morse (2018) argues that validation and verification strategies rely on appropriate and careful use of hard data and soft data. Morse (2018) argues that validation of hard data is through member checking to confirm information prior to the commencement of analysis, but this may be affected by participants changing their information from what was said before in an interview. This study sent interview scripts to participants for member checking. However, if there is sufficient hard data to use, member checking may not be necessary to validate findings as findings should stand on their own (Morse, 2018). This study saw it necessary to double check with participants in addition to sufficient data generated available.

1.12 Ethical issues

This study implemented four ethical axes: these involve applying for ethical clearance to conduct the study, applying for gatekeeper's permission to conduct the study, sending consent forms to participants for their participation in the study, and ensuring the confidentiality of anonymity of participants. The ethical substance is a measure that a researcher uses to legitimate the self morally, and the mode of subjectification as a probable ethical component to illustrate governmentality (Camella & Lincoln, 2018). In the process of developing a research proposal I applied for ethical clearance from the university ethical committee in fulfilment of the ethical requirements to conduct the research. Permission was granted by university ethical committee to conduct research. This study is conducted

in different universities. Ethical norms and standards to be adhered to are different in different places, cultures, and professions, and they change with time (Bassey & Owan, 2019). I applied for permission to conduct research in universities where participants are teaching and received permission to do so from the university ethical committees. I identified participants for the study from different universities. I sent out informed consent forms with details of the study, purpose for conducting the research, methods of data generation, and instruments to be used to generate data. I informed participants that there are no financial benefits for participating in the research. I ensured participants' confidentiality and conveyed that the information they provided cannot be used to harm them.

Arifin (2018) asserts that six important issues involving ethical issues are informed consent and voluntary participation, anonymity and confidentiality, and ethical approval and access to participants. In this study I use the codes U:1 or U: 2 for the two different universities. Codes P1 or P2 and so on are used for the participants, while R is used for the researcher for purposes of confidentiality. These codes will appear with direct quotations from interviews where participants and the researcher interacted. They also appear in the attached annexures of data generation tools. They are meant to show the sequence and evidence of the data generation processes.

I explicitly informed participants that they are free to withdraw from participating at any time should they wish to do so, and that they would not be penalised for doing so. I asked participants if they agreed or did not agree to be tape recorded for data generation, and they all agreed to be tape recorded. I made my contact details available to participants, and further made the contact details of my supervisor, discipline coordinator and the research office available to the participants should they need them. Evidence of the process followed to meet ethical requirements is attached in the annexures to this study. Despite meeting the requirements for ethical issues, there are some limitations of this study, and they need to be acknowledged explicitly. Creswell and Creswell (2018) assert that ethical issues are applicable from the beginning of the study at the proposal stage and throughout the research process to the end of the research.

1.13 Synopsis of chapters

1.13.1 Chapter One: Introduction and background of the study

The chapter gives a bird's eye view of the whole study by briefly articulating the background of the study. This shows the readers its purpose and the contexts of data generation. It briefly outlines the background and motivation of its conception as well as its objectives. It reflects briefly on the literature

and its significant contribution to the body of knowledge. It brings to the fore the objectives of the study and its key questions. The chapter displays its underpinning paradigm, research methodological design and approach. It outlines in brief the data procedural and methodological processes followed to ensure trustworthiness and rigour. Finally, it provides a window to the ethical issues of the study.

1.13.2 Chapter Two: Review of related literature: – conceptualisation of lecturers' experiences of e-learning resources

This chapter provides for the conceptual understanding of lecturers' experiences of e-learning resources. Literature drawn from international and local studies on the topic was consulted. The chapter arrives at three reflective conceptual understanding of lecturers' experiences of e-learning resources: professional, social, and personal reflections. These emerge from literature, and are merged with the process of experiencing e-learning resources. fusing the three into e-specialisation, e-generalisation, and e-connection lecturers' experiences of e-learning resources.

1.13.3 Chapter Three: Explication of theoretical grounding of the study

The chapter builds from Chapter Two on conceptual experiences of lectures' e-learning experiences. e-learning theories from international and local scholars are consulted. e-learning theories involving technological pedagogical and content knowledge (TPACK), (Koehler & Mishra 2009), and the technology accepted model (TAM) (Basak & Govender, 2019); Marangunić, 2019) are interpolated, as are education-entertainment messages (EEM) (Moyer-Gusé, 2008; Slater & Rouner, 2002). The chapter arrived at the unified theory of acceptance and use of technology (UTAUT) as it accommodates various theories in its application and the lecturers' experiences of e-learning resources.

1.13.4 Chapter Four: Research strategic and technical applications

The chapter covers methodological strategies and the application of qualitative principles of the study. It pronounces the study paradigm, approach, data generation processes and procedures applicable to the study sampling strategies. The chapter reveals the hermeneutic circle as its strategy for data analysis. It elaborates on the principles of trustworthiness and rigour applicable to the study. The chapter closes by acknowledging the limitations of the study and its commitment to ethical principles

1.13.5 Chapter Five: Data presentation and discussion of the findings: Expository experiences, empirical experiences, scientific experiences

The chapter is part one of two presenting findings of the study with discussion thereof. The discussion is informed by themes emerging from participants' responses to interview questions based on the three main research questions. This chapter presents and discusses themes from one to three. Six themes emerge from analysis. This chapter presents and discusses the first three themes of six that emerged from the analysis, and how the findings reflect the research questions.

1.13.6 Chapter Six: Data analysis and theoretical positioning of philosophical standing: Subjectivisation experiences, socialisation experiences, and institutionalisation experiences.

This is part two of two chapters presenting the findings of the study and interpretation of the findings. This chapter presents and analyses themes from theme four to six which emerged from the analysis of participants' responses to research question three of the study. Themes are presented and analysed from a UTAUT and UTAUT2 theoretical and philosophical point of view reflecting participants' response to research question three: Why do lecturers use e-learning resources in the way they do in the teaching of History? The question is philosophical, participants' reflections are interpreted by viewing the philosophical underpinnings.

1.13.7 Chapter Seven: Philosophical reflections in theorising the findings through the UTAUT and UTAUT2 models.

The chapter of the study presents its philosophical standing in its theorising the findings on lecturers' experiences of e-learning resources. The theorising part is informed by the six variables of the UTAUT and UTAUT2 theory. The philosophical standing is informed by the analytical understanding of lecturers' experiences of e-learning resources reflected in the themes as subjectivisation (personal), socialisation (social), and institutionalisation (professional). These philosophical reflections are continuously unfolding with the experience of participants.

1.13.8 Chapter Eight: Propositions from the findings of the study

This is the final chapter of the study, it reflected on the title of the study and its main research questions and findings from participants in their responses to research questions. The chapter presented implications of the study and, recommendations to the readers. The chapter reflected on the study future implications in general for higher education institutions in the use and acceptance of e-learning resources. The chapter presented four propositions based on its findings. The first proposition

presented the argument for the use of UTAUT as the analytical strategy to determine performance expectancy in the acceptance and use of e-learning resources. Second proposition argues for the use of e-learning resources to enhance phenomenological experiences in the acceptance and use of e-learning resources. The third proposition argues for the acceptance and use of e-learning resources to promote e-learning pedagogical analysis. The fourth proposition argues for the delivery of mobile e-learning connectivity management that is supportive of quality e-learning resources and material.

1.14 Summary of the chapter

This chapter provided an overview of the study from the background and motivation for the study. It brought to the fore its purpose, objectives and main research questions. It gave synopsis of each chapter. This chapter gave an insight into the literature informing its conception, and the theoretical moulding of the processes of arriving at an appropriate analytical strategy for the study. The chapter gave a view of its data generation processes, data presentation and discussion leading to the findings. It also provided an understanding of the process of theorisation of the findings and the philosophical standing of its thinking. In the next chapter, the study presents literature review consulting the work of international and local scholars on conceptual experiences of lectures' e-learning experiences.

CHAPTER TWO

Review of related literature: Conceptualisation of lecturers' experiences of e-learning resources

2.1 Introduction

This chapter provides a substantial analysis of the literature to explore lecturers' experiences of e-learning resources in the teaching of History and addresses the research questions. The overall purpose of this study is to understand research explored in this topic and contribute pursuant knowledge in this research area (Dyll-Myklebust, 2016). The purpose of this literature analysis is to describe, summarise, evaluate, clarify, and integrate the content of previously conducted studies to demonstrate the literature in this field of enquiry (Dyll-Myklebust, 2016). Kumar (2011) pronounces that scholarly articles referred to in the literature analysis provides an anchor to the whole research process and contribute to its operational steps.

Ramdhani et al. (2014) conceptualise a literature analysis as a survey of scholarly articles such as textbooks, journals and other sources that relate to a certain issue, area of research or theory. Efron and Ravid (2019) state that literature analysis is a systematic examination of the scholarly literature about one's topic. Ramdhani et al. (2014) and Tavakoli et al. (2017) identified two known types of literature analysis: the systematic literature review and the traditional or narrative scholarly work. However, Efron and Ravid (2019) claim that there are three types of literature analysis, and the systematic, traditional-narrative, and hermeneutic phenomenological literature analysis. This suggests that literature analysis can take different based on the purpose of the study.

There are different structures of literature analysis, with the more commonly known structures following authors' work, the chronology of the study, contextual issues, a certain paradigm, a certain theme, and a theoretical framework (Murray, 2011). Van Wyk (n.d.) supports this view, stating that literature analysis examines the nature of the topic and the way in which it will be studied. However, Maturaka (2017) postulates that the literature analysis can take the shape of a course work, with parts of assignments intended to teach certain skills or theses based on the academic discipline. These can be a stand-alone essay in the form of a complete chapter, a series of separate reviews, or a systematic review (Maturaka, 2017).

This literature analysis consults all types of literature that relate to lecturers' experiences of e-learning resources in the teaching of History. Data from the systematic literature analysis, the traditional or

narrative literature analysis, as well as the hermeneutic phenomenological literature analysis are consulted. The traditional or narrative literature analysis approach is employed to search, identify, and select relevant scholarly narratives of leading and subsequent authors. These articles are selected from available written documents on the topic with information, ideas, data, and evidence in relation to the proposed topic (Okoli & Schabram, 2010). Online sources such as ebooks and other electronic material as well as traditional sources such as books, journals and other scholarly work are consulted.

Scholarly work determines boundaries on methodological and theoretical applications (Hart, 2001). The identified and selected literature is classified into themes, emerging themes and sub-themes are used to identify concepts as a continuous integral part of the research process (Cronin et al., 2008). This literature analysis extensively conceptualises lecturers' experiences and then intensively explores their experiences of e-learning resources in the teaching of History to establish what e-learning resources lecturers use in the teaching of History? how lecturers use e-learning resources in the teaching of History?, and why lecturers use e-learning resources in particular ways in the teaching of History? Themes and sub-themes are analysed in this literature analysis by describing, summarising, and critically evaluating them (Hart, 1998). In its evaluation, the literature analysis, summarises and synthesise emerging concepts. Emerging concepts from this literature analysis are used as a base for the theoretical framework of the research (Hart, 2001). This suggests that literature analysis is a foundational base for structured study. This literature analysis employs a thematic or construct structure, and in its organisational structure is as follows: introduction; conceptualisation of lecturers' experiences; lecturers' specialisation experiences; lecturers' generalisation extension experiences; lecturers' connection experiences; lecturers' e-specialisation experiences; lecturers' e-generalisation experiences; lecturers' e-connection experiences. Finally, a summary is provided. Figure 2 indicates the structural flow of this chapter.

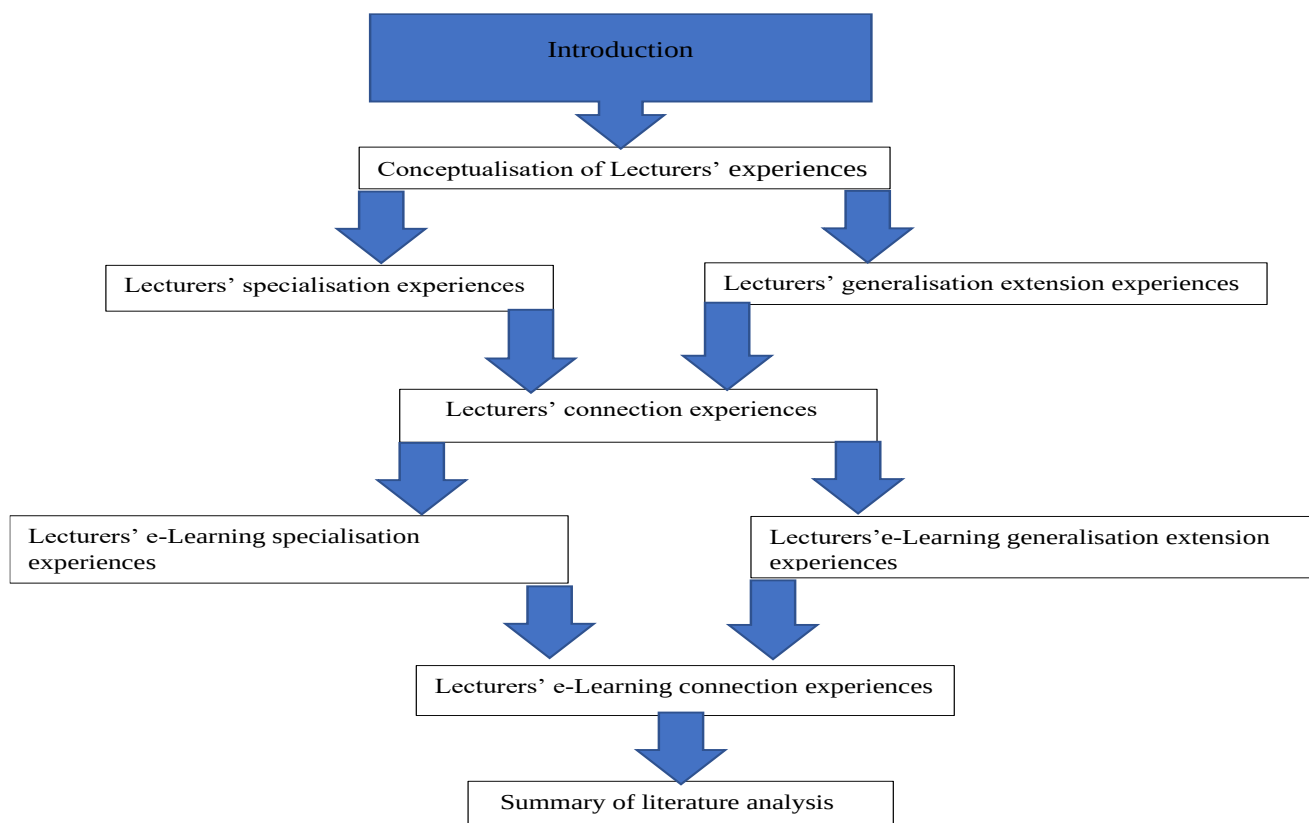


Figure: 2 The chart flow of the structure of Chapter Two

2.2 Conceptualising lecturers' e-learning experiences

Kolb and Kolb (2017) claim that the concept of learning experiences has been explored by various prominent scholars over the past 100 years, including different learning situations and e-learning experiences. These scholars include amongst others Carl Rogers, Jean Piaget, John Dewey, Lev Vygotsky, Mary Parker Follet and Paulo Frere (Kolb & Kolb, 2017). These scholars explored the phenomenon of experience from different settings, and they are often cited in scholarly work. Dewey's (1938) philosophical analysis of experience involves a transaction between an individual, what is taking place, the time in which it takes place, and the environment within which it takes place, as well as the thinking about what is taking place.

Various scholars agree with Dewey's concept of experience; these include Wolff-Michael and Alfredo (2014) who refer to experience as the learning of science in education that denotes ubiquitous

transactions in human activity across space and time. Another scholar that views experience within the wavelength of Dewey is Hohr (2013, p. 8), who agrees that experience involves “conceiving, feeling and enlivening” through the “know-what” and the “know-how” of human experiences. In agreement with Dewey, Kolb and Kolb (2017) argue that learning in education involves the teacher, learner, and subject matter relationship where both the teacher and the learner go through the process of learning about the subject matter. This suggests that the ‘know-what’ addresses the professional experiences and the ‘know-how’ tackles the social experiences. Both the professional and the social meet in the person of the teachers’ or lecturers’ disposition of personal experiences, and this brings in the ‘know-why’.

The context where the teacher, learner and subject matter interact provides for a common empirical measure that connects experiences and the subject knowledge, to contribute to the cognition of potential application of the education spectrum across experiences (Giamellaro, 2017). Vasile (2016) concurs with this view, claiming that experiences reflect the interaction and continuity of teaching. The continuous process of teaching and learning where an individual’s educational philosophy, and personal teaching style within a certain educational setting mandated by administrative and students’ needs, reflects the disposition of various lecturers’ experiences (Kolb & Kolb, 2017). This suggests that in the process of disposition of experiences, connection with the teaching context becomes a construct of lecturers’ experiences. This connection varies according to different conditions and cognitive levels of exposure to the educational setting. The understanding is that educational settings are diverse and complicated and need to be clarified within the teaching environment.

Lecturers’ experiences relate to the identified educational setting or teaching environment that can be referred to as “where you are, who you are with and what resources are nearby” (Schilit et al., 1994, p. 1). They can also be referred to as any information used to characterise the situation of an entity such as interaction between a person, place, and object, the application and the user of the object (Dey, 2001). Literature consulted suggests that educational experience reflects multiple continuous flow of teaching and learning action or events that promote teaching and learning. Such events are connected to the actual present action or activity taking place, and the reflection on activity that took place in the past and the thoughts stimulated in the process of action. On the one hand, the understanding is that the thinking process reflects what is happening at present and what happened in the past and the imagination of possible ways of dealing or facing those activities (Zhou & Brown, 2015), (Di Stefano et al., 2016), while on the other hand, the meaning of thinking about what happened

in the past takes place at the time of thinking about it in a way that translates to an unbroken chain of experiences (Waeraas & Solbakk, 2013; Teichler, 2017, Khoza, 2019).

Teaching and learning at universities reflect a higher education institution or university setting in relation to an ongoing state of self-defining of institutional essential values, characteristics, and perceptions (Waeraas & Solbakk, 2013). Teichler, (2017, p. 1) agrees with this view, arguing that teaching and learning are some of the key activities in a university and are undertaken under a “diverse institutional setting”. Teichler (2017) refers to a diverse university setting in the form of a vertical (formal) discourse and on a horizontal (informal) discourse. Khoza (2019) supports this view claiming that vertical and horizontal factors reflect the personal, professional and social aspects of lecturers in the utilisation of the Curricular Spider Web in the teaching and supervising of students. Zhou and Brown (2015, 2017) corroborate this view, arguing that cognitive development in teaching and learning promotes a variety of experiences consistent with the level of learners’ development. Di Stefano et al. (2016) concur that the cognitive aspect enhances task understanding while the emotional aspect enhances self-efficacy, and both contribute to articulating and codifying previous experiences adding to the present experiences.

The suggestion is that the vertical discourse is differentiated in a linear pattern from the basic lower level to the advanced higher-level cognitively. This also implies that the horizontal discourse is divided into various lateral segments or configurations that are interconnected and interrelated representing multi-lateral layers of contexts or settings that constitute experiences. The understanding is that vertical and horizontal discourses are a continuous simultaneous transaction of values in the process of teaching and learning activities. This involves the interpersonal relations that reflect diversity in embracing and affirming ethical representation of multi-dimensional experiences.

Budden (2017), Crippen and Antonento (2018), Khoza (2017, 2018, 2019), Khoza and Mpungose (2017), Kohen and Kramarski (2018), and Mpungose (2017) support the view of the cognitive development of teaching and learning based on the needs of students. Mpungose (2017) claims that reflection on and in the use of teaching and learning activities produces success in students’ learning. Biesta (2015); Budden (2017), Khoza (2017), Khoza and Mpungose (2017) and Zhou and Brown (2015) agree that reflection on and in teaching and learning activities address different needs of students in a personal, professional, societal capacity. Most of the literature consulted focuses on students’ experiences of teaching and learning in a manner that treats the personal, professional, and social aspects as separate from each other and as an end in themselves. In the following discussion

the professional (lecturers' specialisation experiences), social (lecturers' generalisation extension experiences) and personal (lecturers' connection experiences) are addressed as an integrated continuation of teaching and learning experiences. The discussion addresses the configuration of lecturers' experiences as a means of enhancing the continuous comprehensive understanding of the three aspects of teaching and learning at the same time. The discussion further links this configuration of lecturers' experiences to the use of e-learning resources for teaching and learning as a construct of lecturers' experiences.

2.2.1 Lecturers' Professional (Specialisation) experiences

Lecturers' specialisation experiences began with education related concerns brought about by the First and the Second Industrial Revolutions. When the new curriculum was introduced a more diverse set of options and new general education programmes were designed to offer a variety of elective courses (Penprase, 2018). This view is supported by Xu et al. (2018) postulating that within the three Industrial Revolutions (First, Second and Third), a shift in education was experienced, with a focus on standard modes of learning, standardised testing, and customer model learning respectively. The Second Industrial Revolution in 1960 saw accelerated implementation of electronics and information technology, leading to the current technologically, innovative methods disrupting the conventional ways universities use to deliver their content to students (Xu et al., 2018). Literature consulted shows that different phases of the industrial revolutions redefine the role of universities and lecturers' experiences. A variety of lecturers' specialisation experiences reflect in different ways in various studies, such as (Bitzer and De Jager, 2016 Chauraya et al., 2014 and Treffert-Thomas, 2018).

A survey was conducted in a South African university by Bitzer and De Jager (2016) on the perceptions and preferences of the professional identity of lecturers where lecturers qualified to be practising Chartered Accountants as well as university teachers. The study asked lecturers to provide their preferred identity. They preferred to be identified as lecturers rather than accountants, based on the strength of opportunities of participating in educational activities. Treffert-Thomas (2018) conducted a case study in a university in the United Kingdom (UK), with a purpose to instil, intuitive or informal understanding. The study intended to promote the acquisition of Mathematics language among students, and develop conceptual understanding and competence on Mathematics. The study involved two lecturers, one covering each of two semesters. The study concluded that goals within the algebra linear teaching apply in their universal character, and can be generalised to other areas of Mathematics such as conceptual understanding and Mathematical competency. O'Carroll, et al.'s

(2017) report on higher education in Ireland showed that mature student (over 23 years) prefer career-orientated teaching and learning strategies as they serve their adult life needs better. The report shows that interactive and collaborative methods are mostly preferred because of their inclusivity, with lecturers assuming a facilitator role. The report concludes that Problem-Based Learning encourages deep understanding among mature students.

In a study with different focus, Chauraya et al.'s (2014) descriptive survey intended to find out how lecturers teach at a university in Zimbabwe. The findings show that lecturers' content mastery and use of different approaches of teaching was rated as high in student responses. The phenomenon of these studies is lecturers' experiences, but their focus is different. The focus in Bitzer and De Jager (2016) is on the identity of lecturers; they have to choose between their profession and practice. In Chauraya et al. (2014) and Treffert-Thomas (2018) the focus is on understanding the teaching of content, while in O'Carroll, et al (2017) the focus is more on teaching and learning strategies that are relevant for student needs.

Other differences in these studies are that in Treffert-Thomas (2018) lecturers are participants and they reflect on their own teaching. In Chauraya et al. (2014) and O'Carroll, et al. (2017) students are participants, and they reflect on lecturers' teaching experiences, using their own experience of understanding lecturers' teaching strategies. The literature that was consulted show that e-learning specialisation goes hand and glove with electronic and technological inventions of the Second Industrial Revolution. This suggest that content delivery through e-learning strategy is part of the construct of lecturers' specialisation experiences. This denotes that lecturers' specialisation revolves around identifying with content and such identification has to do with promoting or enhancing educational activities or opportunities. These studies show that the focus on participating in educational activities is diverse, based on the needs of the participants facilitated by e-learning strategies.

Lee et al. (2018) postulate that during the Third Industrial Revolution the rapid spread of information technology brought about the development of society based on common collaboration on building a zero marginal cost society. These general social effects of common collaboration cut across the social spectrum, including education. Le Grange (2016, p. 9) concurs with this view that "emerging transdisciplinary" experiences in higher education are critical for lecturers in the university teaching environment. Educational activities that address transdisciplinary diversity are conducted in the form of scholarships (Fredericks, 2017; Friberg, 2014; Hassan, 2017; Lithgow et al., 2018; McKinney,

2007; Potter & Kustra; 2011). McKinney (2007) and Potter and Kustra (2011) strike a difference between scholarly teaching (ST) and the scholarship of teaching and learning (SoTL).

McKinney (2007) asserts that ST is supported by a body of research to enhance effectiveness while SoTL is a combination of reflection and knowledge related to questions raised about teaching for study. Potter and Kustra (2011) claim that ST is grounded on critical teaching for effective teaching; SoTL is based on publicly shared critique by an appropriate community. McKinney (2007) further differentiates the two scholarships from good teaching, stating that good teaching is about teaching that supports students learning to achieve desired outcomes. In support of this view Friberg (2014) asserts that the SoTL programme focuses on improving systematic examination, teaching and learning as well as dissemination of research work to relevant participants. This denotes that SoTL, and ST programmes benefit from research work, the benefit is either for the purposes of reflection and knowledge sharing or for increasing effectiveness for teaching and learning. This means that the mutual benefit of these two scholarships promotes good teaching, where desired student outcomes are part of the systematic examination that goes beyond research targeting different special needs for teaching and learning.

Studies consulted show that both ST and SoTL are perceived differently by lecturers Hassan's (2017) case study in a university of technology in South Africa showed that lecturers participate in SoTL to improve teaching. This conclusion is opposite to that of international study, where 75% of teaching enhancement counted little compared to research output in higher education in Europe (Bunescu & Gaebel, 2018). Fredericks (2017) case study shows that lecturers participate in SoTL according to the level of experience and exposure to the higher education institution environment. There is evidence of reluctance of lecturers' formal participation in SoTL programmes for several reasons, such as lack of time and lack of direct financial incentives (Hassan, 2017; Bunescu & Gaebel, 2018).

The formal introduction of SoTL internationally and locally provides lecturers with an opportunity to obtain a teaching or educational qualification to teach and promote career prospects in Higher Education (Bunescu & Gaebel, 2018; Fredericks, 2017; Hutchings et al., 2011). Lithgow et al. (2018) support this view as they claim that a transdisciplinary SoTL programme in one of the universities in Canada is run in all the academic years and reflects four levels of engagement. These levels reflect a micro level (individual researchers and their classes), meso level (department-wide discussion and pursuit of SoTL), and macro level (community of practice, grants, conferences) support initiatives (Lithgow et al., 2018). Lithgow et al. (2018) claim that SoTL and the mega level involve presentations

and publication at discipline related and international SoTL conferences). This suggests that obtaining a teaching or educational qualification in addition to academic qualification promotes specialisation in the content teaching and learning using appropriate strategies to address various special needs of participants.

Hoadley (2011, p. 49) postulates that curriculum construction needs to recognize “boundaries” between the “theory” of experiences and “everyday” experiences in its approach to the “valid transmission” of experiences. Kolb and Kolb (2017) concur that lecturers choose methods that accommodate students’ experiences from learning. This view is supported in Crawford and Capps’ (2018) literature review on teacher cognition in scientific practices which concluded that theoretical reflection on critical thinking and conceptual understanding is critical for learning experiences. The key to logical evidence is on based meaningful learning experiences (Crawford & Capps, 2018). Kohen and Kramarski’s (2018) case study involving two preservice teachers in a university in Israel agrees with the former and the latter. The purpose of the study was to understand the pedagogical cognitive and metacognitive strategies of teaching and engagement activities over the pre-/post-action Mathematics lessons. The study concluded that teachers’ theoretical-practical model consists of two parts: part A, an implicit dimension involving what, how, when, and why, and part B, the explicit dimension of strategies and engagement activities of a lesson.

Khoza (2019) conducted a case study in a university in South Africa to find out about lecturers’ reflections in the utilisation of the curricular spider web (CSW). This study included ten lecturers teaching Master’s of Education students across disciplines, and the findings reflected that personal, professional, and societal factors are diagonally reflected with vertical and horizontal processes. The reflection involved where knowledge, skills, values/attitudes represented local, national, and international activities (Khoza, 2019). This suggests that valid transmission (pedagogical) application of experiences involves formal disposition of transaction between teaching and learning activities. This suggests a need for lecturers to be aware of the best methods to deliver the content that enable students to learn from their experiences.

The understanding is that the disposition of specialisation experiences in curricula spider web Khoza (2019) acknowledges the valid transmission of experiences pedagogically (Hoadley, 2011). This pedagogical or methodological transmission of experiences cuts across the disciplines in addressing various needs of teaching and learning. Pedagogical methodological transmission of experiences interdisciplinary specialisation in the teaching and learning of academic content is specially shared

through ST and SoTL platforms (Bunescu & Gaebel, 2018; Fredericks, 2017; Hassan; 2017; Hutchings et al., 2011; Potter & Kustra, 2011).

This denotes that content and methodology are shared among specialists within ST and SoTL in a vertical and horizontal discourse at different levels (Lithgow et al., 2018). Prawat (1999) argues that ideas are sharpened and refined by the reality they encounter when they enter the social domain. Prawat (1999, p. 269-270) argues that the refined reality is “situated” or “located” in the communities of shared experiences. This view is supported by Clark (2001) who argues that a series of localised growth spurts of trade, demand, and demography occurred geographically in the Netherlands between 1500 to 1660. This also involves Northern Italy in the 14th century accidentally triggering Industrial Revolution (Clark, 2001). This denotes that a variety of educational transformation adapts to the shift provided by the need for new skills and competences in the economic sphere that in turn manifest in massive social progress. The understanding is that specialisation is not an end on its own, but a methodological systematic integration of scientifically/factually interwoven means to address a certain situation or condition that affects the society in general.

2.2.2 Lecturers’ social (generalisation extension) experiences

Xu et al. (2018) claim that the First Industrial Revolution from 1760 saw the invention of the steam engine, with textiles and steel as dominant industries. The First Industrial Revolution triggered the Second and Third Industrial Revolutions in 1900, 1960 respectively. However, Clark (2001) argues that textile technology accidentally contributed to the technological advances in Europe as her economy had been increasing since the 15th century. The Second Industrial Revolution saw expansion of access to higher education leading to multiple types of higher education institutions addressing a surge in the diverse needs of societies (Penprase, 2018). These needs were accelerated by the economic growth worldwide (Penprase, 2018). Prawat (1999) claims that relationship between process and content in learning and cognition enables free move of experiences into the dialogic space between people and between the mind and physical world. Chaiklin (2003) claims that Vygotsky’s Zone of Proximal Development (ZPD) can be conceptualised as learning a specific concept or developing specific capabilities. These capabilities may take a month or years of professional training directed to individuals or groups (Chaiklin, 2003; Govender & Khoza, 2022). This suggests that learning experiences can be conceptualised from a narrower sense of a specific individual interest and a broader sense of a general group interest reflecting the social interest.

Lee, et al. (2018); and Penprase (2018) contextualises this view to economic and educational needs postulating that horizontal expansion of the primary, secondary, and tertiary industries, including education industry, converges at the local, regional, national, and international level. How the discipline goes about solving problems is perceived within an established culture of the given society being served (Carrberry & Baker, 2018). The cognition and metacognition in the scientific content knowledge/experiences is influenced by the diversity, cultures, values, and worldviews of that time of living (Sjöström & Eilk, 2018). The Bildung philosophical and educational tradition on cognitive development discourses internationally influenced the classical, liberal, critical-reflexive education thinking (Sjöström & Eilk, 2018). Scandinavian folk-Bildung tradition and Dewey's democratic education bear evidence to this claim (Sjöström & Eilk, 2018). This view is supported by Penprase (2018) who claims that graduate university education in the USA and across the world was transformed by widespread adoption of the German university model for postgraduate research. This suggests that there is continuous integration of specialisation with generalisation as content. This implies that discipline experiences are carried to situations or contexts that extend beyond the theory in everyday life experiences that influence the thinking about theory.

Studies such O'Carroll, et al. (2017) in Ireland show that lecturers' generalisation of specialisation experiences helps to address the general needs of students. In this report problem-based learning for mature students addresses their adult life needs. A case study of two Technical Vocational Education and Training Colleges (TVET) in South Africa by Ngubane-Mokiwa and Khoza (2016) shows that innovative teaching strategies address the needs of students with disabilities. It found that innovative teaching strategies are better than traditional teaching strategies for students with disabilities (Ngubane-Mokiwa & Khoza, 2016). Khoza (2019) asserts that curricular spider web horizontal discourse provides the community with physical access to teaching and learning. Through content-centred strategies and the horizontal discourse financial access through societal-centred strategies, physical access is provided (Khoza, 2019). This view concurs with Giamellaro (2017) who postulates that critical contextual connection between context, the teacher, learner, and the subject matter provides for a common empirical measure on experiences. This contributes to the cognition of potential application of education across experiences (Giamellaro, 2017).

Akpey-Mensah (2017) conducted a case study of 10 academics and 20 human resources staff in three public universities in Ghana to explore the practices of African human resources management on employees. The study concluded that there is no model of human resources management in Ghana public universities and recommended one grounded on African values of ubuntu in pursuit of making

academics more committed and keener to remain with higher education institution. Nkoana and Dichaba's (2017) literature review on the idealistic definition of university uses Wagner et al. (2012) categorisation of stakeholders and identifies three dimensions at the centre of confrontations between management, the society, politics, and money. The study intended to find out the causes of 'Fees Must Fall' protests in South African universities, and the findings are that three dimensions are source of conflict. The study concluded that universities need to pursue indigenous knowledge and Western sciences in a context-specific solution to African development. In support of this view, Hoadley (2018) conducted a literature review on some studies including Abadzi (2006) case study on the links between classroom activity and learning outcomes. In comparing the findings or conclusions of her literature review, Hoadley (2018) argues that poor contexts like poor resources, large classrooms and time constraints contribute to pedagogic inflexibility in developing countries.

Studies consulted show that generalisation extension experiences are used by different authors in different ways (Carrberry & Baker, 2018; Ngubane-Mokiwa and Khoza, 2016). O'Carroll, et al. (2017) focused on problem-based teaching and learning strategies to address contextual limitations affecting teaching and learning. Giamellaro (2017), Hoadly (2018) and Sjöström and Eilk (2018) focus on appropriate content and cultural approaches to effect teaching and learning. Akpeng-Mensah (2017), Nkoana and Dichaba (2017) and Sjöström and Eilk (2018) focus on inculcating values, beliefs and culture for redress and transformation through teaching and learning. Crawford and Capps' (2018) concepts of cognition and metacognition engaging what, how, or when and why is strengthened by the 'where' concept which is reflected in the studies of (Akpey-Mensah, 2017, Khoza, 2019, Ngubane-Mokiwa & Khoza, 2016 and O'Carroll, et al., 2017).

These studies suggest that the general social conditions of students are influenced by their context, this involves the use of technology in their daily experiences. The teaching and learning strategies need to address the technological influence to students' general environmental challenges and settings in the form of e-learning strategies. The thinking is that context, culture or environmental conditions impact on effective and meaningful content teaching and learning. Such effective and meaningful teaching and learning reflects the transition between theory and the general real-life situation, where scientific and academic meanings become resourceful and useful to the general society. This denotes that the process of transaction between teaching and learning need to address general everyday social issues through critical personal understanding of what issues need to be addressed and how.

2.2.3 Lecturers' personal (connection) experiences

A general social space is created by different individuals, and that requires boundaries that connect the general and the personal space (Xu et al., 2018). In support of this view, Biesta (2015) refers to subjectification domain as the domain that enables lecturers to use their own judgement on how teaching and learning affects students and the impact such a process has on students' life. The role of teaching involves facilitating personal experiences, organising, and connecting experiences of teaching and learning (Kolb & Kolb, 2017). It also involves evaluating how to master the application of teaching and learning activities and coaching students to achieve desired goals (Kolb & Kolb, 2017). A case study by Effendi et al. (2017) conducted in the Faculty of Economics at an Indonesian university intended to find out about preferred students' learning styles. The findings of the study show that 59% of students preferred a visual learning style, 24% preferred an auditory learning style and 17% preferred kinaesthetic learning style. Furthermore, more students expected learning by blended learning style, as it is found to be interesting, useful, and easy to understand.

These studies concur with Khoza's (2019) case study in a university in South Africa claiming that ten lecturers were aware of and reflected on the curricular spider web in their teaching and supervising of Master of Education students. These studies suggest the personal reflection of lecturers in addressing the personal needs of students in the process of teaching and learning. It is held that the personal understanding reflects awareness in the choice of methods to teach a certain content to different learners. All this is done by a lecturer who has to cater for diversity of his or her students. More studies such, as De Sward and Hoque (2018), Khoza (2017), Khoza and Mpungose (2017), Machumu and Zhu (2017), Short and Lloyd (2017) and Khoza & Biyela (2020). mentioning just a few, show critical personal reflections. This means that deepening teaching and learning understanding requires personal reflections.

Machumu and Zhu's (2017) case study of 605 students in three Tanzanian universities was conducted to examine the relationship between student motivation to learn and the learning environment. This was study focused on their constructivist-based engagement in blended environment of learning. The findings of the study show that students intrinsic, extrinsic, task value, self-efficacy and test anxiety are the bases for their motivation to learn. It also found that their constructivist-based learning is enhanced by their individual experiences and real-world social engagement (Machumu, Zhu, 2017).

A different case study by Khoza (2017) shows that ten lecturers personally are aware of the curriculum principles in the curricular spider web, and apply them in their teaching to achieve the desired goals in an institution of higher education. Another case study by Khoza and Mpungose (2017) was conducted to explore the effect of psychological spaces of the self, social and professional in the use of Turnitin by academics to determine plagiarism in the assessment of theses and dissertations. The study was conducted in a university in South Africa and the findings show that academics personally use Turnitin more in a self-space than the social and the professional spaces. This suggests that personal development is critical for lecturers to engage students personally in their personal capacity to effect meaningful experiences from teaching and learning activities. The critical personal engagement with teaching and learning is revealed in other studies like Short and Lloyd's (2017) case study on field trips for teaching sensitive issues undertaken in every academic year.

In terms of field trips, in 2013 a cohort of 30 students visited Krakow in Poland and in 2014 a group of 40 students visited Auschwitz concentration camps and the Schindler Museum, while in 2015 there were 35 students who visited Berlin, the Sachsenhausen concentration camp and the Topography of Terror exhibition in Moscow; and in 2016 a group of 15 students visited Gulag Museum and Bunker 42 (Short & Lloyd, 2017). These field trips were undertaken in the teaching and learning psychological concepts of leadership, obedience and social conflict-decision making activities at a university Faculty of Psychology in the UK (Short & Lloyd, 2017). The findings of the study show that taking students around the world for teaching sensitive issues deepen personal understanding about the subject matter. Another study by De Swardt and Hoque (2018) based on a survey of 69 students and 15 lecturers in an academic institution in South Africa intended to understand current learning practices. The focus of the study was on the millennials using student-owned learning-engagement (SOLE) (De Swardt & Hoque, 2018). The findings of the study show that students prefer meta-modes of teaching and learning, lecturers need to adopt a demographic and psychographic of the millennials for effective and meaningful teaching and learning. This suggests that personal engagement is unique and diverse depending on the content and the educational settings that provide resourceful interaction and transaction of teaching and learning experiences.

The understanding is that personal engagement with teaching and learning is an on-going process where specialisation in content or discipline acquisition and understanding are procedurally and deliberately transacted. Such a transaction follows a scientifically organised and socially general understanding on the part of lecturers personally by adding the 'who' concept completing the 'missing link' of the cognitive level (Crawford & Capps 2018; Khoza & Mpungose, 2017). This denotes that

the connection between the specialisation and the generalisation process of transaction is guided and driven by the personal cognitive astuteness of lectures. This is done in a manner that enables continuity, development, and personal growth in teaching and learning. The visual, auditory, and kinaesthetic learning style as reflected in Effendi et al. (2017) for teaching and learning requires the use of e-learning resources (Khoza, 2015). This suggests that such resources need to be used in an integrated way that enhances continuity and growth in teaching and learning experiences. The understanding is that there needs to be simultaneous relationship between specialisation, generalisation extension and connection experiences. These configurations are represented in Figure 2.2, showing the generalisation extension as a 'foundation', the specialisation, and the connection process of experiences as 'purification'. All these experiences are embedded/built into one another in an ongoing simultaneous and continuous growth process.

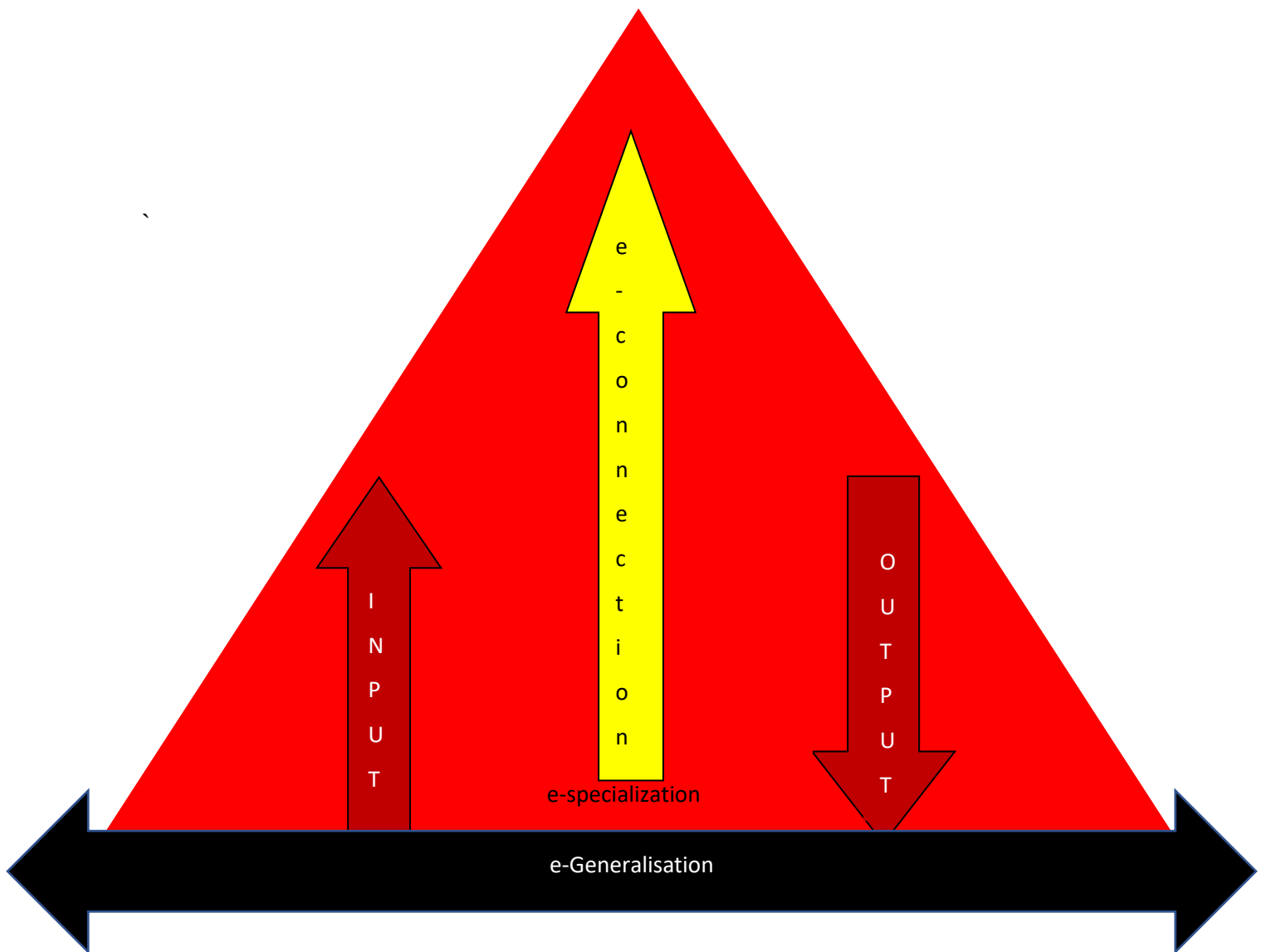


Figure: 2.1 The e-learning specialisation, e-learning generalisation extension and e-learning connection flow of experience

2.3 Lecturers' e-learning specialisation experiences

A technical paradigm shift of technologically enhanced education specialisation emerged with the institutionalisation of the digital age with the internet in the Second Industrial Revolution leading to

the current Fourth Industrial Revolution (4IR) (Lee et al., 2018). This view is supported in Xu et al. (2018) claiming that the implementation of electronics and information technology in 1960 led to the automation of production, signalling the beginning of the Third Industrial Revolution (3IR). The use of e-learning in teaching and learning content specialisation, start from an epistemological or theoretical position (Bates, 2019). However, it could be perceived that some of the beliefs are not fully made explicit, based on limited awareness on the part of the teacher (Bates, 2019). Literature consulted uses different concepts referring to e-learning, such as Khoza (2015, p. 123) referring to it as the lecturer's "use of e-resources", in the form of hardware, software, and ideological-ware. This happens to "create e-learning signals" (basic components of teaching and learning) (Khoza, 2015, p. 123). Bates (2019) and Wan (2012) refer to e-learning resources as 'digital technology' or 'educational technology'.

Moreover, Khoza and Manik (2015) refer to e-learning resources as 'electronic technology'. Others such as Nzai and Reeves (2013), refer to it as 'electronic media' while Helper and Enyon (2011) refer to it as 'Internet and wider variety of ICTs', mentioning just a few of them. Blackburn (2016) asserts that different meanings of e-learning are related to the educational methods, availability of resources and educators' use of e-learning resources. O'Donnell (2015) supports this view claiming that a hybrid method to teach and learn involves both face-to-face and online methods being blended. O'Donnell (2015) asserts that open learning opportunities are used for discipline-specific technologically enhanced learning strategies. Lecturers' e-learning experiences using hybrid approach was tested in a case study by Van Tonder and Steyn (2018) exploring experiences of role players in higher education learning in South Africa and higher education institutions in the USA. The study applied on-site face-to-face individual interviews of eight students, three tutors, one management mentor from a university in South Africa, and used Skype for four students, two tutors and two management members from the USA. The study concluded that hybrid approach is suitable for collaborative and social constructivist learning technique.

Another case study on lecturers' e-learning experiences was conducted by Sohrabi et al. (2019) to find out about the new e-learning educational paradigm in a university in Iran. The study interviewed 15 participants, comprising of one head of e-learning centre, four university vice presidents and ten educational managers from different departments. The study concluded that new e-learning paradigms involve blended learning with integration of traditional face-to-face learning and online learning. I also concluded that computer and internet literacy, lecture recording, online thesis defence,

corporate training linked to other stake holders and online quizzes are all included (Sohrabi et al. 2019). Opportunities that involve more experiences that reflect contexts to teach and learn through e-learning strategies embrace internet literacy. Slootmaker's (2018) case study in a university in the Netherlands identified intended users of five online platforms integrating modern technologies for improved methods enhancing education efficiency. Participants in the study includes teachers, students, administrators, ICT developers and design managers. The study concluded that universities need to develop a wide range of scenario-based teaching and learning games that enable complex cognitive acquisition skills. This integrates complex professional, academic and workplace skills (Slootmaker, 2018). The study concluded that different roles of participants need to be utilised to acquire complex cognitive development skills from different scenarios with different content domains.

Complex professional integration in the Humanities was demonstrated in a case study conducted by Wuttke (2019) to find theoretical and practical reflections on the role of digital and analogue research infrastructure in Humanities and e-research. The study registered 235 participants from the e-humanities and e-heritage community using five webinar series. Participants came from 27 different countries, with one 127 researchers, 52 lecturers 16 executive members. The study also included 12 developers and technicians, while 28 preferred not to disclose their affiliation with a focus on beginner, intermediate and advanced levels. The findings showed that there is a demand for e-research infrastructure amongst e-humanities and e-heritage researchers and practitioners, with potential to increase concerted pedagogical activities. This suggests that the use of e-learning strategies depend on the type of e-learning resources preferred by the lecturers to effect teaching and learning as postulated by Khoza (2015). In the studies of Sohrabi et al., (2019) and Van Tonder and Steyn (2018) a hybrid teaching and learning strategy is used by lecturers. This concurs with the claims by Blackburn (2016) and O'Donnell (2015). The focus of Wuttke's (2019) study being on testing a webinar in e-humanities and e-heritage infrastructure with online participants from a variety of backgrounds adds a different dimension, where interaction becomes more virtual than traditional face-to-face.

Awareness of the choice of e-learning resources by lecturers is critical in promoting certain teaching and learning experiences (Bates, 2019). Watching videos impacts positively on academic and educational performances. This is supported by a survey of 342 responses in a university in Bangladesh (Ali, 2019), which concluded that laptops and mobile phones were mostly used by

participants with preference to short videos and animated educational videos. Mpungose (2009) carried out case study of three lecturers in the Physical Science module in a university in South Africa, to explore their understanding of Moodle as a platform to decolonise the curriculum. The study concluded that lecturers reflected according to their needs in their understanding of Moodle, and that includes their formal needs. In its demonstration of e-learning strategies, a case study on modelling and simulation was conducted by Nwulu (2017) in the Department of Electrical and Electronic Engineering Science at a university in South Africa. The purpose of the study was to introduce innovative teaching experiences to different levels of teaching and learning. The study recommended modelling and simulation for the first-year students, and the use of PowerWorld and Matpower software for fourth-year students, (Nwulu, 2017), and concluded that these innovative e-learning strategies enhance professional teaching and learning experiences linked to professional industrial working experiences.

The case studies in Ali (2019), Mpungose (2019), and Nwulu (2017) show that e-learning teaching strategies are flexible to a variety of software, such as videos, Moodle, PowerWorld and Matpower depending on the purpose of the teaching and learning. This suggests that the purpose for teaching and learning is informed by the content domain in its reflection of different cognitive levels that relate to specialisation scenario in a workplace or industrial setting (Slootmaker, 2018). The use of different software in e-learning teaching and learning strategies requires use of different hardware as tools that support the preferred software and ideological-ware (Khoza, 2015). Chipangura's (2016) case study of 14 lecturers in a South African university investigated their teaching of students using mobile-centric services. The focus of the study is to investigate lecturers' readiness to meet the needs of mobile-centric service delivery to students, and the findings suggest that the lecturers are not ready to meet the mobile-centric delivery services to students, and the findings suggest that the lectures are not ready, based on various reasons that impact negatively on their specialisation experiences. This suggests that professional capacity development on critical technological strategies for e-learning is a necessity (O'Donnell, 2015).

Sebbowa and Muyinda (2018) conducted a case study in a university in Uganda to find out about innovative teaching and learning strategies in large History classes. The study focused on pre-service teachers using mobile phones in the process of teaching and learning, with the intention to enhance dialogical construction of meanings about the past. The findings of the study were that mobile phones with Winksite application enabling mobile forums enhanced interaction between students and

lecturers. It also found that interaction among students were enhanced by collaborative and reflective teaching and learning experiences. A different case study by Mpungose (2019) on students' preferred e-learning platform in a university in South Africa focused on 25 first-year students in the Physical Science module. The study concluded that students have no option in their choice of e-learning platform, and they are using Moodle. However, if they were given an option, they would prefer a WhatsApp e-learning platform based on their familiarity with it (Mpungose, 2019).

The use of software on mobile phones in support of the desk top hardware components poses some critical questions in lecturers' ability and competency in the use and choice of e-learning strategies, as reflected in Chipangura (2018) and Mpungose (2019). This suggests that if e-learning strategies call for content domains and teaching and learning strategies of those content domains. Again it, this suggests that e-learning falls within the specialisation experiences of lecturers in their strategies of teaching and learning. The thinking is that e-learning experiences are a continuous reflection of lecturers' specialisation experiences. The continuous lecturers' e-learning specialisation requires lecturers to use technology resources in their teaching and learning strategies. Lecturers' ability or inability to use technology resources impacts on their e-learning specialisation since they have lower complexity authority in the use of technology (Slootmaker, 2018), which poses a challenge to their level of competency and the ability to apply ideological-ware (Khoza, 2015).

Lecturers can collaborate with other technology experts, but the responsibility to discharge their specialisation to ensure that teaching and learning addresses desired experiences is in their hands (Bates, 2019; Blackburn, 2016). This responsibility is necessitated by the claim that all forms of thinking patterns, be it mathematical, linguistic, creative, imaginary, or abductive thinking, emanate from the modes of human mind restructuring (Logan & Tandoc, 2018). This suggests that e-learning can be used as a teaching and learning strategy based on lecturers' experiences of specialisation. This also implies that the teaching and learning patterns of their distinctive content domains become important for effective use of e-learning resources. However, Kadoić et al.'s (2016) literature review of 40 papers on e-learning, regarding decisions about methods and methodologies involving electronic resources application challenges this view. In the use of electronic resources in universities, the study concluded that the diversity of methods and methodologies adds to the complexity of e-learning strategies (Kadoić et al., 2016). Despite the complexity around e-learning strategies the understanding is that content discipline and methods of teaching and learning through e-learning need to satisfy curricular goals or objectives through specialisation.

e-Learning strategies linking the university programme with real industrial practical experiences was demonstrated in Keckstein et al.'s (2016) study at a university in the Czech Republic, with academics, students, and industrial practitioners in collaboration. The study concluded that materials developed in the project produced a higher pass rate among students and high student project completion. The study also concluded that the quality of material was approved by industry to be sustainable for future use across different subjects. However, use of e-learning strategies is complicated when subject or content discipline teaching and learning is applied, (Naicker & Makgatho, 2017). These authors conducted a case study in four TVET colleges in South Africa to find out about e-learning theory to mitigate against confusion. The case study involved 12 lecturers in Automotive Repair and Maintenance teaching and learning, with the intention to understand their Technological Pedagogical Content Knowledge (TPACK). The study concludes that lecturers reflect specific characteristics or behaviours related to each of the technology integration components of TPACK, and their planning and implementation were successful (Naicker & Makgatho, 2017).

Another case study of two TVET colleges in South Africa using TPACK as an e-learning strategy showed that TPACK addresses inclusivity in teaching and learning where the needs of students with disabilities are addressed (Ngubane-Mokiwa & Khoza, 2016). In a different case study, Mpungose (2019) used the TPACK strategy to find out the preferred choice of e-learning platform between Moodle or WhatsApp by Physical Science students in a university in South Africa. The e-learning mode of learning provides flexibility to teachers and students in terms of place and time for teaching and learning (Mishra & Mishra, 2011). This suggests that since e-learning is flexible, theoretical and content disciplinary experiences are critical to address the needs and purpose for teaching and learning. In these studies, TPACK is used to support purposeful and effective teaching and learning.

However, the use of TPACK as e-learning strategy can be challenging to lecturers in some content domain specialisation from organisational and technical point of view when they are expected to address the desired goals or objectives of teaching and learning (Wright & Abd-El-Khalik, 2018). Technology alone can use deductive (general) and inductive (specific) logic, but it needs abductive (new connections) logic across ideas and meanings, which can be affected by human minds (Logan & Tandoc, 2018). This suggests that technology needs human specialisation to be effective in its application of the identified goals and objectives.

2.3.1 Lecturers' e-learning generalisation extension experiences

The claim in Prensky (2001) about the existence of 'Digital Natives' who are the millennials born into the realm of technology, was met with criticism from Bennet and Maton (2010) and Wang et al. (2014), who argue that no empirical evidence supports that view. This resulted to Prensky's (2011) review of the claim that was made, rather suggesting 'digital wisdom' for lecturers and students. However, studies by Bothun and Vollmer (2017), Dolot (2018), Fong et al. (2019), Giunta (2017), Linnes and Metcalf (2017), Mohr and Mohr (2017) and Reis (2018) suggest that 'digital natives' exist. These studies suggest that such a generation exists alongside other older generations. Bothun and Vollmer (2017) claim that the use of technology or digital media relates to the general perspectives of user experiences, time, and space in determining the choice of preferred digital media. The internet video is the most popular medium, a while books are the most unpopular media among all economic active generations mostly from 1946 to the present period (Bothun & Vollmer, 2017). Bothun and Vollmer (2017) show that globally, cinema enjoys a -1.2% preference, but in South Africa cinema advertising enjoys a 40% preference. This is followed by the UK at 13% and Japan with a 0% preference (Bothun & Vollmer, 2017). The above studies use different names and age ranges in referring to 'digital natives' Dolot (2018) mentions that there is no consensus in defining the generations' age ranges.

Reis (2018) asserts that 'Digital Natives' are the Alpha Generation born after 2010, with children in Generation 'Y' born in 1978-1997, and those in Generation 'Z' (born from 1998). He argues that the Alpha Generation is immersed in the digital world as early as the first year of life as it is integrated into technology in their daily lives which influences their way of life and behaviours. Other studies refer to 'digital natives' as post-millennials, the iGeneration born after 1995 (Linnes & Metcalf, 2017). Fong et al. (2019) refer to this generation as millennials (born in 1981-1994) and Generation Z (born in 1995-2005). A survey of approximately 4360 students in a university in the USA conducted by Linnes and Metcalf (2017) to find out how different generations embrace ebooks in their studies. The study shows that in a response of 319 returned questionnaires, 94.5% of the iGeneration or Generation Z use laptops, compared to 95% of the Generation X (born 1965-1979), Generation Y (born 1980-1995) and Baby Boomers (born 1945-1965) combined. It further shows that 93% of the iGeneration or Generation Z use a smartphone, compared to the 57% of Generation Y and X and Baby Boomers combined. The study also shows that only 15% of the iGeneration or Generation Z use ebooks, compared to the 26% of Generation Y and X and Baby Boomers combined. Regarding

online reading habits 4% of iGeneration or Generation Z conduct all their readings online compared to the more than 11% of the Generation Y and X and Baby Boomers combined.

Fong et al. (2019) claim that 78% of females and 60% of males of Generation Z use emojis to communicate, and 76% of emojis in the USA are used in the work setting. This suggests that the connection between generations show continuation of experiences from one generation to the next, with extension of e-learning experiences from the general to the specific. Giunta (2017) conducted a survey in a university in the USA to investigate perceptions about the use of electronic technology of Generation Z students in the business courses. The study shows that most of Generation Z are familiar with a small part of the internet, but are not familiar with electronic resources such as commercial subscription databases. Familiarity of Generation Z with technology is supplemented through inheritance of accumulated experiences from Generation Y (Reis, 2018). Fong et al. (2009) claim that 62% of Generation Z will not use apps or websites that are difficult to navigate and 60% of them will not use slow apps or websites. This suggests that the use of technology evolves with all generations in an interrelated and integrative way making it complicated to clearly distinguish one from the other in a simplistic way. This view is supported by Mohr and Mohr (2017), who claim that the most active university faculty members teaching Generation Z are from the Baby Boomers and Generation Y.

Literature consulted shows that integration happens in a number of ways such as in business and commerce, with curriculum implementation as a business offering technological services sees an opportunity in reaching out to prospective clients through education (Hwang et al., 2016). In a case study at polytechnic university in the USA. Hwang et al. (2016) used three case studies to experiment on the use of cloud solutions to integrate curriculum with a virtualised enterprise environment. The study concluded that an enterprise-centric approach of modern computing for teaching and learning is highly accessible at a lower cost. It is applicable through partnering with industry clouds connected to data centres (Hwang et al., 2016). In making digital media accessible to teaching and learning industries use this opportunity to link the workplace academic scholarly work (Koffer, 2015). Koffer (2015) conducted a literature review of 79% publications to find out about the practical implications of academic knowledge (experiences) on the digital workplace. The study revealed 212 practical implications under the four main of collaboration, compliance, mobility and stress and overload. The study concluded that collaboration leads to a team climate, compliance creates a security-aware culture, mobility promotes interpersonal interactions and stress, and overload includes involving users in decision making about information systems.

A different case study with a different focus on the use of e-learning related to accessibility to teaching and learning with less cost was conducted in Greece by Gouvia et al. (2019). In a survey of 542 participants with 218 responses, Gouvia et al. (2019) investigated the adult population's means and media of studying during the period of economic austerity in Greece. The study concluded that cognitive understanding of socio-economic factors is critical for adult learning. Islam et al. (2015) found general contextual factors to be posing a challenge for e-learning strategies. Their literature review on challenges faced by lecturers in implementing e-learning in UK universities showed that lecturers are faced with five challenges: the learning style and culture, technical issues, lack of training and lack of time to use e-learning for teaching (Islam et al., 2015).

The studies by Koffer (2015), Hwang et al. (2016), Gouvia et al. (2019), Islam et al. (2015) and Kostas (2019) show that general contextual needs are important in the choice of e-learning strategies and resources. Hwang et al. (2016) focused on a student-run data centre to promote enterprise-centric strategies, and this approach is more business or market oriented stimulating commercialisation through e-learning. Koffer's (2015) study connects the academic context to the digital workplace context using virtual industrial e-learning strategies. For Gouvia et al. (2019) the focus is on the use of affordable and accessible e-learning strategies for teaching and learning generally among the adult population in an economically constrained environment. Islam et al. (2015) focused more on general challenges posed by e-learning to lecturers in their teaching and learning activities at universities. The latter is supported in Argenti et al.'s (2019) literature review on education reforms and changes that originate outside of education contexts. The study concludes that political ideologies, culture, and technology pose challenges to teachers or lecturers as they encounter contradictions in maintaining standardisation and accommodating flexibility. This is caused by contradictions within the macro and micro levels of teaching and learning (Argenti et al., 2019). This suggests that general factors such as lifestyle, commercial consumption, and entertainment, industrial demands and culture have an influence on the general technology user experience, and this influences the choice of e-learning strategies and generally preferred media.

The critical role of general contextual factors in the choice of e-learning strategies is demonstrated in Zhang's (2018) case study with four lecturers on the use of social software to promote academic and cultural integration between two universities, one in Canada and the other in China. The study concluded that social software promotes academic achievement and encourages perseverance among

Chinese students in a different cultural setting in Canada. The general digital space known for socialisation is thought to be an opportunity that is conducive for educational experiences, (Sun, & Chen, 2016). Their literature review conducted on online education prior to 2008, and post 2008 online content, studied 47 published articles and the study found that designing and preparing material that enhance a sense of social online presence is critical for online education (Sun, & Chen, 2016).

Social space is generally dominated by diverse and complicated contextual factors, as literature suggests, and in developing countries accessibility of digital media poses a challenge (Arkorful & Abaidoo, 2014; Macharia, 2019). Macharia's (2019) literature review studies effective use of mobile phones to enhance educational outcomes. The study concluded that mobile phones promote mobile learning, mobile teaching, and mobile education and this promotes new teaching and learning. This eliminates misconceptions about the use of mobile phones for teaching and learning at all levels of education (Macharia, 2019). This view is supported by Arkorful and Abaidoo's (2014) literature review to find out the advantages and disadvantages of using e-learning in higher education. The study shows that there are more advantages of adopting e-learning than disadvantages. It concluded that there is a need for implementation of e-learning as it comes with more benefits to teaching and learning.

However, Basak and Govender's (2019) literature review on important factors that inhibit teachers' or lecturers' successful adoption and implementation of ICT in teaching and learning in developing countries shows that one such factor is lack of conceptual framework. The study finds that negative attitude and resistance to change, lack of time, accessibility, technical support, and lack of ICT skills are some further factors inhibiting successful adoption and implementation of ICT (Basak & Govender, 2019). Basak and Govender (2019) concluded that the technology acceptance model (TAM) is recommended in developing countries to successfully implement and adopt ICT in teaching and learning. Technology acceptance is demonstrated in different contexts as factors vary Zhang's (2018) study and that by Sun and Chen (2016) use general social space for teaching and learning.

However, contextual factors in Arkorful and Abaidoo (2014) and Macharia's studies (2019) are different, and they require a provision for mitigating factors in the use of mobile phones for developing countries. All contextual factors different as they may be, in their general interactions promote socialisation in the social media space (Ammenwerth, 2017). Ammenwerth's (2017) literature review explores a hypothetical experience of teaching at university to find out if lecturers

are aware of their online role of teaching and learning. This study concluded that lecturers are perceived as socialised content experts, which makes them unwilling to take on their new role of online teaching and learning. This study is supported by Chipangura's (2016) literature review and case study of 14 lecturers in a South African university, investigating their use of mobile-centric services to teach their students. The findings suggest that lecturers are expected to provide mobile centric services to students, and they are not ready to do so. These studies suggest that the use of e-learning for teaching and learning is complicated by general contextual factors that are vastly diverse and seem to be competing with and inhibiting teaching and learning.

Flexible use of social media in developing countries is demonstrated by Hamid and Tamam (2018) in promoting awareness about the prevalence of HIV/AIDS among adolescents. Hamid and Tamam (2018) used media exposure to conduct a study sampling 487 Nigerian adolescent girls to investigate attitudes and practices around HIV/AIDS. This was done after witnessing rapid advances in HIV/AIDS in the represented population (Hamid & Tamam, 2018). The findings show that there was a significant mediation effect of HIV/AIDS knowledge (experiences) on the effect of HIV/AIDS media exposure on HIV/AIDS safe practice. The study concluded that media exposure is a necessary, but not enough on its own precursor for HIV/AIDS safe practice. The drive to use easily accessible and affordable social media to address educational objectives seems to be a viable option in developing countries (Kowsari & Garousi, 2018).

A literature review was conducted by Kowsari and Garousi (2018) to examine mental used in over 100 free and easily accessible internet computer games played by all age a groups as hobby. The study concluded that free, simple, and low volume games promote mental and feeling related skills and they need to be taken more seriously than a mere hobby. The use of entertainment media by Onuekwe (2015) in Nigeria to communicate desired social effects to the targeted audience in complying with polio vaccination requirements brought about positive changes in behaviour and attitudes towards complying with the vaccination requirements (Hamid & Tamam, 2018). This suggests that general social media strategies to education are received with a positive response that leads to desired educational outcomes. Knobloch-Westernick's (2015) case study was on the application of media entertainment theory for the Spring session in a university in the USA, and explored speculation, listening to, and watching various entertainment fare. This was intended to find out about mood management and social-psychological effects. The study showed that various narrative discussions revolved around a certain goal through entertainment persuasion techniques. It

concluded that diverse audiences, including students with different disabilities, could be strongly involved with messages delivered in various sessions using a variety of entertainment genres such as comedy, fiction, etc., and less entertainment genres such as news, politics, etc.

General social issues that involve mood management and social-psychological effects such as xenophobic violence can be narrated through a strategy of entertainment-education messages through less entertainment genres (Dauda et al., 2018). Dauda et al. (2018) conducted a systematic literature review using secondary data sources to explore the xenophobic violence in South Africa with a special focus on Nigerians and concluded that any xenophobic violence could lead to breaking of ties between the two countries and affect other African countries, which could hinder progress on the African continent. A study in the education context conducted by Leonard et al. (2018) in a university in South Africa explored a shift in institutional discourse on blended teaching and learning practices, focusing on an instructional design team and academic staff using the learning management system (LMS) over a period of eight years. The study concluded that it was evident that there was a mind-set change in the institution community through voluntary human agency from resistance to blended learning approaches. The study concluded that there is the presence of immersion in blended learning approaches (Leonard et al., 2018). This suggests that general social contexts can vary in different situations which effects diverse outcomes that may enhance or hinder progress. However, entertainment education strategy can mitigate against resistant and anti-social messages or thinking through its strategy of pro-social messages.

The use of social media to change resistance and negative attitudes towards positive responses shows that entertainment media strategies are effective to communicate transformative behaviour and thinking to a diverse and large audience (Hamid & Tamam, 2018); Onuekwue; 2015). Knobloch-Westerwick (2015) and Kowsari and Garousi (2018) showed the use of different games and genres promotes inclusivity and a variety of options through entertainment-education messages. This results in transforming entertainment into teaching and learning with a specific focus on goals and objectives set for a desirable outcome. The persuasive effects of Entertainment-Education Messages in Moyer-Gusé (2008) can be applied in Dauda et al. (2018) in promoting healthy relations among different social groups in developing countries and beyond. The same is applied in Leonard et al. 's (2018) case study of changing the mind-set of the Community of Practice within an institution from resistance to change through immersion in the change to acceptance.

Fong et al. (2019) claim that Facebook is for social events like invitations, Instagram is used to share pictures with friends, YouTube is for streaming content, Snapchat is a fun platform and Twitter is used to see what celebrities are doing. The thinking is that the use of entertainment-education messages varies and is flexible for a variety of contexts; it can be used effectively as an e-learning strategy to address intended educational teaching and learning goals and objectives. The social media influencer effect (someone with a large media following) is more powerful for persuasion as it is perceived to be credible among users (Fong et al., 2019). In addressing the teaching and learning goals and objectives, a continuation of experiences is carried over to the choice of media and the application of teaching and learning strategies is transferred in an integrative extension to new e-learning experiences.

2.3.2 Lecturers' e-learning connection experiences

Vate-U-Lan et al. (2016) claim that the convergence of the physical and the digital world induces a new dimension of learning in a phygital form bringing together tangible objects and the digital learning experiences. This view is supported in Logan and Tandoc (2018), who discussed digital-based-intelligent-based thinking with human reasoning to promote digital-human driven future-oriented interaction as a way to imagine future events. Lee et al. (2018) concurs that the process of self-organisation involves digital connection. The physical world and digital world optimisation of artificial intelligence lead to transformation of estimation from the digital world to the physical world. This suggests that continuous integration of teaching and learning using a traditional face-to-face classroom approach and digital virtual approach are a continuous process of teaching and learning experiences that take place side-by-side or at the same time or a different time. The thinking is that convergence of the physical and the digital space where intelligent-based thinking uses human reasoning to transform optimised estimation towards the future is a personal continuous process of the past, present and the possible perceived future experiences Lee, et al., 2018).

Enhancing of self-esteem by addressing the aesthetic and cognitive needs in promoting self-expression and status brings about self-actualisation and the actualisation of others through self-organisation (Lee et al., 2018). Individual satisfaction with safety, physiological, social, and self-actualisation needs coincide with the First, Second, Third and Fourth Industrial Revolutions respectively (Lee et al., 2018). This view is supported by Xu et al. (2018) who claim that the Fourth Industrial Revolutions brings about a shift in power, wealth, and knowledge (experiences) through rapid technological speed that challenges individuals. It challenges individuals with opportunities for

new skills in innovation (Lee et al., 2018). In support of this view Penprase (2018) claims that the Fourth Industrial Revolution is familiar with exponential technology through an exponential increase in computer power and speed with decreasing cost of storage. This suggests that e-learning strategies using phygital forms of learning connects the chronological teaching and learning experiences to activities in a continuous accumulation of integration of teaching and learning. The implication is that continuity and connection become a process of ongoing experiences of learning as e-learning affirms the existing personal standing by enhancing personal critical experiences of learning for new meanings.

A literature review in Vate-U-Lan et al. (2016) exploring the design of phygital learning for the 21st century learning suggests that a traditional classroom can be renovated to be a phygital learning environment. The study found that phygital learning concepts emphasise the learning process and interaction as a residual benefit among lecturers, students, technologies, and instruments. In support of this view, Griffiths et al. (2019) conducted a case study at a university in Hong Kong by pilot deployment of Bluetooth beacons to enhance physical learning space. The focus of the study is on attendance monitoring and dissemination of teaching material. Further, the study found that Bluetooth beacons involve education entertainment, professional development, and resource management. The study found that the application with its smart building and smart campus provides for support in monitoring large classes through an occupancy detection system, and saves energy by supplying heating and ventilation where it is needed most. The study also found that the application detects flow of movements around the campus through the Campus M mobile application to guide users. The study further found that the Combination of Augmented Reality (AR) systems, content, and the beacon technology allow identified objects of interests to be visualised. Such visualisation is in pictures, and videos, and presented in texts, audio, and other multimedia through smart phones (Griffiths et al., 2019).

Schreibman et al. (2017) observed that there was an absence of AR apps designed for classroom teaching and learning of History in Ireland, except mobile-based student-centred AR for outdoor historic sites. Their case study conducted for two weeks at a university in Ireland aimed to enhance History teaching and learning through phygital augmentations. They argue that the use of phygital learning through several AR apps is common in subjects like Geometry, Astronomy, Chemistry, and other human body-related subjects, but limited for Humanities subjects (Schreibman et al., 2017). The focus of the study is on second level History teachers tasked to gather logical information about

schools in order to develop and design interactions that yield best experiences from phygital learning. The study concluded that a wide variety of technology in Irish schools requires skills that integrate the use of museum material in all different classrooms. This could support teachers' experiences of AR (Schreibman et al., 2017). The study employed a phygital approach by enabling a task-based digital and AR exploration triggered by physical objects and primary sources including photographs, witness statements, three-dimensional (3D) printed buildings, and State records about the Battle of Mount Bridge in 1916.

A need for the use of phygital learning in humanities and social sciences subjects reported in Costa et al. (2018) supports the view of the interrelated connection of continuous experiences of teaching and learning across subjects. Costa et al. (2018) conducted an ethnographic and action research study of second-year students enrolled in degrees across the humanities and social sciences in a university in the UK. The study intended to explore learning experiences of higher education students. The focus of the study is on 87 second-year students and 64 of them participated in the survey for period of three years. The study shows that phygital learning enables digital learning experiences across the humanities and social sciences subjects. The study concluded that strong augmentation that links the university to real-life practices enhances integration of digital practices into the curriculum and digital participation practices. The study concluded that in the absence of strong augmentation, participants do not regard digital participation as part of the learning process, but as merely a form of presence. The study also concluded that students who perceive digital participation as a mere presence feel disempowered in the process of digital learning based on different levels of participation as some are more comfortable and competent with technology than others.

The role of the personal in self-actualisation by Lee et al. (2018) and the challenges posed by technology on individuals (Xu et al., 2018) puts more focus on personal needs. This confirms Pinar 's (2004) autobiographical learning experiences where the present personal learning experiences connect to the past and reflect on the future anticipated learning experiences. However, Le Grange (2019) argues that teaching and learning need to develop beyond individual fixity of learning experiences—it needs to be a continuous in-becoming driven by the power of potential connection of expression and desire to sustain life. This view supports the connection of the personal to the social learning experiences in the process of self-actualisation and the actualisation of others through self-organisation (Lee et al., 2018). Schreibman et al (2017), Costa et al. (2018) and Griffiths et al. (2019) connect e-learning experiences to disciplinary learning experiences where the physical and the digital

space merge together. The merger connects primary sources to secondary sources (Schreibman et al., 2017; Costa et al., 2018); Griffiths et al., 2019). This suggests that disciplines in the humanities connect to disciplines in social sciences when it comes to personal and social learning experiences from the scientific and a general point of view. This leads to new discoveries through personal critical understanding. The reflection is that the disciplinary traditional teaching and learning experiences connect to the digital teaching and learning experiences. This creates new critical personal engagement that transforms experiences to new meanings and new strategies of engagement.

The experiences residually continue to collapse the wall between the technological aesthetic and the disciplinary cognitive learning experiences merging them into one as both enhance e-learning connection experiences. However, personal reflection is related to external contextual factors that regulate conditions and means of engagement (Arenas et al., 2019). Arenas et al. (2019) conducted two piloted workshops to find out about the sustainability of policy making regarding copy rights, open accreditation and datafication regarding the use of technology for education. The study involved participants from different countries, including senior managers, government advisors, educators, advocates of open education, policy makers and civil society leaders. The findings of the study show that technological development is limited by the commodification of data, and regulation is outpaced by the rapid pace of technological development. The study also found that social and ethical issues are impacted upon by technological development. The study concluded that institutional policy needs to be developed to meet the challenges that come with technological development for copy rights, open accreditation and datafication.

The continuous connection between personal learning experiences and the conditions that support e-learning experiences is evident in Chikerema et al.'s (2016) case study to find out about the ethical responsibility of institutions using e-learning technology for teaching and learning. In this study Chikerema et al. (2016) studied eight lecturers in a university in Botswana to find out about their application of ethical responsibility in their use of e-learning strategies for teaching and learning. The study found that implementing e-learning strategies that connect diverse students can be complex and challenging. It concluded that it is complicated where individual personal and ethical obligations are to be observed by lecturers in preparation of learning material (Chikerema et al. 2016). The study concluded that there were individual awareness and efforts made in the preparation of e-learning material to consider ethical issues of individual students. Barber and King (2016) support the view that the choice of learning strategies enhances self-awareness.

Barber and King (2016) conducted an online case study exploring students' self-responsibility in using digital learning. The study focused on the lecturers' adoption of digital learning and the students' responsibility in the process of learning. The study concluded that reciprocal and symbiotic roles in the process of teaching and learning increase student engagement, and that enables lecturers to learn about problem solving together with their students. The study concluded that this helps to enhance self-responsibility through quality digital e-learning skills. This suggests that personal preferences in the use of e-learning resources relates to institutional obligations to offer services which were supportive to personal experiences. However, such offerings and use of resources are regulated to benefit individuals and institutions offering those services. This suggests that division between the digital worlds of learning experiences and the physical world of learning experiences is blurred. This leads to transformation of learning into one complementary e-learning experience.

Simple use of technology may fail to engage all students personally and meaningfully, and e-learning experiences are diverse and complicated. Kay and Pasarica (2019) argue that student engagement across the education spectrum decreases within 5 to 15 years in all generations. Fong et al.'s (2019) online survey at higher education institution in the USA reveal Generation Z's choice of brands and technology ownership, and that 89% of them own smart phones, 83% own broadband internet and 80% own laptops. The study concludes that 53% of choice of brands and loyalty to them consider brands that understand them as individuals. This view confirms the claim by Moravcikova and Klietiko (2017) that the use of smart phones supports phygital learning by pointing a smart phone camera to scan a book title for library search and research on a variety of subjects. Felix and Lerner (2017) conducted a case study in different higher education institutions in the USA to understand student service innovation from student learning experiences. The study piloted 72 projects with 56 real users in a technology rich student learning and computing space, and found that 56% of students spend less time on emails and that the user's point of view determines priorities for innovation. This suggests that personal preferences need to be considered in using e-learning resources to teach and learn addressing student interests, abilities, and relevance to teaching and learning experiences.

The thinking is that meaningful learning experiences in higher education institutions are a personal critical academic activity. Such an activity continuously integrates different levels of engagement with learning. It is through various technological tools and resources that the continuous critical engagement process enhances meaningful integration of e-learning experiences. However, this

interaction takes place in an institution of learning which is a personal and a social space at the same time. This implies that personal e-learning experiences are continuously connected to the existing contextual factors which are social. Durak et al. (2016) show that personal e-learning experiences are critical in the use and choice of e-learning resources. Durak et al. (2016) conducted a case study in a university in Turkey to find out about the redesigning of a lesson unit using quick response (QR) codes. The study focused on 15 students from the Education, Science and Literature and Engineering Faculties with smart phones and access to the internet. The study concluded that students were aware of QR codes and that their features, including visual elements, their attractiveness and direct routing, have a positive impact on education. They had no difficulty in using QR codes, and they liked the design. It further concluded that content should include both superficial and in-depth information in a continuum of use traditional learning material with technology enhanced learning.

A continuum of use of e-learning connection is supported in Sadeck's (2016) case study at a university in South Africa to explore individual teachers' use of e-learning practices. The study focused on teachers using technology in their classrooms. The study concluded that teachers use different points of the continuum of practices simultaneously, in such a way that their continuum is determined by indicators or scales with a range of taxonomies, levels, and stages. Lecturers' ability to use indicators is in support of personal connection to e-learning, as perceived by students in Mashau's (2017) case study at a university in South Africa. Mashau's (2017) conducted a case study of the perception and experiences of online learning of 68 students. The study intended to explore students' perceptions and experiences of learning technologies with a specific focus on software. The conclusion showed a correlation between the students' use of technology and their perceptions based on its role into contributing to their intrinsic motivation for success as opposed to synchronised learning. This suggests that e-learning experiences are a continuation from the traditional face-to-face classroom learning experiences.

The idea is that e-learning experiences build on other learning experiences and this promotes teaching and learning experiences personally, in the process instilling motivation for success. This further reflects that those personal experiences are socially generated, as Generation Z's preferences are influenced by individuals that form the group of Generation Z within a space of teaching and learning services. The use of technology contributes to intrinsic motivation (Mashau, 2017); however, personal learning experiences are a complex and diverse phenomenon and cannot be the same for all – that requires comparing technological resources (Kay & Pasarica, 2019). Kay and Pasarica (2019)

conducted a comparative study on the use of technology by preclinical the clinical students in synchronised and asynchronised learning at a university in Canada. The focus of study was on the designing of learning objectives and tasks regarding student level of engagement using traditional didactic or technology enhanced approaches. The results revealed that there was an increase in both the preclinical nonmandatory session online student engagement and the clinical mandatory session face-to-face student engagement with the application of the Zoom platform to host virtual synchronous sessions.

The quality of engagements and attendance improved with the introduction of Zoom. The study also showed that there was an increase in the number of students engaging in voluntary sessions both as individuals and groups compared to before the introduction of the Zoom platform. The study concluded that the majority of students accessed the clinical synchronous mandatory sessions from their homes. The study also showed this happened when the students were given an option to do so compared to the synchronous mandatory face-to-face classroom sessions. Dietz-Uhler and Hurn (2013) conducted a case study in eight universities in the USA to find out about the best ways of supporting individual students using analytics to determine suitable e-learning strategies. The study used online data from eight US universities to plan suitable e-learning for individual faculty students. It concluded that there is an increase in the use of analytics by universities in their attempt to improve suitable teaching and learning strategies connecting both traditional and technology enhanced teaching and learning for individual students.

Connection of institutional organisation to personal learning in Australia and internationally is reported to have been in existence in universities in the USA, UK and Australia for some decades, and the use of technology increased the level of sophistication (Barrat et al., 2017). Ewan (2016). concurs with this view in the South Africa White Paper on e-learning categorises, which categorises e-learning on a continuum through various categories of digital and internet. This shows a drive to full online learning (Ewan, 2016). Internationally studies show that more focus is placed on personalised teaching and learning. In a case study in two Morocco universities by Bendahmane et al. (2016) the internet was used to assess students' individualisation of pedagogical paths. The study was conducted through traces analysis (Bendahmane et al., 2016). The study collected traces of learning habits from the learning environment, analysed them, classified them through the internet and adapted individuals' learning paths according to proposed learning indicators. The study adjusted learning paths regulation by changing the order of learning activities according to the student's needs.

The study concluded that the approach provides for flexible, reusable and autonomous path of learning adapted to address student's individual needs.

Personal focus through e-learning connection experiences used to connect with students in remote areas was assessed in a case study by Harayanan et al. (2016) at a higher education institution in India. The study intended to address lack of connectedness between multiple remote students and lecturers' live teaching sessions. The study used systems that enabled real-time gestures, face detection and mapping coordinates, tracking movements during teaching, and learning sessions. The study concluded that 91% of participating lecturers reported that they can better tailor their students' needs by enhanced immersion during interaction. This suggests that higher education institutions at international level technologically connect on a personalised level. This promotes individual learning through extrinsic social motivation to stimulate intrinsic personal motivation in the continuity of e-learning experiences. The idea is that e-learning promotes new learning experiences where traditional and digital learning fuse together in blended learning. This collapses the divide between the synchronous and asynchronous classroom and online learning experiences as they converge. The notion is that the creation of new personal e-learning experiences is an ongoing fusion of traditional-digital learning. This connects synchronous--asynchronous-learning and simultaneously enhances convergence of local and international learning experiences that provide new continuous personal learning experiences.

However, enhanced immersion for individual students based on personal preferences and interests in the use of e-learning resources could be challenging (Basko & Hartman, 2017). Basko and Hartman (2017) observed that the use of technology in the process of learning was a challenge at a university in the USA where they conducted a case study to explore an efficient way to combine technological tools. The focus of study was on 58 undergraduate courses with 1302 students. The study employed Remind and video conferencing to encourage student engagement and faculty communication. Remind was used to provide information to students outside Loudcloud. It also used video conferencing to provide students with important information about courses, assignments, and face-to-face meetings with lecturers and other students. The findings of the study showed that there was a 34% increase in attendance from 18% in 38 undergraduate courses, with 849 enrolled students attending the Zoom conference. It also showed that students who participated in the Remind program were coupled with a 92% pass rate. This links of students' learning participation with success signals effective learning (Khoza, 2016).

Meaningful learning is critical for personal engagement, and Khoza (2016) argues that technical and practical personal reflection through e-learning must involve learning signals. Khoza (2016) conducted a case study of two Mathematics postgraduate students at a university in South Africa to find out about their usage of Moodle for teaching and learning. The study concluded that students' technical and practical levels of Moodle use ignores other important aspects such as teaching learning signals that enhance critical reflection about the usage of Moodle. Critical reflection involves different aspects of teaching and learning. The best tools that are most helpful for learning as reflected by students in their emails are those meant for professional use (Barber & King, 2016); Chikerema et al., 2016); Fong et al., 2019). Khoza (2016) suggests that self-actualisation and self-esteem through e-learning connection is not a means on its own, but a means to engage immensely critically and meaningfully with relevant issues of concern at the best and highest possible personal capacity. This suggests that learning signals may come from personal, professional, and social needs as all inform e-learning experiences. The thinking is that AR e-learning experiences reflect all learning experiences simultaneously as they are interrelated and embedded in one another.

Sayem et al. (2017) found that it took a combination of e-learning resources to engage students with learning. These authors conducted a case study at a university in Australia on studying the effectiveness of using Zoom technology to offer evening tutorial sessions to Engineering students in term one of the 2016 and 2017 academic years. The study used Moodle to measure 45 student engagements with the course in 2016, and the same was repeated for 34 students enrolled in 2017. The study focus was on the use of Moodle to engage with learning through the question-and-answer forum, and Zoom technology was used to observe attendance at virtual tutorials. The findings of the study showed that the introduction of Zoom virtual tutorials increased student satisfaction and reduced the lecturers' workload 25%. The study concluded that online Zoom tutorial sessions contributed to a significant improvement in the number of questions and answers posted on Moodle without reducing the engagement levels of students. It also concluded that there was also no need to alter the grade distribution online engagements. The study further concluded that there was an increase in students' virtual session interactions both as individuals and groups (Sayem et al., 2017).

Psychological factors are perceived to be critical in determining student learning and development of future researchers (Maul et al., 2018). Maul et al. (2018) conducted a case study of four dissertation coaches and four doctoral students from a survey of over 300 doctoral faculty and 1800 students in a

higher education institution in the USA. The study intended to find out the impact of using Zoom for coaching doctoral students. The findings of the study show that using video technology increased student retention, self-efficacy, quality scholarly writing, efficiency, and effectiveness of the academic coaching. It further concluded that the relationship between coaches and students improved and motivated students to remain in the doctoral programme (Maul et al., 2018). Fong et al. (2019) claim that most of the younger generation strongly believe that an education, qualification specifically a four-year degree, defines them. The study further shows that 74% of students prefer face-to-face communication, 64% learn best in class discussion, 80% learn best with friends, 60% learn by working through problem concepts and 51% learn by doing rather than being passive (Fong et al., 2019). This suggests that different student needs and their interests, need more than a mere use of technology, as there could be a variety of factors that need to be considered to promote student engagement with learning.

The implication is that e-learning connection connects the physical real world and the artificial virtual world into one personal world of e-learning experiences. These personal learning experiences are a continuation of e-learning connection that connects the professional, social, and personal learning experiences through the augmentation of e-learning resources. The connection is through critical personal engagement. This engagement is enhanced by the professional and the social meaning of learning that reflects the past in the present learning experiences which projects anticipated future learning experiences in continuation.

2.4 Summary of the chapter

This chapter began with an introduction outlining its approach to literature analyses. It discusses conceptualisation, different structures and types of literature analyses. A chart flow indicates how the chapter unfolds. In this chapter consulted literature responds to the first research question by showing the types of e-learning resources used by lecturers for teaching and learning at universities such as Turnitin, webinar series, Winksite, Moodle, WhatsApp, Zoom technology etc. The chapter also responds to the second research question on how lecturers use e-learning resources for teaching and learning. The third and last research question on why lecturers use e-learning resources in the way they do is also addressed.

The conceptual grounding in Dewey's (1938) philosophical analysis of experience as an ongoing transaction between an individual, space and time is a springboard for this chapter's conceptual

exploration. In support of Dewey's (1938) conceptual analysis, Wolff-Michael, and Alfredo (2014) claim that learning experiences as science in education is found anywhere during transactions in human activity across space and time. This view is supported by Khoza (2019), with Teichler (2017) claiming that vertical and horizontal factors reflect the personal, professional and social aspects. In short, Dewey's original concept of experiences is extended from an individual transaction of learning to more inclusive transactions of individuals as a collective in learning which reflect the social dynamics of experiences. This signals that lecturers' experiences of e-learning resources reflect an ongoing integrated scientific transaction of learning experiences between specialisation (professional), generalisation extension (social), and connection (personal) experiences.

Kolb and Kolb's (2017) argument is that an individual educational philosophy, personal teaching style within certain educational settings is mandated by administrative and students' needs. This reflects disposition of lecturers' personal experiences through the social environmental exposure. These experiences of educational setting or teaching environment are referred to, as "where you are, who you are with and what resources are nearby" (Schilit et al., 1994, p. 1). Literature in this chapter shows that there is a need for more continuous changes, transition, and integration of lecturers' experiences between the use of ordinary learning resources and e-learning resources (Durak et al., 2016; Sadeck, 2016; Barrat et al., 2017).

Le Grange (2019) expands an individual learning experiences beyond individual fixity to in-becoming with desire to sustain life. This concept is framed along Vygotsky's (1986) concepts of experiences as an ongoing development towards the Zone of Proximal Development (Chaiklin, 2003; Prawat, 1999). The work of various prominent scholars such as Giamellaro (2017) Hohn (2013), Kolb and Kolb (2017), Wolff-Michael and Alfredo (2014) and Zhou and Brown (2015), were used to support the claim. The chapter discusses two critical experiences of higher education teaching and learning, namely the vertical experiences as formal and the horizontal experiences as informal experiences (Teichler, 2017). Lecturers' e-learning experiences form part of these two critical experiences of higher education with professional (specialisation), social (generalisation extension) and personal (connection) experiences (Khoza, 2019). Literature consulted reveal that the continuous link and integration of lectures' e-learning experiences with traditional learning experiences reflect a less explicit exposition. This is perceived to be in line with the advent and rapid speed of digitalisation of universities for the 21st century teaching and learning. The chapter suggests that digitalisation of

teaching and learning needs to connect all segments and phases that reflect the users' strength regarding exposure to electronic learning resources.

A discussion of lecturers' e-learning experiences in this chapter connects to the First, Second, Third and Fourth Industrial Revolutions (Penprase, 2018; Xu et al., 2018), each Industrial Revolution are beings triggered by its predecessor. They occur through innovations in the field of engineering, commerce, education, and society at large (Lee et al., 2018; Xu et al., 2018). These innovations from all of the Industrial Revolutions serve as ongoing and evolving experiences linked to lecturers' e-learning experiences. Lecturers e-learning experiences are traced back to the First Industrial Revolution. These e-learning experiences unfolded the introduction of new general education, and the new curriculum was introduced with diverse degree of options and a variety of elective courses (Penprase, 2018). Different courses needed new teaching strategies to master the content (O'Carroll et al., 2017), and these required practical and theoretical experiences (Hoadley, 2011; Crawford & Capps, 2018) to develop conceptual understanding and meaningful teaching and learning experiences. Literature in this chapter shows that more of the options and choices that reflect lecturers' e-learning experiences are determined by the external market and industrial contexts rather than the internal academic university context. This suggests a need to align e-learning experiences to the multi-layered factors that link the external and the internal contextual issues affecting teaching and learning experiences.

Disciplinary teaching and learning experiences in Accounting Bitzer & De Jager; 206). In Mathematics, (Treffert-Thomas, 2018) nd so on are critical for lecturers in disposition of their e-learning experiences. Scientifically proven understanding in disciplinary teaching and learning is supported by theoretical disposition in the application of teaching methods (Hoadley, 2011; Kolb & Kolb, 2017; O'Carroll, et al., 2017). Theoretical disposition of teaching and learning methods cut across various disciplines where interdisciplinary lecturers engage in in-depth scholarship programmes such as SoTL and ST (McKinney, 2007; Potter & Kustra, 2011). These scholarship programmes facilitate specialisation by focusing on improving systematic examination, teaching, and learning as well as dissemination of research work to relevant participants (Friberg, 2014).

Contextual external and internal factors reflect ongoing interaction that transact individual experiences through specialisation and requires partnership and cooperation among scholars in the form of scholarship (Lithgow et al., 2018; Potter & Kustra, 2011). Partnership and cooperation among

scholars from a diversity of cultures, values and worldwide views requires critical pedagogic flexibility (Hoadley, 2018; Prawat, 1999; Sjöström & Eilk, 2018). It is through critical pedagogic flexibility that the critical reflection process connects to an individual cognitive development with the connection of the general to the personal space (Xu et al., 2018). An extension of personal critical flexibility requires connection of demographic and psychographic features of an individual to the general (Swardt & Hoque, 2018). Such connection involves learning resources such as Turnitin, webinar series, Winksite, Moodle and WhatsApp (Khoza & Mpungose, 2017; Mpungose, 2019; Sebbowa & Muyinda, 2018; Wuttke, 2019). Literature consulted show that there is a lack of theoretical understanding of the use of e-learning resources to promote more critical e-learning experiences on an ongoing basis in terms of lecturers' experiences, with more revealed about learner experiences.

There are some challenges faced by lecturers in using e-learning resources for teaching and learning. The use of teaching and learning resources such as Turnitin, webinars Winksite, etc., suggest a move from traditional teaching and learning resources to contemporary e-learning resources, and that may interfere with meaningful learning (Khoza, 2015). e-learning resources require e-learning methods to enhance efficiency, and those methods come from the theoretical position of teachers (Bates, 2019). Studies such as those by Mpungose (2019), Naicker and Makgatho (2017), Ngubane-Mokiwa and Khoza (2016) applied TPACK to address a theoretical gap of e-learning in higher education. The theoretical position in the literature consulted ignores the ongoing integrated teaching and learning transaction between the traditional theoretical and the e-learning theoretical disposition which are interrelated and integrated into each other.

Studies, concur on the complexity and challenges of applying theoretical frameworks to e-learning strategies. In integrating theory to e-learning, TPACK is used to balance content, theory and technology for successful teaching and learning (Mishra & Mishra, 2011; Wright & Abd-El-Khalik, 2018). One of the complications discussed is the lecturers' varying ability to use technology effectively for teaching and learning. Studies argue that some of the challenges emanate from the generational divide in the use of technology for teaching and learning. Prensky (2001a, 20001b) argue for the existence of 'Digital Natives while Bennet and Maton (2010) argue that there is no empirical evidence suggesting the existence of such a generation. Some studies provide evidence through surveys conducted (Dolot, 2018; Fong et al., 2019; Giunta, 2017; Linnes & Metcalf, 2017; Mohr & Mohr, 2017; Reis, 2018). The argument about the generational divide in the adoption and usage of e-

learning resources neglects the connection to ongoing teaching and learning experiences where generations overlap on an ongoing basis. Such an overlap imparts teaching and learning experiences from generation to generation.

While a certain generation uses professionalisation as a strength into the process of teaching and learning another generation may use the general extension experiences or connection experiences as a strength. The general extension experiences use entertainment social media for teaching and learning. Entertainment social media is perceived to be effective among the younger generation (Hamid & Tamam, 2018; Knobloch-Westerwick, 2015; Onuekwue, 2015), while some studies argue that entertainment social media is used by the older generation as well, the difference between the use by the younger generation and the older generation being in the purposes for its use (Bothun & Vollmer, 2017; Linnes & Metcalf, 2017). These studies claim that entertainment features enhance persuasive effects in the delivery or attainment of intended goals or objectives (Dauda et al., 2018; Knobloch-Westerwick, 2015; Kowsari & Garousi, 2018; Leonard et al., 2018).

Bothun and Vollmer (2017) claim that the use of technology or digital media for commercial purposes is intergenerational. More of the older generation than the younger generation use laptops, while more of the younger than older generation use smartphones (Linnes & Metcalf, 2017). The younger generation uses email for professional interaction, YouTube for streaming content, Facebook and Instagram for social interaction, and Snapchat and Twitter for entertainment (Fong et al., 2019). More of the older generation than the younger generation use ebooks for study purposes (Linnes & Metcalf, 2017). Literature consulted shows that the younger generation needs support from older generation regarding the use of electronic resources (Giunta, 2017; Reis, 2018). The type of e-learning resources and familiarity with them determines the way they are used for effective teaching and learning.

The use of technology for teaching and learning brings the physical world and the virtual world into one integrated experience (Vate-U-Lan et al., 2016). The convergence of the physical and the digital world induces a new dimension of learning. In a phygital experience the digital-based intelligence and human reasoning converge for future-oriented e-learning experiences (Logan & Tandoc, 2018). These new e-learning experiences promote personal learning experiences that enhance self-actualisation and the actualisation of others (Lee et al., 2018). The phygital learning space promotes personal e-learning experiences by augmenting the real physical and the virtual spaces of e-learning with personal-social learning experiences (Griffiths et al., 2019).

Phygital learning experiences connect personal learning experiences of different disciplines (Schreibman et al., 2017; Costa et al., 2018). The personal and the disciplinary subject learning experiences are connected to the situational socially shared learning experiences. These experiences connect the past and future anticipated learning experiences in the present technologically augmented teaching and learning experiences (Le Grange, 2019; Pinar, 2004; Vate-U-Lan et al., 2016). The augmentation enables vividly clear possibilities of all learning experiences from specialisation (professional) and general extension (social) to connection (personal) learning experiences. These learning experiences continue through e-learning experiences. However, when augmentation is weak, learning signals suffer as personal engagement with meaningful learning gets lost in the process of engagement (Costa et al., 2018; Khoza, 2016).

Engagement using e-learning resources needs to consider different levels of participants' exposure to technology, as some with less exposure find it disengaging and disempowering. It is through AR e-learning experiences that a zone of proximal development (Chaiklin, 2003) could be considered for those with low levels of exposure to technology. The levels of exposure of students to e-learning resources reflects their social background which signals their status as individuals in society. Individuals within a society connect the older and younger generations and that connection is characterised by an ongoing integration of experiences from one generation to the other (Dolot, 2018; Giuta, 2017). Each generation contributes its distinctive characteristics from previously used technological resources and those traits are passed on from generation to generation.

Intergenerational use of technology is influenced by a social scale, this motivates personal preferences which in turn contribute to intrinsic motivation in the use of technology (Mashau, 2017; Kay & Pasarica, 2019). Technological evolution between generations, personal and social, educational, and commercial use necessitates comparison and choice for use (Dietz-Uhler & Hurn, 2013). The AR technology brings together all these experiences, personal and institutional, international, and local (Barrat et al., 2017; Bendahmane et al., 2016; Ewan, 2016). The use of e-learning resources blurs the segmentation of teaching and learning experiences by bringing together all relevant experiences to be experienced at the time of learning.

The use of Zoom in integrating the physical and virtual learning experiences is a good example of e-learning experiences bringing together segments of teaching and learning in one setting. Kay and

Pasarica (2019); Maul et al. (2018) and Sayem et al. (2017) used Zoom platforms to augment the physical and the virtual spaces of teaching and learning. These augmentations of reality reflect the ongoing development and improvement of teaching and learning of different subjects. Technological improvement contributes to methods of teaching and learning supporting quality teaching resources in different subjects. The Zoom platform takes blended learning to another level where face-to-face teaching and learning can take place in virtual space as opposed to virtual teaching and learning taking place in a classroom space only. It further allows synchronous teaching and learning to be experienced virtually but in the same way as face-to-face physical teaching and learning experiences. This collapses the distance and immediate space and time of teaching and learning experiences. Synchronous and asynchronous teaching and learning experiences are made to reflect the continuous and simultaneous overlapping chronological teaching and learning experiences.

Augmentation of reality in e-learning experiences blurs learning experience segmentation where blending of methods cut across disciplinary methods fostering interdisciplinary understanding. Personal learning experiences merge with the social learning experiences to sharpen critical professional engagement at an individual level as well as institutional level through scholarship programmes. The process of engaging e-learning resources while enhancing personal self-satisfaction also enhances self-esteem, self-actualisation, and actualisation of others. It is through the actualisation of others that self-actualisation engages personal satisfaction since the self reflects the social status of an individual. Self-satisfaction is measured against personal reflection within social settings.

Moreover, the choice of subject and interest in pursuing learning in the personal chosen discipline reflects social thinking about it. The institutional approval of disciplinary choices and accreditation of those choices are socially related. The same goes for prioritising e-learning resources: their value is institutionally decided based upon which social needs and relevance are reflected for them to be chosen. Different modes of interaction among technology users can be influenced by either the specialisation, generalisation extension or connection experiences. Specialisation enhances the scientific research functioning, while generalisation enhances the transfer of scientific experiences to social factors for meaningful understanding. The critical element of the personal connection to the former and the latter yields personal satisfaction.

Institutional approved accreditation connects the specialisation and generalisation experiences to personal connection experiences. Literature consulted reflects more emphasis on e-learning resources

in the Mathematics Technology, Science and Engineering (STEM) disciplines than in Arts and Humanities disciplines (Schreibman et al., 2017). However, Costa et al.,’s (2018) study shows that there is a need for more focus in Humanities and social sciences subjects on the use of e-learning. Different e-learning experiences and levels of learning (Basko & Hartman, 2017; Maul et al., 2018) need to be considered as each level’s disposition of experiences is different. Each of these experiences can be carried over as a residual benefit to the disposition of teaching and learning experiences and preferences by adapting to strengthen the specialisation in e-learning experiences (Vate-U-Lam et al., 2018).

Levels of e-learning experiences overlap in continuation from one to the other and build towards the future. In their building towards the future, they bring with them the past learning experiences using the present experiences linking them to the estimation of an anticipation of the future learning experiences. The past, present and future may be connected simultaneously by the AR of e-learning, reflecting overlapping continuation. This connection augments the specialisation, generalisation extension with personal connection experiences to critically engage with new meanings of e-learning experiences. The critical engagement enhances the level of competency with e-learning resources.

For the level of competency in the use of e-learning resources to enhance meaningful engagement, it needs to go beyond the creative aesthetic world of entertainment to the physical world of real life. The contextual factors of the physical and the virtual world are conceptualised reflecting physical and digital interaction. Conceptualisation of the teaching and learning process is continuously refined to produce critical personal experiences using a variety of technologies with a variety of qualities that get the most out of them. Continuous refining of quality is triggered by the space and time of learning experiences, that determine the level of meaningfulness of learning experiences.

e-Learning engagement and participation can empower students with strong augmentation or disempower students with weak augmentation meaning that a balance needs to be struck between these two possibilities (Costa et al., 2018; Khoza, 2016). Engagement with e-learning experiences need to promote new learning experiences of connecting the individual to the collective with the desire to sustain life (Le Grange, 2019). In the process of an individual sustaining life, the value of self-actualisation and the actualisation of others continuously integrates in AR phygital e-learning experiences. Specialisation e-learning experiences are central to meaningful learning since meaningfulness is based on the ability to engage and immerse in the learning process in a discipline

or subject. The ability to engage immensely with such learning is enhanced by technology in the provision of quality learning space. Quality learning space is enhanced by strong augmentation in the use of e-learning resources, connecting all segments of quality teaching and learning. This needs to connect specialisation, generalised extension and personal critical connection to the former and the latter to produce new experiences.

The following chapter discusses theoretical frameworks gleaned from the literature analysis in Chapter Two, then it introduces theoretical concepts and explains their application in research. The chapter introspects on theoretical explication by reflecting on e-learning theories from literature analysis. Reflection covers on technological pedagogical and content knowledge (TPACK), the technological accepted model (TAM), education-entertainment messages (EEM) and the unified theory of acceptance and use of technology (UTAUT) as theories applied in the literature analysis. Lastly, the chapter formulates and explicates the e-learning nexus model (e-LNM) as a new theoretical model emerging from the literature analysis in Chapter Two of this study.

CHAPTER THREE

EXPLICATION OF THEORETICAL GROUNDING OF THE STUDY

3.1 Introduction

Theory and practice are interrelated concepts where intention and doing can be intertwined with each other. Theory can mean different things, such as rebuttal of practice; it can also follow practice, and be seen in the service of practice as the essence of practice itself (Van Manen, 2007). In scholarly work, theory can be sets of related concepts; a frame is an abstract idea around which a study provides a space in which it is situated (Casanave & Li, 2015). The theoretical framework is a blueprint, or a guide applied by researchers to make research findings more meaningful to the constructs of the study in the field of research (Adom et al., 2018). Lederman and Lederman (2015) claim that the theoretical framework is an overall approach to the substance of the research problem and research questions expounded in Chapter One and Chapter Two of the research. Briefly this suggests that concepts that inform the study contribute to reflective thinking that serves as a signpost in addressing the rationale through answering questions of critical significance to the study.

This study explores lecturers' experiences of e-learning resources based on teaching and learning at higher education institutions. e-Learning is about the use of technology for teaching and learning, teaching, and learning is an activity that involves the transaction of disciplinary experiences between a lecturer and a student. The process of transacting disciplinary experiences applies methods that reflect disciplinary principles of engagement. These methods are informed by scientifically proven and shared approaches across the field of education in the form of theories. Starkey (2020) argues that massive innovation in technology comes with a surge in the use of technology for teaching and learning, leading to intuitive use of digital pedagogical approaches from lecturers. This view corroborates the e-learning theories mentioned in Chapter Two: technological pedagogical and content knowledge (TPACK), the technology accepted model (TAM) and education-entertainment messages (EEM), theories that form part of lecturers' experiences of e-learning resources.

Shulman (1986) asserts that teacher disciplinary knowledge constitutes ideas about theories reflected in their organisational framework as evidence that supports their approaches to practice. Starkey (2020) supports this view, arguing that lecturers rationalise their digital teaching and research in the process of teaching and learning through technology. Sadeghi (2019) supports the former and the latter claiming that innovation in technology drives the evolution of teaching and learning methods.

This suggests that lecturers e-learning experiences integrates existing teaching and learning theories continuously across the disciplinary subject-matter. The speed of innovation in technology may lead to haphazard unplanned use of e-learning resources without considering the theoretical implications for teaching and learning. Stevens-Fullbrook (n.d.) argues that e-Learning benefits involve promotion, interaction and engagements, using mobile and classroom apps, connection, and creativity. Updates form part of curriculum differentiation in the process where students become more engaged and taking ownership of their learning is important for interaction in e-learning (Stevens-Fullbrook, n.d.).

Koehler and Mishra (2009) assert that students construct knowledge by acquiring skills to develop habits of mind and a positive disposition towards learning from deep pedagogical practices with TPACK. They further argue that cognitive, social, and developmental theories promote students understanding in the classroom. Moyer-Gusé (2008) claims that EEM draws from social cognitive theory in its disposition of desired attitudes and behaviour. Marangunić (2019) postulates that with TAM, attitudes towards the use of technology are critical for successful application and implementation of teaching and learning. Social cognitive theory applies communication strategies in a direct pathway to promote changes, and a social pathway to mediate influences that connect participants to social networks by providing incentives for desired change (Bandura, 2001). This author further argues that interpersonal networks require socially situated people. Bandura (2001) argues that while communication media teach new forms of behaviour, they also create motivators for action, but that needs individualised guidance to persuade the audience to behave in a desired way. This understanding leads us to next discussion of lecturer's e-learning experiences as reflection in Chapter Two of this study. For the purposes of this study only TPACK, TAM and the unified theory of acceptance and use technology (UTAUT) are discussed as they reflect more teaching and learning experiences using technology.

EEM is discussed as part of UTAUT since they both incorporate social cognitive theory in their application. Social cognitive theory is often used for narrative persuasion in entertainment education and that includes the extended elaboration likelihood model (E-ELM) (Moyer-Gusé, 2008; Slater & Rouner, 2002). The purpose of E-ELM is to discourage counter-argument from a viewer. EEM influences change in social behaviour and thinking about controversial social issues. In UTAUT planned and combined behaviour is consolidated with eight reviewed models.

3.2 Theoretical exposition of this study

Lecturers' experiences of e-learning resources ought to be evolving with new thinking and concepts that goes with continuous innovation of technology. Concepts that might seem to have been established in the past may find themselves challenged and tested by new findings, based on thinking that theories are always open to refutation (Glaserfeld, 1986). This study explores lecturers' experiences of e-learning resources at universities, and these experiences are covered in Chapter Two of this study. It is from Chapter Two of the study where related consulted literature reflects on its theoretical conceptual underpinnings. Reflecting on those experiences from the related literature the study is provided with conceptual thinking on lecturers' experiences of e-learning resources. Theoretical reflection from the literature suggests that there are three principles of lecturers' e-learning experiences: e-generalisation extension (social), e-specialisation (discipline or subject and methods); and e-connection (personal) experiences. It shows that disciplinary or content teaching and learning experiences reflect social life experiences of individuals. In turn individuals aspire to make personal contributions to personal and social space by creating new experiences. Some e-learning theories are recommended in different research studies, and this study reflects on those mentioned in chapter two, such as TPACK, TAM and UTAUT.

3.2.1 Technological Pedagogical Content Knowledge (TPACK)

Technological pedagogical content knowledge is an emerging understanding resulting from interactions between content, pedagogy, and technological knowledge (Koehler & Mishra, 2009). This kind of an understanding is reflected upon in the work of Ngubane-Mokiwa and Khoza (2016), Naicker and Makgatho (2017) and Mpungose (2019) as discussed in Chapter Two of this study. Koehler and Mishra (2009) extrapolate that TPACK requires an understanding of the representation of concepts using technology, pedagogical techniques using constructive ways of teaching and learning. They elaborate that the process involves content knowledge, pedagogical knowledge, pedagogical content knowledge, technology knowledge, and technological content knowledge. This also involves technology, pedagogy, and content knowledge (Koehler & Mishra, 2009). These concepts are synoptically reflected upon in the following paragraphs.

Lecturers' content-subject-matter-disciplinary expertise is critical for appropriate and relevant grasping of specific curriculum principles in the process of teaching and learning. A case study of Education Technology graduates in Indonesia analysing the competence of seven variables of TPACK in ten different disciplines, reached an important conclusion (Agustini et al., 2019). These

authors claim that content and pedagogy content knowledge variables are ranked higher than other TPACK variables (Agustini et al.,2019). Pedagogic area reflecton different specific inquiring in the field of specialisation. Cognitive levels and metacognitive strategies are critical regarding the depth and width of engagement in the processes undertaken. Proper grasp of content-subject-matter-disciplinary fundamentals reduces the misconceptions, confusion, and poor understanding of critical issues within the field of specialisation. Grasp of content knowledge depends on the application of teaching and learning methods by lecturers.

Pedagogic knowledge focuses on the choice of methods or practices used for teaching and learning. It involves the thinking and implementations of chosen ideas for teaching and learning at different times. A variety of factors, such as environment, resources, psychological and personal influences are the determinants in choosing teaching methods to address various cognitive levels. Harris and Hofer (2011) conducted a case study of seven experienced social studies teachers from six different states in the USA on instructional planning using TPACK. The study concluded that types of teacher knowledge are influenced by contextual factors, such as culture, socio-economic status, and social organisational structures. A good grasp of pedagogical knowledge is ideally a prerequisite for meaningful content understanding as it serves to deliver the content to the satisfaction of teaching and learning goals and objectives. Meaningful understanding requires application of taught and learnt knowledge to new situations.

The process of teaching and learning is meant to produce new knowledge, and that can be achieved by adapting or changing undesirable conditions or situations to create new desirable ones. A case study of ten first year Bachelor of Education students at a university in South Africa was conducted by Khoza and Biyela (2020). This study intended to explore and decolonise students' knowledge of TPACK in the learning of Mathematics. The study concludes that pedagogical knowledge drives the understanding of self-reflection identities. Lecturers interpret material used to teach and learn for adaption to the needs of students as they are expected to understand and relate content to real-life experiences for meaningful interactions. Lecturers need to be aware of how students in order learn to choose appropriate strategies for different concepts within content subject matter disciplinary aspects. Awareness on the part of lecturers enables them to choose suitable technology for teaching and learning purposes, enhancing self-reflection identities.

The use of e-learning strategies requires basic computer skills that can be achieved through traditional computer literacy which applies in general application and usage of technology for communication. e-learning skills and competences in Albrahim's (2020) literature review analysing instructors' (lecturers') skills and competences in online learning environment using TPACK puts emphasis on the role of instructors. This study suggests that multiple roles and responsibilities hinders instructors from effective online teaching. The study concludes that instructors pedagogical, content, design, technological, management and institutional as well as social and communication skills are critical for effective online teaching. Technology knowledge can help direct users to more specific intended understanding rather than general application for social communication. Technology knowledge enables users to link technology to other critical components of teaching and learning such as content and pedagogy. It promotes development in different ways technologically by enhancing mastery of complex concepts that integrate technology and different fields in teaching and learning.

Development and progress in different disciplines is accompanied by new technological innovations. Baran et al. (2011) conducted a survey of 180 preservice teachers (lecturers) in Taiwan regarding the strength of the TPACK framework of researchers' and practitioners' (lecturers'). The study shows that the TPACK framework is a valuable tool for research development for researchers and instruction for practitioners. This view is supported by Andyani's (2020) survey of 308 teachers (lecturers) regarding the impact of TPACK in the use of information communication technology (ICT) in pedagogy in Indonesia. The study concludes that the TPACK framework significantly influences the use of ICT in pedagogy. Technological content knowledge is facilitated by emerging ways of representation, adaptation and creativity that brings in the newness of teaching and learning. Presentation of abstract complex concepts is made easy by the creation of new authentic technological representations of phenomena. Technological content knowledge is critical in mitigating against constraints in understanding varied representations. Andyani (2020) further concludes that the organisational innovative climate directly influences teachers' (lecturers') self-efficacy. It is the awareness and choice of lecturers that can make a difference between constraints of teaching and learning and flexibility to enhance multiple layers of understanding of the phenomena.

Technologies can change the course of direction of teaching and learning either to meaningfulness or meaninglessness; futility to teach and learn, or worthwhile teaching and learning. The difference can be determined by the choice of software programs, most of which are designed for business purposes, or web-based technologies mostly designed for social communication and entertainment (Koehler &

Mishra, 2009). Links between technological tools and disciplinary pedagogic approaches are critical in ensuring how understanding is enhanced.

Finally, different knowledge of technology, pedagogy, and content (TPACK) needs to be integrated beyond the individual core of the three components (Koehler & Mishra, 2009). Other complex factors come into play within content, pedagogy, and technology, and need to be considered when applying TPACK as the theory of choice for teaching and learning purposes. In this study the contribution of TPACK is critical in determining lecturers' use of technology as e-learning resource in the teaching and learning environment at two universities in South Africa. Moreover its use is intended to enhance teaching and learning methods. It also contributes to content delivery at different levels of competency by users. Considering factors beyond the three core components can be a daunting task for lecturers. The three components are dependent on other aspects that influence experiences, such as the social and personal space. In this study TPACK does not address factors beyond technology, pedagogy and content knowledge sufficiently such as socially influenced factors. Technology accepted Model (TAM) could be considered to assist participants in dealing with socially influenced factors efficiently. The following section discusses the technology accepted model (TAM) and unified theory of acceptance and use technology (UTAUT), as they both use technology to reflect on the social and personal use and acceptance of technology.

3.2.2 Technology accepted model (TAM) and unified theory of acceptance and use of technology (UTAUT)

The technology accepted model (TAM) involves two core variables: perceptions of its use and easiness in that regard (Basak & Govender, 2019; Marangunić, 2019). The model applies mostly where there are negative perceptions about the use technology generally. Perceived usefulness can apply in different environments where technology is seen to be an alternative to the normally considered ways of interacting. These can be about social communication or entertainment activity. Marangunić (2019) asserts that attitudes toward using technology are antecedent factors. In this study the use of technology for teaching and learning by lecturers is critical to determine acceptance and usability. This assist the study to establish attitudes or reluctance in the use of technology regarding teaching and learning at two universities in South Africa. Perceived usefulness can be linked to disciplinary relevancy and pedagogic suitability which in turn may determine perceived ease of use by both lecturers and students.

Social and economic factors contribute to the use and perceived ease of use of technology in certain areas. Basak and Govender (2019) assert that lack of a conceptual framework in developing countries is an antecedent to acceptance and use of technology for teaching and learning. They postulate that resistance to change, lack of time, accessibility, technical support, and lack of technological skills are among factors inhibiting acceptance of technology for teaching and learning. TAM is mostly influenced from outside the teaching and learning the scope of scope, to be relevant and applicable to teaching and learning. This suggests that it requires lecturers' awareness of desirable or intended teaching and learning goals. Venkatesh et al. (2003) assert that eight construct models applied by researchers to explain the usage of information systems were reviewed and consolidated, postulating that this review and consolidation includes among others TAM, resulting in emergence of the unified theory of acceptance and use of technology (UTAUT).

Venkatesh et al.'s (2016) review and synthesis of information system literature on UTAUT from September 2003 to December 2014 led to UTAUT integration and review of extensions into four types. Venkatesh et al. (2016) assert that UTAUT's four new extensions include new exogenous mechanisms, new endogenous mechanisms, new moderation mechanisms, and new outcome mechanisms. They claim that UTAUT can be used in cross-context theorisation frameworks to mitigate against hindrance of further theoretical development. Cross-context theorising of UTAUT extensions resulted in the dimensions of the contexts of Technology of Acceptance and Use (Venkatesh et al., 2016). Venkatesh et al. (2016) claim that a multi-level framework of Technology of Acceptance and Use should provide for a base line model reflecting the main effects of UTAUT or UTAUT2 for future research.

3.2.2.1 The four new extensions of UTAUT

Venkatesh et al. (2016) assert that UTAUT extensions involve four mechanisms: new exogenous mechanisms, new endogenous mechanisms, new moderation mechanisms and new outcome mechanisms. These authors refer to new exogenous mechanisms as UTAUT external predictors on UTAUT four variables involving: performance expectancy, effort expectancy, social influence and facilitating conditions. The critical contribution of four new extension of UTAUT in this study assists lecturers to understand the implications of using technology for teaching and learning as there are external factors the in terms of the use and acceptance of technology and this is accommodated in the four variables. This assisted this study to theorise lecturers' experiences of e-learning resources in the teaching of History at two universities in South Africa.

Gruzd et al. (2020) conducted a survey of 51 members of the American Society for Information Sciences and Technology in North America to find out why and how scholars use social media for scholarship and research practices. The study concluded that scholars (lecturers) use social media for making new connections with peers and collaboration, and for research dissemination. The study further concluded that there is concern about protection of privacy among scholars, and the lack of social media tools specifically designated for academia. As a result, the top five social media tools most frequently used by scholars are wikis, listservers, blogs, video, and teleconferencing. This is supported in Tiwari's (2020) survey of 430 online learning participants in a university in India, which examined core factors affecting the university students' attitudes towards adoption of online classes. The study concluded that performance expectancy, effort expectancy and facilitating conditions have a strong bearing on behavioural intention towards adoption of online learning.

The former and latter studies confirm four key factors that emanate from new exogenous mechanisms: performance expectancy, effort expectancy, social influence and facilitating conditions. These factors are related to behavioural intentions that determine technology use. Pre-existing conditions are studied and analysed, leading to new exogenous mechanisms that produce new experiences (Gruzd et al., 2020; Tiwari, 2020). External factors from exogenous mechanisms link to internal factors that determine the behavioural intention for technology use leading to new endogenous mechanisms. Influential factors that promote continuance of the use of e-learning are critical for teaching and learning in a university. Factors that underlie the continuance of using mobile apps were studied in Tam et al.'s (2018) survey of 304 students at a university in Portugal. The study concluded that the most important drivers of continuance intention of mobile apps are satisfaction in habit, performance expectancy and effort expectancy. This view is supported in Jacob and Pattusamy's (2020) survey of 419 students at a university in Germany and 216 students at a university in India.

In this study the relationship between UTAUT constructs and the behavioural intention to use mobile internet technology was tested in participants from both countries. The study concluded that UTAUT constructs influence behavioural intention, and behavioural intention predicts the use of technology. Han and Conti's (2020) survey of 112 preservice teachers in the presentation of the new HANCON (acronym of authors) model tool in a university in South Korea corroborates these views. In their study Han, and Conti (2020) conclude that the constructs of the HANCON model could predict and explain the acceptance of social telepresence robots in a social context. Promotion of internal factors

contributes to behavioural intention as a new endogenous mechanism. The new endogenous mechanisms link to new moderation mechanisms as different experiences are created in the process of technology use.

Different types of environments, conditions, experiences, culture and beliefs that impact on behaviour are compared in different users to establish new moderation mechanisms. Muhammed et al. (2017) conducted a survey of 697 online students in five Jordanian universities to examine the effects of different factors on acceptance of mobile learning applications in higher education. The study concludes that perceived information quality, perceived compatibility, perceived trust, perceived awareness and availability of resources, self-efficacy and perceived security are the main motivations of students' acceptance of mobile learning applications. This view is supported in Tamilmani et al.'s (2020) literature review of more than 60 studies on evaluation of appropriate usage of unified theory of acceptance and use of technology extension (UTAUT2) constructs. The study concluded that UTAUT2 constructs are reliable, with correlations to their path relationships across the 60 studies. While studies varied for every relationship, they all measured at least one UTAUT2 core relationship. Differences among users and perceived enabling conditions support new moderation mechanisms which lead to new outcomes.

The main effects of the use of technology communicate a new conception of acceptance which produces new outcome mechanisms. In their survey of 326 teachers (lecturers) at a university in Slovenia (Radovan & Kristl 2017) examine the acceptance and use of learning management systems (LMS), and conclude that blended learning offers more online opportunities. This view is corroborated in Alsheri et al.'s (2019) survey of 171 online students at a university in Saudi Arabia. Alsheri et al. (2019) intended to find out how people accept use of the Blackboard system with UTAUT adoption. The study concludes that technical support is fundamental in determining the acceptance and user of e-learning. The former and the latter are supported by Rahman et al.'s (2020) literature review of conceptual frameworks to find the factors behind students' continued use of online learning systems from 2013 to 2019. The study concluded that the most common factors that influence students' continued use of e-learning are performance expectancy, effort expectancy, social-self, perceived usefulness, and behavioural intention.

New outcome mechanisms may be determined by individual benefits or group benefits. Positive benefits for individuals or groups suggest success in the use of technology for a certain purpose which

determines its acceptance for use in future. Personal and group benefits may be influenced by internal and external factors that connect to other mechanisms of UTAUT or UTAUT2 dimensions of the context of technology acceptance and use. These dimensions produce a multi-level framework connected to the base line model that features the main effects in UTAUT and UTAUT2 creating new context effect for future research (Venkatesh et al., 2016). Various levels and dimensions encourage new outcomes to be pursued by integrating different frameworks based on the main effects. It is from this premise that the following section of this chapter focuses on a new framework model that informs the theoretical explication of this study.

3.3 New framework model: The e-Learning Nexus Model

In Chapter Two of the study consulted related literature revealed different theories apply to the use of technology within different contexts of experiences, this includes the unified theory of acceptance and use of technology. The unified theory of acceptance and use of technology (UTAUT) accommodates various theories in its application for further studies (Venkatesh et al., 2003). In Venkatesh et al.'s (2016) theoretical analysis of the UTAUT framework is informed by Weber's (2012) Theory of Evaluation. The justification of enriching the UTAUT with Weber's theory is informed by Weber (2012) assertion that his theory on evaluation focuses on the quality of an existing theory. Some of the studies that apply the UTAUT framework use different theoretical strategies to determine technology adoption and application in different contexts. Such studies include Radovan and Kristl's (2017) integration of the community of inquiry model with UTAUT in developing a conceptual model framework.

Some of the studies infuse various models such as Tam et al. (2018) applying the expectation confirmation model and structural equation model (SEM) to uncover factors underlying the continued intention to use mobile apps. In the same vein, Alsheri et al. (2019) apply SEM to find out how people accept and use the Blackboard system; Han and Conti (2020) employ the post-acceptance model to investigate the attitudes towards a telepresence robot in an educational setting. This suggests that new framework models are suitable for cross-context analysis where UTAUT is considered part of the structural framework of a study.

This study explores lectures' experiences of e-learning resources at universities and these experiences are covered in Chapter Two. In its reflection on lecturers' experiences from literature analysis this study adopts UTAUT with new a conceptual framework of lecturers' experiences of e-learning

resources. Weber's theory of evaluation does not help in choosing the local phenomena and the ways in which these might be conceived (Weber, 2012). It also does not assist in choosing of the theory's constructs, associations and inside-boundary states and events (Weber, 2012). Theoretical reflection from literature analysis suggests that lecturers' e-learning experiences are an ongoing continuous connection of teaching and learning experiences and technology is central to these experiences. Theoretical connection reflects three phases of lecturers' e-learning experiences involving e-learning specialisation experiences, e-learning generalisation extension experiences and e-learning connection experiences. Theoretical conceptualisation from chapter two suggests that lecturers' e-learning experiences are a continuation of ongoing experiences from traditional learning experiences which is taken with them in their transition to the world of technology.

Theoretical reflection shows simultaneous multidimensional connection of the three e-learning nexuses of professional (e-learning specialisation), social (e-learning generalisation extension) and personal (e-learning connection) experiences. This framework of e-learning experiences is referred to as the e-Learning Nexus Model (e-LNM) because of the continuous inter-connection of the central role of technology in lecturers' e-learning experiences. The e-learning nexus reflects input from general everyday life experiences and the output from specific scientific or scholarly experiences, flowing from both directions. The flow is from the opaque e-generalisation input into e-specialisation and from the lucid e-specialisation output back into e-generalisation with a consistent, continuous flow. The input-output and output-input flow of lecturers' e-learning experiences through technology for teaching and learning connect all three phases of experiences. In the process of analysing e-LNM, UTAUT mechanisms and UTAUT2

dimensions reflect in the theoretical framing. Lecturers' e-learning experiences are represented as the e-LNM in Figure 3.1.

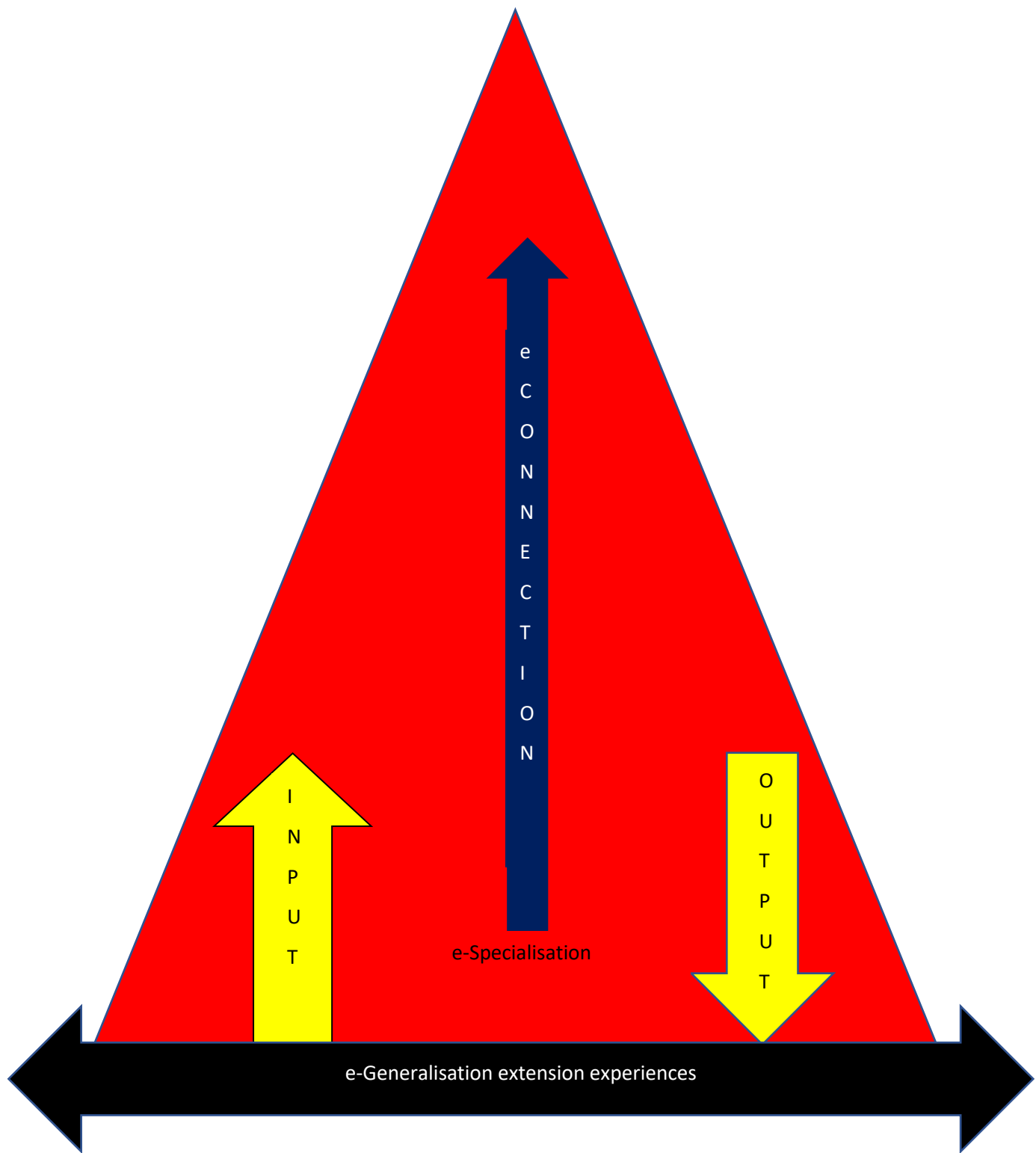


Figure: 3.1 The e-Learning Nexus Model Framework.

3.4 e-Generalisation extension experiences

Technology is generally used in different contexts of life experiences, such as socialisation and interaction with family members using available modes of communication. From home individuals interact with the external world using learnt communication skills. e-Generalisation extension

experiences reflect electronic use of technology from everyday experiences by society in general. Use of technology to enhance online social presence in the work of Sun and Chen (2016) and cultural understandings between Canada and China students (Zhang, 2018) show that culture plays a critical role in the use of technology generally. In Mohr and Mohr (2017) culture is central to intergenerational engagements between Generation Y, Baby Boomers and Generation Z in the general use of technology. The importance of culture in the use of technology resonates with the new exogenous mechanisms of UTAUT, as it is externally acquired by users. The social influence on the use of technology enhances online presence, promotes cultural understandings, and bridges the gap between different generations.

3.4.1 Cultural concepts

The new exogenous mechanisms as explicated by Hamid and Tamam (2018), Knobloch-Westerwick (2015), and Onuekwe (2015) on the social influence of technology contributes to using communication through technology to achieve desired social effects. These studies are supported by use of technology to study the behaviour of society (Dauda et al., 2018) with the intention to understand underlying factors causing xenophobic violence in South Africa against Nigerians. These studies show the role of technology in influencing understanding of behaviours at the social level, and such has a bearing on the new exogenous mechanisms. This suggests that entertainment media for pleasure are used to address issues that cause social displeasure, like HIV/AIDS and xenophobic attitudes. This suggests hedonic motivation related issues with an educational presence in them (Radovan & Kristl, 2017; Venkatesh et al., 2016). Intergenerational use of media, as described by Bothun and Vollmer (2017); Mohr and Mohr (2017) with intention to understand intergenerational experiences of technology, is part of e-generalisation extension experiences (Reis, 2018).

Venkatesh et al. (2016) claim that conditions for the formation of habit relate to the passage of chronological time, which is experienced at different levels of interaction and the extent of familiarity with a target technology. Cultural symbolism reflects the social interconnection of users that could mitigate against misconceptions and myths on the use of technology (Arkorful & Abaidoo, 2014). Use and acceptance of technology by different generations contributes to new innovations in the use and acceptance of technology. Social presence, xenophobia, generations and myths are cultural concepts that contribute to conceptual development of the theory. Cultural influence may have a bearing on facilitating conditions of access, acceptance and use of technology by different users in general, as social contexts could be determined by class and status.

3.4.2 Economic concepts

New innovations reflect improvement in the application of technologies. Use of technology generally connects to the social class's ability and affordability in meeting the costs associated with the use of technology (Gouvía et al., 2019; Kowsari & Garousi, 2018; Macharia, 2019; Maphosa et al., 2020). Technological and conceptual developments continuously interrelate in the process of everyday general use of technology. Venkatesh et al.'s (2016) online survey claims that in comparing UTAUT with UTAUT2 there was a substantial improvement in behavioural intention, from 56% to 74% and in technology use, from 40% to 52%. Venkatesh, et al.'s (2012) study focuses on consumer context informed by three constructs: the hedonic motivation in the use of technology for fun and pleasure; price value, which has a significant impact on the users; and experience and habit. Societies with less income will afford technologies that cost less. Business subsidises less cost accessibility, in exchange for enterprise-centric, commercial consumption through advertising strategies, in promotion of their products to potential consumers, detracting from those which are subsidised with less cost for access (Giunta, 2017; Hwang et al., 2016). Enterprise-centric, commercial consumption and cost are economic concepts contributing to conceptual development of e-learning framework.

Prevailing contextual factors contribute to the new endogenous mechanism as the use and acceptance of technology takes different contextual dimensions. Technological innovations triggered by the First, Second, Third and Fourth Industrial Revolutions affect every aspect of human interaction (Lee et al., 2018; Penprase, 2018; Xu, et al., 2018). The Fourth Industrial Revolution continues what the other three started. There is more emphasis is on the Internet of Things (IoT) where everything is attached to technology through Artificial Intelligence (AI) as a driver for multiple exponential technologies (Lee et al., 2018; Penprase, 2018; Xu, et al., 2018). These Industrial Revolutions have a massive impact on the general scale of social life. The use of laptops, mobile phones, ebooks, and other preferred media add valuable consideration to the use and acceptance of technology in the field of education (Linnes & Metcalf, 2017). Massive use of technology in communicating general life experiences, such as access to resources for better living conditions, introduces technological concepts to everyday life experiences, which includes teaching and learning experiences. AI, the IoT, 3D, laptops, mobile phones, ebooks, and e-learning are technological concepts that contribute to a conceptual development framework.

3.4.3 Technological concepts

The impact of the Industrial Revolution on society in general contributes to new innovations in the field of commerce, industry, and education. Use and acceptance of technology relates more to the purpose that the user intends it to serve: it can be for pleasure, marketing, communication, teaching and learning, etc. (Basak & Govender, 2019; Knobloch-Westerwick, 2015; Venkatesh et al., 2012, 2016). This suggests that different technologies serve different purposes, informed by user intention and behaviour. In teaching and learning institutions that provide education services, lecturers and students are critical role players as users. It is the behaviour and use of technology that leads to new outcome mechanism determined by dimensions of the context of acceptance and use of technology (Venkatesh et al., 2016). New outcome mechanisms are demonstrated in different contexts in the work of Radovan and Kristl (2017), Alsheri, et al. (2019) and Rahman et al. (2020). Continuity of different lifestyles and experiences in the use and acceptance of technology for teaching and learning is supported by engagements in new outcome mechanisms. Different lifestyles in the use and acceptance of technology reflect socio-economic digital activities.

Different lifestyles and diversity of users' experience through perceived engagement with technology contributes to the development of socio-technological concepts such as 'digital natives', iGeneration or Generation, Generation Z, Generation X and Y generation, Baby Boomers (Linnes & Metcalf, 2017; Reis, 2018). Most of social media is designed for social interaction as a general communication tool intended for interaction outside education (Argenti et al., 2019). This denotes that different general choices in preferred lifestyles have an influence on the use and acceptance of technology. Contextual differences lead to new moderation mechanisms. Perceptions associated with certain features, design, and functional applicability of the technology of choice conforms with the chosen lifestyle.

3.4.4 Lifestyle concept

Socio-technological concepts reflect a social ethos such as gender categorisation, as they exist generally in different cultures and their application to technology. Almarwani's (2016) survey of 878 students and 65 English faculty members aimed to find out about the use of mobile technologies in the learning and teaching of English as a foreign language. The study applies the UTAUT2 model, hypothesising age, gender and experience to moderate the impact of factors affecting mobile usage in technologies for teaching and learning English. The study concludes that age, gender and experience hypothetically moderate performance expectancy, effort expectancy, social influence,

facilitating conditions, hedonic motivation, price of devices, price of services and habitat impact on mobile technology use.

Fong et al. (2019) show different preferences in the use of technology by males and females, supported, supported in Romero-Rodríguez et al.'s (2020) survey of 587 teachers (lecturers). The latter study focuses on those aged from 21 to 58 years at a Spanish university, and explores the acceptance of the IoT by university professors using the UTAUT framework (Romero-Rodríguez et al., 2020). The study concludes that performance expectancy, facilitating conditions, and attitude towards technology are influential in the behavioural intention to use IoT between men and women with respect to age. However, in different construct of the UTAUT model the highest average score is obtained in men and teachers over the age of 36. Differences in lifestyles are culturally embedded and gender representation of experiences with technology usage suggests power dynamics reflecting the social class of users and developers of technologies for teaching and learning.

3.4.5 Political concepts

Use and acceptance of technology by users and developers suggests different purposes for use and acceptance of technology. Communication through technology cuts across various structures of human interaction, internationally and locally; the formation of these structures is mostly ideological. Interaction through technology can be complicated where different needs of society have to be balanced. It is through power dynamics that the social presence can be regulated (Sun & Chen, 2016). Decision-making between providers and users in developed and developing countries brings in the element of power dynamics between societies and countries (Argenti et al., 2019). New moderation accommodates diversity based on different ideas and understanding. Ideological formations are mostly political and originate outside of the scope of education (Argenti et al., 2019). Arenas et al.'s (2019) pilot study on the sustainability of policy making regarding copy rights shows that different stakeholders need to participate in decision making regarding the use and acceptance of technology for teaching and learning. Commitment to ethical responsibility by lecturers in Botswana in Chikerema et al.'s (2016) study suggests a need for a new moderation mechanism where responsibilities and rights of lecturers and students are considered. Access to and affordability of the use of technology for different stake holders between the providers and users of services needs to comply with certain conditions (Koffer, 2015). Access and affordability involve power dynamics, class structure and lifestyle.

A new outcome mechanism can balance the benefits of different stakeholders from the use and acceptance of technology for teaching and learning. There is a need to balance less cost with better returns for services providers. Preference in the use of e-learning resources is based on decisions made and compliance with regulations put in place by different institutions internationally and locally. Skills from the general social context in the use of electronic resources continues in the teaching and learning environment. General social skills are learnt informally within the social space. In teaching and learning discipline subject matter-related content and concepts from social informal presentation are elucidated by scientific scholarly presentation. This suggests continuation of the general experience with the phenomenon of interest into the specialisation experiences with the phenomenon of interest. In turn, specialisation experiences improve on the general understanding of the phenomenon of interest experiences and that leads to the continuation of interaction between e-Generalisation and e-Specialisation. The process goes through the use and acceptance of technologies that promote teaching and learning objectives through socially embedded mechanisms.

A combination of different concepts in the use and acceptance of technology for teaching and learning such as cultural, economic, technological, lifestyle and political concepts, contribute to theoretical and conceptual development of an e-learning framework. Cross-context theorisation reflects researchers' conceptualised context in several ways (Venkatesh, et al., 2016). In this study e-generalisation (social), e-specialisation (professional) and e-connection (personal) are considered as contributing to theoretical conceptualisation in the UTAUT and UTAUT2 framework. In this study the e-Learning Nexus Model (e-LNM) of contextualisation of e-generalisation, e-specialisation and e-connection is considered as an ongoing simultaneous teaching and learning interaction. New mechanisms in UTAUT and UTAUT2 extension reflect this continuous, simultaneous teaching and learning interaction through technology. Figure 3,2 below presents e-generalisation extension concepts connected through technology for teaching and learning:

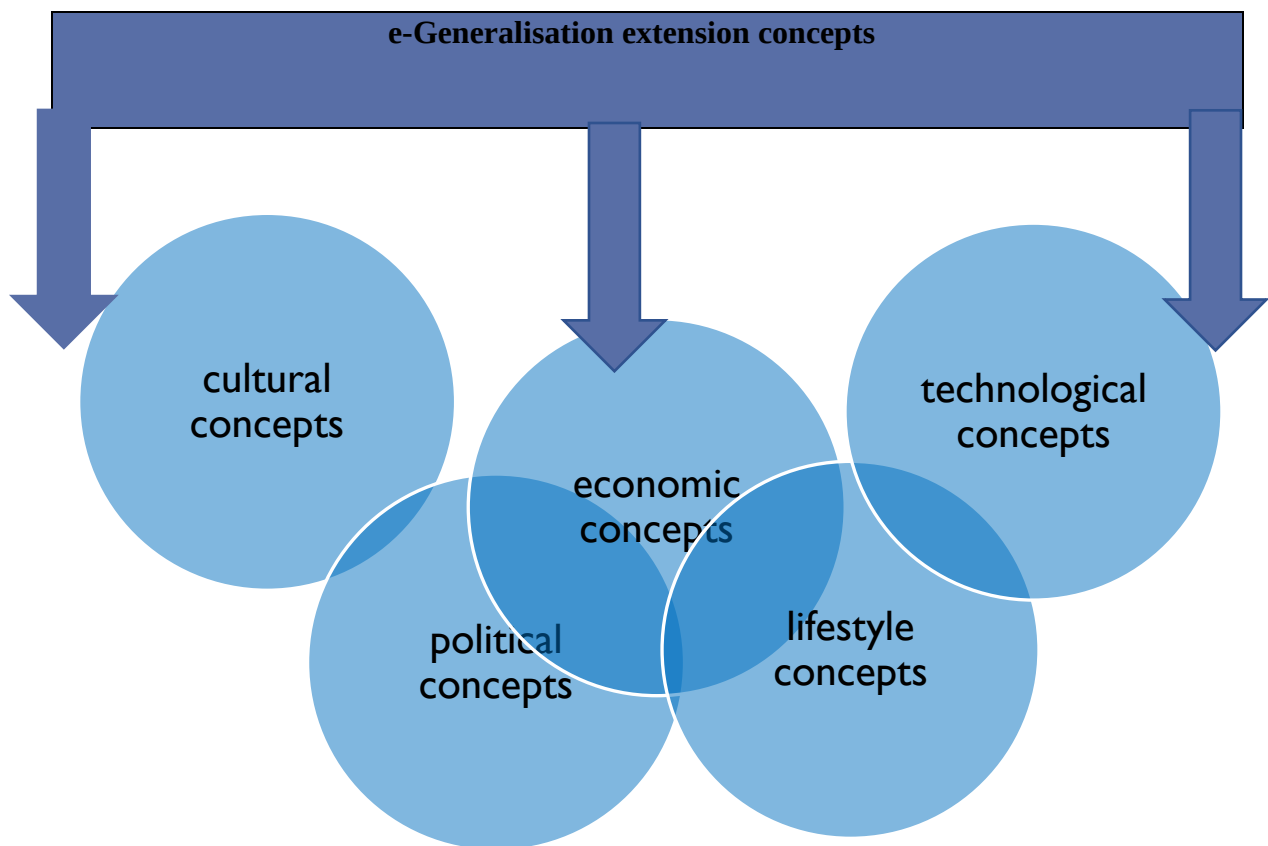


Figure 3.2 e-Generalisation extension concepts.

3.5 e-learning specialisation experiences

Social life experiences are carried over to educational experiences to solve or address broader general life related issues with the use and acceptance of technology for teaching and learning. Cross-context application of UTAUT connects the general use of technology with the scientific use of technology for teaching and learning context academically (Al-Sammarraie et al., 2017). Scientific content knowledge or experiences is influenced by the diversity, cultures, values, and worldviews of the time of living (Sjöström & Eilk, 2018). Social media skills and experiences are transferred to classroom teaching and learning context through e-learning resources. Classroom and social environments are different, as the classroom environment is professional and requires scientific or professionalisation of the general social experiences. Facilitating conditions impacts on the dimensions of context and purpose for technology use and acceptance; in Al-Sammarraie et al. (2017) it applies to dangerous region.

Al-Sammarraie et al. (2017) conducted a survey of 75 university staff in Iraq, where government and public agencies interact and transact activities and tasks online (including education) using computer applications. The study concludes that conditions and context within government use and acceptance of technology are positive and significant for applying the UTAUT framework. This can also apply in academic work, which can be classified into different scholarly or scientific disciplinary fields with specialisation in a certain discipline. In the process of applying scientific or professional transactions, general use of technology merges with scientific or professional experiences in e-generalisation extension experiences. e-learning specialisation involves disciplinary or subject concepts, pedagogical or teaching and learning method concepts as well as scholastic or academic concepts. These concepts are interrelated, and they connect the general everyday life experiences to specific scientific or professional experiences through e-learning resources.

3.5.1 Disciplinary or subject concepts

Interaction through teaching and learning transactions is specific to ways in which experience is perceived, analysed, and understood in the form of a subject or discipline. Performance expectancy and effort expectancy are determined by the context dimension in the application of the UTAUT (Venkatesh, et al., 2016). Disciplinary content can determine the extent of use and acceptance of technology by users. Chumo and Kessio's (2015) survey of 500 students to find out about the use of the UTAUT model to assess ICT adoption in a university in Kenya, concludes that effort expectancy, performance expectancy and social influence factors affect students' behavioural intentions in their choice of web-based information system. The study also concludes that the moderating effect that a course of study has is a significant intention of adoption for a web-based information system. There was a high adoption rate came among students in ICT-related courses such as Information Sciences, Engineering, Computer Science, and Informatics.

Disciplinary influence other than from ICT-related courses is critical in the use and acceptance of technology for teaching and learning. The context dimension in disciplinary experiences is categorised as vertical, from basic to advanced levels (Khoza, 2019; Teichler, 2017). Different disciplines or subject contents such as Mathematics, Accounting, Geography, History, etc. have their own specific approach to teaching and learning (Bitzer & De Jager, 2016; Schreibman et al., 2017; Treffert-Thomas, 2018). The process of teaching and learning is vertical; it requires development of cognitive engagement with teaching and learning (Crawford & Capps, 2018). This suggests that teaching and learning experiences begin from basic general experiences with life; from here specific

focus is put on part of what is experienced in general life. In the process, a specific focus becomes narrow and separated from the rest of general experiences to be further and closely studied.

Disciplinary or subject content experiences at the basic level are simple and introductory to specialisation where concepts are learnt. As it progresses, it becomes more complex. Sound educational principles introduce scientific subject matter through acquisition with everyday social application (Dewey, 1938). It is through the Structure of the Observed Learning Outcome (SOLO) taxonomy that teaching and learning models are classified into depth of understanding and categorisation (Biggs & Collis, 1982). Frame (2018) asserts that categories of SOLO taxonomy could involve understanding nothing; something; several relevant things; several relevant things that relate to each other; or a few related things that apply in new situations about any topic. Levels of understanding can be represented as prestructural, unistructural, multistructural, relational and extended abstract (Frame, 2018). This suggests that teaching and learning experiences in a discipline begins from general ordinary life experiences, and then are narrowed through deliberate effort to subject specifications at the basic level, gradually developing into more advanced levels.

In a teaching and learning context use and acceptance of technologies connects to the specific discipline such as Sebbowa and Muyinda's (2018) use of Winksite in the teaching of History in large classes. Mpungose's (2019) use and acceptance of Moodle and WhatsApp in the teaching of Physical Sciences is another example of using a specific technology for teaching and learning different disciplines. In Nwulu's (2017) study, PowerWorld and MATPOWER software are preferred for simulation in the teaching and learning of Electrical and Electronic Sciences. Laptops, mobile phones and tablet computers as part of the technological hardware play a critical role in support of the software in presentation of the discipline's content (Ali, 2019; Budden 2017; Khoza, 2015). The effective use and acceptance of hardware and software technologies is determined by the purpose which the user intends it to serve in activities related to effective teaching and learning strategies. This denotes that gradual development is linked to cognitive development where conceptualisation develops from practical ordinariness of the everyday to a complex abstract level. This development connects to e-learning resources with technological and technical abilities and experiences of combining technology and disciplinary subject matter teaching and learning activities in a complementary process.

3.5.2 Pedagogical concepts

Teaching and learning activities follow structures intending to achieve desired outcomes. There are certain ways of teaching and learning in different disciplines aimed at attaining certain objectives. Hsieh and Chiu (2020) applied the UTAUT to examine the STEM application of Robot-Assisted Instruction. This is done with a single subject teaching method and the robot-subject instruction (RSI) cross disciplinary teaching method (Hsieh & Chiu, 2020). The study concludes that RSI has a lower learning burden in knowledge learning units and the satisfaction is higher, but the competition activities units at the end cause a decline in satisfaction. STEM-based RSI students had positive attitudes towards STEM model learning after participation in robotics activities.

Different methods of teaching and learning produce different results as they address different needs (O' Carroll et al., 2017; Van Tonder & Steyn, 2018). Teaching methods consider the development level of students and age appropriateness for the choice of relevant methods. Different disciplines have different methods for different students, different subject matter, and different levels of cognitive development. Lecturers need to consider available pedagogical cognitive and metacognitive theoretical approaches that match their desired outcomes (Kohen & Kramarski, 2018).

Interconnectedness of theories cuts across the disciplinary divide, depending on the desired outcome. Theories of teaching and learning can be used interchangeably depending on intention and objectives of teaching and learning. In the use of technology teaching and learning theories relate to the developmental level of students and the type of e-learning resource that meets the requirements for an outcome of teaching and learning. Lecturers' awareness of the relevant e-learning resource is critical for successful teaching and learning (Khoza, 2015). Awareness of e-learning resources needs to consider exponential speed in innovations of new technologies as that influences developments in e-learning resources, which in turn impacts on how lecturers teach. New methods of teaching and learning using e-learning resources develop with new technologies, but this development is connected to the needs of students. These developments narrow boundaries between theory and practice (Hoadley, 2011), and in the process boundaries between disciplines are narrowed too (Hsieh & Chiu, 2020; Le Grange, 2016). Narrowing of boundaries between theory and practice and the disciplinary divide require consistent collaboration among lecturers.

3.5.3 Scholarship or academic concepts

Contemporary developments in different disciplinary teaching and learning needs new strategies to engage emerging transdisciplinary challenges (Le Grange, 2016). Lecturers are perceived to be experts in specific individual disciplines. In the 21st century teaching and learning multiple and cross disciplinary expertise is critical. This call for lecturers to be aware of the challenges of the 21st century skills in order to meet new transdisciplinary challenges. This study is critical in creating an awareness on lecturers of the need for collaboration across disciplines. Scholarships identify gaps in existing current contexts within various disciplines. Almetere et al.'s (2020) survey of 300 students at a university in Saudi Arabia sought to understand an increase in acceptance of IoT technologies using UTAUT framework. The study concludes that a gap exists in field issues, theory, and models of acceptance of IoT technologies. The main effects of UTAUT and UTAUT2 are that they can create opportunities for new research to address identified gaps in research (Venkatesh, et al., 2016). Acceptance and use of technology in disciplines serves as a means to engage meaningfully with disciplinary contextual factors.

Transdisciplinary challenges come with disciplinary diversity that can be addressed by certain forms of scholarship (Friberg, 2014; McKinney, 2007; Potter & Kustra, 2011). It is through scholarship collaborations that research is undertaken to advance and deepen disciplinary experiences. Different disciplines make their findings accessible through academic presentations and publications. Wuttke (2019) shows that use of technology to conduct research offers potential improvement of teaching and learning in the use of e-research resources among practitioners and researchers. This suggests that interactions through scholarships may take different shapes, enhanced by the availability of technology such as online presentations, electronic academic research journals, books, documentaries etc. In the process of collaboration through technology, e-learning resources are utilised across disciplines internationally and locally. The notion is that academic collaboration is informed by scholarship or academic concepts from diverse disciplines and institutional cultures.

Engagement in scholarship or academic programmes is a continuous process from individual disciplinary experiences to transdisciplinary experiences, necessitated by narrowing boundaries between disciplines. In the process of interaction lecturers exchange ideas and disciplinary concepts resulting into new scholarship or academic concepts that collaboratively enrich their specific individual disciplines. Preference of the meta-modes of teaching and learning allows variances in teaching and learning approaches that accommodate various possibilities of experiences (De Swardt

& Hoque, 2018). In the process of exchanging disciplinary experiences, boundaries of new developments and use of technology to conduct research are pushed further. Sharing of ideas on best and new ways of teaching and learning under different challenges is encountered by individuals. Integrating new technologies leads to efficiency and effective quality of education (Slootmaker, 2018). A combination of different disciplinary cultures and technological expertise leads to new innovations in e-learning and teaching strategies, promoting research and improvement of pedagogical approaches.

e-Specialisation experiences with disciplinary, pedagogic and scholarship concepts is vertical in its approach (Biggs & Collis, 1982; Frame, 2018; Khoza, 2019; Teichler, 2017). Scholarship explores the existing experiences and identifies gaps for improvement. Pedagogic concepts reflect on existing methods of teaching and learning experiences, then taps in from what is made available by the scholarship to address existing gaps. Disciplinary concepts focus on the experiences existing at all levels within the discipline, this taps into the pedagogic approaches to address identified needs in the discipline. Disciplinary, pedagogic and scholarship concepts connect to cognitive and metacognitive concepts through personal critical analysis that is scientifically proven in various institutions of higher education. This suggests that the vertical approach influences the use of e-learning resources based on teaching and learning objectives. Pedagogic approaches determine the level of engagement; the lower the level cognitively, the less complex the e-learning skills technically, and the more complex the cognitive level, the more complex the e-learning resources skills technically. More complex e-learning resources technical skills pose a challenge for lecturers, as they require careful considerations of the choice of appropriate theories that combine disciplinary and technological experiences. This is important in order to meet identified objectives. e-Specialisation concepts are presented in Figure 3.3.

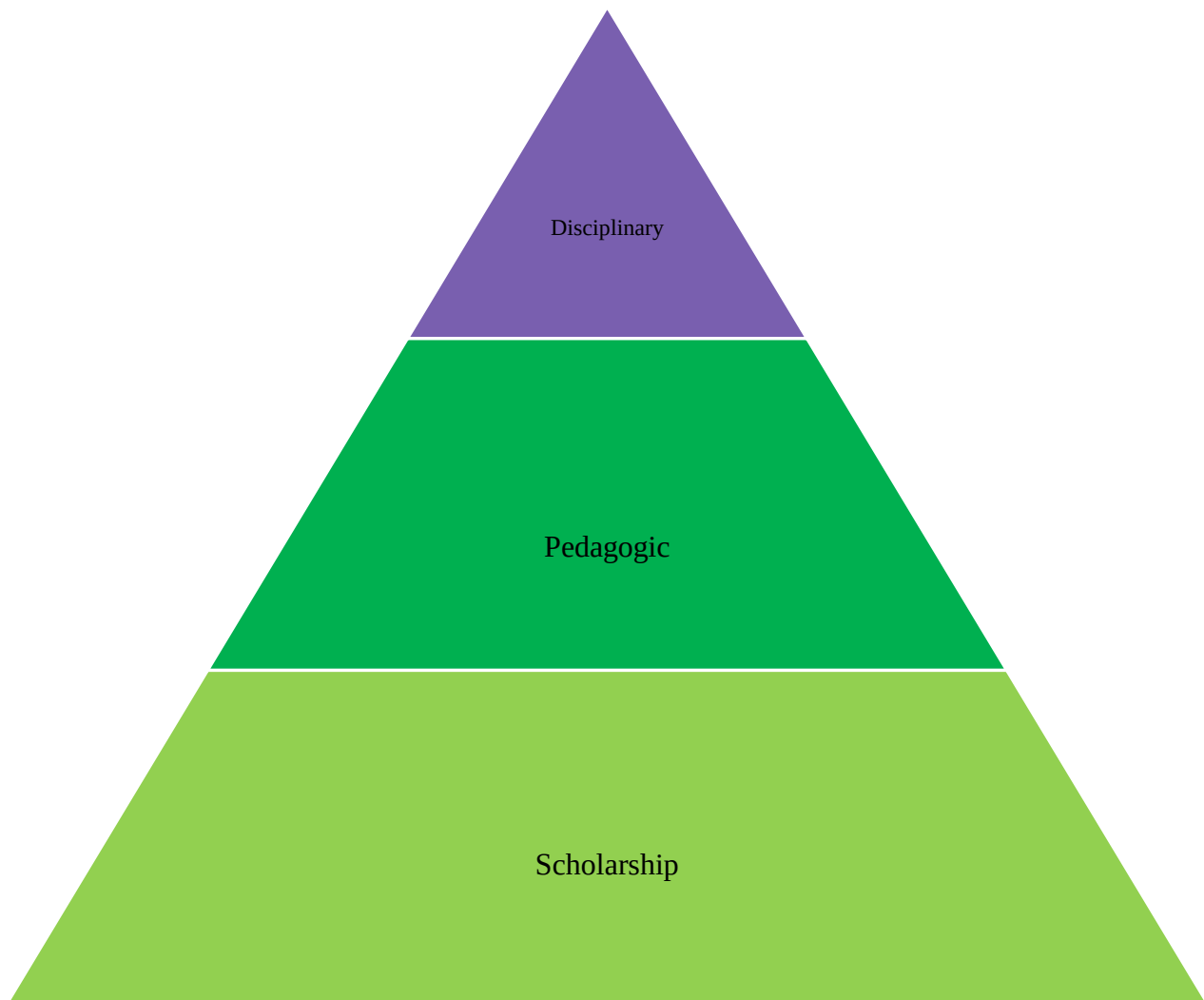


Figure 3.3 e-Specialisation concepts.

3.6 e-Learning connection experiences

e-Learning connection experiences connect e-generalisation experiences and e-specialisation experiences to personal critical engagement with e-learning processes. Use of e-learning platforms can be challenging in the teaching and learning situation. This is demonstrated in Maphosa et al.'s (2020) survey of 200 students who could not attend physical lectures at a university in Zimbabwe during the COVID-19 lockdown. The study shows that WhatsApp is used as an alternative delivery platform using the UTAUT framework. The study concludes that data acquisition posed a serious challenge as costs were too high; however, WhatsApp successfully delivered mediated teaching and learning. In Sokhulu's (2020) case study of master's students at a university in South Africa, students' awareness of personal needs became critical to cope with challenges posed by the COVID-19 pandemic using the Persona-tech analytical framework. They were able to identify technologies that suit their needs by using a problem-based approach to tolerate uncertainty caused by COVID-19.

However, unsystematic introduction of digital technologies became a barrier they had to contend with.

The former and the latter studies support Harayanan et al.'s (2016) emphases on using e-learning to enhance student immersion in teaching and learning sessions. This suggests that students' immersion is personal, it needs critical engagement for meaningful learning and technology of preference can address personal needs of students' learning. Meaningful teaching and learning need to connect concepts in e-generalisation and e-specialisation to personal (e-connection) understanding of teaching and learning using technology. Studies by Harayanan et al. (2016), Maphosa et al. (2020) and Sokhulu (2020) support Kacaleva et al.'s (2014) survey at a university in Greece. Kacaleva et al. (2014) surveyed 360 participants to find out about the acceptance of use of e-learning applying the UTAUT framework, with 92 responses received. The study concluded that gender, age, and experience play critical role in the use of e-learning systems.

However, there are barriers to using e-learning, largely a lack of time followed by lack of technical support and lastly the low level of training provided (Kacaleva et al., 2014). This view is supported in Garone et al.'s (2019) survey of 244 teaching staff at a university in Belgium. The study sought to cluster teaching staff through UTAUT to find about acceptance of new LMS. The study concludes that users of the new LMS vary in their use of e-learning: some are high users, and others average users and low users to varying degrees. High users are innovative, while average and low users need additional support with increased social influence. This suggests that application of the UTAUT framework needs innovative continuation where personal acceptance and use is influenced by social acceptance and use.

In Mpungose and Khoza's (2020a) case study of 20 participants at a higher education institution in South Africa, a compelling situation caused by COVID-19 forced reluctant academics to use LMS for teaching and learning. The study explores transformation experiences of academics during the COVID-19 pandemic, and it concludes that there is a need for identification of values or ideologies relevant to the enactment of a digitalised curriculum. This view is supported in Mpungose and Khoza's (2020b) case study of 31 postgraduate students at two higher education institutions, one in South Africa and the other in the USA. This study explores students' experiences of the use of Moodle and Canvas LMS for non-formal learning. The study concludes that students do not love using LMS, except to download reading and to participate in discussion forums. Students' use of e-learning

resources relies on the lecturers' role in the use of e-learning resources in higher education institutions. Khoza's (2020) case study of 20 students in one university in South Africa and the other in the United States on lecturers' knowledge-building for the Fourth Industrial Revolution and COVID-19 era concludes that self-actualisation helps teaching and learning to understand and address social, professional, and personal needs of lecturers and students.

These three studies concur that situations determine how and why users prefer certain types of technologies based on their personal reflection for social, professional, or personal use. Self-actualisation can mitigate against students not loving using LMS for non-formal learning (Khoza & Mpungose, 2020a, 2020b). Lecturers' reluctance in the use to use the digitalised curriculum may also be a concern (Khoza & Mpungose, 2020a, 2020b). This suggests that through critical personal connection to the use of e-learning resources, an individual synergises and elevates the type of experience that addresses contextual the factors that inform it. The process needs simultaneous continuation of technological enhancement of personal engagement with disciplinary specialisation and general exploration of the 'everydayness' of teaching and learning. New technological innovations are driven by social, professional, and personal needs. The evolution of e-generalisation (social), e-specialisation (professional) and e-connection (Personal) drive the surge in digital technology. e-Connection, e-generalisation and e-specialisation involve four concepts deduced from the literature in Chapter Two: consciousness, ethical matters, convergence, and the Fourth Industrial Revolution.

3.6.1 Consciousness

Individual or personal awareness of the level of performance or skills in the use of technology is critical for teaching and learning immersion. Participants in the process need to self-organise (Xu, et al., 2018). The process of consciousness is enhanced by self-awareness and self-responsibility (Barber & King, 2016). It is through personalising teaching that critical engagement for the meaning making process can be sustained (Bendahmane, et al., 2016). This suggests that lecturers need to understand the best ways of using e-learning resources that adapt to their personal methods of teaching and learning. They further need to understand the best ways in which students learn better, not only in a discipline, but the different subject content matter within the discipline. Different content aspects of the discipline may require different specific reflections to enhance immersion. Lecturers need to be aware of appropriate e-learning resources that can best cater for those different aspects and levels through curriculum differentiation that addresses diverse students' needs as individuals.

Awareness of the self through self-profiling may lead to autobiographic approaches to teaching and learning (Pinar, 2004). This view is supported in Khoza's (2021) case study of 11 teachers of Master of Education using Moodle as an e-learning resource. The study concludes that these teachers reflected consciously on the use of digital technology through their thoughts as well as their natural identities, which became evident subconsciously. Self-understanding through reflection makes it possible to be aware of suitable and best conditions under which lecturers can perform their duties. It also makes them understand what e-learning resources are available at their disposal and how best to adapt them to their methods. Self-awareness in the process of teaching and learning involves learning from direct life experiences that is individually controlled (Kolb, 2015). Direct life experience learning needs coaching from specialists in order to direct learning to certain specific identified objectives (Maul, et al., 2018). This suggests that for self-experiences of teaching and learning process to be meaningful, a team effort from a coach and student is needed in their understanding of their common purpose of enhancing self-experiences.

3.6.2 Ethical concepts

e-Learning platforms are connected to other users outside of education systems, making them open to different stakeholders. Individual stakeholders influence different interest areas, such as education, commercial, industrial, economic etc. All these different interests have a psychological impact on users of e-learning resources (Maul et al., 2018). In order to reduce unnecessary disturbances, education interests of teaching and learning should be pursued by lecturers in balancing what needs to be taught and learnt (Khoza, 2016). Appropriate balancing of teaching and learning objectives contributes to student motivation, from correlation in the use of e-learning resource and student perception of thereof (Mashau, 2017). This suggests that rights and responsibilities of users need to be ensured in order to correlate e-learning resources to teaching and learning objectives.

The process considers participants' safety to be highly regarded in the use of e-learning resources for critical individual growth. It is also critical to understand that individual protection and safety within the broader context of various stakeholders needs to be considered. Individuals need protection to express themselves in their personal growth contributing to broader contextual experiences (Le Grange, 2019). Personal growth on its own reflects filling of existing gaps in general social space, suggesting that personal development connects to general social experiences. The feeling of being protected and safe in turn contributes to the wellbeing of individuals within the e-learning space.

Identifying with the virtual community is enhanced through the e-learning space (Van Deurzen, 2016). Safety features in e-learning resources provide users with security, making them focus more on the task at hand (Griffiths, et al., 2019). This suggests that protection and safety enhance psychological and ethical concerns in the process of using e-learning resources.

3.6.3 Fourth Industrial Revolution concepts

Technological innovation concepts point to new development in ways of thinking and technical application of various skills across educational experiences. Concepts such as e-learning suggest technological application in the process of teaching and learning. The Fourth Industrial Revolution integrates digital-based learning and human thinking that revolutionise teaching and learning processes (Logan & Tandoc, 2018). New technology comes with different improved features influenced by various interest groups and based on user experiences. Analysis of personalised teaching and learning contributes more to individualised teaching and learning using codes that reflect personal preferences (Durak et al., 2016). Concepts such as robotics and coding, the IoT, Artificial, artificial intelligence, 3D and others are associated with the Fourth Industrial Revolution (Lee, et al., 2018; Xu et al., 2018; Penprase., 2018). These concepts influence the use of e-learning resources by lecturers in the process of teaching and learning.

The Fourth Industrial Revolution pushes for changes in ways of communicating information and that impacts on how teaching and learning is experienced. The speed at which information is processed creates information overload, and that requires in-depth research in the field of education. e-learning technology became smaller, and easy to handle and carry around in the process of researching and communication of experiences across disciplines. Use of smart phones with more speed and less cost takes e-learning resources to another level (Moravcikova & Klietiko, 2017). Flexibility in the use of e-learning resources promotes personalised teaching and learning where individuals can teach and learn at their own preferred space and time. Boundaries between general social space and personal individual space is reduced by technology innovations where an individual can be physically an individual but virtually in a social space with a virtual community.

3.6.4 Convergence concepts

Boundaries between time, physical and virtual space are reduced by e-learning resources. The multi-level framework of UTAUT serves as a base line model that serves the main effects of UTAUT in pursuing and refining current context effects to identify new context effects (Venkatesh et al., 2016).

Venkatesh et al. (2016) claim that the baseline model builds on individual-level contextual factors that connect to user attributes, technology attributes, and task attributes at a certain time or event. Individual-level contextual factors converge with high-level contextual factors connecting to environmental attributes, organisational attributes, and location attributes through main effects (Venkatesh, et al., 2016). Convergence of concepts such as phygital, real world and virtual world feature in the use of e-learning for teaching and learning (Vate-U-Lan et al., 2016; Lee et al., 2018), and suggest the blurring of lines within e-learning experiences. Technology as it facilitates e-learning experiences brings together different world view experiences from different parts of the world simultaneously in the process of e-learning experiences. Engagement across the education spectrum, teaching across subjects is one of e-learning experiences (Costa, et al., 2018; King & Pasarica, 2019). This suggests that different experiences converge through e-learning resources and that deepens personal understanding and individual growth in their subject of specialisation. In turn this balances the depth and width of teaching and learning experiences.

Use of augmented reality (AR) brings the physical world into the virtual world (Griffiths et al., 2019; Schreibman et al., 2017). A combination of different e-learning resources complementing one another enhances continuation of e-learning experiences (Basko & Hartman, 2017; Sadeck, 2016). Continuous digital and internet categories of e-learning bring different experiences of online teaching and learning together, creating new experiences (Barrat et al., 2017; Garone et al., 2019). Overlapping and convergence of the social, professional, and personal experiences in the process of self-actualisation suggests continuation of teaching and learning experiences. This connects to formal, informal, and non-formal digitalised curriculum (Khoza, 2020; Mpungose & Khoza, 2020a, 2020b). This implies that individual personal teaching and learning connects to the whole experiences of e-learning made possible by the convergence of diverse and multiple e-learning resources. The present and past as well as the future all converge in the continuous process of teaching and learning. Convergence of activities overlaps them with the intention to enhance teaching and learning experiences. The implication is that there is continuous intra and inter-connectivity between multiple concepts that bring new e-learning experiences for teaching and learning. e-Connection concepts are represented in Figure 3.4.

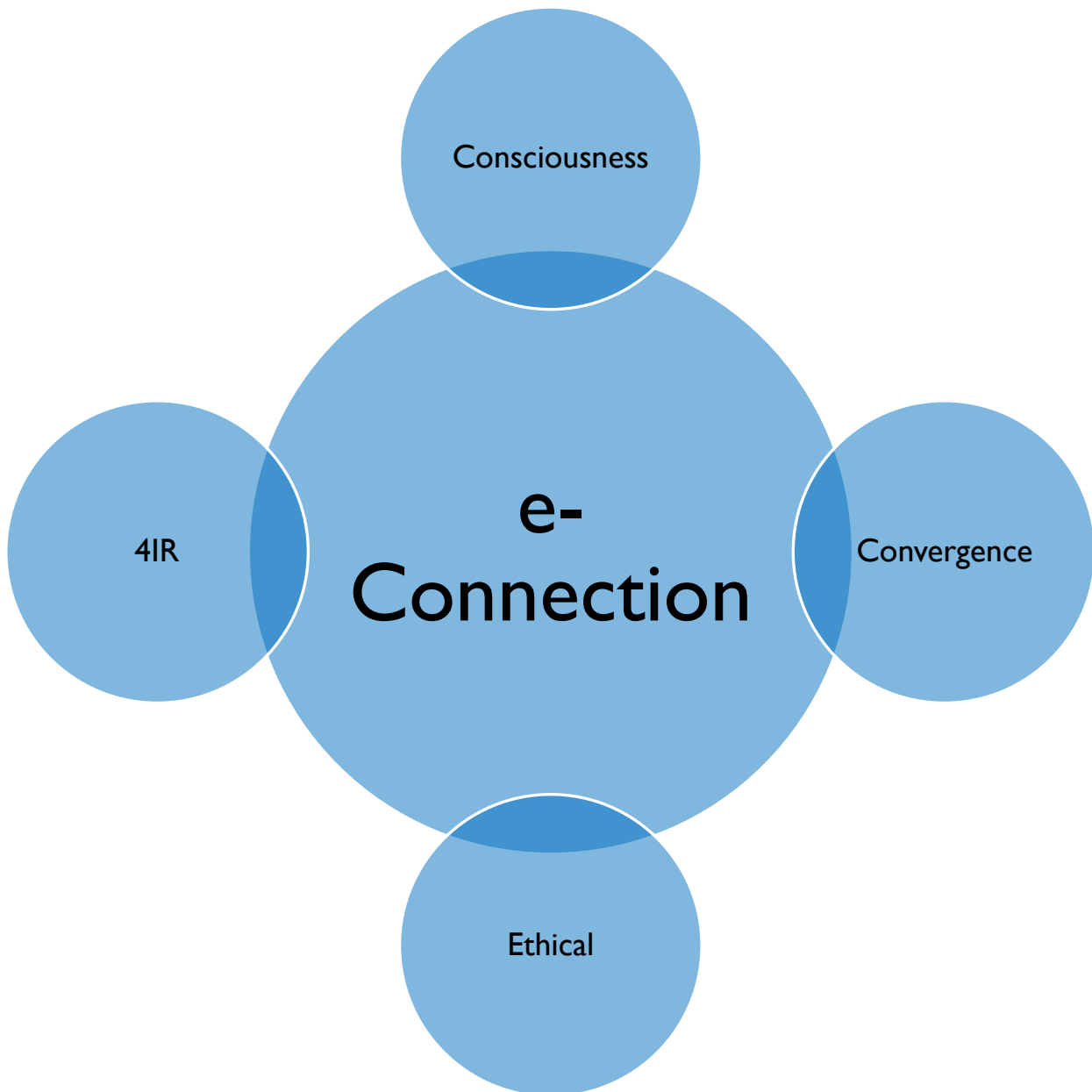


Figure: 3.4 e-Connection concepts.

3.7 Summary of the chapter

This chapter explicated lecturers' experiences of e-learning resources reflecting on the literature analysis presented in Chapter Two. It started with the introduction of theoretical concepts as opined in the literature consulted. Adom et al. (2018), Casanaye and Li (2015); Van Manen, (2007) postulate that theory relates to practice, sets of concepts, and blueprints for research respectively. Theoretical concepts and frameworks reflect the research problem and research questions in congruence with Chapter One and Chapter Two of the study (Lederman & Lederman, 2015). The chapter discusses lecturers' experiences of e-learning resources in relation to teaching and learning at higher education

institutions. In so doing it acknowledges Starkey's (2020) view on the surge in the use of technology for teaching and learning which contributes to massive innovations in technology, putting pressure on lecturers to teach intuitively. The chapter acknowledges that pedagogic approaches for e-learning resources are critical in the context of teaching and learning at a university.

Reflection on e-learning theories in Chapter Two suggests that Khoza and Biyela (2020), Koehler and Mishra (2009) and Mpungose (2019) are some of the studies where TPACK is applied as an e-learning theory. The chapter also shows that EEM Moyer-Guse (2008); Slater and Rouner (2002) is another theory used for e-learning context while TAM (Basak & Govender, 2019; Marangunic, 2019) is another e-learning theory used for teaching and learning at university. The chapter espouses that EEM, and TAM are consolidated as reviewed theories in the UTAUT and UTAUT2 (Venkatesh, et al., 2016). EEM and TAM are discussed under UTAUT and UTAUT2 as part of the theoretical foundation of this chapter.

The chapter acknowledges the significance of the critical importance of the discipline in the use of e-learning resources for teaching and learning. Lecturers' rationale for teaching and learning activities reflect their cognitive ideas (Shulman, 1986; Sadeghi, 2019; Starkey, 2020). Mitigating effects against their intuitive use of e-learning strategies are caused by the massive innovation of new technologies (Shulman, 1986; Sadeghi, 2019; Starkey, 2020). In its focus on TPACK, the chapter extrapolates on Koehler and Mishra's (2009) literature review and reflects on case studies in Mpungose (2019), Ngubane-Mokiwane and Khoza (2016) and Naicker and Makgatho (2017) as discussed in Chapter Two. These studies suggest understanding of representation of technological, pedagogical, and content concepts in the use of technology for teaching and learning.

Albrahim (2020), Harris and Hofer (2011) and Khoza and Biyela (2020) postulate that understanding of TPACK needs to involve self-reflection identities within the disciplinary teaching and learning process. However, multiple roles that come with TPACK pose a challenge for effective online teaching and learning (Albrahim, 2020). Nevertheless, TPACK is valuable for research work and instructional activities for both researchers and practitioners (Baran et al., 2011). The value of TPACK for lecturers and institutions of higher learning is critical for organisational innovations that enhance lecturers' self-efficacy (Andyani, 2020). These studies suggest that more focus is needed on the use of technology for teaching and learning in universities internationally and locally.

The chapter highlights the UTAUT and Unified Theory of Acceptance and UTAUT2, with reference to Venkatesh et al. (2003) and Venkatesh et al. (2012, 2016). In addition to the Venkatesh series of studies, other relevant literature is consulted, such as studies by Anna and Pattusamy (2020), Gruz, et al. (2020), Tiwari (2020), Tam et al. (2018) and others. All of these studies support Venkatesh et al.'s (2003) review of eight construct models to produce a new model of UTAUT with new mechanisms. They also support Venkatesh et al.'s (2016) on review and synthesis of information system literature to arrive at UTAUT2 extensions. In the use of UTAUT Venkatesh et al. (2016) used Weber's (2012) theory of evaluation framework in analysing UTAUT, factors, while Radovan and Kristl (2017) use the community of inquiry framework. Tam et al. (2018) and Alsheri et al. (2019) use the SEM to apply UTAUT factors, while Han and Conti (2020) use the post acceptance model.

This suggests that this study can use its own model with UTAUT factors to explore lecturers' experiences of e-learning resources. This study applies the e-learning Nexus Model (e-LNM) to explore lecturers' experiences of e-learning resources. An illustration of the e-LNM is presented, showing the continuous flow of e-learning experiences from the opaque to the lucid.

The e-LNM is deduced from the literature in Chapter Two of the study. It is presented as social (e-generalisation), professional (e-specialisation) and personal (e-connection). The 'e-' represents electronic or digital, which is technologically enhanced teaching and learning strategies. e-Generalisation refers to everyday use of technology for socialising or communication which includes advertising or any form of networking with a general purpose such as creating awareness of social issues. Literature from Chapter Two reveal that e-generalisation reflects social concepts such as the cultural and generational (Mohr & Mohr, 2017; Sun & Chen, 2016; Zhang, 2018). There are also hedonic factors in e-generalisation (Dauda et al., 2018; Knobloch-Westerwick, 2015; Onuekwe, 2015). Concepts that suggest dispelling of myths in the use of technology (Abaidoo, 2014) are applicable to the UTAUT and UTAUT2 in as much as they are cultural in their application with technology.

Cultural concepts connect to class structural analysis that suggests economic concepts such as costs and affordability in the use of technology for teaching and learning (Guinta, 2018; Hwang et al., 2016; Kawsari & Garousi, 2018; Maphosa et al., 2020; Venkatesh, et al., 2012). Use of technology at social scale outside of education contributes to social identities coining social digital concepts such as 'digital natives' or iGeneration (Argenti et al., 2019; Linnes & Metcalf, 2017; Reis, 2018). These

identities accommodate variances reflecting social strata hence different lifestyles informed by differences in choice of technologies to gender, age, and experience (Almarwani, 2016; Romer-Rodriguez et al., 2020). Factors that affect cultural and economic as well as broader social issues, such as choice of lifestyle, invoke decision making processes. Decision making plays around power dynamics, which are political or ideological. Rights and responsibilities and policy making decisions involve different stake holders, organisationally, internationally, and locally (Chikerema et al., 2016, Koffer, 2015; Wuttke, 2019; Arenas et al., 2019). Use of e-learning for teaching and learning is influenced by different factors outside the scope of teaching and learning. This suggests that it requires multiple stakeholders to connect the relevance of teaching and learning to its meaningful and valid effectiveness. An illustration of the concepts of e-generalisation is provided.

Transaction between e-generalisation and e-specialisation becomes effective with effective teaching and learning. Disciplinary content reflects on social issues that need specific and scientific analysis to make content worthwhile for participants in the process of teaching and learning. Different disciplines offer different subject contents such as Accounting (Bitzer & De Jager, 2016), ICT (Chumo & Kessio, 2015), History (Schreibman, 2017), and Mathematics (Treffert & Thomas, 2018), to name just a few. Use of technology for teaching and learning comes with its own complications as different technologies can be used to cater for differences that exist among participants. Different hardware, software and ideological-ware add to the complex nature of the vertical structure of disciplinary approaches (Ali, 2019; Budden, 2017; Khoza, 2015; Mpungose, 2019; Nwulu, 2017; Sebbowa & Muyinda, 2018). The vertical structure of a disciplinary approach requires alignment of cognitive and metacognitive pedagogical strategies (Hsieh & Chiu, 2020; Khoza, 2019; Teichler, 2017). It is through scholarships that such strategies could be harnessed, as they cut across different disciplines (Friberg, 2014; Le Grange, 2018; McKinney, 2007; Potter & Kustra, 2011). The chapter provides an illustration of the e-specialisation framework to reflect the concepts.

Finally, the chapter reflects on e-connection, where the personal connects to the professional, critically making sense of the everyday experiences of the social world. This process continuously connects through technology with the main effect of creating new e-learning experiences. It requires personal engagement with e-learning experiences that reflect consciousness of the social presence in the personal in the form of awareness (Sokhulu, 2020). The awareness of social presence needs to acknowledge differences among individuals and their personal abilities and skills in the use and acceptance of technology (Garon et al., 2019). The technological innovation of the Fourth Industrial

Revolution requires a combination of technology intelligence and human thinking to ensure psychological and ethical issues are considered in the use of technology for teaching and learning (Deurzen, 2016; Logan & Tandoc, 2018). Contextual factors cut across all experiences as they present the newness of the social, professional, and personal experiences. The surge of technology during the Fourth Industrial Revolution compels the application of a digitalised curriculum that merges formal, informal, and non-formal teaching and learning experiences (Khoza, 2020; Mpungose & Khoza, 2020a, 2020b). This suggests that personal positioning with e-learning resources within e-connection experiences is a possible option to connect to all different experiences at the same time. The speed with which technology innovation surges is unprecedented, resulting to convergence of the real world with virtual world (Vate-U-Lan, 2016).

The introduction of smart phones mitigates against possible exclusion of certain categories of individuals from participating in and contributing to new e-learning experiences (Moravcikova & Klietiko, 2017). Convergence of the physical and the virtual world is also facilitated by the integration and consolidation of theories, cross-contextually merging individual-level with high-level contextual factors through main effects (Venkatesh et al., 2016). This suggests that individual-level contextual factors connect personal experiences with high-level organisational experiences which are social. e-Connection concepts through technology for teaching and learning connect all experiences and contexts that facilitate individual meaningful immersion with teaching and learning experiences that connect to disciplinary contextual factors.

In the next chapter the research design and methodology is discussed, with reflection on the rationale for the study, literature analysis and theoretical framework.

CHAPTER FOUR

RESEARCH STRATEGIC AND TECHNICAL METHODOLOGICAL DESIGN APPLICATIONS

4.1 Introduction

The previous chapter discussed the theoretical conceptualisation of lecturers' experiences of e-learning resources based on the literature analysis in Chapter Two. Aliyu et al. (2015, p. 15) refer to "conceptualisation" as an "abstract model of phenomena in the world by having identified the relevant concepts of those phenomena". This study relates to its abstract model, which emanated from the literature on lecturers' experiences of e-learning resources in identifying relevant concepts leading in the form of e-learning Nexus Model (e-LNM). This reflects on the professional (e-specialisation), social (e-generalisation) and personal (e-connection). This chapter interrogates strategies and techniques of exploring lecturers' experiences of e-learning resources. It relates meanings to material circumstances in a way that communicates practical contexts in reference to participants' experiences (Sayer, 2000). In so doing it discusses strategic and technical means applicable to research aimed to understanding lecturers' experiences of e-learning resources.

The research design is about reflecting on the thesis of the study as it unfolds, its significance and contribution to the body of knowledge in the chosen field of research. It involves selection of the topic, and consultation of relevant literature in relation to a theoretical framework that suits its research approach. The research design involves different research methodologies or approaches preferred by researchers (Creswell & Creswell, 2018). Denzin and Lincoln (2018) claim that the research design is a flexible set of guidelines connecting theoretical paradigms to inquiry strategies and data generation methods. This is a coalescing chapter of the study, connecting all chapters by reflecting on the previous chapters to determine how to proceed, integrate and connect all parts of the study. It demonstrates a connection between the interpretive research paradigm and qualitative research approach that were chosen for this study.

The interpretive paradigm within the lens of hermeneutic phenomenological strategies resonates with the understanding of meanings of e-learning experiences from the participants' understandings. This chapter justifies its choice of the interpretive paradigm in its positioning. Next the chapter reflects on the qualitative research approach employing purposive sampling for selecting participants for the

study. A brief discussion on data generation methods of the study follows, involving triangulation of semi-structured interviews, observation and document analysis, which are the data generation methods assumed to be appropriate for this study.

In its analysis of data for understanding lecturers' experiences of e-learning resources, a hermeneutic circle data interpretation strategy is employed. Ethical considerations as they apply are briefly discussed to ensure appropriate processes are followed before, during and after data generation. This involves securing ethical clearance to conduct research, protocols to gain access to participants and their participation, rights and protection of participants, and principles of quality in qualitative research involving credibility, dependability, transferability, and confirmability. Finally, a chapter summary reflects on what has been covered with brief mention of what is to follow in the next chapter.

4.2 Paradigm as a concept

Understanding the concept of paradigm and its historical background is the starting point of this discussion. Paradigm is a word that originates from the Greek '*paradeiknyai*' meaning "to show side by side ... a pattern or example of something" (Aliyu, et al., 2015, p. 2). Kafle (2011) asserts that Michel Foucault and Thomas Kuhn are two prominent scholars in the 20th century that draw attention to the use of the concept of paradigm. Paradigms are concepts, prepositions and assumptions that orient thinking and research when they are logically constructed from loose collections to become logically related as opined by (Kafle, 2011). In the same wavelength, Creswell and Creswell (2018) assert that the worldview based on general philosophical orientation about the world and the nature of research that the researcher brings to a study is a paradigm. In affirming the view by the former and the latter, Guba and Lincoln (2018) assert that a set of beliefs and feelings about the world and how it should be understood guides a research paradigm. On the same note, Kivunja and Kuyini (2017) corroborate shared views on paradigm as the worldview in perspective, thinking, school of thought or shared beliefs informing meaning or interpretation. This suggests that a paradigm is about making sense of what is happening and experienced by individuals in their personal and social space at a certain time.

A paradigm is critical for understanding researcher's orientation strategies to worldview, it involves the integration of philosophy and experience. Ormston et al. (2013) assert that ontology and epistemology are key to the nature of the world we know and understand. Carter and Little (2007) claim that ontology concerns itself with value judgement about what constitutes knowledge and

epistemology is the theory of that knowledge. The latter and the former are supported in Daniel (2016). Kivunja and Kuyini (2017) postulate that epistemology (knowledge) and ontology (philosophical nature) involve methodology (way of obtaining knowledge) and axiology (ethical issues) as critical elements of a paradigm (Daniel, 2016; Kivunja & Kuyini, 2017). Ponterotto (2005) claims that epistemology is a means to engage with phenomenon experiences through interaction between participant and the researcher. Carter and Little (2007) argue that epistemological research is essentially theoretical. Reflexive researchers actively adopt a theory of knowledge and less reflexive researchers implicitly adopt a theory of knowledge (Carter & Little, 2007). This study employs an interpretive paradigm, and hence is more reflexive in its approach.

4.2.1 An interpretive paradigm in lecturers' experiences of e-learning resources

An interpretive paradigm involves subjective interpretation of the meaning of social contexts by individuals or a group of individuals. Individual meanings are diverse and presented in different strategies within methodologies through data generation, interpretation, analysis and understanding of meanings as presented in research (Denzin & Lincoln, 2018). The interpretive paradigm, like all other paradigms, consists of ontology, epistemology, methodology and axiology. This study seeks to make sense of lecturers' experiences of e-learning resources, through employing the four elements embedded within an interpretive paradigm.

Interpretive paradigm is one of the research paradigms used by researchers to understand a phenomenon under study. There are many programmes and paths within the interpretive paradigm (Van Manen, 2017). Welsham (2001) postulates that the interpretive paradigm involves human actors in the social construction of our understanding. Creswell and Creswell (2018) support this view, claiming that the interpretive paradigm bases its understanding on multiple participants' subjective meanings which are negotiated socially and historically. The former and the latter are supported by Denzin and Lincoln (2018), who claim that the interpretive paradigm includes questions that are asked and the interpretation that comes with them. Creswell and Creswell (2018) assert that the interpretive paradigm is a social constructivist paradigm where the goal of research is to rely as much as possible on the participants' views of the situation being studied. This suggests that the interpretive paradigm applies subjective understanding about the construction of meaning that relates to social context involving the feelings and experiences of those that are affected by the phenomena under study. In this study the interpretive paradigm will be used in responding to three main research questions about lecturers' experiences of e-learning resources.

This study seeks to understand lecturers' experiences of e-learning resources, and it is important for it to describe and interpret this phenomenon. In so doing it focuses on the discipline of History as taught by History lecturers at universities in South Africa. The study tackles the following three critical questions:

- What e-learning resources do lectures use in the teaching of History?
- How do lecturers use e-learning resources in the teaching of History?
- Why do lecturers use e-learning resources in the way they do in the teaching of History?

Understanding requires making sense of meaning that can be understood when it involves subjective interpretation of the meaning of social contexts by individuals or a group of individuals. An interpreted meaning has a hermeneutic element or interpretive understanding ("*verstehen*") (Sayer, 2000, p. 17); "*Verstehen* is a German word with literal meaning to understand" (Aliyu, et al., 2015, p. 21). Guba and Lincoln (1994) assert that hermeneutical methodology is connected to the constructivist ontology with subjectivist epistemology of constructed findings. Direct lived experiences of individuals and groups are the focus of the hermeneutic phenomenology in their interpretation, used to describe experiences and provide a description of the phenomenon in the interpretation process (Kafle, 2011). This suggests that a hermeneutic interpretive paradigm provides for both a descriptive and interpretive understanding of lecturers' experiences of e-learning resources, and this is suitable for use by this study to respond to the three main research questions.

4.2 Reflecting on the historical background of the hermeneutic methodology

Hermeneutic methodological background is critical for this study in bringing its rich historical worldview of understanding lecturers experiences of e-learning resources. Fuster (2019, p. 220) asserts that hermeneutic originates from a Greek word ("*hermeneuein*") referring to 'interpret'. In a scholarly discourse hermeneutics is one of the two strands of phenomenology, which includes Husserl's transcendental descriptive phenomenology and Heidegger's existential interpretive phenomenology (Sloan & Bowe, 2014; Giorgi et al., 2017). On the same note Dowling (2005); and Cal and Tehmam (2016) concur that Franz Brentano had a huge influence on Husserl's conception of descriptive phenomenology. In deepening the scholarly discourse, Husserl influenced Heidegger in conceiving interpretive phenomenology (Lavery, 2003). In emphasizing the critical importance of historical background, Aliyu et al. (2015) claim that hermeneutics has developed from the original understanding of texts specifically biblical understanding. Contemporary scholarly discourses in

hermeneutic phenomenology developed into general understanding of all communication, and the hermeneutic circle is a contemporary aspect used to understand a phenomenon (Aliyu, et al., 2015). Hermeneutic phenomenology focuses on both the hermeneutics (Heideggerian) and phenomenology (Husserlian) (Ajjawi & Higgs, 2007). The flow of discourse in hermeneutic phenomenology using hermeneutic circle traces the origin of the phenomenon to its contemporary state of being. Dowling (2005, p. 132) asserts that the concept of phenomenology has its origin in the Greek word (“*phaenesthai*”) meaning to flare up or to show itself. This implies that social and cultural influences were central to intellectual exchange at the time, this places phenomenology in the social space.

Horrigan-Kelly et al. (2016, p. 2) claim that Heidegger’s phenomenology is grounded on the tenets of (“*Dasein*”) (being there or man’s existence). Heidegger’s phenomenological foundation builds on Husserl’s phenomenology, but is grounded on *Dasein* (being there or presence), that was also influenced by a hermeneutic philosopher, Wilhem Dilthey (Cal & Tehmam, 2016). The tenets of being there involves, lived experience, everyday ordinariness, being in the world, encounters with entities in the world, being with, temporality, spatiality, and the care structure (Horrigan-Kelly et al, 2016). The hermeneutic phenomenological research paradigm is drawn from different scholars at different times, and consists of metaphysics (ontology, epistemology, and axiology), methodology, quality, and ethics (Kafle, 2011). Merleau-Ponté raised the phenomenology of perception with emphasis on reflective description and interpretation (Joseph & Reynolds, 2011). De Beauvoir’s interdisciplinary phenomenology of the second sex with emphasis on women’s representation in the being of phenomenology, contributed to hermeneutic phenomenology (Joseph & Reynolds, 2011). It is a dynamic and interwoven reflection of ever evolving lived human experiences.

The focus of hermeneutic phenomenology is on subjective experiences of individuals and groups (Kafle, 2011). Hans-Georg Gadamer’s contribution on the process of meaning from preconception to universality influenced the idea of the hermeneutic circle of understanding parts and the whole in the phenomenon (Dowling, 2005). It is the contrast and comparison of the phenomenology of having in the world by Marcel and the phenomenology of being impacted upon by the social environment by Schütz that makes hermeneutics interesting within social sciences (Dowling, 2005). This study explores lecturers’ experiences of e-learning resources in the teaching of History at universities. Lecturers as individuals act in their world of existence as individuals and in their social context, which is inseparable from them being lecturers (Horrigan-Kelly et al., 2016). Van Manen (2014) avers that the phenomenology of practice refers to inquiries that address thoughtful understanding of the

meaningful aspects of the experience of interacting. This experience of interacting involves online activity involving email, texting, or social networks of value to professional practitioners (Van Manen, 2014). This suggests that the being of lecturers is professional in the teaching world, which includes the pedagogical aspect of being and having the means to act or interact online (digitally).

4.2.1 Application of hermeneutics techniques to lecturers' experiences of e-learning resources.

The historical background of hermeneutics phenomenology shows that text plays a critical part in the process of understanding. In this study an analysis of the background to the conceptual understanding of lecturers' experiences of e-learning resources produced a conceptual model – the e-Learning Nexus Model (e-LNM). This model's basic understanding shows three different but interconnected individual experiences of lecturers: e-specialisation (professional), e-generalisation (social) and e-connection (personal). These experiences are reflected in the original conception of hermeneutics in seeking to interpret text for understanding descriptions of the phenomenon by others. In hermeneutics our embeddedness in the world of language and social relationships and the inevitable historicity of all understanding is the source of interpretation of meaning (Finlay, 2009). In social sciences meaning has to be understood, and there is always an interpretive or hermeneutic element that enhances meaningful understanding by 'fusing of the horizons' of "listener and speaker, researcher and researched" (Sayer, 2000). Meanings come from actions and texts that are not reducible to the mere interpretation of the researcher (Sayer, 2000). The researcher allows the text to speak, and the answer is found in the text (Ajjawi & Higgs, 2007). This suggests that texts play a critical role in hermeneutic phenomenological studies to understand participants' actions.

Being hermeneutic is about reflecting on lived experience using interpretive language and sensitive language devices to analyse, explicate and describe phenomenological possible meanings of lived experiences (Van Manen & Van Manen, 2014). Walsham (2006) argues that hermeneutics is one of the philosophical underpinnings to do interpretive research. This suggests that being is a state of philosophy where an individual or groups of individuals situate themselves in a certain frame of thinking about their everyday life experiences and feelings about their world. However, in professional fields such as pedagogy, nursing and existential psychology phenomenological researchers concur that the situation is more complex (Holroyd, 2001). Some form of basic guidelines to phenomenological inquiry are needed, that are adapted and flexible to the requirements of the study about the phenomenon (Holroyd, 2001). It can be argued that phenomenological study does not need a theory, but in this study the phenomenology is about the social phenomenon falling within a

professional scope of phenomenology with its professional and scientific theoretical assumptions. Phenomenology is a Social Science endeavour and researchers need to engage to know and feel the phenomenological experience (Kafle, 2011). The idea of applying theoretical reflection in phenomenological studies is supported in other quarters of phenomenology, especially in hermeneutics phenomenology.

Creswell (2003) argued for a framework before designing a proposal in phenomenological studies. Fuster (2019) supports this view asserting that pedagogy is a science that merges different disciplines such as philosophy, psychology, anthropology, sociology and economics with the purpose of transformation. Brinkmann and Friesen (2018) aver that Van Manen characterised his multidisciplinary empirical phenomenological method and pedagogical phenomenological approach as hermeneutic phenomenology. Kafle (2011) asserts that Van Manen contributed to the development of engaged phenomenological research to address phenomena that reflect social science experiences. The former and the latter are supported by Brinkmann and Friesen's (2018) claim that Van Manen developed both phenomenological methods for empirical research and the phenomenological approach to do phenomenological activities for pedagogical practices. The purpose of this study is to understand lecturers' experiences of e-learning resources in the teaching of History at universities in South Africa, bringing to light pedagogical issues.

Lecturers' experiences of e-learning resources are understood within the structural concept of teaching and learning. Hermeneutic strategies are employed as part of multiple interpretive strategies to address various separate discipline activities and projects (Denzin & Lincoln, 2018). Hermeneutic phenomenology, pinned on the theories of Van Manen, Ayala, and Martinez integrate description and interpretation of the essence of lived experiences that draw on the importance of meaning in pedagogy, psychology, and sociology (Fuster, 2019). The focus in this study is on the teaching of the History discipline within human science or a Social Sciences pedagogical approach. Holroyd (2001) claims that pedagogy is multidisciplinary and requires priority actions and procedures; so, methods are part of that process as they guide or lead the pedagogical analysis that inform educational practices. Kafle (2011) asserts that the most appropriate method to explore the phenomena of pedagogical significance is phenomenology. This study applies the hermeneutic phenomenology involving History pedagogical methodology to understand lecturers' experiences of e-learning resources.

Daniel (2016) states that science education curriculum research on problem solving ability bolsters the relationship of benefit between researchers and participants. Description and interpretation of lecturers' e-learning experiences in hermeneutic phenomenology considers the fundamental structures of participants' lived experiences (Fuster, 2019). The recognition of participants' meaning of their experiences to the pedagogical value is important for interpretation of teaching and learning experiences (Fuster, 2019). Hermeneutics is understood to be the art and science of interpretation of meaning, continuously opening new insights and understanding about the phenomenon of experience (Friesen et al., 2012; Kakkori, 2009; Tuffour, 2017). Giorgi et al. (2017) supports this view, claiming that interpretive phenomenology enhances maximum flexibility for different age groups across disciplines. This suggests that contextualisation and recontextualisation of description and interpretation of experiences and meanings are ongoing as new insights and understanding unfolds in terms of the phenomenon under study. In its approach this addresses ongoing understandings of lecturers' experiences of e-learning resources.

Understanding is subjective to individual self-reflection. In hermeneutic phenomenology the researcher is constantly and continuously in a process of self-reflection (Laverty, 2003). Ponterotto (2005) corroborates this view, asserting that in the hermeneutic approach hidden meaning is brought to the surface through interactive stimulated reflective dialogue between the researcher and participants. Christensen (2017) supports the former and the latter postulating that exploring participants' narrative in phenomenological research brings a sense of the valuable wholeness of their lived experiences. Creswell and Creswell (2018) support this view, asserting that hermeneutic phenomenology promotes participants' perspectives of understanding the phenomenon of the study. In hermeneutics deeper and self-reflective understanding of the phenomenon is critical (Zayed, 2008). Self-reflection enhances reflexivity increasing researchers' critical 'awareness of their role in the study.

Reflexivity by a researcher enriches quality by providing for immersion in a thick and detailed description of the phenomenon. Sloan and Bowe (2014) claim that in hermeneutics, lived experiences of participants reflect the practical ways of practice in their respective fields of profession. Lecturers are actors in the pedagogic context and their experiences are informed by their daily expressions through texts and pedagogic activities in their professional capacity. Our ordinary experiences of life and our sense of life meaning must be reverberated by the text (Van Manen, 2007). Different textual accounts of experiences on the phenomenon help us to explore our own nature critically, thoughtfully,

attentively with more understanding of experiences (Qutoshi, 2018). The interconnection of the three dimensions of the e-LNM as gleaned from literature is an integral theoretical and paradigmatic approach to this study, as theoretical conception in hermeneutics begins from the phase of proposal (Fuster, 2019).

Hermeneutic phenomenology research requires the subjective being to be always engaged on-the-way of understanding experiences from which interpretation is gleaned, so that one understands what it looks or feels like to go through experiences (Kafle, 2011). In the process of engaging with literature, the e-LNM reflects a textual pre-understanding description of lecturers' experiences of e-learning resources. The purpose is to bring to the fore the pre-understanding as a transition to reflective understanding (Finlay, 2009). The pre-hermeneutic phenomenological understanding of the phenomenon is not meant to be dogmatically reproduced, as after hermeneutic experiences nothing ever appears the same (Finlay, 2009). The nature of the phenomenon and its context is influenced by different strategies that determine the applicability of the hermeneutic phenomenological study.

Kakkori (2009) asserts that seven steps are recommended as the cyclic process of conducting research in hermeneutic phenomenology: silence, reflection, identification, selection, interpretation, construction, and verification. Kafle (2011) identifies six dynamics of research activities in hermeneutic phenomenology. These involve commitment on an abiding concern, oriented stance toward the question, investigating the experience as it lived, describing the phenomenon through writing, and rewriting, and consideration of the parts and the whole (Kafle, 2011). In Fuster (2019) four phases are identified for hermeneutic research, which involve the previous stage or proposal, collecting the lived experience, reflecting on the lived experience and writing about reflecting on the lived experience (Fuster, 2019). This suggests the complexity, flexibility, multiperspectivity, plurality and dynamic evolutionary artistry and tapestry of the characteristics of the phenomenon of human experiences in the hermeneutics research.

Being an interpretive paradigm, the hermeneutics are critical of critical reflection on experiences; this includes the compositions of elements encompassing a paradigm ontology, epistemology, methodology and ethics. These encompassing elements place hermeneutic phenomenology at the heart of research in this study, and its presence is in all aspects of research from the beginning to the end. Employing the hermeneutic circle and hermeneutic strategy in general draw the researcher nearer to the phenomenon of study, providing the bigger picture around the phenomenon of interest (Aspers

& Corte, 2019). A hermeneutic circle strategy provides the study with a critical voice (Sayer, 2000). A hermeneutic phenomenological study can critically reflect within and outside of its own perimeters to identify its own strengths and weaknesses. This study employs a hermeneutic phenomenological strategy based on its strengths of enhancing understanding of lecturers' interaction with e-learning resources.

The positioning of hermeneutic phenomenological methodology the interpretive paradigm makes it resonate with inquiries in Social Sciences and Humanities. Representation of participants' experiences is central to the interpretivist perspective (Morrow, 2005). Mack et al. (2005) claim that a researcher gains a rich, detailed and complex understanding from participants about the phenomenon of the study. Maxwell (2012) supports this view asserting that understanding meaning relies on participants' participation. Creswell and Creswell (2018) support the former and the latter, postulating that the key idea is to understand the phenomenon from the participants' point of view. Van Manen (1997) claims that the aim of hermeneutic phenomenological research is to select diverse enough participants who have lived the experience that relates to the focus of the study, and are prepared to reflect on their experiences. This suggests that methods applicable to studying Social Sciences and the Humanities apply to hermeneutic phenomenology.

Mack et al., (2005) assert that a given research problem or topic needs to be understood from the perspective of the local population it involves. Kafle (2011) asserts that context and the field of research are important in generating the life world stories of research participants. Hameed (2020) supports this view, postulating that phenomenology research focuses on the individual or a group of individuals' descriptions of the lived experience phenomenon. This suggests that participants' subjective feelings and perspectives about the phenomenon are a critical element of the study. It is important that any study involving participants' experiences needs to consider its methods and processes of participant selection carefully. This study discusses the selection of participants in the section on research approach, and that selection is influenced by this hermeneutic perspective.

4.2.2 The strengths of hermeneutic research methodology

Hermeneutic methodology resonates with Humanities or Social Sciences studies, making it appropriate to study human experiences of a social phenomena. It focuses on subjective epistemologies, seeking to understand the phenomena from the point of view of those who are affected by the experiences of the phenomena of the study (Creswell & Creswell, 2018; Erickson,

2018). Ponterotto (2005) claims that epistemology is a means to engage with experiences of phenomena through interaction between participant and researcher. Carter and Little (2007) assert that in hermeneutics epistemology and axiology are inseparable; they are embedded in each other. Methodological rationale is influenced by epistemology that connects to research theory; this includes the choice of methods to communicate research objectives, process, analysis, and findings (Carter & Little, 2007). This view is supported in Cal and Tehmam (2016), who claim that epistemology directs the way in which researchers conduct research by reflecting on their worldview. This suggests that hermeneutics methodology involves all aspects of paradigm ontology, epistemology, methodology and axiology.

It has been proven in some hermeneutics studies that descriptive and interpretive techniques and strategies support each other to better understand the phenomena of the study (Allen, 1995; Halling, 2008; Finlay, 2009; Landbridge, 2008; Kafle, 2011). In Paterson and Higgs (2005) the meaning of participants' experiences of professional practices was facilitated by understanding the horizons based on a literature review of others' experiences. In this way the hermeneutic study enabled the connection of a description of the phenomenon from the literature to participants' description of the phenomenon. The connection between the literature description and participants' description enhances deeper understanding from the horizons to individual participants' understanding, helping the readers to connect the product and process of research (Paterson & Higgs, 2005). This suggests that texts play a critical role in augmenting understanding in hermeneutic phenomenological studies.

Participants' involvement is always centre stage in hermeneutic studies. In Ajjawi and Higgs (2007), hermeneutic strategies are applied to access participants' experiences of personal learning through the subconscious learning process. In Sloan and Bowe (2014) hermeneutics was applied both as philosophy and methodology to understand lecturers' experiences of curriculum design. The study found that hermeneutic methodological techniques enhance participants' voice of understanding lecturers' experiences of curriculum design. This suggests that hermeneutic methodological techniques are part of the study proposal and an integral part of the research questions in seeking to understand the research phenomenon from the point of view of the participants.

It is important to understand the connection between philosophy and methodology, description, and interpretation in hermeneutics because all play a critical part in making sense and meaning of the phenomenon under study within the phenomenological context. Fuster (2019) claims that the

theoretical conception from the proposal is enhanced by the descriptive elements from various sources of experiences, and for pedagogical description phenomenological text becomes critical. The pedagogical experience is in the form of an epiphany from the subject perspective that enhances hermeneutic understanding (Fuster, 2019). This suggests that there are different levels of understanding, the preunderstanding: horizontal understanding, and the deeper understanding. In this study deeper understanding of lecturers' experiences of e-learning resources is sought. In so doing it applies the hermeneutic methodology with the description and interpretation of lecturers' experiences of e-learning resources. This helps the study to reflect on literature consulted and participants' experiences through data generation methods involving semi-structured interviews, observation, and document analysis. However, the critical strength of hermeneutic methodology has its own shortcomings.

4.2.3 Weaknesses of hermeneutic research methodology

Phenomenologists identify a lack of research framework for hermeneutic study as contributing to its weakness (Joseph & Reynolds, 2011; Van Manen, 2014; Christensen, 2017). The subjective nature of hermeneutic methodology creates confusion in identifying the subject matter (structure of the experience) and meaning of experiences (state of being) (Fuster, 2019). Use of concepts in hermeneutics and phenomenology is confusing and contradictory at certain times (Kakkori, 2009; Zahavi, 2019a, 2019b). The combination of description, design, and analysis in hermeneutic methodology within a cultural context of an individual creates confusion through multiple constituencies's reflections of multi-layered experiences of awareness and a variety of levels of understanding (Carter & Little, 2007; Kakkori, 2009). The hermeneutics is often contrasted with phenomenology on ontological and epistemological representation (Lavery, 2003). There is some confusion in the hermeneutic methodology concerning the application of a formal analytical method or allowing data to dictate how analysis should unfold (Sloan & Bowe, 2014). Different scholars and schools of thought in different eras add to different interpretations of the hermeneutic methodology (Kakkori, 2009; Sloan & Bowe, 2014). Different interpretations lead to lack a cohesive uniform, application of hermeneutic research methodology.

4.2.3.1 Mitigating against the weaknesses of the hermeneutic research methodology

Hermeneutic research methodology inquiry is interested in human life experiences, which means it shares a common inquiry interest with disciplines in the Social Sciences or Human Sciences. Disciplines are studied from a certain point of view or perspective, and that makes them paradigm

orientated. A study in the field of curriculum, education and pedagogy bases its inquiry on Social Sciences or Human Sciences experiences of its phenomenon. A hermeneutic research methodology adapts to disciplinary methodological inquiry in the sphere of the Social Sciences or Human Sciences. De Beauvoir and Marcel employed disciplinary inquiry methodologies with hermeneutics to access the self in the social world of experiences (Joseph & Reynolds, 2011). Professional experiences contribute to the being of an individual in the social professional space, and that relates to the sphere of hermeneutic interest in understanding life world experiences in the process of those who are experiencing them. This study employs an educational pedagogical disciplinary strategy that informs the phenomenological experiences of participants in this study.

In Sloan and Bowe (2014) lecturers' experiences of curriculum design are understood by employing Max van Manen's methodological strategies, which are based on Merleau-Ponté's phenomenology of perception. Cal and Tehmam (2016) assert that phenomenology is new and is still developing, it does not have its own framework, hence researchers can develop a local range of theory to enhance understanding within a certain context and time. In this study I employ pedagogical experiences of lecturers that are applicable to understanding their experiences of e-learning resources, beginning from the point of view of the horizon (Dowling, 2005). In my reading through the literature my initial understanding of the phenomenon of lecturers' experiences of e-learning resources was enhanced, leading to the formulation of the existing concepts of the e-Learning Nexus Model (e-LNM). This enabled the study to connect the professional, social and personal experiences of lectures' e-learning experiences. This study intends to deepen my understanding beyond the horizon, by describing and interpreting data generated from the direct involvement of lecturers who are participants in the study. This is done in response to main research questions that guide this study to understand lecturers' experiences of e-learning resources.

Consulting relevant literature on the hermeneutic research paradigm and methodology is critical to mitigate against confusion of concepts. Positioning of hermeneutic study within the Social Sciences and Humanities Methodologies serves as a strength to justify and identify critical human experiences in the life world, by using the hermeneutic circle to relate parts to the whole. This study employs the hermeneutic circle to describe and interpret the phenomenon of lecturers' experiences of e-learning resources. The versality and flexibility of the hermeneutic methodology makes it an appropriate interpretive paradigm where inquiry involves human participants, as it evolves and adapts with the being of an experience in a variety of contexts and times. This also helps to mitigate against confusion

around description, design, and analysis, as well as ontological and epistemological confusion. The hermeneutic circle analysis reflects participants' experiences based on their context of experiencing within qualitative inquiry (Sloan & Bowe, 2014). Hermeneutic methodology and qualitative methodological research inquiry are supplementary to each other. The next section discusses the qualitative research approach as applied in this study.

4.4 Conceptual understanding of qualitative research

It is important for this study to clarify its conceptual understanding of qualitative research. Mason (2002) asserts that there is no consensus in conceptualising qualitative research since it is broadly associated with different schools that are grounded on different philosophical positions. One of the reasons for finding it difficult to conceptualise qualitative research is its continuous ability to adapt to different contextual experiences about the phenomenon. Denzin and Lincoln (2018) assert that qualitative research is moving in several directions all the time. This suggests that the complexities of peoples' life experiences are continuously reflected in different social contexts and disciplines in qualitative research strategies and techniques. The continuity in qualitative research reflects breaking new ground in continuous experiences and new findings and developments about the phenomenon under study.

Schwandt and Gates (2018) assert that specific approaches to understanding the social world are associated with philosophical principles. Creswell and Creswell (2018) claim that qualitative approach is grounded on constructive philosophical worldviews, as it seeks to establish meaning of a phenomenon from participants' point of view. Denzin and Lincoln (2018) support this view, postulating that the qualitative approach makes sense of the phenomenon by interpreting meanings that people attach to it. Qualitative research is broadly grounded on an interpretivist position as it is concerned with interpretation, understanding, experiencing, producing, or constituting the social world (Mason, 2002). Mohajan (2018) supports this view, asserting that qualitative research stresses the interpretation of how people make sense of their experiences to understand the social reality of individuals. This study grounds its philosophical assumptions on constructive qualitative research that connects it to an interpretive phenomenological paradigm in understanding lecturers' experiences of e-learning resources.

4.4.1 Foundational conception of qualitative research strategies

Erickson (2018) links the origin of qualitative research to the cross-cultural work of Greek scholar Herodotus in the fifth century B.C.E., and the cross-cultural survey of morality in societies by Greek philosopher Sextus Empirians in the second century C. Studies conducted on their works provided the fundamentals of basic understanding of human life experiences by applying descriptive reports of everyday social practices (Erickson, 2018). This continued cutting through different historical periods to the present (Erickson, 2018). This view is supported in Mohajan (2018), who postulate that the roots of qualitative research are in social and cultural anthropology, philosophy, psychology, history, and sociology. Erickson (2018) presents a contemporary connection of qualitative research to social sciences or humanities with German philosopher Wilhelm Dilthey's approach to *verstehen*, understanding inquiry in human sciences or social sciences. It is Dilthey's approach to study human sciences or social sciences inquiry that influenced Edmund Husserl's and Martin Heidegger's ideas in phenomenology and hermeneutics (Erickson, 2018). This suggests that the qualitative research approach and the hermeneutic phenomenological paradigm have common historical background, and that it is appropriate for this study to employ qualitative research in its approach.

4.4.2 Approaching qualitative research

There are three different approaches to conduct research: these involves qualitative, quantitative, and a mixed-methods approach (Creswell & Creswell, 2018). Creswell and Creswell (2018) claim that the research approach connects the research proposal, research design and research methods to a philosophical worldview that is either postpositivist, constructivist, transformative or pragmatic. Tuffour (2017) proffers that the complex inquiries of qualitative research explore what, why and how questions about peoples' life experiences. Mohajan (2018) and Denzin and Lincoln (2018) concur with this view, postulating that currently there is more interest in social sciences qualitative research, since it is located within the territory of lived experiences at the intersection of individual belief and culture. This study employs a qualitative approach because it resonates with its philosophical grounding on a constructivist philosophical worldview. In its approach this study finds it important to critically reflect upon lecturers' experiences of e-learning resources guided by three main research questions. In so doing, the study seeks to understand what lecturers' experiences of e-learning resources are, how they experience e-learning resources and why they experience e-learning resources in the way they do.

4.4.3 Quality in qualitative research

Purpose, process, and procedure in undertaking qualitative research are used to measure its quality. Quality in qualitative research is in its purpose of understanding human life experiences (Tuffour, 2017; Erickson, 2018). The process needs to comply with the philosophical thinking within social sciences or human sciences. There are procedures that are in place to ensure quality in the application of strategies and techniques for understanding issues, or phenomenon under study. The criteria need to abide by certain principles within the qualitative research approach. The ability of qualitative research to adapt to new situations and its flexibility to accommodate diversity enhances its quality. Human life experiences evolve with time, and unfolding experiences enrich understanding in qualitative research (Denzin & Lincoln, 2018). Mechanisms of exploration in qualitative research create new knowledge and new perspectives of the issues or phenomena under study (Tuffour, 2017). The process of exploring involves different qualitative strategies and techniques, among which are description and interpretation.

The goal is to ensure quality in qualitative research by systematically describing and interpreting issues or phenomena from the point of view an individual or group of individuals (Mohajan ,2018; Tuffour, 2017). Description and interpretation of a social phenomenon by an individual or group of individuals is complex. It provides the reader with a deep understanding of the process and procedure involved in the analysis of the data generated (Denzin & Lincoln, 2011). This makes research open to a critical understanding of the research undertaken. This suggests that quality in qualitative research constitutes its ability to involve the researcher, participants, and readers in the process of constructing meanings that describe and interpret the phenomena under study.

Description and interpretation in qualitative research are informed by the data generated. There are different ways and means of generating data in qualitative research. A single data generation method can be used, based on the nature of a study, or more than one data generation method can be used. Data generation by applying multiple data generation methods (triangulation) (Mohajan, 2018) enhances quality in qualitative research. The complexity and dynamic nature of social phenomena need different methods of data generation to corroborate the findings of the study. Different perspectives enhance the multiperspectivity and diversity of beliefs and understanding about the phenomenon under study. What counts most in qualitative research is the voice of participants (Creswell & Creswell, 2018). This suggests that description and interpretation of the phenomenon in qualitative research is sensitive to description and interpretation of participants' experiences.

The context and time within which participants experience the phenomenon under study are critical in understanding their experiences. Individuals and contexts are unique and that can pose a challenge to researchers. The process involved needs to be authentic to the context of the experience of the phenomenon. Authenticity is a critical requirement to enhance quality in qualitative research (Denzin & Lincoln, 2018). The social phenomenon needs to reflect life world experiences of the phenomenon which could be experienced by those who live the experience. Qualitative research methodology gives voice to participants (Sloan & Bowe, 2014), and it is their voice that ensures the authenticity of the study. Giving an authentic voice to participants can be challenging and certain procedures need to be put in place to enhance quality. Consideration of ensuring authenticity in qualitative research is one of its critical characteristics in the presentation and representation of participants' voice, views, experiences and understanding of the phenomenon.

In a situation where the researcher and participants interact rules of engagement are put in place to protect the quality thereof. Qualitative research is conducted with human participation in the process of generating data. Ethical considerations are part of qualitative research (Denzin & Lincoln, 2018). Rules and regulations need to be followed to protect individuals engaged in the process of data generation. Quality in qualitative research can be ensured by consistent implementation of ethical issues at all levels where data is a concern. Rules and regulations about ethics involve institutions playing the role of oversight of processes and procedures that need to be followed (Bassey & Owan, 2019). The credibility of qualitative research needs to be supported by quality ethical application in the process of conducting research (Suri, 2020). The next section applies the abovementioned processes, procedures, and goals in understanding lecturers' experiences of e-learning resources.

4.4.4 Application of the qualitative research approach

Ormston et al., (2013) assert that qualitative research can be carried out in many ways. Creswell and Creswell (2018) support this view, asserting that qualitative research employs different strategies to understand the phenomenon of the study. Padilla-Diaz (2015) opines that qualitative research embraces diverse philosophical paradigms that contextualise different conceptions of reality. Tuffour (2017) claims that qualitative research explores what, why and how questions. However, Jameel et al. (2018) claim that qualitative research addresses the why and how questions rather than the what and how of the phenomenon. In support of the former and the latter, Hameed (2020) argues that an individual or group of individuals describe their subjective experiences with the phenomenon and its meaning to

them, and how they experience it. This suggests that qualitative research addresses what, how and why questions. This study seeks to understand what lecturers' experiences of e-learning resources are, how they experience e-learning resources, and why they experience e-learning resources in the way they do. This study applies the qualitative research approach to answer these three main research questions.

The purpose of understanding lecturers' experiences of e-learning resources is driven by the main research questions which are informed by the contextual factors highlighted in previous chapters. Contextual cultural contributions enable distinctive new understandings about the phenomenon of the study (Williams, 2007). Ormston et al. (2013) claim that all research is influenced by researchers' beliefs and behaviours in the research process. Researchers sketch a bigger picture as it mirrors real world experiences, then modify or adjust their pre-understanding of the phenomenon (Creswell & Creswell, 2018). Creswell and Creswell (2018) assert that qualitative research requires the researcher to construct a rich detailed description of a central phenomenon. Mohajan (2018) corroborates this view, postulating that rich, detailed description and analysis enables a researcher to gather and analyse individual at deeper levels. This implies that social contextual factors reflect on a phenomenon as a wide general and open mythical phenomenon which needs to be more clearly understood. The connotation is that an individual understanding of the phenomenon in qualitative research is informed by social contextual factors.

The phenomenon of experience is complex to understand because it is dynamic and subjective. Experience as a phenomenon can hardly be understood without simultaneous inquiry into the meaning it portrays; it can also be hard to study meaning without grounded experience (Friesen et al., 2012). Sutton and Austin (2015) opine that qualitative research requires researchers to reflect before and during the process of research. Aspers and Corte (2019) argue that different strategies are employed in qualitative research in an iterative process that makes significant new distinctions. Creswell and Creswell (2018) assert that in qualitative research, researchers reflect on their role, and how their personal background, culture and experiences have a potential impact on their study. Denzin and Lincoln (2018) concur that participants' voices become critical to understand the study phenomenon and the biographical situatedness of the researcher that influences the interpretation. The process of understanding the phenomenon requires conscious self-experience (Denzin & Lincoln, 2018). This self-reflection reflects itself in the type of questions asked by the researcher to understand the phenomenon under study.

It is critical to understand the role that researchers play in a study. Researcher perspectives and strategies in qualitative research contribute to controlling or managing subjectivity (Morrow, 2005). Maxwell (2012) asserts that researchers' experience regarding the phenomenon of the study influences the type of questions asked by the study. Hammarberg et al. (2016) claim that questions about experience, meaning and perspectives from the participants' standpoint are answered in qualitative methods. Aspers and Corte (2019) claim that research is aimed at improvement of understanding of the scientific community by drawing nearer to the studied phenomenon. This suggests that qualitative research methodology is a scientific research approach with processes and procedures that guide the research approach methodologies under its approach umbrella. The qualitative research approach has its own strengths and weaknesses.

4.4.5 Strengths of the qualitative research approach

The methodological strengths of qualitative research are in its criteria to establish and ensure quality in the processes and procedures of carrying out research work. Research that intends to study how people experience a given research issue can employ a qualitative research approach to understand complex contextual descriptions (Mack et al., 2005). Maxwell (2012) claims that qualitative research is good at identifying unanticipated phenomena and influences in the study. Denzin and Lincoln (2018) opine that a set of interpretive material practices in qualitative research makes the world visible in different ways. A qualitative research approach is ideal for studies that intend to describe and interpret a phenomenon systematically from an individual point of view (Mohajan, 2018). This study seeks to employ qualitative research to give contextual descriptions of identified lecturers' experiences of e-learning resources. It further intends to interpret the descriptions of lecturers' e-learning experiences from lecturers' point of view.

Involvement and access to people, issues and data enables observation or participation with deeper understanding as its methods for the most part are meant to achieve depth of understanding (Walsham, 2006; Mohajan, 2018; Eitikan et al., 2016). Qualitative research is growing remarkably in the field of social sciences. The ability of the qualitative research approach to employ different data generation methods and a variety of data generation instruments enhances its strength (Daniel, 2016). The strength of qualitative research is its approach to study peoples' life experiences by describing, exploring, and interpreting the phenomenon of interest for deeper understanding (Tuffour, 2017). In its attempt to understand lecturers' experiences of e-learning resources, this study employs three

methods of data generation: semi-structured interviews, observation, and document analysis. In as much as qualitative research approach has its own strengths, it has its own weaknesses too.

4.4.6 Weaknesses of the qualitative research approach

Mack et al. (2005) argue that qualitative research can extend similar characteristics of its findings to other areas, without eliciting data that can be generalised in those areas. This view is supported by Daniel (2016); and Mohajan (2018) asserting that the subjectivity of qualitative means that its data do not reflect larger populations. Daniel (2016) argues that multiple interpretations in qualitative research affect its dependability. Methods employed in qualitative research are diverse, making it difficult to attain quality data analysis, and the certainty level of research reflexivity is difficult to attain (Mohajan, 2018). Westbrook (2018) argues that qualitative research bases its understanding on judgement which is always difficult at the level of abstraction. Cheek (2018) argues that different stakeholders influence the interest for favourable findings in qualitative research studies. The next section seeks to clarify the approach to mitigating against weaknesses in employing qualitative research techniques and tools to understand lecturers' experiences of e-learning resources.

4.4.6.1 Mitigating against qualitative research approach weaknesses

Weaknesses of qualitative research reflect in different aspects of its application, such as data analysis methods, selection of research population, and paradigm-related issues because the whole study is framed round qualitative principles. The purpose of conducting qualitative research is to deepen understanding (Farrokhi & Mahmoudi-Hamidabad, 2012; Mohajan, 2018). Deepening understanding involves multiple interpretations using different methods (Denzin & Lincoln, 2018). Mohajan (2018) asserts that it is difficult to define qualitative research because it does not have a paradigm or a theory of its own. However, Denzin and Lincoln (2018) postulate that ontology, epistemology, and methodology are three interconnected activities that define the qualitative research methods. Denzin and Lincoln (2018) argue that researcher reflexivity is reflected in his or her application of the above three interconnected activities. Researchers' own background and positioning within the research shape their interpretation based on their personal, cultural, and historical experiences in qualitative research (Creswell & Creswell, 2018). This suggests that mitigating against the weaknesses of qualitative research is applicable in the whole research process.

Mitigating against the possibility of including all representatives of a population in a study, requires sampling of participants. Sampling is the inclusion of a selection of the subjects of research from the

entire population or universe, that represent the total quantity of things or cases (Eitikan, et al., 2016). Mack et al. (2005) assert that a sample involves a subset of a selected number of a population for any study. Sampling is about decisions taken by researchers on the type of information that suits their research (Williams, 2007). This study seeks to understand lecturers' experiences of e-learning resources in the teaching of History. In its approach to mitigate large representation of the study population, the study employs sampling methods and sampling techniques applicable to qualitative research studies. There are two commonly known qualitative research methods of sampling, the probability method of sampling and the non-probability method of sampling (Taherdoost, 2016). Taherdoost, (2016) asserts that probability methods include every item in the population in random sampling where all have an equal opportunity to be sampled.

A non-probability sampling method deliberately selects from the population of interest using different relevant techniques such as quota sampling, snowball sampling, judgement sampling and convenience sampling (Farrokhi & Mahmoudi-Hamidabad, 2012; Taherdoost; 2016). Judgement sampling is also known as purposive sampling (Farrokhi & Mahmoudi-Hamidabad, 2012). In purposive sampling, research participants are selected by a researcher on the basis of their ability and willingness to respond to research questions (Farrokhi & Mahmoudi-Hamidabad, 2012). This study employs a non-probability sampling method with purposive sampling techniques to understand lecturers' experiences of e-learning resources.

4.5 Purposive sampling techniques

Purposive sampling is one of the most common methods used in qualitative research (Jameel et al., 2018; Mack et al., 2005). The research problem and the central phenomenon of the study are better understood when individuals and sites are purposefully selected to inform understanding (Creswell, 2013). Nonprobability sampling involves purposive sampling or judgement sampling, which is a non-randomisation sampling, but subject to the techniques applicable to the study (Farrokhi & Mahmoudi-Hamidabad, 2012). Purposive sampling techniques fit well with subjective data not reflecting smaller populations; this makes it appropriate for this study which seeks to understand lecturers' experiences of digital technologies. Sampling of participants in purposive sampling varies as it seeks to understand meaning rather than statistical requirements (Abakpa et al., 2017; Ponterotto, 2005). The sample in purposive sampling is small and may not be reflective of the broader population (Daniel, 2016; Hammarberg et al., 2016; Mohajan, 2018). This implies that the purpose is to study in-depth experiences of individuals or groups of individuals with what appear to be similar experiences.

Maxwell (2012) postulates that purposive sampling is a deliberately selected strategy where particular settings, persons or events provide crucial information for the study. Farrokhi and Mahmoudi-Hamidabad (2012) assert that participants with similar or specific characteristics, such as age, culture, jobs, or life experiences are selected in purposive sampling. (Farrokhi & Mahmoudi-Hamidabad, 2012). Padilla-Diaz (2015) supports this view, postulating that a homogenous population for purposive sampling provides for a specific criterion that suits participants at a particular time. Frels et al. (2011) assert that participants are a critical element in research, and that makes it important to have a detailed method of selection. It is important to remember that sampling techniques are part of broader research approach. In this study sampling is informed by the chosen qualitative research approach principles.

The number of participants depends on the nature of study and the type of data generated (Laverty, 2003). Polkinghorne (1989) recommends between 5 and 25 participants in studies of a phenomenological nature. Padilla-Diaz (2015) recommends between 3 to 15 participants. Creswell and Creswell (2018) recommend 3 to 10 participants for a study of phenomenology. In Knapik's (2006) study in Canada, four participants were interviewed to find out about their accounts of past research interviews and their implications. Hogue (2012) selected three participants to assess educators' experiences related to perceptions of Statistics at a university in the USA. Holroyd (2001) selected two participants in Australia for phenomenological research investigating their experiences of the phenomenon of being-in-community. Padilla-Diaz (2015) avers that participants need to articulate their experiences, but the more diverse the experiences, the harder it becomes for the researcher to find common meanings attributed to the phenomenon of the study. This study sample comprised six participants from two universities in South Africa who represent detailed and rich e-learning experiences in the teaching of History.

The sample considered all available participants at these two universities to take part in the study. Six participants that met the requirements of the study were identified to participate in the study. Participant one has twelve years of teaching experience, participant two has thirteen years, participant three has nine years, participant four has seven years, participant five has eight years, and participant six has seven years. The universities from which they were selected are the only two well-known and highly respected universities in one of the provinces of South Africa. The high number of graduates who are teaching in most of the schools in the province, graduated from these two

universities. These participants represent the population of lecturers that could be found in the two universities that were accessible during the period of restricted movement and interaction due to the global COVID-19 pandemic.

Sampling methods, sampling techniques and data generation methods are purposefully selected to suit the participants of a study (Mason, 2002). In purposive sampling data generation is critical in facilitating better understanding (Farrokhi & Mahmoudi-Hamidabad, 2012). In qualitative research data are used to support findings in response to research questions by addressing meaning of experiences from participants' point of view (Hammarberg et al., 2016). The description of lived experiences in professional fields such as education can be acquired through interviews and observations including descriptive accounts; the life world-world for lived experiences needs to be searched everywhere (Van Manen & Van Manen, 2014). This suggests that subjectivity in qualitative research involves all decisions made in the process of conducting research. The use of different methods validates findings and mitigate against too diverse understanding at the abstraction level. This study seeks to enhance deeper understanding of the phenomenon from the point of view of participants. It is critical for this study to employ a triangulation of three data generation methods, involving semi-structured interviews, observation, and document analysis to enhance deeper understanding.

4.5.1 Strengths of purposive sampling techniques

Purposive sampling techniques need people who will be able to contribute relevant information to the research (Farrokhi & Mahmoudi-Hamidabad, 2012). Its focus is on selecting participants with appropriate knowledge and experience regarding the phenomenon, their availability, willingness, and ability to communicate their experience and opinions in an articulate, expressive, and reflective manner (Farrokhi & Mahmoudi-Hamidabad, 2012). Taherdoost (2016) claims that purposive sampling costs less, it is convenient, is not time consuming, and is ideal for exploratory research.

4.5.2 Weaknesses of purposive sampling techniques

Taherdoost (2016) asserts that the purposive sampling technique is subjective. Failure to obtain appropriate data impacts on proper analysis (Farrokhi, et al., 2012). It can be challenging to select sources of data if they can be searched for everywhere (Van Manen & Van Manen, 2014). It may be difficult to determine an adequate number of participants for a homogeneous population where a

bigger number of possible participants meets the requirements of the study. Purposive sampling can easily allow bias on the part of the researcher when choosing suitable participants for study.

4.5.2.1 Mitigating against weaknesses of purposive sampling techniques

All interpretive studies are subjective, but employing scientific theoretical sampling strategies controls the extent of subjectivity. I consulted literature on the requirements of purposive sampling, guided by the research questions and the purpose of the study. This helped in selecting participants that could articulate their experiences (Padilla-Diaz, 2015). The study focused on interpretation of participants' experiences, with a shift in focus from the researcher to the participants. This helped to keep subjectivity under control by relating it to participants' experiences as the focus of the study. The study's main research questions help to mitigate against obtaining inappropriate data. The use of three different data generation methods helps in the coordination of data that respond to the questions of the study. This gives direction and focus to the selection of appropriate data.

In mitigating against obtaining sources of data everywhere the study narrowed down the number of participants to six from two universities because of their proximity, feasibility, and time constraints against including more universities that are too far away to be easily accessible. This process of sampling participants helped in mitigating against choosing less suitable participants for the study. This also helped the study to mitigate against the possibility of choosing too many homogenous members of the population with the necessary requirements for the study. The process of mitigating against selecting too many homogenous members of the population needs to be balanced against bias.

It is critically important to guard against bias when selecting participants from the homogenous population. In mitigating against bias when selecting suitable participants, the study was guided by selection techniques applicable to purposive sampling. This involved appropriate knowledge, experience regarding the phenomenon, availability, willingness, ability to communicate experiences and opinions in an articulate, expressive, and reflective manner (Farrokhi & Mahmoudi-Hamidabad, 2012). These guidelines have their limitations, but the study attempted to employ them as a means to mitigate against biased sampling. In so doing, the study selected lecturers with experience of e-learning resources in the teaching of History at two universities in South Africa. Purposive sampling is appropriate for this study as its purpose is not aimed at generalisation of its findings, but at enhancing deeper understanding of lecturers' experiences of e-learning resources. Purposive

sampling facilitates selection of methods of data generation. The next section discusses the methods of data generation employed in this study.

4.6 Methods of data generation

Burnham (2012) explores different understandings of the concept of data from different research institutions and concludes that it relates to skilfully generated pieces of information. The concept of data is understood differently from different perspectives, informed by different disciplinary approaches, but all serve the common purpose of applying appropriate analytical tools to study and publish the analytical results of their findings (Burnham, 2012). The process of using scientific methods and strategies to study and understand more about the phenomenon of interest involves data generation. Different data sources and methods of data generation are used by qualitative researchers. Data sources are places or phenomena thought to be suitable for data generation; and data generation methods are strategies or techniques used to generate data (Mason, 2002). This study uses an interpretive hermeneutic phenomenology approach, and its intention is to interpret lecturers' experiences of e-learning resources as participants of the study.

In interpretive research the techniques most used for data generation are interviews, observation, and document analysis (Bhattacharjee, 2012). Raw data need to be qualitatively processed based on the epistemological, reflexive, and ethical considerations of the study (Giorgi et al., 2017; Mason, 2002). Interviews are currently the most common method of data generation in the human and social sciences (Brinkmann, 2018). Warren (2001) postulates that data in interviews are generated from unfolding social contexts. Lived experiences in the hermeneutic phenomenology narratives are gathered and explored through interviews (Ajjawi & Higgs, 2007; Williams, 2007). This suggests that data can be generated from participants as sources through interviews as techniques or strategies for data generation. This study employs semi-structured interviews as one of its strategies for data generation.

4.6.1 Semi-structured interviews

Interviews are purposeful conversations seeking to acquire concrete descriptions of participants' lifeworld experiences to enhance multiperspective interpretations of understanding (Brinkmann, 2018). Semi-structured interviews are the main data generation method for this study. The overall purpose of interviewing is to share participants' in-depth experiences in their own words (Ajjawi & Higgs, 2007). Different techniques apply to different forms of interviewing; this study focuses on semi-structured interviewing techniques. Different names are used by different authors

interchangeably to refer to semi-structured interviews. Brinkmann (2018), Mason (2002) and Warren (2001) refer to semi-structured interviews as qualitative interviews. Ryan et al. (2009) refer to semi-structured interviews as semi-standardised interviews. These differences in concepts suggest the versatility, flexibility and independence of thinking among qualitative researchers. Flexibility and differences of concepts in reference to semi-structured interviews follow qualitative principles that apply in interviewing participants.

Adhabi and Anozie (2017) claim that there is no rigid adherence to a specific sequence in interviewing participants using semi-structured interviews. Williams (2007) suggests that the length of an interview in phenomenological research is between one to two hours, which allows a researcher to interpret a participants' perceptions of the meaning of the phenomenon. The flexible approach of semi-structured interviews provides an opportunity to explore spontaneous issues that emerge from the interviewees in the interview process (Ryan et al., 2009). The conversation approach affirms the interviewees' perspectives of experiences. In this study the interviews explore my understanding of lecturers' experiences of e-learning resources. In terms of their own experiences, lecturers are expert interviewees on the phenomenon under study (Knapik, 2006). Ajjawi and Higgs (2007) support this view, asserting that understanding is informed by interviewees' (lecturers') own words on their experiences of e-learning resources.

The interviewer enters the conversation when attending to responses from interviewees in the process of interactions (Knapik, 2006). I modified questions to keep up the flow with a spotlight on issues relating to the phenomenon, to allow interviewees' perspectives of the experiences to merge. The interactional style and seating position in the interview process are critical, as this may suggest egalitarian or mutual positioning or learner's stance, where the interviewee is an expert on his or her own experience (Knapik, 2006). In this study the seating was arranged in an egalitarian mutual positioning, with the interviewee and the interviewer sitting across from each other at a table, having a conversation about using e-learning resources in the teaching of History. Brinkmann (2018) asserts that dialogues provide for contexts that make interviewees visible in the data generation process. I am interested in the way interviewees articulate their experiences in an interactional exchange through dialogue (Mason, 2002). My role is to facilitate a conducive situation of free-flowing conversational interaction about the phenomenon, guided by the main research questions.

Understanding interviewees' everyday world of experiences is possible from the insights provided through the conversational data generation of semi-structured interviews (Palmer & Bolderston, 2006). In the process of interviewing both the interviewee and the interviewer co-generate data (Warren, 2001). However, most important for the study is the description and interpretation of lecturers' experiences of e-learning resources. It is critical for this study to capture as fully as possible the current sociocultural and historical context of their experiences of e-learning resources (Zayed, 2008). Semi-structured interviews provide for a conversational dialogue with the goal of understanding other people articulating their experiences (Brinkmann, 2018). This suggests that the role of an interviewer is to provide an interviewee with the opportunity to reflect on their experiences.

The interviewer needs to ensure that interviewees are at ease by providing for a comfortable interview environment (Ryan et al., 2009). I conducted interviews with participants in their offices making them feel relaxed and comfortable. Understanding the phenomenon from interviews is contextual and situational, reflecting unfolding social interactions (Mason, 2002). The contextual or situational atmosphere in which a semi-structured interview is conducted shapes the flow of the interview (Warren, 2001). The interviewees and the interviewer share their personal, disciplinary, and social experiences about the phenomenon (Warren, 2001). During the interview process I reflected on the skills of interviewing by applying a semi-structured data generation method to allow fluidity of conversation. I reflected on the nature of the study as an interpretive study requiring description of the experiences of participants. I modified my first research question to make it clear to participants that my interest is in the description of their experiences with e-learning resources in the teaching of History.

The modification of the first research question was an attempt to make interviewees comfortable in giving description of their experiences as they unpacked them in their own way, narrating their experiences with e-learning resources. Semi-structured interviews conducted in face-to-face interaction serve as a window into the social context within which an interview is taking place. Brinkmann (2018) claims that what people say in an interview is primarily perceived as a topic or subject matter that accounts for a social practice which needs to be studied further. Social interactions produce the social phenomena which become the subject matter of the interview. I tape recorded my conversations with interviewees so that I would be able capture the data generated in the process of the interview (Mack et al., 2005; Warren, 2001). Face-to-face interviews may be complemented by electronic methods such as email, online or telephone interviews (Creswell, 2013). Today interviews

could be conducted in a variety of forms by the use of telephone or the Internet, helping in interviewing people in an inaccessible situation possible (Brinkmann, 2018). This study enhanced its face-to-face interviews with email by sending written questions to participants asking them to respond if they were comfortable to do so.

However, interviews may be challenging when interviewing participants like university lecturers who are perceived to be experts in their disciplines. They may also change the subject from the intended research questions by taking over the role of the interviewer and directing questions to the interviewer. Mason (2002) asserts that being consistent with research questions in the process of interviews requires interviewers to think on their feet in the interview itself. Consistency with research questions in an interview provides an opportunity that creates an interpersonal context with probing questions (Brinkmann, 2018; Warren, 2001). However, an interpersonal context and probing questions may encroach on sensitive matters that affect ethical issues (Brinkmann, 2018; Warren, 2001). In this study I attempted to relate probing questions to the main research questions in observing the ethical issues of the study.

In this study the level of being conscious of ethical issues is exercised in the understanding that questioning the interviewees is to ensure that, the study objectives gain their personal and individual experiences of the phenomenon. However, interviews can reflect participants under the prepared set-up of interview processes being aware that their responses are being recorded, making them unwilling to express and reflect their everyday lived experiences. In minimising any possible discomfort that may crop up in the interview process, I aligned my questioning to the main research questions, and considered the interviewees' non-verbal cues when using probing questions. However, balancing the interviewer and interviewee perspectives is challenging, as it requires quick, on point decision making during the process of interviewing as contextual and situational factors keep on unfolding, bringing complex dynamic factors into the dialogue. Semi-structured interviews have strengths when used as a technique for data generation.

4.6.1.1 Strengths of semi-structured interviews

Semi-structured interviews are critical in revealing experiences and meaning about the phenomenon of the study from participants' perspectives. It provides both the interviewer and the interviewee with an opportunity to discuss the phenomenon. On-site contact interviews embody the presence of interpersonal contextual sensitive contact with the fullest extent of conversational flexibility

(Brinkmann, 2018). The interviewer is able to guide the interview with a set framework of questions supported by open-ended probes where the interviewee elaborates with his or her personal experiences (Ryan et., al 2009; Alhamndani, 2016). In the process of interviewing different perspectives about the phenomenon are discussed between the interviewer and the interviewees from diverse subjective individual perspectives (Ryan, et al., 2009). Open ended interviews provide understanding of the experience from the participants' point of view (Warren, 2001; Ajjawi & Higgs, 2007). This suggests that the researcher needs to be aware of participants meaning making in the study.

Researchers are considered as part of the data generation instruments within the social context of their studies (Bhattacharjee, 2012). Semi-structured interviews provide for interactional dialogue exchanges in a fluid and flexible face-to-face engagement that leads to the development of unexpected themes (Mason, 2002; Ryan, et al., 2009). These open-ended engagements produce co-constructed meaning that leads to better understanding of the phenomenon under study. In as much as the co-generation of data between the interviewee and the interviewer is considered to be a strength of semi-structured interviews on the one hand, it may also be its weakness on the other. The next section discusses weaknesses of semi-structured interviews.

4.6.1.2 Weaknesses of semi-structured interviews

The subjective engagement between the interviewer and the interviewee may impact negatively when the interview process diverts from a set framework of questions meant to guide it (Ryan et., al 2009; Alhamndani, 2016). Poor listening skills may impact negatively on guiding the interview process with appropriate questioning (Mason, 2002). Semi-structured interviews may be costly, time consuming, biased, and inadequate in questioning (Ryan, et al., 2009). In this study measures were put in place to mitigate against the weaknesses of semi-structured interviews used to understand lecturers' experiences of e-learning resources in the teaching of History at universities in South Africa.

4.6.1.2.1 Mitigating against the weaknesses of semi-structured interviews

In mitigating against the negative subjective interview process that may divert from a set framework of questions, I used the main research questions as a guideline. In so doing I employed my own disciplinary awareness as it informs my experiences and perspectives about the research I am conducting (Warren, 2001). My experience and perspective are informed by History in Social

Sciences, helping in shaping the framework of my questions for this semi-structured interview method. I mitigated poor listening skills by tape recording the interview, so that I would have time to replay and listen to the responses of participants and transcribe their responses. In mitigating against possible costs, excessive time, bias, and inadequate questioning, I consulted the relevant literature for guidance. In so doing I consulted Alhamndani, (2016) on how to ask what, how and why type of questions, in an iterative form using open-ended questions.

Interview interactions in this study were further complicated by the COVID-19 global pandemic conditions under which it was conducted. The ‘new normal’ conditions imposed by the global pandemic impose restrictions on human contacts and interactions. These restrictions impacted on the length of time taken to interview participants as it was shortened by a half, from the suggested one to two hours. I had six different interviews with participants: the first interview took 30 minutes, 52 seconds; the second took 48 minutes, 49 seconds; the third took 33 minutes, 58 seconds; the fourth 39 minutes 23 seconds; the fifth took 32 minutes, 45 seconds, and the sixth interview took 40 minutes, 24 seconds. All interviews were face-to-face semi-structured interview sessions with participants in their offices. I further sent written questions to participants for them to respond by email.

Mitigating against bias and inadequate questioning, I used cues and signs from the sociocultural background that communicates experiences about the phenomenon of interest (Warren, 2001). Researchers must use their observational skills and trust with participants to generate information correctly (Bhattacharjee, 2012). This suggests that observation is supplementary to semi-structured interviews in data generation. In the next section observation is discussed as another data generation method used in this study.

4.6.2 Observation

Observation is very close to the on-site interviews because direct contact interviews are context based as they are conducted within a particular social context. Warren (2001) asserts that many qualitative researchers report that in their data generation they viewed meanings of the phenomenon as they intersect with their own interpretations. In this study I am a participant observer as my interest is to generate subjective data by understanding participants’ views and experiences of e-learning resources (Creswell, 2013). It is critical that observations in an interpretive study are carried out in a manner that is embedded in the participants’ social context (Bhattacharjee, 2012). Ajjawi and Higgs (2007) argue that observation captures work settings with cultural tools that involve subconscious elements

of experiences which cannot be verbalised in an interview. Palmer and Bolderston (2006) claim that the main purpose of employing observation as a data generation method in research is to witness first-hand individual life world experiences. The social world can be apprehended through hearing, talking, listening, and asking as well as seeing and feeling (Warren, 2001). This implies that experiencing meanings of everyday life world experiences is subjective and intersubjective among those who share the experiences.

Data generated through other means can obscure participants orienting and researchers inhibited organisational factors in research (Knap, 2006). Mason (2002) postulates that self-conceptualisation is perceived in an active and reflexive research process. Observation involves researchers' ontological perspective of interactions, actions, and behaviours, and takes place within an epistemological positioning of access to the social world (Mason, 2002). However, observation can be complicated and demanding if not appropriately planned. Ajjawi and Higgs (2007) claim that observation can be convenient but complicated by contextual social interaction. Researchers need to be skilled in multitasking during observation such as organising, participating, probing, listening, communicating, doing, thinking and time keeping (Ajjawi & Higgs, 2007). This suggests that the strength of observation as a data generation method is that it enhances the contextual factors involved in the data generation process.

4.6.2.1 Strengths of observation

Mason (2002) claims that observation provides for a multi-method strategy that helps researchers to enter the world of the participants, and to be part of the social world where other forms of data generation do not generate the required data. Observation helps in providing access to the richness of complex data generated by enhancing depth, roundedness and multidimensionality that reflect the social world through different perspectives (Mason, 2002). Warren (2001) asserts that observation provides cues and signs that help deepen understanding of the phenomenon of the study. This view is supported in Ajjawi and Higgs (2007), who postulate that understanding the subconscious level of individual experiences can be accessed through observing lifeworld settings. Observation reveals more of what is not said in words, but can only be noticed when people interact with each other (Zayed, 2008). Knapik (2006) emphasises the importance of reflexivity, asserting that participants' and researchers' perspectives are shaped by their environmental factors which can be captured through observation. This suggests that observation is subjective to the context and experiences of

both the participants and the researcher. There are also some weaknesses in using observation as a data generation method.

4.6.2.2 Weaknesses of observation

Observation requires the researcher to focus on different issues at the same time that may come with the physical world of data generating. It could be a challenging task to manage the different skills that go with the process of observation. Ajjawi and Higgs (2007) assert that inability to manage social understanding may impact negatively on the process of observation, misdirecting the context and action to be observed. Observation can be unfocused and vague, with poor planning or lack of appropriate planning (Ajjawi & Higgs, 2007). Poor description of the phenomenon to be observed can lead to inadequate or misdirected observation (Dey, 1993; Giorgi et al., 2017). These weaknesses can be mitigated against by putting in place measures to tackle such challenges. The following section outlines the mitigating factors against the weaknesses of observation.

4.6.2.2.1 Mitigating factors against the weaknesses of observation

In mitigating against different issues from the physical world of data generating, observation was conducted on virtual platforms as face-to-face lectures were not allowed in the universities where the study was conducted because of the COVID-19 pandemic. The use of virtual platforms was not considered at the beginning of this study, but real contextual conditions that existed at the time of conducting it necessitated modification of the observation strategy. Virtual observation as the only available way of experiencing participants' use of e-learning resources added value to the experience of e-learning resources. It placed more emphasis on the use of e-learning resources for teaching and learning by participants. This helped in mitigating against the physical world of data generation as more of the virtual world was used for data generation.

Mitigating against the requirement of different skills at the same time, I developed an observation schedule to focus on research questions in order to identify observable activities relevant to lecturers' experiences of e-learning resources. This addresses the second main research question, by responding to how lecturers experience e-learning resources. In their use of e-learning resources I observed them using e-learning resources to teach. Mitigating against inability to manage social understanding, I observed participants in action in their normal everyday teaching context. I observed their interaction with students in the teaching and learning process. The surroundings of their teaching and learning space of interaction with students provided me with accurate recording the time, space, language,

content, and voice of participants. This opened the process to revealing more of the social and contextual understanding of the study.

Giorgi et al. (2017) claim that there is no perfect description; descriptions can be good, adequate, and inadequate, but good descriptions are those that provide for rich descriptions of experiences. Rich descriptions are ‘thick’ descriptions; they integrate processes that reflect the context of action, and the intentions of the actors within that context (Dey, 1993). Giorgi et al. (2017) assert that the phenomenon of learning emanates from several descriptions of learning. In mitigating against poor description of the phenomenon I paid attention to resources providing for first-hand information by witnessing the type of e-learning resources used by participants for teaching and learning. Observing activities provide evidence on how participants engage in the process of teaching and learning. In so doing I wrote down every detail of observable actions and resources used in order to extract more information for interpretation of lecturers’ experiences of e-learning resources. Observation can be used with other data generation methods (Ajjawi & Higgs, 2007), such as balancing evidence of e-learning with documents that guide teaching and learning.

4.6.3 Document analysis

Document analysis can be used as a main method for data generation, with interviews as an additional data generation method (Owen, 2014). In other studies, such as those of Kumar, et al. (2017), Straubhaar (2015) and Wach (2013), document analysis is used as a research methodology. However, in this study, document analysis is used as an additional method of data generation. Bowen (2009) claims that document analysis involves both printed and electronic material that follows a systematic procedure in reviewing or evaluating text and recorded images. It is expected that in an interpretive qualitative study multiple sources at least two data sources and methods of data generation are considered (Bowen, 2009). Bowen (2009) argues that document analysis is the most suitable for hermeneutic inquiry processes using a phenomenological technique. This study finds the document analysis data generation method to be critical and relevant as it is grounded on the hermeneutic phenomenological approach.

Palmer and Bolderston (2006) suggest that external critical questions on the selection of documents for analysis involves understanding what the document is about, who produced it, and the background of the author of the document. Moreover, knowing when the document was produced, knowing whether the document is complete and finally knowing whether the data are thorough and worthwhile

for the study are also important (Palmer & Bolderston, 2006). This study takes into cognizance that document analysis can provide the context that connects different contexts before and after the researcher entered the research space. Bowen (2009) claims that document analysis provides research with supplementary data. Owen (2014) supports this view postulating that document analysis is critical as supplementary to other methods of data generation by providing additional context. Palmer and Bolderston (2006) suggest that reflecting on the initial research question, helps the researcher to reflect on the content of the document and the document itself.

However, Wach (2013) avers that selection of documents for data generation needs to be critically considered. Owen (2014) argues that gathering data through document analysis is not an easy endeavour, as facts are selected to serve an interested witness. Data overload may be difficult to manage (Palmer & Bolderston, 2006). This study critically selects documents that reflect lecturers' experiences of e-learning resources. In so doing, it considers the main research questions as a guide in selecting documents for data generation.

4.6.3.1 Strength of document analysis

Documents are easily accessible (Palmer & Bolderston, 2006); Bowen (2009) supports this view, claiming that they are cost-effective and unaffected by issues of reflexivity. The coverage can be broad and accurate in document analysis, and their selection requirements make them efficient and less time consuming as they are easily available (Bowen, 2009). Document analysis can be used as the only data generation method in different studies (Straubhaar, 2015; Wach, 2013). They can be presented as printed or electronic documents, meaning that they can be accessed by different researchers in any form (Bowen, 2009). Palmer and Bolderston (2006) opine that documents can easily respond to main research questions. There are also some weaknesses in document analysis.

4.6.3.2 Weaknesses of document analysis

Details might be insufficient as they are selectively biased towards what was intended to be covered (Bowen, 2009; Owen, 2014; Wach, 2013). Documents may be of poor quality making it difficult to use them. It may also be difficult to retrieve and establish the authenticity of electronic material (Bowen, 2009; Palmer & Bolderston, 2006). The following section outlines some measures to mitigate against the weaknesses of document analysis.

4.6.3.2.1 Mitigating against the weaknesses of document analysis

In mitigating against bias, I considered using all available copies of documents electronic and hard copies relevant to the topic of the study. This enabled me to compare information in different documents and their relationship to the study. I used document analysis as a schedule and a guide for data generation on the selection criteria that responds to the research questions. This helps in answering the third main research question by providing evidence why lecturers use e-learning resources in the way they do. Documents provide text that supports the course and purpose of both the description and interpretation of lecturers' experiences of e-learning resources.

Mitigating against poor quality I considered currently used documents in support of teaching and learning using e-learning resources. It is critical to mention that document analysis enhances interpretation by connecting the dots before and after the research has been conducted. It is through connecting the dots that more questions and more understanding about the phenomenon come to the surface. In mitigating against the lack of authenticity of electronic material, this study found that universities where research was conducted use electronic versions because they use e-learning resources to teach. If there is a need to use hard copies, the same content from the electronic versions could be printed onto hard copies, with no difference in the content of the document. Document analysis plays a critical role in data analysis. The following section discusses data analysis.

4.6.4 Data analysis

Data analysis is conceptualised from different perspectives. Lacey and Luff (2009) aver that qualitative data analysis is the description and summary in the form of words and narratives of massive data generated by qualitative methods. This involves interviews or observations in response to qualitative research questions (Lacey & Luff, 2009). Description is context related through the action and intentions of the actor within that context; and an example of summarising data is stripping away unnecessary detail by delineating more central characteristics of the data (Dey, 1993). Bruschia (2005) conceptualises data analysis as a day-to-day methodological log that involves the records of the research process, thoughts, or insights of the researcher throughout the research regarding data generation and analysis. This suggests that there is no uniform conceptualisation of data analysis in qualitative research. Bruschia (2005) argues that qualitative research varies based on focus, purpose, methods, and epistemology and that influences their procedures in analysing data. In this study I analyse data employing hermeneutic phenomenological techniques.

4.6.4.1 Hermeneutic Circle

The hermeneutic circle has become an important aspect of hermeneutics, the idea of which is to literally understand ‘*verstehen*’ (Aliyu et al., 2015). Data generated in this study is aimed at enhancing depth in understanding participants’ experiences of e-learning resources in the two selected universities. Hermeneutic phenomenology enhances multiperspective understanding by breaking the data up through classification, where the process moves from the part to the whole from analysis to synthesis, and from description to interpretation (Bruscia, 2005; Dey, 1993). I employ the hermeneutic circle strategy of understanding and interpretation, with iterative movement of data between parts and the whole to evolve understanding of the phenomenon (Ajjawi & Higgs, 2007). Meaning of the parts and the whole is achieved by iterating the interdependent meaning of all human understanding (Klein & Myers, 1999). In so doing I apply six hermeneutic principles: These involves contextualisation, interaction between researchers and subjects, abstraction and generalisation, diagonal reasoning, multiple interpretations, and principle of suspicions (Klein & Myers, 1999). This hermeneutic circle technique helps the study with the process of reading; and reflecting on texts and interpreting meanings.

4.6.4.1.1 Contextualisation

Conceptualisation of research contextualisation may mean different things, but Shehadeh’s (2020) conceptualisation of contextualisation is appropriate for this study. Shehadeh (2020) asserts that research contextualisation is the approach used to link a research project to the setting of the study. This link can happen in two ways, by relating the study to the relevant literature and by linking its specific context where it was conducted to a geographic location as well as possibly the discipline of the study (Shehadeh, 2020). This study is contextualised within the hermeneutic phenomenological interpretations as a prior horizon of understanding the approach to lecturers’ experiences of e-learning resources. The process of data generation and analysis is informed by hermeneutic principles. Literature on the principles of hermeneutic phenomenological strategies was consulted in this study. Data for this study were generated from specific geographic locations where lecturers use e-learning resources for teaching and learning History at different universities in South Africa. The context of this study is informed by the contextual factors of two universities in South Africa where data were generated.

4.6.4.1.2 Interaction between researchers and participants

I facilitated interaction between lecturers (participants) and myself (the researcher) prior to and during the data generation process. I sent participants emails asking them to participate in the study. Email correspondence included all ethical issues that needed to be complied with. In the process of email interaction, I introduced myself and explained the study and its purpose. I sent participants' ethical forms to be completed with the research questions. I requested participants to respond to emailed research questions if they were willing to do so, as this would precede the semi-structured interview. One of the participants provided written responses as per the emailed research questions. A follow-up to written emails was made with face-to-face semi-structured interviews. I tape recorded the interviews with the permission of participants and transcribed the data generated. I sent transcribed data to participants for them to give input on the data generated if they wished to do so.

I maintained a telephonic conversation with participants after the process of interviews to make an arrangement for other data generation methods. I intended to observe participants in the process of using e-learning resources. I wanted to know about their teaching and learning sessions so that I could make an arrangement for observation. COVID-19 restrictions made it impossible to have a physical interaction observing participants in the process of using e-learning resources for teaching and learning, because no contact sessions were offered for teaching and learning. I made an arrangement to observe virtual interactions with participants in the process of data generation. I joined one live virtual lecture with one of the participants to observe the process of teaching and learning using e-learning resources. I could not join a live virtual lecture with the other participants because logging in needed a username and password to be allowed in. I received a recorded lecture from one other participant and I managed to observe the proceedings of the recorded lecture using e-learning resources. I could not observe the other four participants due to technical challenges. All these different means of communication enhanced the participants' interaction with the researcher.

I interacted with participants before the process of data generation by introducing myself and asking them to participate in the study through emails and using a cell phone. I also interacted with participants physically during the data generation process, through face-to-face semi-structured interviews. I further interacted with two of the participants virtually, observing them using e-learning resources for teaching and learning. I also interacted with participants after the process of data transcription, sending them transcripts of the recorded data for their input. This interaction supports the researcher's immersion in the research context and participants' everyday lived experiences

(Paterson & Higgs, 2005). Interaction between participants and the researcher facilitates the co-generation, where participants and the researcher describe lived experiences from the point of view of the participants to be interpreted and analysed by the researcher.

4.6.4.1.3 Abstraction and generalisation

Abstraction and generalisation embody cognitive analytical processes that are carried out through the act of reasoning processes. It is during this process that connections are made between the parts and the whole and the whole and the parts. This process provides for illustration, and illumination leading to the integration of understanding the phenomenon of interest (Ajjawi & Higgs, 2007; Paterson & Higgs, 2005). In this study I identified words, phrases, and all other relevant elements of the study from the point of view of participants, classifying them for the purposes of analysis. In the process of doing so, I attempted to relate different elements to the research questions and the context within which they are experienced. This process helped the study to strive for the crystallisation of socio-historical understanding of lecturers' experiences of e-learning resources.

4.6.4.1.4 Diagonal reasoning

The study seeks to describe and interpret lecturers' experiences of e-learning resources; this process requires connection between description and interpretation, which applies diagonal reasoning between the two (Ajjawi & Higgs, 2007; Paterson & Higgs, 2005; Klein & Myers, 1999). I applied diagonal reasoning for synthesis and theme development in this study (Ajjawi & Higgs, 2007; Paterson & Higgs, 2005). In so doing, I connected data from three different data generation methods, the semi-structured interviews, observation, and document analysis. I coded concrete data from the narratives of participants in describing their experiences in the interviews, recorded them expressing themselves. I observed participants in action teaching their students physically and virtually and transcribed their action, facial expression and body language as tangible observable descriptions. I went through participants documents and transcribed concrete evidence that support their experiences regarding the description of their experiences.

I made inferences of the meaning of their descriptions for the process of interpretation. I continuously connected the concrete description to the interpreted meaning of their description. I moved between the parts and the whole, reading to reflect on the text as transcribed in order to understand participants descriptions (Ajjawi & Higgs, 2007; Paterson & Higgs, 2005; Klein & Myers, 1999; Lavery, 2003). Understanding is the core production of meaning that emanates from reading and writing (Lavery,

2003). I read the transcribed texts from the interviews to relate it to data I generated from observation and document analysis, and to make inferences that developed themes in an attempt to interpret meanings. Each part that relates to the completion of the whole is considered to be critical in understanding the phenomena of interest (Jorgensen, 2006).

4.6.4.1.5 Multiple interpretations

I attempted to integrate different perspectives from the data generated in a manner that facilitates multiple interpretations (Klein & Myers, 1999). This process enhances an iterative representation of layers of spiral horizons of understanding reflecting the lifeworld experiences (Bruscia, 2005; Dey, 1993). My ontological and epistemological filters on data analysis are informed by the hermeneutic circle (Saldaña, 2013). It is within this diversity of views that my decisions on data coding are informed by the hermeneutic circle filter covering data analysis strategies for interpreting data from different horizons. The description of constructs of human actions, behaviours, intentions, and experiences as they reflect life world interactions are logically interpreted through the hermeneutic circle (Paterson & Higgs, 2005).

4.6.4.1.6 Principle of suspicion

In the process outlined above, I employed multi-interpretation and the principle of suspicion strategies to enhance integration and critique of the study by its audience (Klein & Myers, 1999). This suggests that meanings and understandings that embrace multi-interpretation and the principle of suspicion need to reflect transparency in the process involving data coding.

4.7 Coding

In qualitative interpretive research data is generated in the process of finding answers to a myriad of fascinating life world experiences of individuals or groups of individuals. Different authors conceptualise coding in different ways. Bruscia (2005) conceptualises coding as fixing a label or title of each data unit to the best description or representation of that unit. Saldaña (2013) conceptualises coding as an evocative attribute of a portion of language-based or visual data often in a word or short phrase that assigns a summative, salient, essence symbolically. Sutton and Austin (2015) claim that coding is the revelation of participants' narratives that involves identification of topics, issues, similarities, and differences as interpreted by researchers. This suggests that conceptualisation of coding is an ongoing process in studies of qualitative research. In this study the coding of data is

informed by the principles of the hermeneutic circle, that involves, immersion, abstraction synthesis and theme development.

4.8 Thematic analysis

Liamputtong (2009) claims that different types of data analysis exist in qualitative research, and thematic analysis is one of them. Thematic analysis involves two steps: making sense of the transcript interview data by reading through each of them; and making sense of what is being said by participants by checking across the data (Liamputtong, 2009). This study explores lecturers' experiences of e-learning resources using hermeneutic circle analytic strategies. Three different data generation instruments are used to check across data generated on participants' experiences of e-learning resources.

Presentation of the themes in this study involves answering the three main research questions:

- What e-learning resources do lecturers use in the teaching of History?
- How do lecturers use e-learning resources in the teaching of History?
- Why do lecturers use e-learning resources in the way they do in the teaching of History?

Meaningful presentation of participants' experiences involves the set criteria under which the study is conducted, which requires a careful iterative process that aligns the ontological and epistemological principles with methodological filters of the study. This study employs qualitative measures of trustworthiness; in the hermeneutic circle these measures reflect rigour in the interpretation of data. The next section outlines the application of trustworthiness and rigour in this study.

4.9 Trustworthiness and rigour

There are ongoing debates about ensuring the trustworthiness and quality of data analysis in interpretive qualitative research. Bhattacharjee (2012) claims that the debate about the criteria to determine trustworthiness and rigour in social sciences is settled in Lincoln and Guba (1985). Bhattacharjee (2012) asserts that the principles of dependability, credibility, confirmability, and transferability are more appropriate to studies of social phenomena. Paterson and Higgs (2005) argue that quality in interpretive research involves three main criteria: credibility, rigour, and ethical behaviour. In Ajjawi and Higgs (2007) the emphasis in qualitative data analysis is placed on the two criteria of the establishment of rigour and credibility. These debates are ongoing in social sciences because of the evolving nature of social phenomena. Everyday lived world experiences are

determined by various contextual factors and diverse epistemological understanding in qualitative research.

In the social sciences the concept of trustworthiness is understood to encompass rigour. Some studies, such as those of Creswell and Creswell (2018), Davies and Dodd (2002), Johnson and Rasulova (2016), Morse (2018) and Pereira (2012) to name just a few put more emphasis on rigour as a prerequisite for phenomenological research data analysis. In hermeneutic phenomenological studies, the concept of rigour is perceived to be equivalent to the concept of trustworthiness. The critical point about these studies, is that they base their claim on Lincoln and Guba writings on the establishment of rigour in qualitative research. A comprehensive, coordinated conceptual postulation of rigour is given by Johnson and Rasulova (2016). They put together the concept of rigour from various writings such as Agar (1986), Burk (1991), Guba (1981), Guba and Lincoln (1982), Guba & Lincoln (1985), and Kirk and Miller (1986). This consolidates the conceptual understanding of rigour in qualitative research. Johnson and Rasulova (2016) adopt and consolidate all different writings under Lincoln and Guba's framework of rigour. In so doing they claim rigour principles to involve the following credibility, confirmability, dependability, transferability, and authenticity.

Noble and Smith (2015) argue that credibility is enhanced by the truth value of reflexivity and reflection, with representativeness of findings to ensure consistency that achieves auditability in a transparent description of the entire research process. Johnson and Rasulova (2016) claim that these principles of rigour reflect specific traits in the study in the following sense: credibility ensures that the truth about the findings of the study builds confidence in the researcher about the context of the study and selection of participants. They claim that confirmability enhances the presence of reflexivity to ensure that the research process and findings conform to ethical issues. These authors assert that dependability enables the study to trace sources of data to ensure consistency with data generation process throughout the research. They postulate that transferability enhances the provision of a rich, detailed description of information that can be applicable in another similar context. They proceed to claim that authenticity helps to promote understanding of a diversity of values and constructions that enhance a process of learning, changing, negotiating, and finally acting on new understandings.

The concept of rigour is taken further, with Morse (2018) expanding on its use from as early as prior to 1960 to the present. Morse (2018) argues that rigour is associated with paradigm; it has been a contested concept between the quantitative and qualitative approaches until resolved in Lincoln and

Guba's (1985) work when a decisive break from the quantitative approach became evident. Morse (2018) argues that the framework of establishing rigour in qualitative research currently relies on the representation of data as hard data or soft data. Hard data involve concrete or permanent evidence of the phenomena suitable for description, and soft data involve experiential evidence of the phenomena that are suitable for interpretation (Morse, 2018). Morse (2018) argues that validation and verification strategies rely on appropriate and careful use of hard data and soft data. A balanced consideration of appropriate use of both hard data and soft data in this study seeks to establish rigour.

Morse (2018) asserts that validation of hard data is through member checking to confirm the information prior to the commencement of analysis, but this may be affected by participants changing their information from what was said previously in an interview. If there is sufficient hard data to use, member checking may not be necessary to validate findings, as they should stand on their own (Morse, 2018). Audit trails are strategies used to establish verification of data; they reveal how decisions were made in the process of data generation and data analysis (Morse, 2018). In other words, audit trails show connections and relationships between hard data evidence and soft data evidence. This can be done by linking data evidence from different data generation methods to confirm the findings of the study.

The study employs triangulation (multiple methods of data generation) (Johnson & Rasulova, 2016). Creswell and Creswell (2018) claim that triangulation is the use of different data sources. I use semi-structured interviews, observation, and document analysis as methods of data generation. I declared my reflexivity explicitly in the application of the hermeneutic circle strategies for the data analysis process, and that ensures confirmability of the findings. I tape recorded all interviews with participants and transcribed their accounts of the phenomenon verbatim. I explicitly declared my data analysis process and the coding of data strategies from the data generation methods of observation, document analysis and semi-structured interviews. I coded data following the hermeneutic circle strategies to describe and interpret data for analysis, moving from parts to the whole, and from the whole to the parts iteratively to understand the meaning of lecturers' experiences of e-learning resources.

In its application of the hermeneutic circle analysis, the study enhances rigour by constructing rich detailed descriptions through interpretation of findings that are transferable to similar contexts. In so doing synthesis of analysis enhances conceptual and abstract application. This illuminates thematic interpretation of the process of understanding and constructing diverse values in life-world

experiences that is authentic. A successful response to authenticity enhances trustworthiness, which is rigour in hermeneutic phenomenological study. The ability to connect concrete data evidence provides the study with a hard description for validity and the ability to reflect perceptual or transient experiences (Morse, 2018). This provides the study with verifications of soft interpretive data through pattern recognition (Morse, 2018). Morse (2018) asserts that rigour involves all phases of the study, from the beginning to the end. Davies and Dodd (2002) postulate that rigour is built around the cluster of ethics terms such as empathy, carefulness, attentiveness, sensitivity, respect, reflection, conscientiousness, engagement, awareness, and openness. The following section outlines the application of ethical issues in this study.

4.10 Ethical issues

Ethical issues are a corner stone of qualitative research since their phenomena involve human participation in one way or another. Bassey and Owan (2019) claim that ethics are norms that help to distinguish between right and wrong conduct in the process of conducting research. Studies that involve participation of people in their everyday environments, such as qualitative studies need to be aware of the ethical issues that concern participant and researcher interactions (Richards & Schwartz, 2002). Creswell and Creswell (2018) assert that ethical issues are applicable from the beginning of the study, in its proposal stages, throughout the research process to the end of the research. Camella and Lincoln (2018) postulate that there are four ethical axes, including ethical substance as a measure that a researcher uses to legitimate the self morally; mode of subjectification as a probable ethical component to illustrate governmentality; ethical work as a method to transform what one defines to be ethical; and telos as a willingness to disassemble self or to deconstruct one's world to connect to ethical practice (Camella & Lincoln, 2018). This suggests that ethical issues are meant to regulate and monitor the researchers' conduct, interactions with participants and activities during the research process.

It is important for researchers to be aware of considering adherence to ethical issues when conducting research. Creswell and Creswell (2018) stress that researchers need to apply for permission to conduct research with individual institutions before data generation and participants sign informed consent forms before they participate in the research. This view is supported by Arifin (2018), who postulate six important issues involving ethical issues: informed consent and voluntary participation; anonymity and confidentiality; and ethical approval and access to participants. Head (2020) corroborates the views in the former and the latter stressing that informed consent is a prerequisite in

studies that involve identifiable subjects. Suri (2020) asserts that epistemological orientation is critical as it gives direction to appropriate purpose, literature, analysis, and understanding and guides the highest standards of quality and rigour. This suggests that literature from the chosen research paradigm becomes critical in the application of ethical issues. In this study I consider Ajjawi and Higgs (2007) and Paterson and Higgs (2005) application of ethical issues in hermeneutic phenomenological studies.

Ajjawi and Higgs (2007) and Paterson and Higgs (2005) concur that approval to conduct the study need to be sought by researchers from the ethics committee. Participants should receive and sign written informed consent forms before the data generation process, and participants' confidentiality should be guaranteed (Ajjawi & Higgs, 2007; Paterson & Higgs, 2005). Moreover, participants' voluntary and revocable agreement to participate in the research needs to be clarified (Ajjawi & Higgs, 2007; Paterson & Higgs, 2005). They emphasise that participants need to be provided with written information about the aims of the research and the research process. Ajjawi and Higgs (2007) and Paterson and Higgs (2005) assert that participants should be informed that they can withdraw at any time from participating in the research without negative consequences. Participants' rights are protected and there will be no harm or risk caused by participating in the research (Ajjawi & Higgs, 2007; Paterson & Higgs, 2005). This study employed a similar process as Ajjawi and Higgs (2007) and Paterson and Higgs (2005) to issues of ethics.

In the process of developing a research proposal I applied for ethical clearance from the university ethical committee in fulfilment of the ethical requirement to conduct research. Permission was granted to conduct research by the university ethical committee. This study is conducted in different universities. Ethical norms and standards to be adhered to are different in different places, cultures, and professions, and they change with time (Bassey & Owan, 2019). I applied for permission to conduct research in universities where participants are teaching and received permission to do so from the participants' university ethical committees. I identified participants for the study from different universities. I sent out informed consent forms with details of the study, purpose for conducting research, methods of data generation, and instruments that will be used to generate data. I informed participants that there are no financial benefits from participating in the research. I ensured confidentiality of participants who took part in the research, and that the information they give cannot be used to harm them.

In this study I use the codes U: 1 and or U:2 for the two universities, codes P1 or P2 and so on for participants, and R for researcher for the purposes of confidentiality. These codes will appear together with direct quotations from interviews where participants and the researcher interacted; they will also appear in the attached annexures on data generation tools. They are meant to show the sequence and evidence of the data generation processes. I explicitly informed participants that they are free to withdraw from participating at any time should they wish to do so, and that they would not be penalised for that. I asked participants if they agreed or not to be tape recorded for data generation, and they agreed to be tape recorded. I made my contact details available to participants. I further made contact details of my supervisor, discipline coordinator and the research office available to the participants should they need them. Evidence of the process followed to meet ethical requirements is attached in annexures to this study. Despite meeting the requirements for ethical issues, there are some limitations of this study, and these need to be acknowledged explicitly.

4.11 Limitation of the study

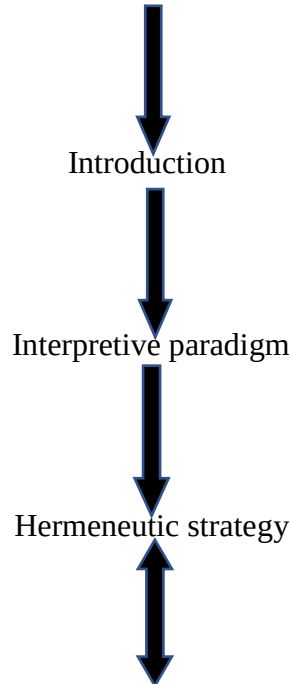
Brutus et al (2013) assert that researchers need to disclose limitations of their studies, as this sustains the principle of falsification to determine and identify factors informing the findings as a prerequisite for robust scientific progress. This view is supported by Theofanidis and Fountouki (2018) who claimed that every research attempt has its own limitations and delimitations. This study is also subject to limitation based on a variety of its assumptions. The study made a declaration of its theoretical paradigm, research design and methodology from its proposal phase, as required to justify its approach to study the phenomenon of interest. The research questions used to explore lecturers' experiences of e-learning resources as the phenomenon are limited to three questions as they relate to the study proposal. The choice of research paradigm, methodology and literature are limited to those which the researcher saw fit for the purposes of this study.

The sampling of participants using nonprobability sampling and purposive sampling enabled the researcher to decide on the preferred criteria to choose suitable participants for the study. A limitation is that participants do not represent a wider population of the study (Atieno, 2009). Participants in this study are limited to two universities with six homogenous participants, as they were the only available participants with the experiences required by the study. Two universities were chosen because of their proximity and access to the researcher and based on the time constraints and available resources to conduct the study. This kind of sampling is biased to the needs of the researcher by

selecting participants that related to the research topic and were available at the time of conducting the study.

The study employs hermeneutic interpretive phenomenology with a hermeneutic circle analytic strategy, limiting it to the processes of hermeneutic analytical principles. This process uses participants' descriptions of lived world experiences. Interpretation of participants' lived world experiences are processed by the researcher, with participants offered the opportunity to check if the information in the data represents the views of the participants. This may create ambiguity in the lived world experiences of participants before, during and after data generation. The study may be limited to the context in which data were generated, where participants were only giving data that they wanted to published, holding back on more data that could be critical to the study. Data generated from observation, in this study is limited to virtual observation, as face-to-face or contact teaching and learning sessions were not allowed in universities due to the restrictions related to the COVID-19 pandemic. Disclosure of study limitations helps to improve the quality of findings and robust interpretation of evidence presented by the study (Theofanidis & Fountouki, 2018). The concepts presented in this chapter appear in Figure 4.1.

Research strategic and technical methodological design applications



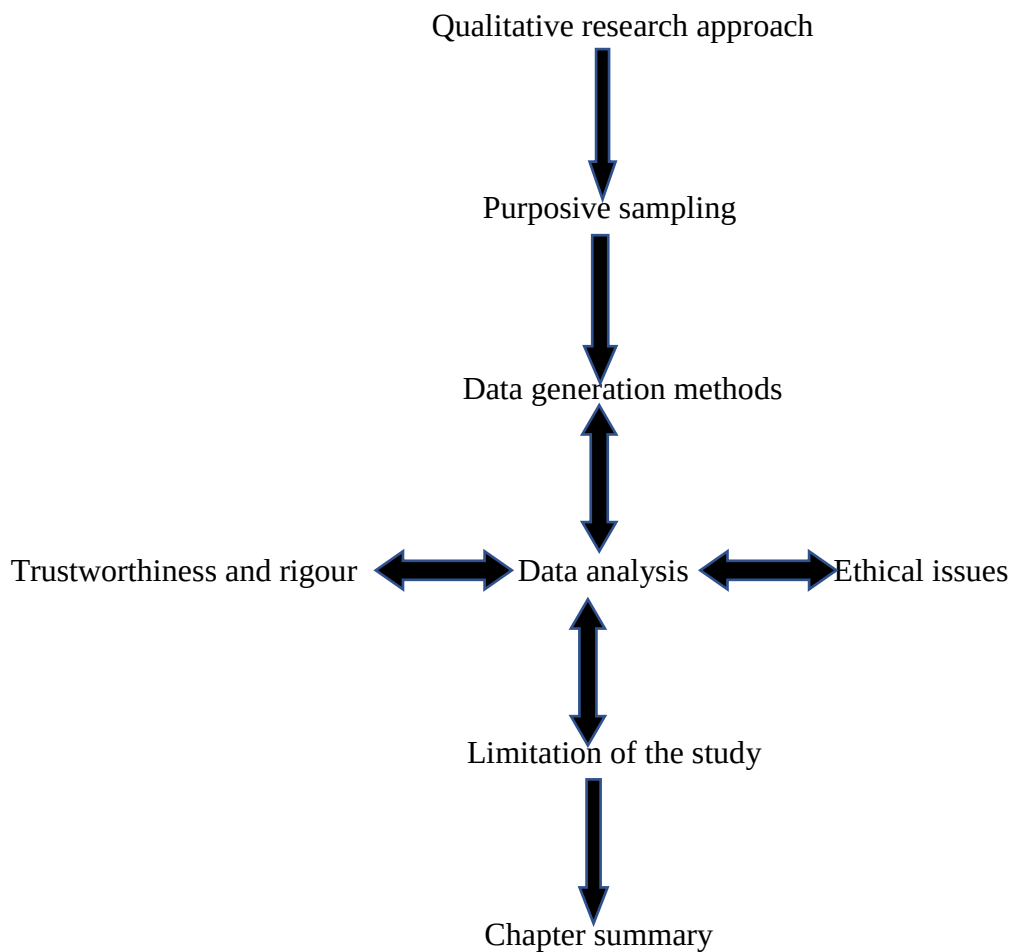


Figure 4.1 Concepts of the research design methodology used in this study

4.12 Summary of the chapter

The introduction in this chapter reflects on conceptualisation as an abstract model identifying relevant concepts of the phenomena (Aliyu et al., 2015). The chapter acknowledges the meaning of research design and methodology from the different conceptual perspectives of methodological approaches. It connected a flexible set of guidelines reflecting theoretical paradigms (Creswell & Creswell, 2018; Denzin & Lincoln, 2018). Reflections and relationships in the chapter are reflected from previous chapters, most critically Chapter Two on literature analysis. This led to the emergence of the e-learning Nexus Model (e-LNM) representing e-specialisation (professional), e-generalisation (social) and e-connection (personal) needs of e-learning experiences.

The chapter gives a brief background to the origin of the concept of paradigm as a pattern or example of something originating from the Greek word '*paradeiknyai*' (Aliyu et al., 2015). Research paradigm is acknowledged from a conceptual understanding of it being the acquisition of knowledge based on

basic beliefs about our views of the world (Lincoln & Guba, 1994) interconnected concepts of paradigm involving ontology, epistemology, methodology and axiology are reflected upon. Justification of the choice of the interpretive paradigm as research paradigm is presented, as it involves individuals or groups of individuals in their social context. The world of participants includes multiple understandings of subjectively, socially, and historically negotiated meanings, feelings, and basic beliefs (Creswell & Creswell, 2018; Welsham, 2001). The chapter presents the hermeneutic phenomenological strategies as chosen as an appropriate technique for the study.

There is reflection on the application of hermeneutic phenomenology within an interpretive paradigm as a suitable technique to reflect on participants' lived experiences, which is the aim of this study (Van Manen & Van Manen, 2014). A historical background of hermeneutic phenomenology is briefly presented as the '*Dasein*' (being) and its originating from the Greek word '*hermeneuein*' (interpret) (Horrigan-Kelly et al., 2016; Fuster, 2019). This chapter reflects on the conceptual horizon of understanding of lecturers' experiences of e-learning resources as a requirement in hermeneutic circle techniques (Bruscia, 2005; Paterson & Higgs, 2005; Sayer, 2000). Strengths, weaknesses, and mitigation against weaknesses of hermeneutics phenomenology are briefly discussed. The chapter makes it explicit that its approach is application of hermeneutic techniques guided by qualitative interpretive research principles.

A brief presentation is made reflecting on the origin and historical background of qualitative research as a philosophical concept (Erickson, 2018). Justification of the choice of a qualitative research approach is supported by the purpose, process and procedures of philosophical principles of the social sciences or human sciences (Tuffour, 2017; Erickson, 2018). These principles involve assertions on experiences, meanings, and perspectives from participants' point of view in answering research questions. These involve questions that seek to understand 'what', 'how' and 'why' (Hammarberg et al., 2016; Tuffour, 2017; Jameel et., al., 2018; Hameed, 2020). These principles reflect in the main research questions of this study about lecturers' experiences of e-learning resources. The chapter reflects on the strengths, weaknesses and factors mitigating the weaknesses of the qualitative research approach.

Clarification and justification of selection and sampling of participants in a non-probability method and purposive sampling technique (Maxwell, 2012) are outlined. Non-probability sampling involves participants that are deliberately selected to meet the requirements of the study (Farrokhi &

Mahmoudi-Hamidabad, 2012). Purposive sampling conforms to qualitative research principles and procedures on how to identify, choose and gain access to appropriate data sources with relevant participants (Mason, 2002). The chapter declares and justifies its data generation methods by employing three different methods (triangulation), (Mohajan, 2018): semi-structured interviews, observation and document analysis (Ajjawi & Higgs, 2007; Mason, 2002, Palmer & Bolderston, 2006; Warren, 2001). Strengths and weaknesses of data generation methods are briefly discussed with factors that mitigate against the weaknesses of the three data generation methods. The chapter justifies its approach to data analysis of employing a hermeneutic circle.

Reflection on the hermeneutic circle strategies (Klein & Myers, 1999; Sayer, 2000; Ajjawi & Higgs, 2007; Dey, 1993; Paterson & Higgs, 2005) suggests that application of techniques for data analysis is appropriate for this study. Data coding is briefly discussed based on qualitative research processes and procedures leading to themes (Bruscia, 2005; Sutton & Austin, 2015; Saldaña, 2013; Lacey & Luff, 2009; Liamputtong, 2009). In so doing the chapter employs the six hermeneutic principles of contextualisation, interaction between researchers and subjects, abstraction and generalisation, diagonal reasoning, multiple interpretations, and the principle of suspicions (Klein & Myers, 1999). The study uses coding techniques aimed enhancing trustworthiness and rigour by linking hard data and soft data in the process of validation and verification of data (Morse, 2018).

The chapter briefly highlights principles that determine trustworthiness and rigour. In so doing emphasis is put on the requirement for credibility, confirmability, dependability, transferability, and authenticity (Davies & Dodd, 2002; Johnson & Rasulova, 2016; Morse, 2018). There is a brief discussion on ethical issues as a prerequisite for qualitative research processes and procedures presented (Richards & Schwartz, 2002; Bassey & Owan, 2019). The chapter reflects on issues of concern in the application of ethical issues (Camella & Lincoln, 2018; Suri, 2020). There is emphasises and acknowledgement of the application of ethical issues from the beginning to the end of the research (Creswell & Creswell, 2018). This study sought permission to conduct research, and consent from participants, and their rights were declared to them (Arifin, 2018; Creswell & Creswell, 2018). The limitations of the study were explicitly acknowledged. Finally, the chapter presents the concepts used in research design and methodology in Figure 4.1.

The next chapter, Chapter Five, presents the first section of the data that were generated and discussion thereof. Themes and categories are identified as they inform discussion of the findings.

The chapter develops leads into the next section of the finding that reflect the theoretical positioning and underpinning philosophical thinking, which are presented in a separate Chapter Six.

CHAPTER FIVE

DATA PRESENTATION AND DISCUSSION OF FINDINGS: EXPOSITORY EXPERIENCES, EMPIRICAL EXPERIENCES, SCIENTIFIC EXPERIENCES

5.1 Introduction

The design and methodological strategy used to explore and understand lecturers' experiences of e-learning resources was presented in the previous chapter. The chapter explained in detail the alignment of the study's strategic methodological approach to the interpretive paradigm. Construction of conceptual thinking on the philosophical orientations underpinning the assumptions and understandings that guide a research paradigm was discussed. Different literature was consulted, such as Kafle (2011), Creswell and Creswell (2018), Guba and Lincoln (2018), Kivunja and Kuyini (2017) and others. The interpretive paradigm based on hermeneutic phenomenological strategies was explained in detail as an option for the study. The chapter also presented the methodological design for data generation in the qualitative research approach. Methods and procedures of data generation was discussed in depth using semi-structured interviews as the primary methods supplemented with observation and document analysis. Literature such as Creswell and Creswell (2018), Denzin and Lincoln (2018), Erickson (2018), Hammarberg et al. (2016), Mason (2002), Mohajan (2018) and Tuffour (2017), to mentioning just a few, were consulted on the qualitative research approach. Methods and procedures of data generation were discussed in depth, with semi-structured interviews used as the primary, methods, supplemented with observation and document analysis.

The chapter explicitly narrated the sampling strategies used, guided by consulted literature on non-probability and purposive sampling (Farrokhi & Mahmoudi-Hamidabad, 2012; Taherdoost (2016). In its attempt to understand lecturers' experiences of e-learning resources in the teaching of History at universities in South Africa, six lecturers were sampled from two different universities. These lecturers provided the study with sufficient data to meet its purposes. Experiences as the phenomenon embedded within an individual social context is placed in the social sphere of the participants in the study. The thinking is that this study needs to interrogate data generated from participants' experiences of e-learning resources. Data from three data generation methods, semi-structured interviews, observation, and document analysis are analysed to arrive at the findings presented in this chapter. This chapter employs different data generation methods (triangulation) to provide different perspectives on lecturers' experiences of e-learning resources in addressing the main research

questions (Flick, 2008). Data analysis enables the study to describe lecturers' experiences of e-learning resources and to interpret the meaning as experienced by the lecturers.

The hermeneutic circle strategy is employed in combining descriptive analysis from hard data with interpretive analysis from soft data to enhance rigour (Morse, 2018). Hard data are "significant for the mode of verification used to determine rigour ... hardness occurs on a continuum of hard to soft data" (Morse, 2018, p. 1375). Descriptive analysis from hard data represents subjective lecturers' experiences of e-learning resources. Descriptive data from observation and document analysis provide analysis of "concrete data" while interpretive data (soft data) from semi-structured interviews provide analysis of both concrete and "perceptual data" (Morse, 2018, p. 1393). This chapter presents a highly interpretive analysis from soft data necessitated by the study's phenomenological strategic focus on "the dimensions of the lived experience" (Morse, 2018, p. 1376). It is necessary for the analysis of the interpretive study to begin from a descriptive discourse.

Validation is achieved by member checking of interview information as provided in the transcriptions of the tape recorded semi-structured interviews, supported by data from observation and document analysis. Verification is achieved by interpreting soft data from semi-structured interviews supported by hard data (Morse, 2018). Hard data are used to support soft data, for adequacy and appropriateness of data quality (Morse, 2018). Supplementary data from observation and document analysis provide the study with sufficient hard data that inform the analysis of soft data supporting member checking to validate findings. Sufficient hard data help the findings to stand on their own (Morse, 2018). This chapter employs a continuous transition between hard data and soft data as it moves between description and interpretation of data in the process of analysis. This process is supported by a move from the parts to the whole and from the whole to the parts in a spiral hermeneutic circle strategic analysis.

The study focuses on exploring lecturers' experiences of e-learning resources, guided by the main research questions. The analysis addresses three main research questions that are connected to each other. The first research question seeks to understand what e-learning resources lecturers use in the teaching of History. This leads to the second question, which seek to understand how lecturers use e-learning resources in the teaching of History. The third question connects to the first and second questions, seeking to understand why lecturers use e-learning resources in the way they do in the teaching of History. Metaphorically, the first question is like a canopy of a garden umbrella, covering

the focus in the description of experiences. The second question is like the pole of the garden umbrella, connecting the canopy and the base of the umbrella – which are the first question and the third question – with evidence of lecturers’ experiences of e-learning resources. The third question is like the base of the garden umbrella, anchoring meanings of lecturers’ experiences of e-learning resources to their descriptive experiences. These questions are addressed in an intertwining manner emanating from semi-structured interviews where participants freely express themselves in their responses to research questions.

Presentation of the data analysis in this chapter is structured by addressing the main research questions. Analysis of participants’ responses to these is supplemented by probing questions from the semi-structured interviews. These probing questions are asked to get in-depth understanding that can yield thick rich descriptions. Descriptions are coded into categories that are grouped together to identify emerging themes in response to each main research question. Emerging themes are numbered in relation to responses made to the main research questions. Findings are presented together with discussions supported by direct quotes from participants and substantiated by evidence from observation and document analysis. Discussions on interpretation are supported by literature to enhance quality and depth that reflect the lived experiences of the phenomenological interpretive analysis (Van Manen, 1990).

Table 5.1 represent the first three themes identified in this study together with their categories grouped together in response to each main research question. During interviews research questions were modified to address the description of the phenomenon of lecturers’ experiences of e-learning resources, to make it clear to participants what is required by the study. Lecturers’ experiences of e-learning resources are understood within the description of their experiences with those e-learning resources.

Table 5.1: First three Themes and categories emerging from analysis of the generated data

THEMES	CATEGORIES
THEME ONE: Expository experiences What e-learning resources do lecturers use in the teaching of History?	• Moodle • Teaching and Learning • Assessment • Communication
THEME TWO: Empirical experiences How do lecturers use e-learning resources in the teaching of History?	• Features • Delivery • Material • Interaction
THEME THREE: Scientific experiences Why do lecturers use e-learning resources in the way they do in the teaching of History?	• Discipline/module/content • Specific • Rationale • Method • Continuation • Flexibility

5.2 Presentation of the data

Presentation of the data that were generated is organised in response to the three main research questions. The first research question seeks to understand: What e-learning resources do lecturers use in the teaching of History? The second research question intends to find out: How do lecturers use e-learning resources in the teaching of History? The third main research question seeks to understand: Why do lecturers use e-learning resources in the way they do in the teaching of History?

In response to the first research question, the study arrived at a theme that reflects lecturers' exposition of e-learning resources and the theme is framed around expository experiences as theme one. In response to the second question, the study established a theme around the practical implementation of the use of e-learning resources by lecturers, and it is framed around empirical experiences as theme two. Responding to the third research question, the study intends to find reasons why lecturers use e-learning resources in the way they do. The study found that lecturers employ researched knowledge, and theme three is framed around scientific experiences. The third main research question leads to theme four expanding on the lecturers' descriptive experiences to interpretative experiences of why they use e-learning resources in the way they do, which is discussed in Chapter Six.

Descriptions are presented based on hard data generated from semi-structured interviews and written responses, supported by hard data from observation and document analysis. Document analysis included course or discipline documents used by participants. Written responses on research questions by participants are hard data that support the face-to-face semi-structured interviews. All hard data are used for descriptive purposes. Inferences from interpretation are supported by literature consulted as a base for spiral horizons of understanding (Bruscia, 2005; Paterson & Higgs, 2005; Sayer, 2000). This enhances the phenomenological theoretical dimensions of multiperspectivity from soft data generated through participants' experiences with e-learning resources. In this chapter data are presented from theme one to theme three of the study. Each theme presented responds to the main research questions, supported by descriptive conceptual categories.

This study presents hard data describing participants' experiences of e-learning resources. These data are meant to support hard data generated from written responses and face-to-face interviews with participants. The description of participants' experiences of e-learning resources is interpreted based on the participants' description of their experiences of e-learning resources. The purpose for using descriptive data in this study is to enhance multiple interpretation of soft data for interpretative

analysis. Hard data may be initially used for the subjective description of the phenomenon in interpretative research (Morse, 2018).

The first participant is coded as P1, second participant P2, third participant P3, fourth participant P4, fifth participant P5 and sixth participant P6. The six participants are from two universities at which they teach History Education, and the first university is coded as U:1 and the second university is as coded U:2. P1, P 3 and P5 are from U:1, while P2, P4 and P6 are from U:2. The table 5.2 shows the profile of the six participants.

Table 5.2 The profile of the participants

Pericipnts' Code	Institution and subject	Experience	Gender
P1	U:1History Education	12 years	Male
P2	U:2 History Education	13 years	Male
P3	U:1 History Education	9 years	Female
P4	U:2 History Education	7 years	Female
P5	U:1 History Education	8 years	Female
P6	U:2 History Education	7 years	Female

5.2.1 Theme one: Expository experiences

Theme one shows that lecturers' use the available resources at their disposal in their experiences. It is their exposure to resources that informs the type of experiences they go through in their everyday life world. e-Learning is one of those experiences they go through, and the type of e-learning resources used vary based on their exposure to them. The following data are presented as generated from lecturers' responses to the first main research question: What e-learning resources do lecturers use in the teaching of History? Participants' responses show that the first theme, expository experiences, is supported by four conceptual categories, which are Moodle, teaching and learning, assessment, and communication. Presentation of data and the discussion of findings follows the

themes that emerged supported by their categories which emerged from data generated in response to the main research questions.

5.2.1.1 Moodle

In their responses lecturers show that Moodle and laptops are the most used e-learning resources. This is how lecturers responded:

P1: *No, to me e-learning resources, they cut across ... For example, when you get into the class, you need to have a laptop and you need to project ... When you go to the class you may have Googled ... if you can't submit through Moodle, you can also email ... So, she couldn't open a particular document that she hoped to open on her cell phone.*

P2: *... So is basically... is Moodle, WhatsApp, email, ja those are the thing s... I go with my laptop; I have a PowerPoint not every time... So, it was Moodle. Eh, it started with such called LAN platform and it's linked to Moodle, so it became Moodle later, they now called it LAN again, LAN 2021, but I think is too closer to Moodle ... We do live lectures where they have to join on Zoom ... Sometimes as a recorded video ... They may not have the laptop or the smart phone ... ICS is also available, Moodle ICS, they are available ... but we have some students who have never really touched a computer, to start with ... or go to the internet and stuff like that.*

P2 written responses: *Laptop, cell phone, Wi-Fi, online platforms e.g., Moodle, WhatsApp, email, Zoom ... I use the laptop for research and other preparation (including making PowerPoint slides). I also work on the laptop to access platforms such as Moodle and Zoom. This means that I also use Wi-Fi for the same purposes. I teach using the laptop and I also use it for communication via Moodle, Zoom and email. I also communicate using my cell phone either as phone calls or messaging through SMS or WhatsApp. The only new resource that I am using is Zoom.*

P3: *I am using Moodle ... usually, we I use it for live teaching, and I also upload some videos ... because my laptop is always there with me ... I also upload some videos, some audio ... for them ... It depends if questions asked by student are individual questions and want me to respond there or maybe the feedback needs the whole group, I respond there or wait for the next lecture to respond ... is the Moodle site... I also upload some videos ... and some audio ... different types of gadgets that can be the phone, can be the laptop, can be the computer, you know if they got that app that can be linked to Moodle and be able to log in wherever they are ... For me I'm using my laptop ...*

P4: *It's computers, I use my laptop and I use tablet ... also use smartphones ... I am able to use the internet, ... I'm able to access YouTube ... I get educational videos I also prepare presentations PowerPoint presentation ... through the phone I'm able to send voice recordings, I'm able to send voice notes ... I use ... Moodle ... it facilitates e-learning and nice slides... Files and links for websites that the students can access.*

P5: *I prefer using Moodle, the Moodle... Normally I use Zoom for the live sessions while you're working on the PowerPoint ... It is recorded in a video when I leave the live session, there is a programme where they are able to go in and view the saved videos ... on the e-learning under their portal. They respond on WhatsApp ... I use a voice note where I record ... On the cell phones, they are mostly comfortable ... to log in on a laptop...*

P6: *Gadgets that I normally use, uh, laptops and tablets, uh, smart phones, which, uh, which can connect to internet. I also make use of data projector where when I will be doing contact classes. I make use of Microsoft Teams at times as well as Zoom, ... so that when I connect to the internet, I make sure that I won't get any glitches. but I'll prepare them on Microsoft Office, Microsoft Office, the Word document ... for the Microsoft Teams or, whether Zoom or the WhatsApp, Moodle. ... With the WhatsApp, because it is in two ways, audio, you also have the video and it doesn't take a lot of students, but I can get a larger group when I use the voice notes for them, and I put it on the WhatsApp, because when I have to like to use a video call.*

P1 uses Moodle, cell phones, laptops, Google, data projector, and emails as e-learning resources. He does not give a direct answer, but in the later part of the interview he reveals the names of e-learning resources that come with his experiences of e-learning resources. P1 reveals in one of the examples he made during the interview, “For example, when you get into the class, you need to have a laptop and you need to project ...”. This suggests that he uses a laptop and a data projector because he projects in class. He also said, “When you go to the class you may have Googled ...”. This suggests that he uses the Google search engine as well. He further said “... if you can't submit through Moodle, you can also email ...”. This implies that he uses Moodle and email. He also said “... she couldn't open a particular document that she hoped to open on her cell phone”.

This shows that he uses cell phone or uses e-learning resources that enable students to retrieve documents using their cell phones. P2 uses Moodle, Moodle ICS, smart phone, computer, email, internet, LAN, LAN 2021, laptop, PowerPoint, video, WhatsApp and Zoom. P2 submitted written responses to the research questions earlier, before the face-to-face interview. In his written responses he mentioned the use of a laptop, cell phone, Moodle, WhatsApp, email, Zoom and PowerPoint, which are confirmed in the face-to-face interview later. What is not mentioned in the face-to-face interview is the use of Wi-Fi and SMS (Social Message Service) as e-learning resources. He uses Moodle as a basic e-learning resource, supplemented with WhatsApp and email, and he relies on his laptop while mobile, as he uses it with a PowerPoint all the time wherever he goes. The interchanging of names between LAN, LAN 2021, Moodle and Moodle ICS suggests frequent changes and updates of e-learning resources he uses in the university. He uses various e-learning resources suggesting flexibility and easier interconnectivity in the institution. He mentions having live lectures using Zoom as well and the difficulty experienced by some of the students to connect based on their lack of exposure to e-learning resources. He mentions that he uses different e-learning resources for different activities, such as live lectures with Zoom and communication with cell phones and WhatsApp.

P3 uses Moodle, laptop, video, audio, computer, and the phone; she is not specific on the type of phone she is using as a component of her e-learning resources. She emphasises that she uses different applications that link to Moodle. Most important she uses the laptop. She uses Moodle for live teaching, uploading videos. She always keeps her laptop with her to upload video. This suggests that she uses it more while mobile; she also uses it to upload audio. She says she uses a variety of e-learning resources such as phones, computers and laptop to connect to Moodle. She mentions that she uses a variety of e-learning resources that can provide students with access to the links.

P4 uses computers, laptop, tablet, smartphone, the internet, You Tube, PowerPoint, videos, voice notes, websites, and Moodle. She says she uses these e-learning resources to facilitate learning and for students to have access to files and website links. She mentions that she uses these e-learning resources to have access to YouTube, get educational videos and prepare for her presentations using PowerPoint. She also sends voice recordings and voice notes using Moodle to facilitate proceedings and for the slides. She uses e-learning resources for files and website links for students to access. This suggests that she uses e-learning resources extensively for the benefit of students.

P5 uses Zoom, video, WhatsApp, student portal, cell phones, voice notes, laptop, and PowerPoint. She says she prefers using Moodle, but normally she uses Zoom for live sessions while recording as she presents using PowerPoint. She uses her recorded sessions for students who could not attend live sessions and those who want to revise the lesson. Students retrieve from the student portal and WhatsApp is used for communication. P5 prefers the cell phone for communication. This implies that she chooses her e-learning resources based on the activity or programme for the day. P6 use Moodle, Zoom, video, laptop, WhatsApp, student portal, cell phones, voice notes, Microsoft Teams, the internet, Microsoft Office, the Word documents and a data projector, and she uses Microsoft often. She uses a projector, meaning that she uses PowerPoint to project as well, which she did not mention in the interview. She normally uses a laptop, tablet, and smart phone. A data projector is used for contact sessions, and she uses Microsoft Office, Word documents to prepare her lessons, presented through Microsoft Teams or Zoom or the WhatsApp or Moodle. She says she uses video for smaller audiences and audio for larger audiences. She also uses video calls as an e-learning resource. This suggest that participants use a variety of e-learning resources based on their intentions for using them.

Participants' experiences of e-learning resources show that those which are most used are Moodle and laptops. Video and WhatsApp are used by five participants while cell phones are used by four participants. Computers, internet, PowerPoint, Zoom, and voice notes are used by three participants. Data projectors, smart phones, email, and a WhatsApp student portal are used by two participants. Google, LAN, LAN 2021, audio, phone, tablet, YouTube, Microsoft Teams, Microsoft Office, and Word documents are used by one participant. Identification of the by participants is informed by the concepts used by participants. In mentioning the e-learning resources they are using, some of the concepts may have the same meaning – such as a phone, cell phone and smart phone, and voice note and audio. The use of Moodle and a laptop by all participants shows that Moodle and a laptop are the most preferred e-learning resources in both institutions. This may be related to the historical background of the use of Moodle and its ability to extend to other applications such the laptop.

Brandl (2005) asserts that Moodle is an acronym for Modular Object-Oriented Dynamic Learning Environment which is a course management tools for online learning developed by Martin Dougiamas. This view is supported in Khoza, who (2021) postulates that Moodle was developed in 1999 by Martin Dougiamas when he was a student at Curtin University of Technology. Khoza (2021) asserts that Moodle was prescribed by some institutions as their learning management systems (LMS), signalling migration to a digitalised curriculum. The university context became critical when

Moodle was developed, as trends in higher education institutions preferred Moodle as a modern e-learning tool for use by both students and teachers (Al-Ajlan & Zedan, 2008). The extensibility of Moodle and its applicability to university context makes it favourable for consideration by lecturers teaching to the university context (Robb, 2004). In their interviews participants revealed that they use Moodle in their institutions with other e-learning resources, and that it is easy to do so. P2 referred to the use of (local area networks) LAN which he perceives to be like Moodle. Clark and Pogram (1978, p. 1497) state that LAN is “a data communication network ... limited in a geographic scope”. This suggests that LAN can be used within limited institutional geographic space or scope.

5.2.1.2 Teaching and learning

Data reveal that participants use e-learning resources for teaching and learning and that inform their experiences of e-learning resources. In their responses to the first research question, they described their use of e-learning resources for teaching and learning as follows:

P1: ... *I teach students how to teach History ... think if I'm going to teach this particular unit or this particular topic, what teaching and learning resources do I need ... you see when it comes to History e-learning resources are limited ...*

P2: *Moodle ... is useful for teaching and learning ... I also still have to do some teaching and learning ... So, that's Moodle for teaching and learning ...*

P3: *I am a lecturer I have lot of students that I'm teaching ... the lesson that I will be lecturing to my students ... I will be teaching my learners.*

P4: ... *the use of computers is a major component when I teach my students ...*

P5: ... *while I'm teaching in order to move to the next section ... move along with my slides.*

P6: *As a History teacher I use online learning resources in terms of teaching my subject content. I make use of Microsoft Teams at times as well as Zoom, all those online platforms that are available for my students and which are easily accessible by them.*

P1 uses e-learning resources for teaching, and uses them for teaching specifically History students on how to teach History. He focuses on a particular unit and a particular topic, and selects e-learning resources that he thinks are appropriate for his teaching needs. This suggests that he considers lecturer needs. This implies that he uses his choice of e-learning resources for a particular unit and a particular topic. This suggests that different e-learning resources can be used, or the same e-learning resources can be used if they are appropriate for particular units or a particular topic.

P2 uses Moodle for teaching and learning, and says that Moodle is useful for teaching and learning. He mentions that he still has to do some teaching and learning. This suggests that he is carrying out activities other than teaching, but most important for him is the role of teaching and learning. He perceives Moodle to be central in his teaching.

Being a lecturer teaching History is all that P3 perceives as important to her. She mentions that she is teaching big classes, but teaching is all that she does. She interchanges the concepts of lecturer and teacher, lecturing and teaching. This suggests close or similar roles between the two concepts, blurring boundaries between them.

P4 uses the computer as a major component in her teaching. The idea of using the computer as a major component suggests that there are other varied minor components that she is using. When she uses them, they might be for other activities or supporting the computer as a major component. This suggests that the computer plays a central role in her teaching.

P5 is teaching, and she uses slides as part of her e-learning resources in her teaching. She reflects on the methods she uses, mentioning the order of movement from one section to the next. This suggests sequencing of the teaching process, as one section connects to the other in sequence or in a certain order.

As a History teacher, P6 uses online resources which are e-learning resources to teach her subject content. She uses Microsoft Teams and Zoom for online sessions. She chooses these e-learning platforms because they are accessible to her students. This suggests that her students are a priority in her choice of e-learning resources.

In their responses all participants are teaching, using different e-learning resources. The choice of Moodle as e-learning resource is influenced by many factors, mostly the purpose of developing it for online teaching and learning. The purpose of Moodle is to support online learning (Brandl, 2005), which makes it an obvious choice for lecturers to use as an e-learning resource. Teaching and learning cannot be complete as a process when assessment is not considered. It is shown in the responses that participants were involved with assessment in their use of e-learning resources.

5.2.1.3 Assessment

Teaching and learning are activities that require evaluation of the unfolding of processes and that is done through assessment. Participants mentioned that they teach their students and in so doing their students learn from their teaching. The processes of evaluating teaching and learning are through assessment. This is how participants responded in the interviews:

P1: *Well, I can say 70% of them are fine, they are able to submit very well without a problem, but some have a problem of connectivity which therefore stands in their way of submitting. So, we have to think of other avenues, for example you end up giving them an option that if you can't submit through Moodle, you can also email. So therefore, find it easy to email [for] those who struggle, but mostly 70% of them do submit they don't have a problem. Some have a problem because of their location, so it's difficult for them. They don't have the network and all this thing works with network, it works with data, so some struggle with data, some struggle with the network, but most of them do their best in submitting.*

P2: *I would say ... but we also use it for assessment because instead of them submitting to us their work, there is a platform for them to actually submit their assessment there ... So, we use it for assessment in terms of them submitting their work and we assess that work there, then as soon as we assess they already see their marks. There, you don't even have to say here are your marks, as soon as I assess, the students can see the assessment.*

P3: *I could see from their responses when they need to submit assessments ... they will submit there, submit online, you are able to save it for learners, when I do marking I do it online, they are also able to see the marks and the feedback.*

P4: *I can also assess my students through Moodle, they can respond to quizzes in the platform and respond and get feedback immediately because Moodle can also be used to mark and give feedback to the students.*

P5: *I assess on the program, we send the assessment, they will find it on the program. They work on a programme then is going to come back. I will mark and also give feedback, it's also in the same program I assess with the module.*

P6: *So, with this one, maybe the paper will be five hours so that they are able to connect because they need to also be visible on the screen, on the camera. They need to be visible. So, the camera it's the one that serves as an invigilator to our students. So, we do assess them. We upload papers. They, know when to access them and they get open for that particular period. And after five hours, they need to submit. Then it's closed. Uh, with the online exam [it] can be written anywhere.*

P1 uses Moodle for assessment but is faced with challenges involving connectivity caused by the network, cost of data, and students' location. This affects submission of assessment by students. He uses an email facility as an alternative for struggling students. Despite all the challenges 70% rate of submission is received, and he is happy with that.

P2 uses e-learning resources for assessment, and students submit online. He says they assess the work online as submitted by students, and students receive the feedback as soon as they have assessed them online. He says they also use e-learning for assessment, suggesting that assessment may not be the major reason they use e-learning resources, but it is one among others reasons for which it is used.

P3 says she can see student's responses from assessment submitted. This suggests that she receives feedback from formative assessment using e-learning resources. She mentions that students submit online, and she conducts marking online as well. As soon as she completes marking, she makes the marks ready for the students to retrieve online.

P4 uses Moodle for assessment, she marks their assessment tasks online and gives feedback online as soon as she finishes marking online. Her students respond online as well.

P5 says she assesses on the program and students find the same program of assessment sent there. This implies she refers to the e-learning program, as she says they send it there for students to retrieve it. She marks the work and gives feedback to students online. She interchanges the concepts program and module suggesting reference to a unit or section of work and course outline with scheduled activities for assessment or programme of assessment. This suggests that formative assessment features prominently in P5's e-learning assessment as there is more emphasis on immediate feedback to students.

P6 gives a detailed programme of the practical writing of a paper. She says the paper is scheduled to be written with more time than for a contact session examination. This is done in consideration of problems related to connectivity on the day of the examination. She mentions that invigilation of the paper is by the camera and students can access the paper anywhere. P6 articulates assessment processes that reflect summative assessment protocols, by saying that cameras serve as invigilators during monitoring of students as they are sitting for their assessment.

All participants use e-learning resources for assessment of submissions by students. They all assess using e-learning resources, and their students receive feedback immediately through e-learning resources. They responded that students are able to see their marks in the same e-learning resource as soon as they have assessed them. P1 says some of his students experience challenges with submission with Moodle and they are given the option to use email. He also mentions that connectivity, data availability and the location of students pose some challenges.

However, he says about 70% of his students are able to submit. P4 also mentions the use of Moodle for her students to submit their assessment. Moodle can be used as an e-learning resource for both formal and informal assessment (Khoza, 2021). Formative assessment creates an opportunity to provide for feedback, as shown by participants in their use of e-learning resources for assessment. Challenges related to assessment need to be resolved, and that involves effective communication.

5.2.1.4 Communication

Communication involves an element of understanding; without understanding, communication loses meaning and it becomes miscommunication caused by misunderstanding. It is important that teaching results in learning; learning is experienced when assessment tasks meet desired requirements. Desired requirements need to be effectively communicated, with appropriate understanding that fits the

purpose. In their responses to experiences of e-learning resources, participants revealed that communication is one of their experiences of e-learning resources:

Response from P1: *Yes, yes, we use e-learning resources, we use eh...emails to a larger extent, eh ja. ... Whereby now the only mode of communicating.*

P2: *... But we already had eh...started making sure that beside contact lectures, we communicate with students electronically. Eh and also try to use which ever technology we have ... But we also use it for communication because it has a section where they say... where they say announcement. So, we add all the important communication ... So, ... if I want them to join a WhatsApp group cell, I put the WhatsApp announcement saying, this is the link for the WhatsApp group, click on this link and you come to WhatsApp. Or the assignment is due on such and such day or eh...lecture is cancelled whatever, so, we use it for communication ... The students can also respond there on Moodle and everyone sees the response, it's more like chat ...*

P3: *I give them a chance to communicate, so as they were getting a chance when we were communication in contact sessions ... let me make an example that I just want to sign in to face book...*

P4: *No, actually it can be used for a number of things, eh just like communicating with the students, remember when you are having your sessions, they might have not been online ... I'm able to communicate with the students eh even if they were not able to attend the session that was planned.*

P5: *The skills, they come with knowing how to use a cell phone. Meaning it gives you ... it's more like you are chatting on your phone whereas you are able to pass on ... a lesson, you're communicating with the students as well ... They respond on WhatsApp; they are able to communicate with me directly on WhatsApp on a group WhatsApp.*

P6: *We prefer for communication of any sort we prefer the mobile ones, the mobile tablets or the cell phones, because they can get messages immediately. So, as they are, they are using those WhatsApp, those platforms, they, have the emails, all the students do have their emails, so we can post on WhatsApp as well as emails. We can access them on emails. And we also make use of the portals like Moodle.*

P1 says he uses emails as an e-learning resource to a larger extent for communication. His repeated use of being in agreement with the use of e-learning resources suggests certainty in his confirmation of the use, of e-learning resources. It also suggests the extent or the frequency of the use as he mentions that emails are used to a larger extent for communication.

P2 reveals that use of e-learning resources for communication has been in place for some time in his institution. The mentioning of “we already had” suggests it has been in place for some time. He says they use any e-learning resource they have at their disposal for communication. The most used e-learning resources for communication are WhatsApp and cell phones. He says they mostly communicate important announcements such as submission of assignments, cancellation of lectures and other related announcements. He says Moodle is also used, where students are allowed to see responses to their questions.

Responses from P3 show that she uses e-learning resources to communicate with students. She responds to communication within a learning environment, as she says she gives them a chance to communicate. This implies that it is a discussion within the teaching and learning situation. She confirms that thinking by saying “communication in contact sessions”.

P4 begins with a negative “No” response but in her articulation the response indicates positive thinking in the use of e-learning resources for communication. She makes a comment in the interview in reference to reminding the interviewer about the rules of interaction. She reveals that she is able to communicate with students who happened not to be able to attend live sessions. This implies that she provides extra support to students experiencing challenges with e-learning communication.

Development of skills is critical in the use of e-learning resources for P5. She uses e-learning resources to communicate, mostly WhatsApp. She says the communication is direct, using cell phones. This implies that the communication happens within the learning set-up where, she teaches certain skills required by the lesson.

Preference for using e-learning resources to communicate is shown by P6, who prefers mobile phones, tablet, and cell phones for communication. She prefers them because she gets messages immediately from WhatsApp. She also uses emails to communicate with students as well as Moodle.

As well as the subject matter on communication, communication, is placed within the societal horizontal discourse strategies reflected in a Curricular Spider Web representing physical access to teaching and learning (Khoza, 2019). Khoza (2019) concurs with Giamellaro (2017), who espouses that the context, the teacher, and the learner's critical connection contributes to the experiences, leading to across-education experiences. The former and the latter relate to the participants in the use of e-learning resources to communicate horizontally or across education experiences that are embedded in social contexts of digital experiences and challenges. The use of e-learning resources by participants connects to their practical experiences on a daily basis.

5.2.2 Theme two: Empirical experiences

Participants are lecturers and their e-learning experiences relate to their life world of practical engagement with e-learning resources. Their experience is demonstrated in their application of skills using e-learning resources to allow practical engagements. The ability and inability of e-learning resources to do so can make the difference between a breakthrough or a hindrance to practically engaging in the process of teaching and learning, assessment, or communication. In order to make a breakthrough, the features of e-learning resources become critically important. Lack of the necessary features may result in hindrance or misdirected effort in ensuring appropriate experiences of e-learning resources on time. In theme two participants revealed that features, the delivery mode, form of material and type of interaction are four components of their empirical experiences of e-learning resources. Participants were requested to respond to second main research question; How do lecturers use e-learning resources in the teaching of History?

5.2.2.1 Features

This is how participants responded to the second main research question in terms of the features of e-learning resources:

P1: I have to show them something here ... and you need to project ... I have to project something here ... You may have Googled, you may have got some stuff from the system... to present so in the end e-learning resources you see ... So, therefore find it easy to email those who struggle.

P2: ... sometimes when they may miss the lecture they can always come back and watch that lecture as a recorded video ... so if they want to read, they can read, obviously they should read more outside of Moodle ... it's linked to Moodle And...eh if I'm doing an online lecture and I'm showing slides ... It means they are not seeing my face; they only hear my voice, and we know that when you're a teacher your interaction is not just vocal. They also need to see you, how animated you are, eye contact, those kinds of things, but they don't see you. They only seeing your PowerPoint and you're talking; you're speaking behind it.

P3: The learners ... they use different types of gadgets that can be the phone, can be the laptop, can be the computer, you know as long as they got that app that can be linked to Moodle, I'm able to update the content that eh ... So, what is good about this Moodle is that it is being updated each and every year, then they will submit there, submit online, you are able to save it for learners, when I do marking I do it online, they are also able to see the marks and the feedback.

P4: ... that learning platform is really, really eh useful especially for sharing material with students, files and links for websites that the students can access. And it's just easier through Moodle to manage material when it is accessible to my students ... get feedback immediately because Moodle can also be used to mark and give feedback to the students, It's not just theory, it's not just face-to-face and it's just, it could be videos, it could be voice notes, it could be recording, it could be drawing, it could be ... just ... the whole setup become different and learners are ... students and learners are just not the same, they don't have the same capabilities, some are really visual and they are interested in that, so, these resources they provide for that.

P5: They are slightly different, they are slightly different, there's not much difference from the contact, even on the live video, learners are able to raise their hands and ask for clarity, same as in a contact class ... You just connect all the resources of e-learning resources, you're able to do a PowerPoint presentation, your able to ... eh, while you're working on the PowerPoint the students are able to stop and ask for clarity while you're still, eh projecting to them.

P6: I will be able to project ... when I use the voice notes and I put it on the WhatsApp ... for them I have to like to use a video call So ... I always use Microsoft Clips. With the WhatsApp because it is in two ways, audio, you also have the video.

P1 says he needs to show students something projected; he says he needs to Google something from the system that he can present, and e-learning resources need to provide for that. He mentions that it has to be easy to email those who struggle.

P2 says that sometimes it that could happen that students miss the lecture; they should always be able to come back and watch that lecture as a recorded video. He articulates that they have to read, they can read in as much they should read more outside of Moodle, and that e-learning resources should be linked to Moodle, allowing him to be online with his lecture and able to show slides. He says e-learning should make up for the absence of showing his face, as students can only hear his voice. He says it must also strengthen interaction and not just be vocal. He says it must supplement for students not being able to see you, how animated you are, eye contact, those kinds of things which they won't be able to see, since are only seeing your PowerPoint and you are talking behind it.

P3: articulates that learners are all different and e-learning resources need to cater for their differences. It must be able to provide for the use of different types of gadgets, whether the phone, the laptop, the computer, it should provide for the link to Moodle, and she must be able to update the content and other material. She articulates that is good as it keeps on updating Moodle, and she needs e-learning resources that can provide for online submission and are able to save work for learners. She also needs to do marking online, and students must be able to see their marks and feedback.

P4 mentions that she needs a learning platform and that it really useful especially for sharing material with students, files, and links to websites that the students can access. She says it is just easier through Moodle to manage material and it is accessible to her students. She says she e-learning resources should provide for her to mark and give students immediate feedback, and Moodle does that. She mentions that she needs e-learning resources that could provide for her to use videos, voice notes, recording, and drawing, and more as she needs. She mentions that e-learning resources could provide for different learners, as students are not the same, they don't have the same capabilities. She mentions that some students are really visual, and they are interested in that, so, these resources should provide for that.

P5: says she needs e-learning resources that sustain the contact, even on the live video. She mentions that she needs e-learning resources where learners are able to raise their hands and ask for clarity, the

same as in a contact class. She articulates that she needs e-learning resources that provide for her to just connect all of the resources electronically for learning, she needs to be able to do a PowerPoint presentation while working on the PowerPoint, and she needs students to be able to stop and ask for clarity while she is still projecting to them.

P6: mentions that e-learning resources should allow her to be able to project, use voice notes and put them on WhatsApp for students. She articulates that e-learning resources should allow her to use a video call. She mentions that she prefers e-learning resources like Microsoft as it always provides for her use of Microsoft Clips. She articulates that e-learning resources with a WhatsApp afford her the use of an audio together with video.

Five of the participants suggest that e-learning resources should provide for features such as showing, projecting, presenting, and videos, as well as PowerPoint.

Five participants also show that e-learning resources features should involve Google, reading outside of Moodle, different links to Moodle, websites and connect all resources. Four participants reveal that recording, saving, managing material, and voice notes are essential features of e-learning resources. Considerations of struggling students and catering for different capabilities in the use of e-learning resources in response to missed lectures was mentioned by four participants. A need to use Moodle features or to link to Moodle by e-learning resources is shown by three participants. Two participants reveal a need to strength participation using e-learning resources; this is suggested by the use of concepts like interaction and raised hands. The need for e-learning resources features providing for the sharing of material is suggested by one participant. Features of e-learning resources with Microsoft Clip are mentioned by one participant.

Dhawani (2020) asserts that e-learning features need to use customised procedures and processes that supports the needs of learners.

The findings show that e-learning resources features that involve showing, projecting, presenting, and videos, as well as PowerPoint are important for lecturers' experiences in the use of e-learning resources. I can also be highlighted that feature involving the use of Google, reading outside of Moodle, different links to Moodle, websites and connecting all resources are of importance to lectures experiences of e-learning resources. The less important e-learning resources features as shown by participants are those involving the sharing of material and the use of Microsoft Clips. These less

important features might be covered by other features in the most mentioned resources in terms of their functions; for example, sharing of material may be included in using different links and connecting to different websites. The use of Microsoft Clips may be included in the videos, recordings, voice notes etc. Features of e-learning resources should serve a purpose and participants showed that their choice of features of e-learning resources serve the purpose of delivery.

5.2.2.2 Delivery

It is expected that e-learning resources deliver certain results. Delivery is an indication and evidence of commitment to what is taking place. In their responses to the use e-learning resources, participants mentioned delivery in the following ways:

P1: No, I only consider the capacity of the lecture halls because those are the same students now. I can't here say, now that our class for example has 80 students, let me divide them into two or three because of e-learning resources ... So, in other words, the same students ... we just use the e-learning resources because at least the hall can accommodate them, so then I'm fine ... I hope it's something 30 minutes or less. So, I do use them in the class and outside of the class and even if when students come to my office for some reasons and if it need be ... I have to project something here I have to show them something here so in other words, whether I'm in class or not, or e-learning resources are just there.

P2: There's no limit, it's really up to them in terms of whether they want to attend. Well, they must attend, [it] is compulsory, but as you know, as I say some will not attend ... It's difficult to convince them, but as I said, we understand that some have genuine problems. So, he may say OK I'll watch the video afterwards, maybe when people are sleeping, and I'll watch the video on my own No face-to-face at all in terms of physical face-to-face. We do live lectures where they have to join on Zoom and...eh, if there are any discussions ... If I have to teach that particular thing, I teach there, but we don't do physical face-to-face, so, the face-to-face is online. So, it's really just e-learning throughout The good thing is you can go back and check after a week to see of those who missed the lecture because of genuine problems, how many have now gone [to]download that video and watch it in their own time ... Legally they are the same, eh, they are still the same, although we were told that, the university understands that it is impossible to have a proper one and a half session because of concentration levels ... Many other factors that may come into play, eh, for honours two hours sessions. So, for my honours sessions it also depends on the topic. Some topics we really push

the whole two hour; eh, some topics, most topics now, if I get beyond an hour, I think I'll say let's give this a rest. Eh, any other discussion we can do on WhatsApp group, and we can talk about whatever needs to be talked about ... in general they are much shorter than they used to be ...

P2 written response: *It depends on the nature of the topic under focus. For modules that I have been teaching for a while, I need at least an hour for preparation and 90 minutes for the actual teaching and about 30 minutes of administrative issues after the lecture. However, this year, I have been teaching a new module in a content-heavy topic, so preparation has been taking me at least 3 hours ... I prepare on my own.*

P3: So, I use it for live teaching ... It takes about one and a half hour ... I can accommodate plus or minus 100 students in a session, but the site can accommodate more than that ... I do not limit the numbers because I will limit the numbers and find that those learners won't be able to log in because of the challenges they are facing ending up with few learners. The site can accommodate more and more learners, it is open to everyone.

P4: You know through using ... like your virtual tutoring or your online lessons or whatever material that you present to your students Moodle, that learning platform is really, really eh useful especially for sharing material with students ... the content that I need to deliver... I can just deliver it to them. Oh, you do breakdown the work into sessions ... and they can comprehend and understand so the work is broken down into sessions which could be an hour, over two hours... ...".

P5: It is recorded in a video when I leave the live session, there is a programme where they are able to go in and view the saved videos because they understand that most lessons and the information, they need to know [they] will get it on the e-learning under their portal, where there is also a video where they can get their lessons ... In a scale of ten, nine out of ten will attend, so, it means they are able to be in class on time because it's anywhere they are. They don't need to be specifically in a lab or anywhere else ... There's no limit at all, there's no limit.

P6: For e-learning. I accommodate a large number. I can take like more than 100 in each lesson, but, but with the face-to-face learning, it's just a small group. And when you are, on Microsoft Teams. So that even the learners won't get confused of like receiving it each time you link, and you can move with them for a longer session, can take longer, more than an hour. As I said that I prepare for two-hour session unlike in Zoom, you only have a limit. So, if, the session is going to be like 30 minutes,

then I can make use of Zoom. But most of my contact time, is two hours. So, I always use Microsoft Clips.

P1 articulates that that he considers the capacity of the lecture hall in determining the number of students accommodated in his e-learning sessions and eighty students are ideal for him. In his preparation for using e-learning resources he takes thirty minutes, and those thirty minutes should be the same for his actual use of e-learning resources for teaching and learning. He says he can show or project to his student anywhere in his office or in the lecture hall.

P2 says he does not limit student attendance in his e-learning sessions but that comes with some challenges as most of them do not attend on e-learning sessions. He mentions that there could be some problems that some of his students cannot resolve, but others could be just invalid excuses. He mentions that he prepares some recorded video lectures for those who could not attend live lectures so that they can have time to watch them. He says his sessions are on e-learning throughout and he is using Zoom for discussions. He mentions that he presents sessions for different levels of students; for honours class the session can be two hours or more, but for other sessions it takes 90 minutes for the actual teaching session. He says should it happen that he could not finish the topic, he uses other platforms and other strategies to continue with it, like a WhatsApp platform. He says at least an hour is enough for him to prepare, but if he is teaching a new preparation it can take him three hours.

P3 says she uses e-learning resources for live teaching and her session takes one and a half hours; she allows students to connect during this one and half hour session. She mentions that she is able to accommodate approximately one 100 students per session but can also accommodate more if that is needed.

P4 mentions that she uses Moodle for virtual tutoring or online teaching. She can share and deliver content material breaking it down into an hour or over an hours to two hour per session for her students.

P5 mentions that she records her sessions for those who may not be able to attend her live teaching sessions. She saves her recordings in the student portal for them to access. She gives a scale of nine out of ten being able to attend live sessions, and there is no limit to the number of students attending live sessions.

P6 says she accommodates more than 100 students per session and that is more than she can accommodate in a contact session. She prefers to use Microsoft Teams for longer sessions like two-hour sessions, and she prefers to use Zoom for shorter sessions like 30-minute sessions. She says she uses Microsoft Teams in most sessions because her sessions are mostly two-hour sessions.

All participants reveal that e-learning resources should deliver in terms accommodating an unlimited number of students. However, P1 prefers to keep the number of students the same as those attending contact sessions, while P2, P3 and P5 do not have a limit to accommodating students on e-learning sessions. P6 prefers 100 or more of students to be accommodated in an e-learning session. P4 did not indicate any number in relation to accommodation of students in her e-learning sessions.

Kay and Pasarica (2019), Maul et al. (2018) and Sayem et al. (2017) used Zoom platform to augment the physical and the virtual spaces of teaching and learning. The use of technology for teaching and learning brings the physical world and the virtual world experiences into one e-learning experience (Vate-U-Lan et al., 2016). In their experiences, participants show that accommodating students in e-learning sessions considers their physical ability to attend the live session, and video recordings are prepared for them should they be unable to physically attend the live session. In terms of time, it shows that participants' use of e-learning resources to deliver scheduled live sessions and recordings and for storage or saving material for teaching and learning. Brandl (2005) claims that Martin Dougiamas developed e-learning resource as a course management and delivery system. It is shown that from participants experiences, e-learning delivery involves the preparation, actual delivery and saving or storage of content material before and after the e-learning sessions. Participants' experiences show that they use course or content material for the capacity, time, and preparation of live e-learning sessions and actual delivery of these.

5.2.2.3 Material

Material in any form determines quality of service and efficiency of delivery of any kind to those who may be involved. In this study, delivery of material using e-learning resources is experienced by participants. Their responses to the second main research question show their concern about material of e-learning resources in contributing to their experiences.

P1: ... she couldn't open a particular document that she hoped to open on her cell phone, so even if she opens her cell phone, she found that some of the documents are not clear as they would have been if it was a laptop ... You may have got some stuff from the system... to present so in the end e-learning resources you see ... you just use any based on what you want to do at particular time.

P2: ... we put our course outlines there, so, the students know this week we are dealing with which unit and so on, we put our readings there, ... we put some of the important readings there ... So, usually I have my laptop be it in a PowerPoint or some documents for them to see or pictures or whatever, but I always have to have my laptop with me.

P3: ... they will be able to find the work because I'm uploading all the time ... so they can be able to access the information the system is very much easy to use or to update information if they do not have more information regarding that particular content that need to be taught or I deliver to them

P4: ... manage material when it is accessible to my students ... think that go through the material and just share and just throw the material to them ... I can also send information to them, whether on the content I need them to understand, activities, any interactive material it could be a presentation that I need to share with them or just any, any learning material. it's actually how the material is presented to them ... as I want them to update any information in the course or in the module, I can just send it to them and through their phones, they have got smart phones.

P5: ... access their portals to get the information get their messages ... they understand that most lessons and the information, they need to know will get it on the e-learning under their portal ... I do have an assistant who is assisting me when I'm loading the programme ...

P6: And we also make use of the portals like Moodle, the school portals, where we upload learning materials for them, then for all the, maybe the class sessions, then we will be coming together in whatever space In our institution we do have IT [information technology] specialists whenever we get stuck in terms of the connectivity... we do have IT allocated to us ...

P1: mentions that a student could not open a document on her cell phone and when she opened it, she found that some of the documents were not as clear as they would have been on a laptop. He says he uses some information from the system to present, based on what he wants to do.

P2: puts his course outline on e-learning resources for students to know about the important readings for the units and for which weeks they are. He says he always has his laptop with him and can use PowerPoint or documents, with some pictures or whatever needs to be presented.

P3: says her students are able to find the work because she is uploading all the time, She says the system is easy to use or update and she delivers the content to students.

P4: says she manages material when it is accessible to her students, and goes through the material before sharing it with her students, sharing what she needs them to understand, activities, any interactive material, presentation, or just any learning material. She says it is how the material is presented to them, and wants updates to any information in the course or in the module. She says she can just send it to them via their smart phones.

P5: articulates that student have access to their portals and get the information and messages. She mentions that students understand that most the lessons and the information they need to know is available on portal.

P6: mentions that she makes use of portals like Moodle because it is a school portal, and this is where she uploads learning materials for her students. She articulates that then material for all her class sessions are in e-learning space.

Participants state that they need to use clear documents that can be accessible to students through e-learning resources. They use e-learning resources that show course outlines for student to know about and how to use any e-learning resources for any material, including PowerPoint documents. They indicate that they need to support students so that they are able to find the work and keep updating the work on e-learning resources. They also show that they manage material so that it is accessible to students, making sure that students are able to use the documents and understand what is required by the documents.

Dhawani (2020) argues that e-learning material can lead to distraction, frustration, anxiety, and confusion as well as lack of personal or physical attention. In their experiences participants show that they need to be interactive in presentations and they have to use and make it possible for students to use their cell phones or smart phones to access documents from e-learning resources. In their responses participants showed the importance of interaction in their experiences of e-learning learning resources.

5.2.2.4 Interaction

Interaction in their use of e-learning resources is critical for those participating through e-learning resources. In response to the main research questions participants, revealed that interaction takes place in their use of e-learning resources:

P1: They started to have laptops for the first time when they are enrolled here at the university, so, this way they start to interact; I mean using this, I mean, e-learning resources ... so that students can interact ... based on what you want to do at particular time ... Ja, ... we do have the unit here in the university called ICT, so when we've got a problem with our technology there, they come in. So, when it comes to e-learning resources, for example, if I get stuck somewhere they are there ... There are also a few colleagues who are ... are user friendly, I mean who know about this, so, either I call up my colleagues or I go straight to ICT, but they are there to assist ... Yes, yes, we use e-learning resources, we use eh ... emails to a larger extent ...

P2: ... we have some students who have never really touched a computer, to start with they don't have an email address. They don't know how to set it up, they don't know how to send an email ... ICS is also available, Moodle ICS, they are available if you are really struggling with something. You can just email them to say, listen I want to upload a video and I really don't know how to do it; they will respond. So, I think the university has done its part ... In 2008 at the end of 2008 because I had not used ICT in many ways, but Professor ... who was here gathered us together and said let's write contribution to a journal ... Each one had to write contributions in terms of how to use ICT to teach History. I was allocated to write about PowerPoint which was ... which is quite basic, but still wasn't ... in 2008 it wasn't used that much, eh, then someone would write on the use of cell phones to teach History.

P3: But, with technology there can be some challenges but very few experience that, technology sometimes doesn't work ... can just say... But very few have experienced that ... we do have IT specialists at the university, and they are very much helpful, if there is a new app or so ...

P4: ... as much as it is interactive, students can maybe keep quiet at times ... as a lecturer you just need to be interactive ... You really need to engage with them ... they are working remotely. As a lecturer you just have to ensure that it's interactive and engaging so that you ensure that they participated ...

P5: There's more participation because there's not that much pressure to say, oh, I think this is the correct answer, but what if it is wrong and then so and so next to me, hey ... the student is in his or her own space they are able to responds as and when without fear...

P6: ... there is not only one person that can talk in Zoom. The whole class can be engaged, we take turns. And like in class they can unmute themselves and they can stop me on the way whilst I'm explaining if they, they did not understand the concept. So, but I won't move alone so they can stop at any time and ask for clarity.

P1 responds that students start interacting using e-learning resources when they enrol at the university, and start using laptops for the first time. He also mentions that he mostly uses emails to interact with other colleagues in the university when he is not in a position to go there physically. P2 articulates that some of the students have never really touched a computer and do not even know how to open an email account and send an email as they do not have email addresses. He mentions interacting with other colleagues at the university using email. He thinks that the university has played its part in facilitating e-learning services for interaction and mentions that they as colleagues took initiatives to enhance the use of e-learning resources for interaction, especially regarding teaching and learning activities.

P3 says that technology comes with some challenges in terms of interaction, but not many of her students experience such challenges.

P4 expresses that student can be quiet at times and not interact. She says it is important for her to facilitate interaction in using e-learning resource and that she really needs to engage with students as they are working remotely. She emphasises that as a lecturer she has to ensure that e-learning resources are interactive and engaging, so that she can ensure that students participate.

P5 articulates that more students participate because there is not that much pressure on them. She thinks that students need their own space in order to be confident, and that e-learning resources provide that space.

P6 mentions that e-learning resources like Zoom promote interaction among more people. She expresses that it can be used to engage the whole class, and all involved can have a chance to interact. She mentions that if there is a problem with sound the chatting option can be used, and it can also facilitate discussions.

Participants reveal positive experiences with the use of e-learning for interaction. However, Arkorful and Abaidoo (2014) argue that e-learning lacks interaction, resulting to lack of explanation and interpretation skills, which may cause negative communication. Participants experience of using e-learning for interaction reveals that their students start interacting by using e-learning resources for the first time at university, including resources like laptops or computers. They also state that some of the students cannot use some of the most basic e-learning services like email when they first enrol at university. Emails are the e-learning resources used most by colleagues to interact at universities. Participants acknowledge the role played by their universities in promoting the use of e-learning resources for interaction among themselves. The participants also experience challenges in using e-learning resources to interact.

However, participants experience the importance of using e-learning resources to facilitate participation and interaction. They also experience that interaction using e-learning resources provides students with their own space, which enhances confidence. Kay and Pasarica (2019), Maul et al. (2018) and Sayem et al. (2017) used Zoom platform to augment the physical and the virtual spaces of teaching and learning. The use of technology for teaching and learning brings the physical world and the virtual world experiences into one e-learning experience (Vate-U-Lan et al., 2016). Participants used Zoom and found that it involves more people being able to interact, and also

provides alternatives such as chat should there be a problem with sound. Participants' interaction using e-learning resources shows that their experiences involve scientific experiences.

5.2.3. Theme three: Scientific experiences

Lecturers' experiences are informed by teaching and learning activities. Activities that involve the use of e-learning resources for teaching and learning need to apply scientific understanding. Participants' experiences of e-learning resources show that they use scientific concepts to describe their experiences of e-learning resources involving a discipline or module or content. Moreover, they use concepts such as objectives, methods, continuation and flexibility, in the description of why they use e-learning resources in the way they do.

5.2.3.1 Discipline/module/content

This is how the participants responded to the third main research question, showing that they use scientific concepts to describe their experiences of e-learning resources involving a discipline or module or content:

P1: *I teach students how to teach History ... You see when it comes to History, e-learning resources are limited because even when you go to class you can sit there and think. We normally use charts whereby we need to draw, unlike the Natural Sciences whereby they have to test for something. They can go to labs and all the stuff, even in schools the distribution of resources will always differ. In the sense ... there will always be imbalance in the sense that subjects like History don't have too much resources that they need, but when it comes to other subjects they do.*

P2: *... we had an honours module that had to do with using ICT field to teach History, and because we ran that module ... So, because we have this module and this module content would kind of force us to read about it and find our way, getting it worked out ... Eh, I don't want to lie and say I really know eh, those differences. ... it would really be assumptions on my part to say I don't think they use them there ... because I honestly also think that someone who is not in History would not think that the way we use ICT is the way we use ICT. I don't want to lie and say I would know, but my answer would be that I think each discipline eh...should and must use, eh... technology to teach ... So, that they have to find the way of using it for the benefit of the learners. So even if this lockdown stuff ends, I think it has been a lesson for each discipline to find ways of [using] technology although we can go*

back to contact sessions. Some form of e-learning should continue because they have learnt some lessons. So, I think every discipline ... has ... should have a space for e-learning, enough space.

P3: I'm teaching in my discipline History ... in order to be able to cover the curriculum. ...be able to cover the content as per the History module.

P4: ... I have just realised that in the subject History.... I rely on to impart knowledge and eh to convey knowledge to the students ... investigate different topics in the subject ... I'm able to send voice notes on content to my students ... the work is packaged into modules.

P5: but it depends on the type of the section that I'm doing on a specific module ... in the same programme I assess with the module.

P6: As a History teacher I use learning online learning resources in terms of teaching my subject content. we have modules in our, in my History.

Participants use scientific concepts in reference their experiences, like subjects, History, Natural Sciences P1 makes a vertical comparison by referring to schools' teaching experiences and university teaching experiences, universities and a horizontal comparison between subjects History teaching and Natural Sciences teaching that shows scientific experiences. He mentions scientific structure, such as the use of a laboratory and the charts for teaching experiences. He critically mentions the distribution of teaching resources, with History receiving fewer teaching resources. This involves e-learning resources, as he says he find himself siting and thinking what e-learning resources he is going to use to teach History. When referring to the material used to teach, P1 switches to use the refence "we" as he says "we use charts" and in reference to the Natural Sciences he says "they". This shows demarcation of the boundaries of disciplines and the allocation of personnel to disciplines. This experience supports Hoadley's (2011) claim boundaries between theory and experience are critical for the transmission of knowledge.

P1's thinking is informed by the practical experiences he shares with others in the discipline. This experience is in contrast with Dhawani (2020) who argues that e-learning is lacking in different disciplines, but not all disciplines. He claims that more of the disciplines, as in the social sciences and

humanities, are better off with e-learning resources, as their approach is flexible enough to use different electronic learning resources.

In support of the disciplinary experiences of P1, P2 mentions concepts like modules and refers to the honours module, specifically ICT as a field, and also mentions History. He uses concepts like content, and discipline. He describes his e-learning experiences in reference to scientific concepts such as ICT and technology. He says he used the honours module to acquire ICT skills; he used the content and it also forced him to learn how to use ICT in the teaching of the module. He says he had to read and find his way in the use of e-learning resources.

In sustaining vertical disciplinary experiences, P2 does not want to commit to understanding what other disciplines are doing regarding the use of e-learning resources. He makes it clear that in his experience he can only relate to History modules. This is supported in Khoza (2019), who postulates that objectives and aims form part of vertical reflections, which is reflection on- while methodology forms part of horizontal reflections, which is reflections in-. However, P2 also sustains the horizontal experiences in learning how to use ICT but does so through the vertical channel, using his History honours module to learn about the use of ICT in teaching History. This suggests that P2 thinks that the use of e-learning resources is determined by the disciplinary specificity. He believes disciplines apply e-learning resources differently, as he says that the way he uses e-learning in History may be perceived differently, from the perspectives of other disciplines. He believes that the use of e-learning resources by different disciplines is of benefit to them. In his reference to the lockdown that hastened the use of e-learning resources by different disciplines, he shows the influence of horizontal reflection in his e-learning experiences.

In her experiences P3 refers to teaching in the discipline of History, and is doing so in order to cover the curriculum, and the content of the History module. This reveals the conscious reflection on her responsibilities to the university and adherence to the History course outline. This may stifle creativity, innovation, independence, and experiences with the disciplinary critical thinking, by adhering more to technical thinking in terms of the disciplinary experiences.

P4 reveals a breakthrough in her experiences, by mentioning that she has just realised that in the subject of History reliance on imparting knowledge and conveying knowledge to students to investigate different topics in the subject is critical. She is able to send voice notes on content to her

students, and the work is packaged into modules. This suggests that the breakthrough is on the use of e-learning resources like the voice notes. This adds to other conventional methods of conveying knowledge, such as textbooks and other hard copies she used before realising new ways of conveying knowledge.

Expression of experiences by P5 reveal that she depends heavily on the content of the section she is teaching at a particular time. This implies that her experiences are episodic, as they shift focus on specific to the specific module she is thinking about at different times. She links teaching and learning to the assessment program for the module. This connotes that her experiences are assessment oriented, and she is more concerned with student performance.

For P6 being a History teacher using e-learning resources drives her experiences in the discipline. This suggests that she is trying find out more about e-learning resources that can be used in the teaching of History. She matches appropriate e-learning resources with the purpose of her e-learning sessions.

Disciplinary experiences of e-learning resources are suggested by P2 when saying that enough space should be given for each discipline to explore more with e-learning resources, as that could be of benefit to them. Disciplinary experiences, conveying knowledge, course content or modules are content specific, as the concept suggests; this also shows in the participants' experiences of e-learning resources.

5.2.3.2 Content specific

In their description of e-learning experiences, participants mentioned content specific experiences:

P1: Eh ... it depends on the...It depends on that particular... element that they... are going to use, for example if I talk about Moodle ... If I'm going to teach this particular unit or this particular topic, what teaching and learning resources do I need, you'll find that it's very, very rare whereby you find yourself carrying something that you're going to use in class ... So, when you talk about something technological, they easily grasp that ... so that one is sure...

P2: ...so there was some training for Moodle specifically using Moodle to teach but I wouldn't say that as you asked, theories behind it and so on. I wouldn't say we got that through training ... training was really technical in terms of the actual use of Moodle Although as I said, it was an honours module, we tried to infuse the content of this honours module in our undergrad modules ... if I have to teach that particular thing, I teach there.

P3: ...learn more regarding that particular content when I'm conducting the introduction for the content that I'm going to deliver... if they do not have more information regarding that particular content that need to be taught or I deliver to them... when I'm designing my course, I'm designing the course.

P4: ... at times depending on the content and the concept that is being addressed ... because you might get to the end of the presentation of the lesson or the content session ... I can also send information to them, whether on the content I need them to understand, activities, any interactive material; it could be a presentation that I need to share with them or just any, any learning material.

P5: We use a variety of e-learning resources depending on the specific programme we are working on.

P6: And as ... during ... History's ... the introduction phase ... early stage of the teaching and learning ... e-learning helps.

P1's experiences of e-learning resources build on a particular element; he says if he is teaching a particular unit or topic, that informs him what e-learning resources he is going to use. He implies that when going to class he often does not have to take any conventional teaching aids with him but uses e-learning resources based on what he is going to teach. P1 articulates that his use of e-learning resources is complemented by his students easily grasping what he is teaching when is done with e-learning resources. He makes specific reference to the use of Moodle.

Reference to a particular use of e-learning resources, specifically Moodle is sustained by P2's experiences. He states that their training on the use e-learning resources for teaching was focused on the use of Moodle, specifically for History colleagues. They attempted to infuse their skills acquired

from using e-learning resources in their honours module to their specific undergraduate modules. P2 stresses the concept of the particular against the concept of the non-particular, also referring to the particular within the module that he has to teach.

Reference to the particular is sustained in P3's experiences in the use of e-learning resources. She connects the particular to the content, and is precise in mentioning experiences in the use of e-learning resources. She is specific about the introduction of the content she is going to deliver, and mentions the specific or particular in her design of her course. Lederman et al. (2013) argue that scientific understanding is informed by scientific literacy used by educators to influence students' decisions about personal and societal problems. Participants make references to disciplinary content concepts that apply to the scientific understanding of their students in the use of e-learning resources.

The specifics are also mentioned by P4 in relation to her experiences; she uses concepts like content, and specifically articulates that her experiences are time-specific to the content and concepts being addressed. She states that specific timeous intervention could be at the end of the lesson or session, regarding the particular content she wants them to understand. This implies that she zooms in at specific time to interact with her students for a specific identified need. She uses a specific strategy supported by a particular e-learning resource either to enhance understanding, facilitate activities, support interaction, facilitate presentation or share learning material.

P5 also mentions the use of e-learning resources depending on the specific programme which they are working on at a particular time.

P6 is detailed and specific in her use of e-learning resources, as it is specific to different phases of her teaching, specifically in History. She chooses her e-learning resources for different phases of her teaching, such as the introduction or early stages of the teaching and learning. In their experiences with the specific concepts, participants revealed involvement of rationale in their choices of e-learning resources.

5.2.3.3 Rationale

The use of rationale in the choice and use of e-learning resources emerged from the experiences of participants:

P1: ... So, mine it's all about developing students' epistemologies, so that's what I do. So therefore, the methods that I'm going to use will therefore suit that particular objective, which is the objective of the lesson.

P2: ... there was the kind of the ... lot of collections of readings and rationale behind it and teaching electronically and why that should be done and how it can be done.

P3: I use it for the live activities, if I just want my students to be engaged with Moodle, because you know we are living in the new normal, so contact should be less, it should be less.

P4: ... to convey knowledge to the students ... to ... monitor and assess where they are, are they progressing, their understanding right at the same time, all of them ...

P5: It is really assisting when you're teaching concepts and outlining what is expected from the learner, what is the content of the lesson. It is really effective in that part ... I prepare my lesson in the office.

P6: It depends on the content that we'll [be] doing in that particular time. My preparation phase, I make use of documents, the slides. So, it depends on how the lesson will be presented, but I'll prepare them on Microsoft Office, Office, the Word document. I have to prepare the document that I will be able to project them to them. I'll make use of the presentation slides.

P1 makes it known that his rationale is to develop students' epistemologies. He is certain that developing student epistemologies involves the methods he uses, but he puts emphasis on the objective of his lesson. In his reference to developing student epistemologies, he is responding to a pattern of three rationale questions, concerning what, how and why. What is his rationale? It is to develop students' epistemologies. How is he going to do that? He is going to use methods. Why is he using methods to develop students' epistemologies? It suits the objective of his lesson.

In P2's experiences, readings were used with a rationale to learn about using e-learning resources to teach History. The rationale involved finding out about ways of teaching with e-learning resources and why they have to be used to teach. In the use of rationale P2 also answers three questions. The

what question is asking what he is using to understand the use of e-learning resources to teach History. The response shows that he is using readings. How is he using readings? He is using them by going through a lot of collections. The third question is regarding why he uses readings. The answer is that he uses readings to understand or know how to use e-learning resources to reach History and why he should be using them.

The same pattern of questions are experienced in P3's rationale. Responding to what she using as an e-learning resource – she is using Moodle. How is she using Moodle? The answer is by using live activities to teach. The answer to the third question as to why she is using Moodle to teach live activities is because contact should be reduced under the existing conditions.

The objective or rationale in P4's experiences is to convey knowledge, which responds to what to do. How she does this by monitoring and assessing students, and she does this to see their progress and understanding.

Rationale for P5 in terms of what she is doing is that she is using e-learning resources. How is she using e-learning resources? The answer is by teaching concepts. Why is she teaching concepts? The answer here is to outline what is expected from students.

In response to what e-learning resources to use in terms of rationale, P6 uses Microsoft Office. In response to how it is going to be used, Microsoft Office is used in presenting or projecting slides. This is done in order to teach a lesson on particular content. Dhawani (2020) supports the use of e-learning resources in a way that creates opportunities by developing critical thinking and adaptability, and this can be done through rationale questions. The rationale questions can also extend to include who, when, and where in addition to the triangle pattern of what, how and why questions, as it is open to adaptability. It is about planning and preparation for teaching and learning as well as assessment-related activities in relation to using e-learning resources. The use of the rationale pattern by participants in their experiences shows that they use methods.

5.2.3.4 Method

When answering research questions about their experiences of e-learning resources, participants' answers reveal the use of methods in their use of e-learning resources:

P1: *OK, I teach method of History, it's not History per se but its method of History..., I teach students how to teach History. Well, the methods since they are different, they are also made for different contexts ... So, therefore, the methods that I'm going to use will therefore suit that particular objective, which is the objective of the lesson. ... You see sometimes you have to come with discussion in class so that students can interact, sometimes you have to employ narration method so, depending on that particular context, what is it that you want to achieve. In terms of methodologies, I'm flexible, I only consider that particular issue that I'm going to present that day, then I consider the most conducive method that I'm applying.*

P2: *... in our method modules, we would have sections where we would teach the use of the ICT to teach History ... And so, if you are...if you are teaching your students that you're supposed to use ICT and these are some of the benefits and then in your teaching yourself you are not using it, it wouldn't make sense to them ... Just like if you are saying to them, these are the advantages and the disadvantages of group work, but in your class, you never try ... Of course we have huge classes, but you never practically try and show how group work, works, it wouldn't make sense because if you're saying you should teach this way, you should try and apply it as well.*

P3: *I use to link the prior knowledge, how much do they know so that I will be able to link, so, I've got those 15 minutes or so for the linking and then I will proceed with my introduction and then we have that question-and-answer deliberation because I do give them some time to ask questions.*

P4: *... and obviously there are methods that I engage in and used ... I really believe theory will catch up as we practice. The more practice we get the more we are just able to facilitate learning through e-learning. It just requires you to practice it and it can really be done. Otherwise, if we may rely on theory, we might not get anything done as quickly as we want, as much as it is beneficial, it can really be beneficial, but you can go on and practice and just apply the whole thing. So, we have been provided with, eh some training as much as you would want more, eh we have been provided with some training so, that we are able to use the Moodle platform.*

P5: *You don't necessarily need to go to ... or to get a class or to take a course for it, it's user friendly, it operates normally, it's more in line with what you use on your cell phone.*

P6: *I think that the hearing part, the audio part is more important because the learner, uh, as I said at the beginning that we, are recording all these learning sessions that we have.*

P1 teaches methods of History, he makes a difference between teaching History and teaching methods of History. In his description of methods of History, he says he teaches students how to teach History. He also mentions that methods of teaching History are different, and they apply to different contexts. He makes reference to the objectives of the lesson. This suggests that methods of teaching History are independent from History, and they are different from one context to the other. In his mentioning of objectives of the lesson the participant suggests that using methods to teach History fits with the objectives of the lesson. The participant articulates that those methods should be conducive to the purpose or what he intends to achieve at that particular time. This suggests that he has an option to choose which methods he thinks are more conducive or suitable for that particular lesson, context, and time in relation to the use of e-learning resources. It implies that e-learning resources need to fit within the objectives of the lesson and be conducive to the applicable method within that context.

Reference to methods as part of the participants' experiences is continued by P2. He prefers using methods collectively with his team in their modules, as he says he makes reference to method modules. This suggests that their methods are embedded within their modules. P2 relates the use of modules to sections and to each in the section how to use the ICT to teach History. This implies that the use of methods to teach History using e-learning resources is shared as individuals and also as a collective from individual sections. He articulates that the use of ICT needs to be of benefit to yourself, and that you can benefit when you are making use of the ICT when you are teaching. He also expresses the significance of using methods that you are teaching students about when you are teaching them. This suggests that you combine the theory of teaching method with the practical use of the methods when you are teaching about it. This implies that when choosing an e-learning resource to teach methods, it is critical to choose one that is supportive of the method you are teaching.

In her reference to the use of methods, P3 prioritises methods that promote a link between prior knowledge and current knowledge. She mentions the importance of time to link different aspects of the lesson. In her articulation more is said about the practical side of doing rather than the theory. This suggests that timing is critical in her choice of e-learning resources, timing is critical for each aspect of the methods. It implies that the method needs to be accurate to be accurate for the specifics of

the phases of the lesson. It also suggests that methods need to be well prepared in advance to suit the context of their application.

For P4 methods are used to engage students more in practical activities. The use of e-learning resources is intended to enhance the practical delivery of the learning content. In this situation the choice of e-learning resources is considered in terms of what practical component of the work it can assist to provide. This suggests that a situation of practice precedes theory. What counts more are the results that come out of the activity, then theory can be determined out of that process. P4 says they were trained to use e-learning resources, but training was only offered on Moodle. She says the training was on the use of Moodle, suggesting that it was on the practical side of the actual use of e-learning resources with reference to Moodle as applicable. Some of e-learning resources are developed to suit a particular method like Moodle; its use can imply application of a particular theory. Robb (2004) asserts that Moodle supports a socio-constructivist approach in education. This is supported by Brandl (2005) who claim that Martin Dougiamas developed Moodle to enhance socio-constructive pedagogy design. This suggests that training on the practical use of Moodle comes with Moodle theoretical of this LMS.

Similarly, P5 is says there is no need to get training on the method of how to use e-learning resources. She says natural social exposure to technology, such as the use of a cell phone, is enough for using e-learning resources as methods for teaching and learning. This suggests that this depends on what you want to teach, and the use of e-learning resources should facilitate only what you want to teach at that particular time.

P6 prefers the use of e-learning resources that support methods that develop listening skills. She says she relies more on the use of audio resources, and her sessions involve more listening. This suggests that students are passive, listening to voice notes or recordings of what is being said. The use of any e-learning resources comes with opportunities for e-learning methodological and digital development (Dhawani, 2020). The importance of methods in the use of e-learning resources from participants experiences suggests that methods with digital development enhance continuation.

5.2.3.5 Continuation

Continuation formed part of participants' reflection as they were interviewed:

P1: *You see, I use them both in the classroom and outside of the classroom because when I prepare for the lesson surely, this ... remember this when you manage to plan a lesson, you try to be in class before you're in class so, in other words you have to see yourself in class whereas you're not yet in class. So, in other words, these e-learning resources as I prepare for the lesson I have to think about these e-learning resources, sometimes I have to use them and see if they can materialise in class, would I be able to achieve I mean, the objective of the lesson. When I get to the class as well, that's where you use the same resources that you have kind of tested before if they will materialise or not. So, I do use them in the class and outside of the class and even if when students come to my office for some reasons and if it need be I have to project something here, I have to show them something here, so in other words whether I'm in class or not, but e-learning resources they are just there.*

P2: *Eh, but those ideas of using e-learning had already been there at the back of our minds, and I wouldn't claim that we were ... we were doing exceptionally well ... as soon as Moodle came up, we decided that we are not doing any hard copy notes anymore, eh ... which meant that, we only communicated with the students in class face-to-face, but basically, we decided that most of our learning was now kind of e-learning through Moodle. So, when this covid thing came up now, I would want to say, it was not a major shift for us in History Education obviously the major shift is the...the live lectures, eh but everything else was more like a continuation of what we have been doing and I'm sure some of your questions would kind of ask me to elaborate on that, but I wanted to start there ... But because we ran that module for some time, we already had a ... some ideas of how we should be using ICT to teach History even though we are a contact session campus ... It was really some ideas that we already had, and some scholars which we referred to, based on particularly that module that we taught ...*

Written response from P2: *I had always used them for my pedagogy, but now it is out of necessity as a result of the Covid-19 related restrictions. For the other resources, the difference is that I use them more since they are now a necessity, rather than the alternative that they used to be ... This is why I had already been using these resources before national lockdown and only intensified their use now.*

P3: ... Usually, we used to be physically ... But now we cannot ... so, I'm using this site. So, I use it for live teaching.

P4: ...we would use online teaching just to supplement and support the face-to-face classes that we had, but now is mainly online they are not used to that.

P5: e-Learning has come in to assist so that the students are able to continue to study while they are home ... It's more of a normal class in an electronic way; it means they are able to be in class on time because it's anywhere they are ... I'm teaching in order to move to the next section.

P6: ...the difference is not that much because they can ask questions ... Same as when I'm in contact session because there is not only one person that can talk in Zoom. The whole class can be engaged, we take turns. And like in class they can unmute themselves and they can stop me on the way whilst I'm explaining if they, they did not understand the concept. So, but I won't move alone so they can stop at any time and ask for clarity.

In his response P1 says he uses e-learning resources in the classroom and out of the classroom because he uses them to prepare for his lessons. He mentions that he reflects when he prepares for his lesson and in his reflection, he needs to use e-learning resources in the way he is going to apply them in the lesson. Khoza (2019) argues that reflection involves vertical reflection and horizontal reflection; vertical reflection is reflection -in and horizontal reflection is reflection -on. Reflection -on involves hardware of e-learning resources, objectives, lecturer, and physical access, while reflection -in involves software of e-learning resources, methodology, outcome (Khoza, 2019). P1 articulates that he uses the same e-learning resources in his office if it requires him to do so. He also uses them to support his students should they come for support while he is in the office. He says he is always in a position of using e-learning resources to help his students out of or inside the classroom. This suggests that there is continuation of the same lesson, because of the use of the same e-learning resources in the same way in preparation for as well during the actual lesson.

Continuation is shown in using the same e-learning for the whole class and for individual students who need some support outside and inside the classroom. Reflection in the use of the same e-learning resources for the same lesson before the actual lesson suggests continuation. This suggests that P1 reflects in both the reflection -on and the reflection -in about the use of e-learning resources.

P2 refers to the previous ideas of using e-learning resources for teaching and learning before they started using Moodle. He articulates that they started using e-learning resources for teaching and learning only, but when Moodle they used contact sessions for communication with students. This suggests that theoretically they were thinking about how to use e-learning resources practically for teaching and learning. This implies that there was continuation from theory to practice in the use of e-learning resources between contact sessions and e-learning sessions as they used contact sessions for communication and e-learning sessions for teaching and learning.

P2 says that when contact sessions became a non-viable option because of the COVID-19 pandemic, it was not a major shift in the History Education module because they already had ideas on the use of e-learning resources. He says the only major shift was the introduction of live lectures, but to him it was more like a continuation. The thinking of continuation in the use of e-learning resources pre-COVID-19 and post-COVID-19 is supported in Gonzalez et al. (2020) claiming that there is a relationship of significant improvement in student performance with the advent of Covid-19. Participants' experiences from interviews confirm that there is a continuation in putting ideas into action. P2 had ideas about the use of e-learning resources to teach History, and those ideas were put into action through the actual use of e-learning resources as contemplated in his ideas which suggests continuation.

P3 says they used to use physical interaction to teach, but now they cannot do that, and they have to use live teaching. This implies that there is continuation from face-to-face contact sessions to e-learning sessions. The same can be said about P4, she said that they would use online teaching to supplement or support face-to face classes, but now they mainly use online and they are not used to chat. This suggests that there is continuation from face-to-face classes to online e-learning classes, and supplementing and supporting also suggest continuity. Dhawani (2020) claims that e-learning resources provide opportunities that enhance the scope of innovation. This suggests that continuous use of e-learning resources provides opportunities for innovation in teaching and learning.

For P5 e-learning has come to assist so that students can continue to study while they are at home. She says that with an e-learning session it is more like students are in a normal class. She also mentions that she is teaching so that she can move on to the next section. This implies that there is continuation where e-learning assists to continue studying, and it suggests that students were already

involved in studying. It also suggests continuation when an electronic class is perceived to be like a normal class; it shows that there is or there was an existing class before the electronic class, and that class is or was perceived to be normal. This suggests that an electronic class is perceived to be a continuation from the normal to the abnormal. P5's mentioning of a move to the next section also suggests continuation.

P6 mentions that she is doing the same in the e-learning sessions as she did in the contact sessions. She says they are engaging in the same way through using e-learning resources, specifically Zoom, where there is an exchange of ideas in class as much as it happened or happens in contact sessions and they are able to teach and understand concepts the same way. This suggests continuation from contact sessions to e-learning sessions in engagements, exchanging of ideas, teaching, and understanding concepts. Participants' experiences further reveal that flexibility is part of their experiences.

5.2.3.6 Flexibility

Responding to why they use e-learning resources to teach History in the way they do, participants answered in the following ways:

P1: *In terms of methodologies, I'm flexible, I only consider that particular issue that I'm going to present that day, then I consider the most conducive method that I'm applying ... There are options if you want to go advanced, you're free to go advanced and if you want to stick to basic you stick to basic. So, in other words, one other thing good about e-learning resource is that it is flexible in that way, that you can either go advanced or remain average or even remain basic, so, it's just up to you.*

P2: *Eh ... Moodle, eh ... I usually go there during working hours, and upload whatever has to be uploaded, but the thing is sometimes I may not have time during the day, and I work at night. So, I upload notes at night and send a message that there are now notes you need to look at, whatever time they will look at it's fine because it won't be a harm. But when it is for really, teaching and learning for that time, it obviously has to be during the day, because we use WhatsApp as well. We create WhatsApp groups for communication because you use less data for WhatsApp than you would use or go to the internet and stuff like that ... WhatsApp is their easier communication tool, so I'm available for communication on WhatsApp anytime of the day ...*

Written response of P2: *At my home, I use them all the time when I have to prepare, lecture, communicate, assess and handle consultations. I use them every time I am doing anything related to teaching and learning.*

P3: *... you know updating the content or the lesson that I will be lecturing to my students. So, you end up having a lot of things you are able to put in ... the moment the learner feels he or she has some time to log in ... Anywhere, anytime ...*

P4: *... they are able to access even if it is offline and they can work on it.*

P5: *... be flexible, be able to contact people electronically which really means we need to have such.*

P6: *They can be free, wherever they can access the learning through online ... Uh, with the online exam can be written anywhere. At home, if you prefer to go to the lab, you can be at the library, it depends on the individuals. They can network wherever there is network, wherever there is data. So, they need to, they can connect anywhere, but they are monitored by that camera.*

P1 says he uses methodology flexibly, based on the particular issue he is presenting on the day. He says he considers the most conducive method to apply. He also mentions that there are options to choose from in his application skills in the use of e-learning resources, which he describes as basic, average, and advanced, and that he can choose the level he wants. P1 describes flexibility of e-learning resources as another good aspect. This implies that he chooses his e-learning resources based on the flexibility they offer to him, and the fact that they offer him an opportunity to focus on a particular issue makes them good.

P2 says that he uses Moodle at any time of the day, and mentions that he can upload, notes, send messages, and respond to students' concerns at any time. He says he sets some boundaries of his choice as to when and when not to respond to students' questions. P2 says he has a choice to extend the use of one e-learning resource to another, such as Moodle to WhatsApp for communication. He mentions that this is based on certain conditions, such as lower costs for data or availability of the internet. He says he can use e-learning for different reasons, such as preparing for his sessions, communication, assessment, consultation, and anything in relation to teaching and learning. The

flexibility provided by e-learning resources is supported by Arkorful and Abaidoo (2014) who assert that flexibility involves a time and place that enhances efficacy of knowledge and qualifications and that is cost-effective in terms of individual differences by compensating for scarcities of staff and promoting self-pacing.

P3 says she uses e-learning resources to update the content or lesson she will be lecturing to her students. She says she is able to upload without limit and her students are able to access information at any time and are free to log in anytime and anywhere. The same goes with for P4 she is able to access at any time online, or offline, and students can also work on the system and the material.

P5 expresses her ability to contact people electronically which she really appreciates, as well as being free: being wherever you want to be and having access to e-learning resources at any time. She also mentioned being able to write examinations anywhere that there is a network and having centralised e-learning monitoring by using a camera to monitor candidates while they are writing examinations. The flexibility of e-learning resources is supported by Dhawani (2020), who claims that the strength of e-learning resources lies in their student-centred approach, flexibility of location, human touch in the form of lecturers, and collaboration which makes for an interactive learning environment.

5.3 Summary of the chapter

This chapter presented an introduction with a brief description of the previous chapter on the design and methodological strategy to explore and understand lecturers' experiences of e-learning resources. It explained its strategic methodological approach as the interpretive paradigm, consulting relevant literature (Kafle, 2011; Creswell & Creswell, 2018; Guba & Lincoln, 2018; Kivunja & Kuyini, 2017). The chapter presented data generated from interviewing six participants from two universities in South Africa using three main research questions were asked to participants. The first research question seeks to understand: What e-learning resources do lecturers use in the teaching of History? The second research question intends to find out: How do lecturers use e-learning resources in the teaching of History? The third main research question seeks to understand: Why do lecturers use e-learning resources in the way they do in the teaching of History?

The presentation of data in this chapter is structured by addressing the main research questions. Analysis of participants' responses is supplemented by probing questions from the semi-structured interviews which were asked to get an in-depth understanding that can yield thick rich descriptions.

Descriptions were coded into categories that are grouped together to identify emerging themes in response to each main research question, and are numbered. The Findings are presented with discussions supported by direct quotes from the participants and substantiated by evidence. Discussions on interpretation are supported by literature to enhance quality and depth that reflect the lived experiences of the phenomenological interpretive analysis (Van Manen, 1990).

However, it must be noted that only two participants were observed because of time constraints and the other four participants were not observed. Document analysis was also carried out with each of the two observed participants. This study decided not to use observation and document analysis for its data presentation and analysis since not all participants were observed and not all participants' documents were analysed. This is because the approach of the study is mainly based on the description of participants' experiences, based on their personal responses to the interview questions. Observation and document analysis were going to be used as backup in support of the evidence presented by participants.

One of the participants (P2) who took part in the interview also responded by providing optional written responses to the interview questions, and his responses were included, indicating which response is from the face-to-face interview and which from the written response. Written responses to research questions by participants are considered to be hard data from interviews that support face-to-face semi-structured interviews. All hard data are used for descriptive purposes. Inferences from interpretation are supported by literature consulted as a basis for spiral horizons of understanding (Bruscia, 2005; Paterson & Higgs, 2005; Sayer, 2000). This enhances the phenomenological theoretical dimensions of multiperspectivity from the soft data generated through participants experiences with e-learning resources. The data in this chapter were presented in three themes., each of which presented responses to the main research questions supported by descriptive conceptual categories.

In response to the first research question, the study arrived at a theme that reflects lecturers' exposition to e-learning resources and is framed around expository experiences as theme one. In response to the second question, the study established its second theme around the practical implementation of the use of e-learning resources by lecturers and the theme is framed around empirical experiences. Responding to the third research question, the study intends to find reasons for lecturers' use of e-learning resources in the way they do. The study found that lecturers employ discipline or researched

knowledge, and theme three is framed around scientific experiences. The third main research question leads to theme four expanding on the lecturers' descriptive experiences to interpretative experiences of why they use e-learning resources the way they do. Theme four involves theoretical and philosophical foundational bases of data analysis.

This study presents hard data for description of participants' experiences of e-learning resources. These data are meant to support hard data generated from written responses and face-to-face interviews with participants. Participants' experiences of e-learning resources are interpreted from their own descriptions of their experiences. The purpose of using descriptive data in this study is to enhance multiple interpretation of soft data for interpretative analysis. Hard data may be initially used for the subjective description of the phenomenon in interpretative research (Morse, 2018). Data generated from the first participant is coded as P1, second participant P2, third participant P3, fourth participant P4, fifth participant P5 and sixth participants as P6. The six participants came from two universities which they teach at, and with the first university is coded as U:1 and the second university coded U:2. P1, P 3 and P5 are from U:1, while P2, P4 and P6 are from U:2.

During interviews research questions were modified to address the description of the phenomenon of lectures' experiences of e-learning resources. This was done to make it clear to participants what was required by the study. Lecturers' experiences of e-learning resources are understood within the description of their experiences with those e-learning resources.

5.3.1 Theme one: Expository experiences

What e-learning resources do lecturers use in the teaching of History?

Categories generated from the data are Moodle, Teaching and Learning, Assessment, and Communication. Theme one shows that lecturers' use the available resources at their disposal in their experiences. It is their exposure to resources that informs the type of experiences they have in their everyday life world. e-Learning is one of those experiences they go through, and the type of e-learning resources vary based on their exposure to them. Presentation of data and the discussion of findings follow themes that emerged supported by categories from data generated in response to the main research questions. In their responses lecturers show that Moodle and laptops are the most used e-learning resources, while Google, LAN, LAN 2021, audio, phone, tablet, YouTube, Microsoft Teams,

Microsoft Office, and Word documents are the least used e-learning resources. Robb, (2004) argues that the university context is influential in lecturers' choice and use of e-learning resources.

The extensibility of Moodle and its applicability to university context make it favourable for consideration by lecturers teaching within a university context (Robb, 2004). All participants use e-learning resources for teaching and learning, assessment, and communication, and they choose their e-learning resources based on the content, topic, context, and the e-learning resources at their disposal at that particular time. The use varies according to contextual factors that prevail.

5.3.2 Theme two: Empirical experiences

How do lecturers use e-learning resources in the teaching of History?

Categories generated from data under this theme are features, delivery, material, and interaction. Participants are lecturers and their e-learning experiences relate to their life world of practical engagement with e-learning resources. Participants preferred e-learning resources with certain features such as videos, recording, uploading, and downloading documents, presentation or projecting, voice notes, audio, live interaction, etc. They also preferred immediate delivery from those features, such as accommodating a certain number of students for a certain period in live sessions with live interaction. They preferred e-learning resources with quality material, storage and management of files, assessment activities and access to different links or websites. Participants show positive experiences with the use of e-learning for interaction. However, Arkorful and Abaidoo (2014) argue that e-learning lacks interaction, resulting in a lack of explanation and interpretation skills, finally causing negative communication.

However, participants experience the importance of using e-learning resources to facilitate participation and interaction. Participants also experience that interaction using e-learning resources provides students with their own space, enhancing confidence. This contradicts Arkorful and Abaidoo's (2014) claim of e-learning lacking interaction. Kay and Pasarica (2019), Maul et al. (2018) and Sayem et al. (2017) used the Zoom platform to augment the physical and the virtual spaces of teaching and learning. The use of technology for teaching and learning brings the physical world and the virtual world experiences into one (Vate-U-Lam et al., 2016). In their experiences, participants used Zoom and found that it involves and allows more people to interact. All participants emphasised

the importance of interaction and support for those who face challenges in participating or interacting on e-learning platforms.

5.3.3 Theme three: Scientific experiences

Why do lecturers use e-learning resources in the way they do in the teaching of History?

Categories generated from data under this theme are discipline/module/content, specific, rationale, method, continuation and flexibility. Participants' experiences of e-learning resources show that they use scientific concepts to describe their experiences of e-learning resources involving discipline or module or content. They use concepts like conveying knowledge, lab, ICT field, honours, objectives, methods, course outline, Natural Sciences, continuation, and flexibility. These concepts suggest a scientific description of e-learning experiences. The choice of e-learning resources used by participants suggests continuation within their disciplinary content, topic, levels of engagement, interdisciplinary interaction, interaction both inside and outside of the classroom, interpersonal connection, and integration of different e-learning resources for the same content or topic. Rationale based on three patterns of questions the 'what', 'how' and 'why' of the choice and use of e-learning resources by the participants.

There is an interplay of methods in the use of e-learning resources by participants, and they are specific to different contexts, needs, lessons, topics, or content. It is shown that participants link their choice of e-learning resources to their methods. There is flexibility in the way they use their e-learning resources, rationale is considered and other impacting factors like access, affordability, location of their students, time for live e-learning sessions and many others. This is supported in Khoza (2019), who postulates that objectives and aims form part of vertical reflections which is reflection on- and methodology forms part of horizontal reflections which are reflections in-.

Question three extends to three other themes, theme four to theme six, which are presented separately in the next chapter. Themes four to six form the second part of the data analysis, grounded on theoretical and philosophical understanding and thinking of participants' experiences of e-learning resources. In so doing a unified theory of acceptance and use of technology (UTAUT) and unified theory of acceptance and use of technology extension (UTAUT2) (Venkatesh et al., 2003; Venkatesh et al., 2012, 2016) is consulted with other relevant literature. The choice of theoretical analysis strategy is informed by the main research questions and literature in Chapter Two as well as

theoretical framework in Chapter Three. Philosophical thinking is informed by participants' responses to main research questions from data generated in interviews.

CHAPTER SIX

DATA ANALYSIS AND THEORETICAL POSITIONING OF PHILOSOPHICAL STANDING: SUBJECTIVISATION EXPERIENCES, SOCIALISATION EXPERIENCES, AND INSTITUTIONALISATION EXPERIENCES

6.1 Introduction

The previous chapter discussed data generated from participants' interviews in response to the three main research questions. Themes four to six are in response to the third main research question: Why do lecturers use e-learning resources in the way they do in the teaching of History? Theme one to theme three were discussed in the previous chapter, each with categories of participants' descriptions of experiences. In this chapter participants' responses come from the same interviews as those from which data were discussed in the previous chapter. In the previous chapter participants reflected their use of e-learning resources based on their exposure to e-learning resources at their disposal. It also shows that they are all practically involved in the use of e-learning resources. It was interesting to find that participants use scientific concepts or knowledge of their discipline in their use of e-learning resources.

This chapter continues with the description, interpretation, and theoretical analysis of participants' experiences. This study uses the unified theory of acceptance and use of technology (UTAUT) and unified theory of acceptance and use of technology extension (UTAUT2) to analyse the use of e-learning resources in the teaching and learning of History, because it is a theory with different variables that apply to different teaching experiences, disciplines and teaching situations. The study seeks to understand the theoretical significance of using e-learning theory in the teaching and learning of History. The four themes apply to all participants' experiences, in its theorisation, the chapter attempts to minimise repetition of experiences by including three participants' experiences in the analysis that are interpreted against the theoretical understanding of the unified theory of acceptance and use of technology (UTAUT) and unified theory of acceptance and use of technology extension (UTAUT2). Table 6.1 present the themes and categories which emerged from analysis the generated data.

Table 6.1 Themes and categories emerging from analysis of the generated data

THEMES	CATEGORIES
THEME FOUR: Subjectivisation experiences	• Lecturer • Needs
THEME FIVE: Socialisation experiences	• Context • Development
THEME SIX: Institutionalisation experiences	• Accessibility • Affordability • Adaptive • Enabling • Inclusive • Transformative

6.2 Theme four: Subjectivisation experiences

In response to the third research question, participants revealed their experiences in giving the experience of a person attached or connected to the responsibility of being a lecturer and the person detached or independent from the attachment or connection to his or her responsibilities of being a lecturer. These experiences produced the theme of being a subject with subjective and professional connections. This connection is in a process of making, it is continuously unfolding. This type of identification is conceptualised in Matthies (2009) as subjectivisation by Theodor Adorno. Matthies (2009, p. 319) asserts that subjectivisation “refers to the process of becoming a subject, a fully responsible, autonomously thinking and acting adult citizen, as opposed to manipulated and system-functioning object”. She also refers to it as being conscious, suggesting that lecturers are conscious of who they are and what they are doing as lecturers. This study explores participants’ experiences as lecturers and the concept of subjectivisation is used.

6.2.1 Lecturer

The concept of ‘lecturer’ is a professional concept, which applies in identifying the type of work a person is doing. It is an occupational identity of someone who is trained to be an expert or specialist in a particular field of specialised practice. In this study lecturers are interviewed to respond to questions of their specialisation using e-learning resources. They were asked: Why do lecturers use e-learning resources in the way they do in the teaching of History? Their responses are captured as follows:

P1: *OK, I teach method of History, it's not History per se but its method of History, I teach students how to teach History, so mine it's all about developing students' epistemologies, so that's what I do.*

P2: *So, I'm ... at the moment I'm discipline head, in History Education here at ... and so, it comes with certain responsibilities in terms of coordinating how the discipline runs, but eh beside that coordination I also still have to do some teaching and learning, and, and I also have to do some supervision, and I also have to do some research, but I know you're interested in e-learning particularly, eh ... but, but I wanted to clarify that ... eh, that's my work responsibilities.*

P3: *I am a lecturer I have lot of students that I'm teaching ... the lesson that I will be lecturing to my students ... I will be teaching my learners.*

P4: *OK, ehm ... as a lecturer I have just realised that in the subject History, the use of computers is a major component when I teach my students, so I've got electronic devices that I rely on to impart knowledge and eh to convey knowledge to the students.*

P5: *... while I'm teaching in order to move to the next section ... move along with my slides.*

P6: *As a History teacher I use learning online learning resources in terms of teaching my subject content. we have modules in our, in my, in my History.*

P1 expresses himself saying “I teach method ...”, he uses “I” subjectively as an individual lecturer and as an individual self. He is sharing his experiences of teaching methods of History with the audience. The subjective positioning is critical in order for his audience to understand. It is critical to

understand it within the theoretical understanding of the UTAUT and UTAUT2 theory, the theoretical perspective of e-learning related-experiences. P1 is teaching History and in teaching it he performs using e-learning resources. He is expected to perform and is expected to make an effort to do so. In relation to the UTAUT and UTAUT2 using e-learning theory, P1 is performing in his teaching but there is no e-learning resource that can show performance expectancy or effort. He says he is teaching methods of History, meaning that there is an effort made to teach methods of teaching History.

P2 uses the subjective “I” and the professional person of “I” in his responsibilities as performing but no e-learning resource shows us its use to perform, there is no use of e-learning resources to show performance expectancy and effort expectancy.

P4 sustains the “I” personal subjective experiences and the professional “lecturer” who has just realised computers are a major component for teaching. She is using a computer to teach how to teach. This suggests that there is a facilitating condition variable as she is using a computer; there is performance and effort expectancy, and also a behavioural intention variable for electronic devices and technology use to operate the computer. There is also a new outcomes mechanism for using electronic devices to impart or convey knowledge. She will need facilitating condition for the use of technology/computer and technology use for new outcome mechanisms because the use of the computer needs to produce outcomes from using it.

Participants reflected that they use e-learning resources from the perspective of their discipline. The study finds that participants use e-learning resources in the way they do because they are teaching History or History methods as lecturers or teachers who are lecturing. This supports Sebbowa and Muyinda (2018) who claim that a teaching and learning context’s use and acceptance of technologies connects to the specific discipline.

6.2.2 Needs

Individual persons in their personal capacity have needs. Lecturers as individuals who are expected to fulfil their individual roles also expect their needs to be addressed. They are operating within a certain scope of their experiences. In their capacity as subjects, participants responded to the interview questions as follows:

P1: *I'm moving in par with the Fourth Industrial Revolution ... use of this e-learning resources shows that one is flexible enough and is developing professionally ... is accommodative of learners who are user friendly to technology. Instead of carrying the hard copies you can just simply project in class, instead of carrying these hard copies you can just post on Moodle so while you're in class teaching we don't need to carry our chalks, ja.*

P2: *... the university creates it for us, so when you log in, eh, your log in details is linked to the university system ... I also have to do some supervision, and I also have to do some research ... I need to empower myself because obviously as you would have expected most of the literature on that stuff is western. And so, the question is here on the African continent, what we are doing to catch up when we found out that, this is what they are doing in Germany, this is what they are doing in Britain. This is... you realise that, you know, we need to catch up.*

Written response from P2: *At the moment I use them mainly because they are a necessary for the current exercise of remote/online teaching and learning to take place. Without them no teaching and learning would take place. However, I also use them because they are convenient and productive.*

P3: *I am using Moodle ... usually, we I use it for live teaching, I also upload some videos ... and also some audio ... different types of gadgets that can be the phone, can be the laptop, can be the computer, you know as long as they got that app that can be linked to Moodle and be able to log in wherever they are ... For me I'm using my laptop ...*

P4: *... I also prepare presentations for my learners and PowerPoint presentation and its easier and it facilitates e-learning and nice slides that I prepare for them just on the content that I need to deliver ... Formal training will be beneficial, it's always beneficial to have some training but looking at how everyone else has been thrown into e-learning, at times it has not been practical to receive that kind of training. You just had to catch up and just try to learn on your own. The more you use the platform, the more you are exposed, exposure I have discovered it has been the best teacher, so, you work on it. You might have colleagues that are experienced, and you could then share the knowledge and get information from them, but learning through using the platform is ... has just been the best. Training is the requirement but at times it does not happen.*

P5: *.... be flexible, be able to contact people electronically which really means we need to have such.*

P6: *Gadgets that I normally use, uh, laptops and tablets, uh, smart phones, which, uh, which can connect to internet. I also make use of data projector when I will be doing contact classes.*

P1 sustains the subjective experiences of “I”; his needs are to be on par with the Fourth Industrial Revolution with the use of e-learning resources, and not only that but to be flexible as well. He wants to develop professionally and to accommodate students since they are technology friendly. He just posts on Moodle. There is a social influence variable on being on par with the Fourth Industrial Revolution. There is performance and effort expectancy, and behavioural intention in the use of e-learning resources and to be flexible enough and develop professionally. There is technology use in the use of Moodle for posting.

For P2 the “I” experience and professional experiences are intertwined. He appreciates the support from the university for the training offered. This means performance and effort expectancy, facilitating conditions for the use of technology by the university and the participant. He wants to do some research and empower himself and catch up. He is also conducting remote teaching online. P2’s variable for conducting research is the behavioural intention in the use of technology. Technology uses are the variable for remote teaching or online teaching because technology is used.

In P4’s response, subjective experiences are there in the “I”; preparing presentations for students using PowerPoint and slides shows facilitating conditions. Performance and effort expectancy and, behavioural intentions are present in preparing content to deliver new outcome mechanisms for training. This suggests that she needs facilitating conditions to prepare and technology use to present and deliver. She needs formal training to improve her skills; behavioural intention to use the computer is present. Social influence is present since everyone is thrown into e-learning, and she needs more exposure to it. She has to catch up, and she has discovered from experience that she learns more from using the platform and is learning from colleagues as well. She believes in sharing information to get to know more; this strengthens the social influence and technology use as well as behavioural intentions. Learning from experience suggests new outcome mechanisms.

The study finds that the needs of participants reflect their individual subjective identity as “I” in the first person and the other as an occupational identity of a lecturer or adjective identity of “lecturing” or “teaching”. These descriptions reflect the subjective identity of participants. Identity can be different, and it reflects the state of consciousness or subconsciousness (Khoza, 2021).

6.3 Theme five: Socialisation experiences

Participants revealed experiences that reflect the social space where they interact with others. In their responses to why they use e-learning resources in the way they do. The idea of working with others is there; they are in a social space interacting continuously.

6.3.1 Context

Participants reflect contexts when responding to questions which entails living experiences of interaction in their life world:

P1: *Well, the methods since they are different, they are also made for different contexts ... So, background will always come into play when it comes to e-learning resources ... Yes, yes, yes, Moodle, is something else ... it's new on their side, but with the technology background they already have, so, they find it easier to cope ... Some of them are disadvantaged by it ...*

P2: *Eh ... so, I will be honest and say it has taken me more work, and one of the reasons why it has taken me much more work is that in my sessions, contact sessions we used to discuss a lot ... Almost every, every session students come and present things, So, you can't expect this core teaching to happen the way it used to happen. Now eh ... so I have to teach more than I was teaching because the circumstances don't really allow them to do lot of presentations, that was mostly how I taught, so ja ... if ... I were to review myself, this has been quite a major limitation because in my contact sessions I used to be very interactive.*

P3: *I have lot of students that I'm teaching in my discipline History ... we are living in the new normal, so contact should be less, we are exposed to many learners. So, for me to be engaged with lots of students, so I'm using this site ... the learners that we are teaching do not come from the same background that there are some challenges that they face.*

P4: *I've noticed that when they are just new at tertiary, when they are undergrads, they have not been exposed to e-learning resources where they come from in most cases, like I mentioned the environment that they come from, background that they come from, a few are at a higher level of using, but just a few, most of them when they are just coming in to the university they are still*

undergrads, they, they are at a lower level of using the e-learning resources. But as they progress now and they become accustomed to it now, using ... so, exposure is now different, they are confident now, they have seen, touched, worked on a computer, it's not a foreign gadget to them. Because some of them when they come here, they have their phones and that's all that they have used. But as they come in, with us exposing them to using the e-learning resources, they also become confident, and they are able to use. So, levels are not the same, by the time they reach the postgrad and masters level now they are much more efficient, and they can use them freely and independently. So, levels are not the same, but some they come understanding and being able to but just a few, just a few.

P5: *The use these of e-learning and the background of the students does go hand to hand because where a learner is from far in a rural area and comes to the university, most of the things, most of the electronic devices are new to them. So, there will be ... you'll find those learners who feel that they are not there, they do not understand what is happening; however, if you give them time and explain to them, because this program is user friendly, they do catch up on time.*

P6: *That's why we have our sessions ... are given at times, uh located at times that during this time to this time, you will be connected. You need to be connected because there'll be a class so that they can move maybe from wherever they are in the bundus and come up to the place where it has a smooth connection.*

The response by P1 reflect social space; he says methods are different and they are made for contexts. This suggests that he is linking methods to contexts, he is linking them to background, and he says they will always come into play when it comes to e-learning resources. His response is occupying a social space and in a continuous way. These experiences are unfolding and they come into play when it comes to e-learning. This suggests that this ongoing experience is in the space of e-learning. The space of e-learning is in the background, contexts, and methods. This suggests that social influences are present for e-learning resources. He says e-learning is new to students, but those with a technology background find it easier, but some are disadvantaged. This suggests that facilitating conditions are present, as some are disadvantaged by their background. There are also behavioural intentions in the use of e-learning resources as well as technology use, as they find it easier to cope. Performance and effort expectancy as well as background will come into play with e-learning, and new outcome mechanisms are also there.

P2 says it has taken him more work, in his sessions because they used to discuss a lot in the contact sessions. The social factor of “they” suggests a socialisation perspective by P2. He says in all session students come and present things, but now he can’t expect this core teaching to happen in the way it used to happen. He says he has to teach more than what he was previously teaching because the circumstances don’t really allow them to do lot of presentations. He says that was mostly how he taught, and this has been quite a major limitation because he used to be very interactive in his contact sessions. Performance and effort expectancy and social influence are present: there are broader changes affecting this use of e-learning resources. Facilitating conditions are absent for sessions, as they affected his intersection in interacting with his methods of teaching. Behavioural intention is weak and the use of technology as well as new outcome mechanisms in terms of changes in his use of e-learning resources are present

P4’s reference to “they” shows the concept of social space experiences. She has realised that when they enrol at the university, undergraduate students have not yet been exposed to e-learning resources. The environment they come from influences their use of e-learning resources. When they progress at university, they become accustomed to e-learning resources because of their exposure to them, that makes them grow in confidence. The only gadget they know about when they enrol is their phone. She compares this situation to that of master’s programme students, who are efficient and confident as they work independently. Social influence is present here, as students reach the university without having been exposed to e-learning resources. Facilitating conditions exist and behavioural intentions and technology use are present for new outcome mechanism predictors in the use of technology. She says students progress with confidence and that can be determined by new outcome mechanisms and performance and effort expectancy. In its theoretical analysis, the study identified six variables of UTAUT and UTAUT2 in the use of e-learning resources: performance expectancy, effort expectancy, behavioural intention, facilitating conditions, technology use social influence. It also identified a need for new moderation mechanisms to determine individual differences in the use of e-learning resources, and the new outcome mechanisms to show the impact of using e-learning resources on an individual performance (Venkatesh et al., 2016).

The study finds that contexts differ, and their differences have an impact on lectures’ teaching methods. It also shows that there is more work with less interaction and limited options for lecturers. Different levels of exposure to e-learning context are a challenge for those with disadvantaged background. Where e-learning is involved contexts become complicated, as Dhawani (2020) argues

that e-learning features need to use customised procedures and processes that support the needs of learners.

6.3.2 Developmental

Participants are lecturers whose experience in the use of e-learning resources show developmental experiences. Developmental experiences within the social context. They operate within a social space where their interactions facilitate the process of socialisation. This is how participants responded to the research questions:

P1: *No, the world has...I mean the environment has changed so much, but for the good as I say, it suits both of us because some of them don't even need to carry exercise books when they go to the lecture whereby they have to be busy writing notes. Also when I have to project something and let them write notes, wait for them when they have yet not completed writing, but with these, so the pace that I'm using in class whether I ... whether they've written everything, it doesn't matter because they already have these things at their disposal. So, the world has changed for good, now life is easier than before. We don't need to carry our chalks, ja.*

P2: *Well, I will say that the university did its part in terms of training us to do these things. There were people would do training for ... especially now during the time of the lockdown when it started, before that there was training but, it wasn't really serious because as I said it was a choice, but under lockdown because it wasn't a choice everybody had to do it. There were some training sessions, and I don't think it would be fair for me to say we didn't get training, we did, but sometimes even when you go through training you don't grasp everything ... because it's technical stuff, so you don't always catch it, so, along the way you teach yourself as well, you know, you just learn, and say OK, if I click here this is what is going to happen. But they did ... I think they did their part. And...they ... ICS is also available, Moodle ICS, they are available if you are really struggling with something you can just email them to say, listen I want to upload a video and I really don't know how to do it, they will respond. So, I think the university has done its part.*

P3: *The level of competency is increasing each and every year because even the system, when I started the system was not like this. So, what is good about this Moodle is that it is being updated each and every year, ja it is easy to access, the navigation is being you know, updated too. So, you end up having a lot of things you are able to put in.*

P4: *Because some of them when they come here, they have their phones and that's all that they have used. But as they come in, with us exposing them to using the e-learning resources, they also become confident, and they are able to use. So, we use it for communication so, no one is left behind, no one will be like I do not know what happened whenever we, we keep up using online teaching, the gadgets and WhatsApp group and everything else that now we have become accustomed to. We have been provided with some training so, that we are able to use the Moodle platform. They can use them freely and independently.*

P5: *...I will say the e-learning does help a lot of students, it needs to be accessible and maybe be given a specific programme where it will not only depend on data because in the new normal it's the only way, but we will also be able to further our studies.*

P6: *As you know, we are BBT, born before technology, also have kind of students that are lost yeah. And we don't see it taking us back, or we will make use of both methods for face-to-face and this e-learning because we've seen that.*

P1 says the environment has changed, but it's good for both of them meaning himself and the students because no one will carry exercise books or notes, and he will not need to take chalk with him when going for a lecture, he will just project and students will receive. This suggests social influence and behavioural intention, because both P1 and the students are affected positively by the changing environment. He will also be able to pace himself in the class without being required to wait for students to take notes, because they will receive electronic documents with all the information they need. This suggests facilitating conditions, performance and effort expectancy and the use of technology.

P2 mentions people that he attended a workshop with, saying "I think they did their part", showing a social experience. He appreciates the training by the university, and refers to the lockdown that affected them and was the cause for the training, workshop, which suggests social influence and facilitating conditions. Going through training, grasping, technical stuff, performance and effort expectancy suggest behavioural intentions. He says "click here this is what happen", which suggests technology use. He says he thinks the university has done its part, which suggests new outcome mechanisms.

P4 says “some of them “; when they come here” in reference to the social experiences. She says the students have cell phones, which is all that they have used, and this suggests social influence as they become exposed to using e-learning resources, as well as facilitating conditions. They become confident, suggests behavioural intention. P4 says they use it for communication, which shows technology use and says no one is left behind. Stating “We keep using online teaching, the gadgets and WhatsApp group ... we are able to use Moodle platform “, all performance and effort expectancy suggesting technology use. “Now we have become accustomed” ... we have been provided with some training ... they are able to use them freely and independently suggests new outcome mechanisms.

There is a positive feeling about development in the use of e-learning resources. Lecturers feel that it is critical for universities to offer training to mitigate the impact of lockdown. They also feel that students with more exposure to e-learning resources before they enrol at university are more confident in using e-learning resources. Development can be noted but some studies reveal the opposite. Mpungose (2020) argues that the ‘digital divide’ is a hindrance to students realising the full potential of e-learning, but lecturers still want students to submit assessment tasks and engage with course activities using Moodle.

6.4 Theme six: Institutionalisation experiences

The concept of institutionalisation in this study reflects on its own structural experiences; its meaning is reflective in its own presentation. This theme is made up of six categories: accessibility, affordability adaptive, enabling, inclusive and transformative.

6.4.1 Accessibility

Technology is user friendly, but access can be a challenge when it comes to specific learning resources:

P1: *How to access what, this and that, how to do this, so, they ... as much as technology for them is user friendly, but when it comes to a specific e-learning resource....they can be able to access information that is posted there ... So, they need to be workshopped on that ... They find it easier for them since they are already using technology, they are using cell phones for example ... Yes, of course, of course, of course, I remember one of the students was saying that ... her cell phone...as if that ... it was not compatible. So, she couldn't open a particular document that she hoped to open on*

her cell phone. So even if she opens her cell phone, she found that some of the documents are not clear as they would have been if it was a laptop. So, they use these same cell phones for the e-learning resources as well.

P2: *One of the main reasons why the university introduced Moodle, was obviously accessibility ... If they log in to Moodle, they can access their stuff, when students register for a particular module. If they log in to Moodle, they can access their stuff ... But now with e-learning, considering the issues that I raised, that some students may genuinely not have data. Someone may genuinely not have a nice smart phone that can work for them to actually teach us or a laptop to teach the rest of the class. The best they can do is to one day borrow someone's laptop to see what has been taught and so on.*

P3: *I want my learners to access. Another thing that is important they can access it anytime... So, even the load shedding as we are living under shade of the load shedding, so they can be able to access the information.*

P4: *I'm able to access ... which is also a great platform for learning and actually for teaching students ... for websites that the students can access ... to manage material when it is accessible to my students ... you can't connect for some reason, we have a load shedding, we've got a whole lot that can affect the smooth running of your presentation ... We are able to access, students are able to access all the learning material that is required or that they need to access ... they are able to access it and there's ... so, Moodle just ensures that they are able to access even if it is offline and they can work on it. So, I really think it's accessible and affordable.*

P5: *... the Moodle, eh app, ... it's an application, it is easy, accessible ... Learners are able to even access their portals to get the information get their messages without being online which means they can use it even if they do not have data. Normally I use Zoom for the live sessions because they are easily accessible as well. Because it uses less of data, it's accessible and is efficient, it also depends on the availability of the connection where they get access of data so that they will be able to be in class.*

P6: *They do have challenges with connection, mostly the network. ... but with connectivity, it's used to be a problem because they connect in different places in some areas and find that they have a challenge of a network.*

P1 says students can access information posted, but they need to be workshopped. This suggests performance and effort expectancy that social influence and facilitating conditions need to be considered as variables in the use of technology. P1 continues saying students need to be workshopped, to be able to use e-learning resources through their cell phones. This implies that behavioural intention and the technology use predictors should be applied. However, using their cell phones can be challenging; sometimes documents may not be retrievable by cell phone, sometimes the quality may be compromised owing to a cell phone not being capable of retrieving such documents. In this situation new endogenous mechanisms and facilitating conditions need consideration as well as behavioural intentions and technology use. Access in using e-learning resources can be challenging without adequate support. New endogenous mechanisms suggest an existing influence on the behaviour and use of technology by an individual (Venkatesh et al., 2016).

P2 says Moodle is meant for easy access for students. Students get their details when they log into Moodle for access. They have challenges with data when they use their cell phones or laptop to do some class presentations. This suggests that performance and effort expectancy facilitating conditions, behavioural intentions, technology use, and new moderation mechanisms need to be considered.

P4 says access to e-learning resources is great, and she can actually use e-learning resources for teaching and learning. She can manage material access websites; however, she mentions the negative side of e-learning resources, where sometimes she cannot access e-learning resources, because of load shedding. She is happy that students have access to e-learning material and Moodle is helping them to gain access to the e-learning site. So far, her presentations are running smoothly, with performance and effort expectancy. She mentions that learners can also access materials while offline. Facilitating conditions, social influence and behavioural intentions need to be considered with technology use predictors and new outcome mechanisms.

The findings show that data is the main challenge to access of e-learning resources. Moodle is the most accessed by lecturers for teaching and learning. Zalat (2021) argues that connectivity or unstable internet is the greatest barrier in higher education in Egypt, which implies that access is a major concern internationally.

6.4.2 Affordability

e-Learning resources generally save costs, but some learners may still face issues of affordability:

P1: *Some of them, they do have their devices, ja ... Some of them even have their own laptops so it's therefore simple, it's easier than during those times of ours, whereby we never had cell phones, ja ... NSFAS [National Student Financial Aid Scheme] somehow gives them laptops, in this way they start accessing laptops.*

P2: *... but it also ... was meant to save both the university and the students money in terms of hard copy and the resources because we used to give them hard copy course outlines and readings. But now we have the option to say we want to continue our lectures as hard copy lectures, or we want to do it online with Moodle. ... every year when the year started, we would be asked, ... are you giving your student hard copies, or you are doing it electronically. So, that if we are doing hard copy stuff, the students would be ... eh, charged money for those notes because notes would have to be made, printed, and distributed and so on. So, we will be asked if we are doing so or not.*

P3: *... you do not have to pay that licence fee maybe every month or each and every year you ... find that a learner has got some challenges maybe regarding the data or regarding the network.*

P4: *... I really believe it's affordable students may not have data at times, and they come from different backgrounds ...*

P5: *... it is also consume less data ... you can easily afford ... the money ... you can easily afford to get on WhatsApp.*

P6: *So, yeah, but with ... in terms of the data, we normally provide them and tell them that it is just for learning, not for anything else. It's for learning the, on the, on the data side. It's not that much problem ...*

P1 has experienced that some have devices while others do not because of their background. Some of them have their own laptops, which may be provided by NSFAS in some instances. This needs

facilitating of conditions where those who do not have devices are assisted. This involves behavioural intentions and technology use, performance, and effort expectancy.

P2 says Moodle was meant to save both the university and students money, and that it saves on cost of hard copies that no longer have to be printed out. The decision by the university to provide for electronic material shows facilitating conditions, and the choice to use electronic documents by P2 and the students suggests behavioural intention. The actual use of Moodle suggests technology use, performance, and effort expectancy. The choice by the university to use Moodle to save money suggests new moderation mechanisms with hedonic motivation (Venkatesh, et l., 2016).

P4 states that she really believes e-learning resources are affordable, although students may not have data at certain times because of their different backgrounds. This shows facilitating conditions, behavioural intention, new outcome mechanisms, performance, and effort expectancy. Participants feel that the role played by NSFAS is important in supporting qualifying students to afford education. Moodle plays an important role for students from disadvantaged backgrounds to be able to afford e-learning resources. Dhawani (2020) claims that congestion or heavy use of some websites can be costly.

6.4.3 Enabling

Participants had different views on e-learning as being enabling, most perceived it to be enabling:

P1: *Well, that one, it can take me about eh ... thirty minutes, because at least I do have everything here at my disposal. So ja, it's easier, I hope it's something 30 minutes or less ... we do have the unit here in the university called ICT, so when we've got a problem, with our technology there, they come in. So, when it comes to e-learning resources for example, if I get stuck somewhere they are there. And there are also few colleagues who are at least ... are user friendly, I mean who know about this, so, is either I call up my colleagues or I go straight to ICT, but they are there to assist.*

P2: *I will be honest and say if were to talk about eh ...eh ...my misgivings about e-learning that would be one of the misgivings ... As I say students don't all come from an enabling environment where they can discuss and so on. And as we also know, not every student is really keen on doing those discussions, and some students genuinely bunk. But now is mostly me speaking ... eh, because ... we have sessions where we discuss and sessions where I still try to make it interactive. ... I can say I can pick a particular student and say you are going to come prepared to speak about this. Or I give a*

task and say everybody submit that task before class and then when class come, I can pick a particular student to read their work and start a discussion. I still try to make it interactive, but I will be honest and say it has not been interactive as it was, so, it's more teacher talk now in my teaching than it used to be under contact sessions.

P3: ... you can meet, I can meet with my students as groups or a particular group for that particular time and then I move on with another group. Even if sometimes I have to meet with a learner individually, I do use it, individually because sometimes you do have a learner that does not grasp information the same. Sometimes you need to pay that individual attention to that learner and then I do ...

P4: The use of e-learning resources will sort of ..., let me say maybe force them to interact. I will get a response from all of them because if I've got a question or maybe a quiz or an activity, an interactive activity and I need a response from all of them and from all of them if I've got 15 students, I'm able to tell if all they got it right or 8 out of 15 students got it right you know, I have a problem with the five. But in a situation where we are face-to-face, I might not be able to do that I can just maybe ask maybe one or two students then I move on. So, I really feel it's beneficial, it's really ... you get a lot from them when...and it's really interactive when they are using the e-learning resources.

P5: ... on the Google they are able to research, to find explanations and to find how things are done, mainly is there to assist when do not know how to get the information and how to go about using the information ... To some of them yes, but the voice works well, I do get better feedback on the voice than the contact because sometimes you find that a person will be inferior when there's no need, but when there is a voice, they are able to listen and go with you and go with the flow.

P6: Some are unable to even know where to touch in the email, how to see me, how do I see the link? So, you'll always take them step by step that you click on this, you do this. And when they connect, you find that others will say, I do not have sound, you know, so you ... yeah. Even in Zoom in Microsoft Office, we have a chat, a chat it's only not, it's not only audio. We also have chats where if a student does not have a sound, we'll just write on the chat that I do not have a sound.

Having everything at his disposal is important for his lesson and ICT makes that possible for P1. Thirty minutes is what it takes him to be prepared for his teaching sessions. He says the ICT team is

available to offer any technical support should he need it, and he also has colleagues who can help when he needs support. Communication with the ICT team is direct; he can call or physically go there for help. This suggests facilitating condition possible are in place, where it only takes 30 minutes to prepare for a lesson, and an ICT team is available to assist. Behavioural intention is there, and technology use is considered.

P2 expresses strong sentiments about the enabling ability of e-learning resources. He believes that assumptions are made that all students come from an enabling environment, this makes him have some misgivings about the ability of e-learning resources to support all students. He says not all students are keen to use e-learning resources, and he believes they are not suitable for interactive engagements. He cannot teach in the way he prefers, which is teaching through discussions, because e-learning accommodates more talking by the teacher than discussions. This suggests a need for facilitating conditions for all students to be supported using e-learning resources. Behavioural intention in the use of technology, technology use and new outcome moderation are needed, as well as performance, and effort expectancy.

P4 believes that e-learning resources enforce interaction, as she gets responses from all of her students. She is able to engage interactively with her students using e-learning sessions, and she thinks they facilitate interaction better than contact sessions do, and feels that e-learning resources are more beneficial and more enabling to her and her students. Performance and effort expectancy, facilitating conditions, social influence, behavioural intentions, technology use and new outcome mechanisms are ideal in such a situation. One of the participants was not happy about pressure exerted on them to do more work with less interaction, and this is supported by Starkey (2020), who states that massive innovation in technology is putting pressure on lecturers to teach intuitively.

6.4.4 Adaptive

While the skills that need to be applied may be the same across e-learning resources, the e-learning resources themselves differ:

P1: ... now, they may be applying the same skills, but on a different environment, because Moodle is something else. Even when they chat there, when they are sitting there at home, something they don't know about, so they will only know about when they get to university. When it comes to them being supposed to know that particular resource, so they apply the same skills, but on different environment.

P2: *I wouldn't say is the same, eh, for somebody like me who had been teaching these modules for some time now, going into the lecture room was very easy. Because I mean I have been teaching this content for a long time. ...and obviously, there are changes here and there once in a while, so you update your information ... In generally because students prefer to see things ... so, in preparation for those contact sessions, eh...everything was visually there, I would just add and modify every year, modify something if there is new content. But now it was quite different now because it's a different thing. You have to upload things and everything you were not doing; you have to start doing things. Things that you could explain in class, you realise that sometimes explaining things online is not the same because the reality is that not every student is listening.*

P3: *Usually, we used to be physically, so, we are exposed to many learners. But now we cannot ... There is change in the use of e-learning resources before COVID-19 pandemic and after COVID-19 pandemic. So, for me to be engaged with lots of students, so I'm using this site. So, I use it for live teaching ... Previously there was no urgency need for me to use e-learning resources. It was maybe if they do not have more information regarding that particular content that need to be taught or I deliver to them, so I need that e-learning ... But, now because of the new normal, I'm forced to use it and I love it, because it makes my facilitation to move freely.*

P4: *You really need to engage with them, it could be that they are just behind the gadget and just away from you and remember there's' now this change because of COVID-19, the regulations and everything, they are working remotely. ... you try and cover it using the same time that you use for face-to-face, but now, ... maybe online teaching, you find that at times ... as much as it is interactive, students can maybe keep quiet at times, you know as you are presenting, eh is not easier at times to probe because it's not face-to-face , so, at times depending on the content and the concept that is being addressed you might find that you move quicker because there's' silence on the other end, eh you can just assume that everything is covered and there's understanding. But when it is face-to-face at times you're able to probe and you're within and you're around sometimes is easier.*

P5: *The previous-normal we mostly relied on contact classes you do things, your student is here, you're here, everything is mostly here in front of you. But now in the new normal you need to work electronically ...*

P6: *Nothing much except that when we started with this e-learning eh, it has more challenges because we are, we were all new to it, but currently and with COVID times, we've learned do that. We cannot just sit home and fold our hands and say, we are on lockdown, and we cannot do anything. The teaching and learning continued during this pandemic time. And we were able to divert from our own ways of doing things and learn new things. Then I think we are now in a space where we are comfortable with this learning.*

P1 articulates that in his experience of using e-learning resources he observed that skills that need to be applied are the same across these e-learning resources. However, the e-learning resources themselves are different. He mentions that Moodle is different from any other e-learning resources that are not used by a university for the purposes of teaching and learning. He lacks reflection on the application of Moodle in different contexts. He says because students were not exposed to Moodle before they enrol at the university. They use the same skills which they are familiar with when they were at home. P1 needs to consider the social influence predictor as a predictor of the use of technology regarding the use of the same skills, behavioural intention for the use of technology in Moodle, performance, and effort expectancy, and technology use regarding the use of technology

The use of e-learning resources is not the same for everyone involved, says P2. He says he used to do things differently when he was still using contact sessions, but now everything has changed. He says his students prefer to see things, and everything was there for them to see. He would edit his content all the time to keep it updated. He mentions that all that changed, as now he has to upload material and he has to start doing new things that he was not doing before. He makes an example that what he could explain in contact sessions sometimes the skill is not the same because e-learning needs listening skills and not everyone is listening. There is a need to consider social influence, behavioural intention for the changes, technology use for using technology to teach, and performance and effort expectancy.

P4 states that her experiences with the use of e-learning resources involve lack of engagements. She mentions that when students are on the other side of an e-learning resource, they may not be learning if they are not being really engaged. She says that when using e-learning resources, students tend to be quiet, unlike in a face-to-face session where there is contact. She says now the sessions involve remote engagements because the COVID-19 pandemic mean that face-to-face sessions may not continue as they used to. She says that she tries to use the same teaching time in e-learning sessions

as she used for face-to-face sessions it is not the same. Sometimes pacing can be misleading, thinking that all students are involved only to find that there are some problems with others not interacting. She says sometimes the pacing might be quicker because of lack of interaction; hence a quick pace may not mean that everything is easy, and all of the students understand as she may assume. She says the pace may be determined by content and concept being addressed, as well as silence from lack of participation on the part of students.

P4 says that in face-to-face sessions it is easy to probe, so that she can determine if students understand what she is teaching; however, in e-learning sessions probing is not easy. She says the latter sessions require her to focus more on how to strengthen interaction. El-Sabagh (2021) argues in support of adaptive e-learning in terms of improving participation skills. P4 needs to consider facilitating conditions in the use of technology for teaching, behavioural intention for the use of technology in the teaching sessions, and new outcomes mechanisms for strengthening interaction, performance, and effort expectancy.

6.4.5 Inclusive

For some of the students the use of e-learning resources is not easy, as their background may reveal that they come from disadvantaged contexts:

P1: *...remember most of our students, they are coming from disadvantaged contexts, disadvantaged families, they are coming from rural areas whereby they don't have enough exposure to this. So, therefore, yes, ... the background knowledge will always count when it comes to e-learning resources, because some of them, they have never had laptops for example.*

P2: *... it really varied, it was very interesting that it really varied, it's difficult for me to categorise it as postgraduate and undergraduate. And my reasons for this is that you would have some students who were undergrads who had been with the expectation that when you come here you were supposed to know how to use a computer. But at first year we had students who can't really do anything with ..., on the computer, not all of them, but we have some students who have never really touched a computer, to start with. So, expecting them to catch up, would be very difficult. So, at first year, we were quite lenient with the first-year students, then obviously as they go to the second year, third year and fourth year. I mean these are young people, they end up learning, knowing much more than you in terms of the computer and the phone and so on, because is their generation ... So, when those*

students now came to the honours, ... it was very easy to continue with them doing e-learning. But then sometimes, the problem is that, at postgrad level you also have someone who last did his undergrad in 1998 and has decided to come back and study now. Wherever he was teaching, he wasn't using computers, so he never bothered to learn about computers. So, you will also have some postgrad students who come, at a ... really, big disadvantage. You have to work with them to catch up, they don't know how to They don't have an email address, they don't know how to set it up, they don't know how to send an email. So, those ones are really behind, that's why I'm saying it's difficult for us to really say the postgrads are better than the undergrads. It would really depend on the quality of postgrads you're getting. Or maybe if I were to categorise, let me say that nowadays, it's better for the postgrads, most postgrads come quite equipped unlike in the past. In the past what would happen is that when students finished their undergrad, most of them would go and teach, they wouldn't come straight for ... for postgrad. But we now have cases where students, a lot of students now come back for honours as soon as they finish their undergrad. Some because jobs are now a bit more difficult to get, so instead of sitting around looking for a job, they would rather be studying as well. So now ... we have postgrads who come quite equipped because they were with us at undergrad then. But in the past, most of our honours students would be taken away, they will be sitting at work, but not using ICT, so it was quite difficult, but things have changed now ... So, we have a mixed bag of situations where some students don't care, but you have some students who really care, but circumstances don't allow.

P3: No, I do not limit the numbers because I will limit the numbers and find that those learners won't be able to log in because of the challenges they are facing ending up with few learners, the site can accommodate more and more learners, it is open to everyone. Oh, sorry I can pay attention to group learners of the same barriers who got some difficulties maybe with tasks, like maybe for instance interpreting ... so I need to be engaged with them, those few learners are able to use the site.

P4: I think eh when at times e-learning and teaching is not like...is not contact they are somewhere out there, just behind the gadget, behind the computer and ... and for all you know they might be doing something else, so, as a lecturer you just need to be interactive and try and be inclusive and engage them and not just assume and think that go through the material and just share and just throw the material to them.

P5: *On the cell phones, they are mostly comfortable, you'll find those who will try to log in on a laptop and they do not have eh... the understanding, but on the cell phones they are all comfortable ... There is a difference, you will find that the first years, they are not there yet, they are still trying to come to party, to come to the level of ... I am at the university now and in the postgrads you'll find that eh ... because of age some of them feel that eh, the laptops, the cell phones are for younger people, so, you will have problems there.*

P6: *For e-learning. I accommodate a large number. I can take like more than hundred in each lesson, but, but with the face-to-face learning, it's just a small group. It's easy to access the learning material. I'm able to reach a larger number, a large group of students ... So, in each I can even combine, we find that in the face-to-face situation, I move from one, one lecture hall to another. But with this one everybody can connect in that particular time for that particular session ...*

P1 says his students come from rural areas where there is not enough exposure to e-learning resources, and that background knowledge always counts. He cites the example of some students who never had laptops before. P1 needs to consider social influence of the background in the use of technology, performance and effort expectancy in facilitating conditions for students' exposure to technology, behavioural intention, and the use of technology to address the disadvantage caused by their background in the use of technology.

Levels of using e-learning resources are different among students, it is not easy to tell if it is undergraduates or postgraduates who have a problem, says P2. He says it is expected that students enrolling at university already know how to use a computer – but have never used a computer before. He says it is difficult to expect them to catch up, so they are more lenient with first-year students at first. They expect them to learn quicker, because they are young and such knowledge belongs to their generation. He says it is easier to teach with e-learning resources at honours level, because those students are more able to use e-learning resources as they continued on to postgraduate level. However, the problems lie also with those students who studied and left the institution, later deciding to come back to continue their studies.

P2 says there are therefore also those postgraduate students who are at a very big disadvantage, and they need help to catch up. He says they don't have an email address or know how to set one up and send an email. He says it is difficult to say, if it is undergraduates or postgraduates who have a

problem with e-learning resources it depends on the quality of the postgraduates they are getting. However, he mentions that nowadays it's better for the postgrads, since most come quite equipped since they were with them during their undergraduate studies. go, and teach, they wouldn't come straight for postgraduate studies. They have a mixed bag where some students don't care while others really care but their circumstances don't allow. There is a need to consider social influence in terms of differences, and facilitating conditions to address different levels and help students to catch up, with behavioural intention to help those who are behind. Performance and effort expectancy of technology use is in place, as when they continue studying they use technology and improve its use.

P4 articulates that it is important to know what students are doing 'behind the gadget' as a lecturer when you are interacting with them online; you have to be interactive and try to be inclusive through engaging them. She says you should not assume that they are up to date with the material, and need to go through and just share rather than just throwing it at them. The implication is that performance and effort expectancy, and social influence impact on the students' use of e-learning resources and require more interaction and engagements from lecturers. Facilitating conditions need to be considered to address differences, and behavioural intentions in the use of technology need to be considered to know what happens behind the gadget and to interact and be inclusive. Coman et al. (2020) claim that interaction using online channels did not work at two of the largest universities in Romania, and that its advantages are diminishing.

Participants think e-learning platforms put those who are disadvantaged and less exposed in a challenging position. The digital divide is a challenge to all age groups, and students at all levels of education. There is less interaction in using e-learning resources when using them for teaching and learning.

6.4.6 Transformative

Participants feel that more exposure to e-learning resources can facilitate transformation:

P1: *Well, the ... students eh ... remember, the undergrads, they're young, but postgrads most of them are old, they don't know some of the things. They even say hhayi into yey ngane le, into eyaziwa yi ngane, [no this belongs to children], even their cell phones, sometimes they have to get assistance from their children, so, surely there is a difference in the sense that those undergrads it's easy for*

them to cope with e-learning resources rather than the postgraduates because most of them are the old people and to them this technology is not like the other one.

P2: *Is a mix, eh ... as I said ... if I had not come here where they had that module on ICT I don't know what my attitude towards e-learning would have been, but when I came here I loved that module a lot because it exposed me to something that I wasn't thinking of that I'm supposed to focus on. You know I was simply learning about a module on African History, a module on History three and theories and so on all those things.*

P3: *... when I started the system was not like this. The level of competency is increasing each and every year.*

P4: *No, actually it can be used for a number of things, eh just like communicating with the students, remember when you are having your sessions they might have not been online, they might have challenges with the gadgets, we always have trouble, you think you going to have a meeting even at the work situation and you can't connect for some reason, we have a load shedding, we've got a whole lot that can affect the smooth running of your presentation. So, I'm able to communicate with the students eh even if they were not able to attend the session that was planned ... I update them ... on what went on during the session and I'm able to send recordings eh...to the students so that they can listen to them at their own pace ... eh I'm able to send videos of whatever. All these I can even share at a later stage you know, update information for them at a later stage and eh so, that they can always catch up on what was going on. So, even if it is not catching up as I want them to understand something, or as I want them to update any information in the course or in the module, I can just send it to them and through their phones, they have got smart phones and ... we use social platforms like we have a WhatsApp group that we have going on and those are quite useful because ... its interactive they can send voice recordings, they can send their queries through that, they can send their questions. I can also send information to them, whether on the content I need them to understand, activities, any interactive material it could be a presentation that I need to share with them or just any, learning material. I can just deliver it to them through the WhatsApp group, so, it makes communication very, very easier and students can access it at anytime and anywhere they are. So, we use it for communication so, no one is left behind, no one will be like I do not know what happened whenever we, keep up using online teaching, the gadgets and WhatsApp group and everything else that now we have become accustomed to.*

P5: ... this is the new app they are using called Moodle, so, they are trying to come to terms with it ... they are slightly different, there's not much difference from the contact, even on the live video, learners are able to raise their hands and ask for clarity, same as in a contact class.

P6: There is a change during this time of COVID-19 because we are not allowed to do the gatherings, you are not allowed to come together in large numbers. So whatever information, or even the classes, the schedule of classes, are also shared maybe on WhatsApp because we've created a WhatsApp group for them. And we also make use of the portals like Moodle, the school portals, where we upload learning materials for them, then for all the, maybe the class sessions, then we will be coming together in whatever space. And this is what is good about the e-learning is that they can access learning wherever they are. So, it's not like they should be in a certain place, space where they can, they must be in a controlled condition. They can be free, wherever they can access the learning through online.

Social influence in the use of technology relates to the situation where the undergraduates know more about technology than the older postgraduates, as described by P1. The postgraduates acknowledge that they are behind with technology compared to the younger undergraduates. Performance and effort expectancy as well as facilitating conditions are required to address the situation in the use of technology. Behavioural intentions and the use of technology are needed to address the inability to use technology of the postgraduates and the new outcome mechanisms must be considered to improve the situation.

P2 was not sure if he should go for training in the use of the ICT, but finally he decided to. This suggests that it was because of social influence that he decided to go to training on the use of ICT for teaching and learning, meaning that facilitating conditions were put in place. He says it changed his attitude towards the use of ICT for teaching and learning which suggests the application of future intentional usage of technology to teach. He says he loved the module, and was happy to have attended the training because he was exposed to things he did not previously know about. The module changed him to think positively about it, which suggests that performance and effort expectancy for technology use is involved. He says he learnt something new, which suggests the application of new outcome mechanisms.

P4 uses e-learning resources for communication, and communicates with students even if they are not able to attend sessions owing to problems related to connectivity, etc. She keeps communicating with students offline to find out if they have problems. This shows that performance and effort expectancy social influence predictors are followed, and that facilitating conditions are in place, because when they go offline, they can communicate with students. They can consider the behavioural intention of students when they communicate with them even if they are not attending sessions. The use of technology is considered in the process of communicating with students through the use of WhatsApp and smart phones. P4 sends materials and questions through technology and employs new outcome mechanisms by finding out if the work was received by the students.

Participating in e-learning or ICT training support transformation, while frequent disconnection has a negative impact on it. Mpungose (2020) argues that e-learning cannot bring about transformation because of digital divide, and he proposes connectivism. This takes the debate about the digital divide further.

6.5 Summary of the chapter

The introduction of this chapter reflected on the previous one, highlighting the process of data presentation. This chapter continued with the data presentation, developed from the third research question. In this chapter question three was taken further from theme three in the previous chapter and developing to themes four, five and six. These themes represent the philosophical thinking of participants' experiences of e-learning resources. Theme four is subjectivisation experiences, theme five socialisation experiences, and theme six institutionalisation experiences. Themes were presented together with descriptions, interpretation, and philosophical understanding of participants' e-learning experiences.

The following chapter theorises philosophical thinking regarding participants' e-learning experiences. In so doing it employs the e-learning theory suggested in Chapter Three of the study. The unified theory of acceptance and use of technology (UTAUT) and unified theory of acceptance and use of technology extension (UTAUT2) were employed to analyse the philosophical thinking behind participants' experiences of e-learning resources.

CHAPTER SEVEN

PHILOSOPHICAL REFLECTIONS IN THEORISING THE FINDINGS THROUGH THE UTAUT AND UTAUT2 THEORETICAL MODELS

7.1 Introduction

This chapter theorises lecturers' experiences of e-learning resources in the teaching of History. Literature in Chapter Two showed the surge in multiple and diverse needs in 21st century teaching and learning that requires multiple tasks and skills from individuals, organisations, and governments. This has been further accelerated by the current socio-economic contradictions and COVID-19 pandemic impacting on education at large. Higher education institutions are called upon to provide alternatives to address the surge, and e-learning mechanisms are the only viable channel to respond to the call. It is on these grounds that I argue for the use of the unified theory of acceptance and use of technology (UTAUT) and unified theory of acceptance and use of technology extension (UTAUT2) in the teaching and learning of History using e-learning resources.

Participants were interviewed as suggested in Chapter Four. This chapter reflects on their responses applying six perceived variables of UTAUT and UTAUT2, a theoretical model used to reflect on the use of e-learning resources across disciplines. Participants' experiences of e-learning resources reflected performance expectancy, effect expectancy, behavioural intention, facilitating conditions, technology use and social influence. In their reflection the subjective, social, and institutional experiences in the use of e-learning resources emerged. This chapter gives an insight into UTAUT and UTAUT2, reflecting on the findings regarding participants' experiences of e-learning resources through the variables of UTAUT and UTAUT2.

UTAUT and UTAUT2 is an e-learning theory used to determine participants' acceptance and use of e-learning resources. Venkatesh, et al. (2016) claim that the UTAUT and UTAUT2 is a high-level theory involving contextual environment, organisational and local attributes. Its use is meant to achieve new conception of acceptance and use of e-learning resources to yield new outcomes of the phenomenon. The UTAUT and UTAUT2 theory applies to different disciplines using different variable analytical experiences. The use of UTAUT and UTAUT2 as the theoretical lens of understanding the theoretical significance of participants' experiences of e-learning resources provided the study with new understandings. UTAUT and UTAUT2 variables involving performance

expectancy, effort expectancy, social influence, facilitating conditions, behavioural intention and technology use were applied. The UTAUT and UTAUT2 theory is presented in Figure: 7.1 showing its variables as used in the theoretical reflection.

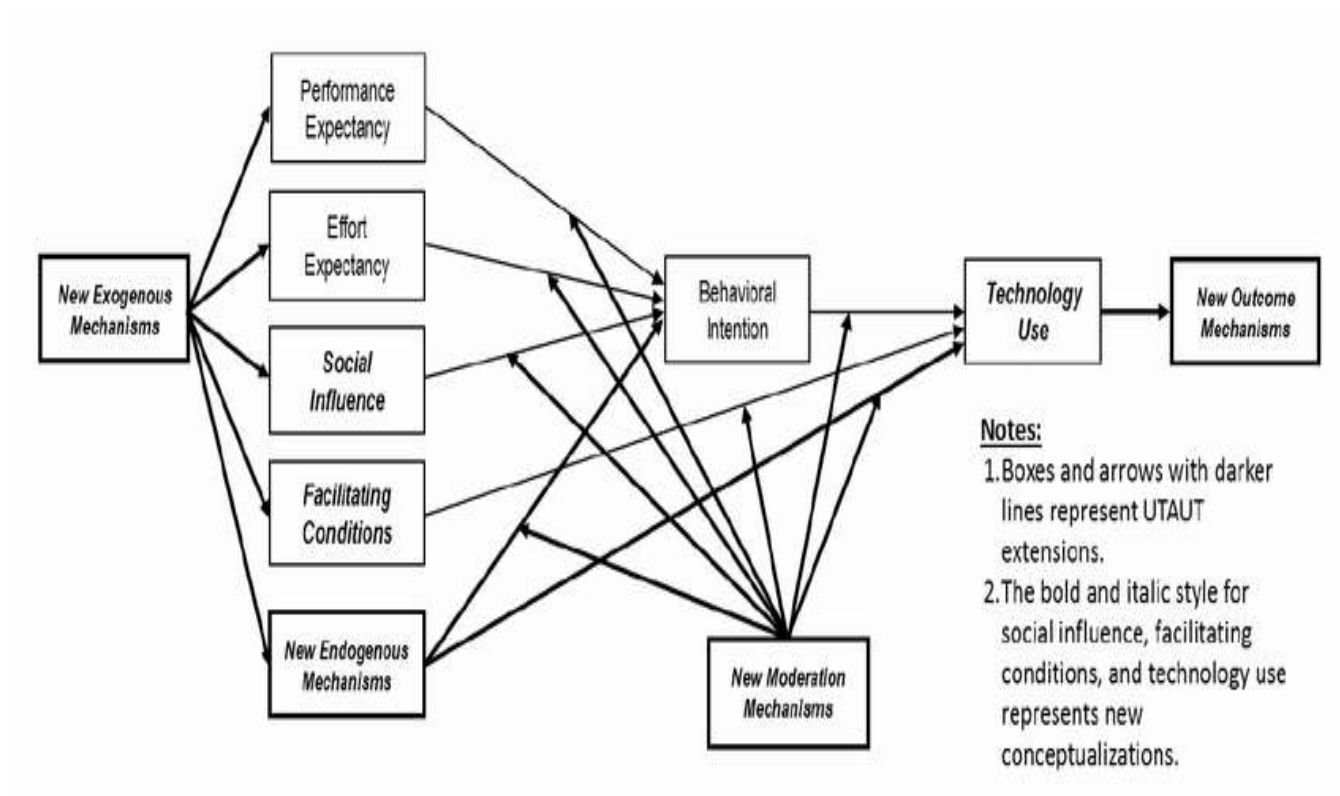


Figure 7.1 Unified theory of acceptance and use of technology (UTAUT) and unified theory of acceptance and use of technology extension (UTAUT2).

This chapter seeks to understand the theoretical significance of using e-learning theory in the teaching and learning of History. Three of the six participants' experiences were theorised using UTAUT and UTAUT2 through the following six variables: performance expectancy, effort expectancy, social influence, facilitating conditions, behavioural intention, and technology use. Participants were selected from the six whose data were presented, discussed, and analysed in the two previous chapters. Three main research questions were asked. The First research question was: What e-learning resources do lecturers use in the teaching of History? This required description of e-learning resources by lecturers, specifically informed by their own contexts of experience (Sloan & Bowe, 2014). Participants reflected three philosophical representations of experiences of e-learning resources – the subjective (personal), social (collective) and institutional (professional) – in a continuous process of the unfolding of experiences with each of the variables of e-learning resources.

7.2 Performance expectancy

Performance expectancy is participants' perception about the benefit of acceptance and use of e-learning resources for the task (Alsheri, et al., 2019; Almaiah, et al., 2017). Findings show that performance expectancy is highly considered by participants. This suggests that acceptance and use of e-learning resources should be based on the participants' perception of their degree of performing a task. Perception is subjective to an individual participant's perspectives about e-learning resources in terms of the task. As specialists in the subject of History, it is critical to understand participants' relationship with the performance of e-learning resources from their own experiences. P1 mentioned that he needs to cover methods and methods apply to different contexts, and in so doing he needs to develop students' epistemologies. He said that requires him to have all of his e-learning resources with him all the time, and that he does not need to carry anything with him when going to class. He said that e-learning resources are limited in History, but those that he is using cut across different methods. This suggests his acceptance and use of the e-learning resources needed to benefit the performance of these tasks.

During interview P2 said he is teaching a content-heavy module, and that currently he cannot teach for the whole duration of the session because e-learning sessions are different from contact sessions. He has to deal with a lot of other issues that emanate from the e-learning platform which are unique to its context. He mentioned that explaining concepts is different from when doing so in contact sessions, as there is more actual interaction and students prefer visual teaching skills presentations. In e-learning there is more talking and listening, which affects students' concentration over a two-hour session. Scheduling of e-learning teaching and learning sessions are the same as for the contact teaching and learning sessions. He said in contact sessions activities were more in the form of presentations by students. However, since e-learning sessions started to be the only platform used to teach, it is not possible to teach for the two-hour duration as students lose concentration. He is forced to reduce the session using other strategies, but he cannot cover all the content and is working more than he used to do during contact sessions. This means that he needs more time to engage with students, but with the current COVID-19 pandemic, e-learning sessions are the only alternatives for teaching and learning sessions.

P3: said that she is teaching the History discipline in order to be able to cover the curriculum and content as per the History module or course outline. P4 said she needs e-learning resources that can

enhance students' engagement and interaction; she tries more to keep students engaged interactively, but sometimes students keep quiet and it is not easy to know why they are acting like that. She said it disrupts the pacing of the presentation, as she may think the pace is quicker because students understand the lesson, only to find out later that this was not the case. She said she will not understand because she cannot tell what is happening on the other side, behind the gadgets. She also cannot ask them probing questions during e-learning presentations as she does in contact sessions. P5: mentioned that it depends on the type of section that she is covering in a specific module, and she assesses in the same program. P6: mentioned that as a History teacher she uses online learning resources in terms of teaching the subject content. All these responses suggest that all of the participants' adoption and use of e-learning resources requires their individual task performance that benefits different tasks, as they suggested.

Studies show that performance expectancy links with behavioural intention in the use of e-learning resources, to determine adoption and use of e-learning resources by students. Participants need e-learning resources that will enhance performance of the tasks using e-learning resources. Alsheri et al.'s (2019) study on the use of UTAUT acceptance and use of e-learning resources in Saudi Arabia found that performance expectancy had a superior effect on attitudes towards using Moodle. Almaiah et al. (2017) had similar findings with Jordanian universities, using UTAUT to determine the adoption and use of mobile phones by users. The study showed performance expectancy having an influence on behavioural intention. This suggests that performance expectancy has an influence on the behaviour intention of participants.

Rizvi and Nabi (2021) argue that students attending online classes in an unsuitable home environment feel isolated. This results in them becoming demotivated due to lack of face-to-face interaction and excessive screentime causing fatigue. This needs further probing to better understand the impact and experience of e-learning resources on those who are using them. The use of UTAUT and UTAUT2 to arrive at a deeper understanding of the acceptance and use of e-learning resources can benefit the users of e-learning resources in terms of such experiences.

Alsheri et al. (2019) assert that performance expectancy is significant in supporting other variables to determine the use and acceptance of e-learning resources. Many studies concur with Venkatesh et al. (2016) that performance expectancy enhances the intentional link to possible behaviour in the acceptance and use of e-learning resources. The benefits which participants are getting from e-

learning resources need to be specifically designed for the task within the specific context. What is shown by the results of the study is that participants' focus is on the disciplinary performance, and they are not aware about the performance expectancy of e-learning resources that they are using to teach the discipline. They handle a variety of tasks with e-learning resources, which suggests that they have preferences that suit their style of teaching. Teaching History to a class of more 100 students is not an easy task when using e-learning resources. Gaebel et al. (2014), on e-learning in European higher education institutions, suggest that 77% of participants agree that e-learning resources change the approach to learning and teaching.

There is a need to attend to different students with different backgrounds, and participants need e-learning resources that can reduce their administrative work so that much of their time is spent on teaching and learning. Albrahim (2020) applied the UTAUT model to find out about critical higher education online course requirements, and six classified categories of skills were tested. The results showed that online teaching is demanding, making most uncomfortable with it because it involves a lot of administrative work. It was decided that an online programme be designed for professional development for online course. Passive methods of learning, such as online certification courses through education portals, were least preferred (Rizvi & Nabi, 2021). This shows that the use of UTAUT to analyse the acceptance and use of e-learning resources can be helpful in terms of participants' experiences. Once a perceived factor is modelled, updates can be effected to the actual e-learning resources (Almaiah, et al., 2017). Some of the e-learning resources can be updated by the user to reduce expense and avoid the obsolesce of technology (Dhawani, 2020).

The perception of participants is critical in the application of the UTAUT model, because they teach the content and can make decision regarding the acceptance and use of e-learning resources. Participants described their role in the teaching of History emphatically, showing the passion they have for performance. It became critically important to note such experiences of every individual participant when they expressed themselves. They said they are teaching, and that the e-learning resources need be designed for that specific task. The way they teach is based on the contexts where they are teaching, and differences need to be considered when e-learning resources are designed to perform the task. Khoza (2021) argues that lecturers as human beings have different identities that are located in the conscious and subconscious mind physically and emotionally. This suggests that participants' perceptions rely on their conscious and subconscious identities.

Any decisions on the acceptance and use of e-learning resources need their input, for the teachers to be able to plan properly and rationally. I remember P1 saying that before he goes to class, he takes about 30 minutes preparing using the e-learning resources that he is going to use in class. P2 also said he needs an hour to prepare, but when he is teaching new content, he needs three hours to prepare. P3 said that when she is preparing for a module and experiences some technical problems, she calls for help from the IT specialists. P4 also said that she prepares in order to ensure that students are engaged in interaction; her presentations need more interactive activities. P5 prepares for a lesson in her office, and P6 takes an hour to prepare for a session. This suggests that participants engage in a process of reflection. Reflection involves reflection -on (vertical), which is professional reflection and reflection -in (horizontal), which is societal reflection (Khoza, 2019). Reflection on the purpose is critical for e-learning context. Hunt and Ivergard (2005) argue that e-learning is not the purpose, but rather the focus should be on context, purpose, and usability. Tertiary education focuses on a high level and wide range of content, standardisation of learning activities, homogeneity of students' abilities, expectations of self-discipline, and great deal of student independence (Hunt & Ivergard, 2005).

It is about the benefit that each participant receives from e-learning resources; it is about the user who is experiencing the performance of e-learning resources. It is important to carefully listen to each and every one of them in their role as individuals. There are personal needs of participants that need to be considered for the use and acceptance of technology. When interviewed participants reflected on being themselves and the lecturer, this introduced them into the subjective individual world as "I", and it places them in the structural world of "*lecturer or teacher*". Lederman et al. (2013) argue that conceptualising scientific concepts informs the scientific literacy of students about personal and societal decisions. This suggests that if scientific understanding involves personal and societal decisions then it enters the phenomenological understanding (De Regt & Baumberger, 2019).

Phenomenological understanding of e-learning resources is the understanding of experiences regarding discipline related choices that will make a difference in lecturers' decision making on the acceptance and use of e-learning resources. This suggest that experiences of lecturers' use and acceptance of e-learning resources reflect performance expectancy. They perform inside of their disciplinary performance expectancy. In acceptance or use of e-learning resources, those resources need to meet the requirements for expectancy. Performance expectancy connects with behavioural intention as performance of tasks triggers a response from receiving performance; efficiency in the performance of tasks is based on participants' perceptions and the extent of acceptance and use of e-

learning resources. The performance of tasks relies on the participants' acceptance and use of e-learning resources. This suggests that performance expectancy influences behaviour for the future acceptance and use of e-learning resources.

7.3 Effort expectancy

Effort expectancy is the level or degree which participants perceive to be the easiest in the acceptance and use of e-learning resources (Chumo & Kessio, 2015). Assessment is one of the complicated systems in the field of education, and it requires giving effort to the task at hand. Participants in the study reflected on assessment tasks. P1 said if students cannot submit through Moodle, they can use other avenues and suggested, for example, using email to submit tasks for assessment. P2 said that as soon as he assesses, students see their marks and they are available for feedback. P3 said she could see from their responses when they need to submit assessments, and that the students will submit their work online; she is able to save them for the students, and when she does mark online the students are able to see the marks and the feedback. P4 said she assesses students through Moodle, and their marks are available immediately after assessment. The e-learning resources are providing what is required of them after teaching and learning. In Ja'ashan's study (2020), the prospect and challenges of using e-learning resources involved a lack of the necessary time for preparing online examinations and assignments, and comprehensive training in the e-learning resources is recommended.

P5 mentioned that she sends the assessment, and students will find it on the program. They work on a program, then submit, and she will mark them and give feedback. P6 mentioned that completion of the paper will take five hours, so students have to connect because they need to be visible on camera, on screen. She said they upload papers and students know when to access them and keep that period open. This implies that e-learning resources need to be perceived as making it easy to perform a task. This suggests that performance expectancy impacts on effort expectancy, and participants show that in the study. This triggers behavioural intention in the acceptance and use of e-learning resources when students retrieve their results and feedback from e-learning resources with little effort. It is easy to use e-learning resources for assessment, as marking is done using the e-learning resources and results are received as soon as the marking is complete in the e-learning resource file or portal. In Ja'ashan 's study (2020) users experienced the software of e-learning resources as too complicated to use.

In a study conducted by Alsheri et al. (2019) UTAUT model was used to test students' perceptions of the learning management system (LMS) used in a Saudi institution; the study was conducted to

find out why students were not using the LMS, as it was meant for their use. The study found that relationships between facilitating conditions and the behavioural intention of students to use the LMS was not supported. The study analysis indicates that the presence of performance expectancy and effort expectancy could be the reason why the use of the LMS was not supported, because facilitating conditions were the strongest predictor for use of the Blackboard system. This finding was explained by more than half of the variance suggesting the role of Blackboard usage behaviour at the Saudi university (Alsheri et al., 2019). This suggests that it is important to consider the user when e-learning resource is designed, and the user experience is influenced by the facilitating conditions. Khoza (2019) claims that assessment forms the horizontal reflections in knowledge, and is a societally centred form of knowledge. This suggest that assessment influences perceptions of facilitating conditions, where the user experiences the effects of performance and effort; this in turn determines the acceptance and use of e-learning resources.

Acceptance and use of e-learning resources is influenced by individual or collective experiences, as was the case at the Saudi university. In this study participants' identities reflect both the individual and the collective. P1 says "*we*" have to think about other avenues, speaking as a collective, not an individual. He is part of the team. P2 says "*but we*" also use it for assessment referring to e-learning resources, and he is also speaking as a collective. P3 said the "*they*" are able to see their marks, and P4 that "*they*" can respond to quizzes, in their reference to students. P5 said "I assess ... we send assessment" and P6 mentioned that "*we* upload papers". This suggests that as they refer to "*we*" or "*they*"; they, the participants enter into the socialising world, in a shift from the personal world of "*I*", but they maintain themselves, the occupational identity of being a lecturer or a teacher, introducing the structural world identity of being "*teachers or assessors*".

Various activities are associated with the world of assessment. The common activities which participants mention are, assess, submit, and feedback, but e-learning introduced upload and download, which are contextual. Participants experienced some e-learning challenges with this interaction. P1 experienced problem with connectivity, meaning that assessment required extra effort. This is the perception awareness that the UTAUT model needs to analyse to find out about the effort expectancy of the participant in the acceptance and use of e-learning resources. Connectivity challenges are also reported in other studies in the use of the UTAUT model Zalat (2021) asserts that connectivity is the most common highest barrier in the e-learning environment. This suggests that e-learning resources need some improvement to enhance effort expectancy. Rizvi and Nabi (2021)

found poor network connectivity to be a challenge. The study shows that the UTAUT and UTAUT analysis brings to the fore challenges with e-learning resources, where it could not be easily understood how they impact on the acceptance and use of e-learning resources.

The study reveals that students experience some challenges when they need to download documents. P1 said one of his students struggled with opening a document using her cell phone. This is an aspect that e-learning resources need UTAUT and UTAUT2 to analyse. The success and efficiency of using e-learning resources is shown, as P2 said he uses e-learning resources to keep digital documents and all other important information about announcements and course outlines. It is also revealed that P4 is able to manage and share material with her students, which shows the effort from e-learning resources to meet the requirements.

Gonzalez et al. (2020) claim positive student performance in the use of e-learning resources, based on continuous use of these resources before and during the COVID-19 pandemic. This proves e-learning resources' effects on the performance of students in the period where contact classes were restricted. However, Coman et al., (2020) claim that interaction using online channels did not work at the two largest universities in Romania, and that their advantages are diminishing. However, in another study Ja'ashan (2020) argues that compulsory e-learning courses need to be included in the curricula for all students. This suggests different contextual thinking on the acceptance and use of e-learning resources.

In this study one participant revealed that there are some challenges with the use of e-learning resources for assessment. P1 said 70% of his students submit using e-learning resources but we have to be concerned about the other 30%, as the study shows that there is a problem with connectivity, which can further disadvantage those making up the 30%. This means that there is a gap which needs the focus of analysis by the UTAUT and UTAUT2 model to inform participants. In reflecting on the online submission of assignments, Mpungose (2020) argues that the digital divide is a hindrance to students realising the full potential of e-learning, but lecturers still want students to submit assessment tasks and engage with course activities using Moodle. This is one of the concerns that requires UTAUT and UTAUT2 analysis to give a clear understanding of the current digital usage for assessment and determination of acceptance and use by participants. Perceived awareness has significant effect in the use of e-learning resources (Almaiah, et al., 2017). This suggests that lecturers

need to be aware of the impact of using e-learning resources on students in the submission of assessment tasks.

There is also a positive side with e-learning resources, all other participants including P1 as well they said they are assessing online as soon as assessment is completed, students get their marks, all of them use Moodle to assess, all assessment activities are kept there for student to access, these are the benefits of e-learning resources. This shows effort expectancy links with behaviour intention as it requires students to get feedback, it determines the behaviour of students for acceptance and use in getting feedback from participants. The behaviour to accept and use e-learning resources depends on how the e-learning resources deliver the tasks with easy to the perception of participants. If they are satisfied with the e-learning resources, they will use and accept it, but if they are not satisfied, they will not accept and use it.

7.4 Behavioural intention

Behavioural intention is about the participants' condition of being prepared or willing to accept and use e-learning resources (Almetere et al., 2020). Behavioural intention is one of the UTAUT and UTAUT2 variables used to determine the future use and acceptance of e-learning resources. It was the second most common among the six variables from participants' responses; this suggests that participants show intention to accept and use e-learning resources. The study found that participants need UTAUT and UTAUT2 analysis to find out about the acceptance and use of e-learning resources to accommodate big class numbers in an e-learning session. P1 said currently he can accommodate 80 students in an e-learning class, and cannot take more than that. The study found that P2 needs e-learning resources that will address the challenges of e-learning attendance. He said there are some students who are absent without a valid reason, but others are absent for genuine reasons. He also said he cannot cover all of his work, because it is impossible to have students concentrating for more than two hours. He reduces the time for e-learning sessions, making them shorter than 'normal' sessions in contact classrooms.

P3 mentioned that students use different types of gadgets; as long as they have the app linking them to Moodle, it works for them. P4 said using Moodle for virtual tutorials and online lessons enables her to share material with students. She is able to deliver the content, well packaged for the students in her sessions that run for one or two hours, depending on what she is presenting. P5 articulated that students come with some skills: they know how to use a cell phone and that enables them to use chats

on their phone, so she is able to communicate with them about lessons. She said students respond on WhatsApp and are able to communicate with her directly on a WhatsApp group chat. P6 said they prefer using mobile tablets or cell phones because they can get messages immediately. She said they are using WhatsApp and email, and that all of the students have email, so they can use these platforms. She mentioned that students can access information by email as well as on portals like Moodle. The behaviour of students is in response to performance expectancy and effort expectancy because their tasks influence the performance and effort on the tasks.

The impact on the adoption and usage of e-learning resources by students influences the future use. Behavioural intention is the most important variable to determine the future acceptance and use of e-learning resources. Other e-learning sessions are successful in terms of behavioural intention; Gonzalez et al, (2020), where students continuation with studies yielded positive results. Gonzalez et al. (2020) claim that continuation with the use of e-learning resources led to increased student performance pre-COVID-19 and post-COVID-19. This suggests connecting performance expectancy, effort expectancy and behaviour intention using Moodle. The use of Moodle may be influenced by performance expectancy, effort expectancy which in turn influences facilitating conditions because of support from the universities, then facilitating conditions influencing behavioural intention in the acceptance and use of Moodle. (Alsheri et al., 2019). The study found that there is frequent interaction and connection between performance expectancy, effort expectancy and behavioural intention, which determines the acceptance and use of e-learning resources.

7.5 Facilitating conditions

Facilitating conditions involves how participants perceive e-learning resources when they are using them (Almaiah, et al., 2017). Technology systems operate effectively in supportive environments. This makes it easy for participants to get the necessary support. Participants have technical backup should they experience technical problems. P1 said they have the support of the university ICT when they have problems with technology. P2 said they had really technical training in terms of the actual use of Moodle. P3 mentioned that they do have IT specialists at the university, and they are very helpful if there is a new app or so on. P4 said "... we have been provided with some training so, that we are able to use the Moodle platform". P5 said she is helped by an assistant when she is loading the program. P6 mentioned that they have IT specialists allocated to them whenever they get stuck in terms of connectivity. In Ja'ashan's (2020) study lack of training, lack of administrative support, and

inadequate ICT and e-learning infrastructure were some of the challenges experienced by the institution.

Facilitating conditions are a strong determinant in the acceptance and use of e-learning resources by participants. In this study participants have enough support to ensure that e-learning resources are accepted and used. This enhances the behavioural intention on students' acceptance and use of e-learning resources. The study shows that participants' facilitating conditions had a direct impact on the use of e-learning resources, in acceptance and use of e-learning resources. The finding in this study supports Alsheri et al.'s (2019) finding that facilitating conditions can influence behaviour intention significantly. Findings show that Moodle is used by participants and technical support is always there regarding the side of e-learning resources. This makes it easier for participants to accept and use e-learning resources. Almaiah et al. (2017) claim that facilitating conditions involve three aspects: having resources to use, having the necessary knowledge to use, and a contact person to respond to technical problems. In this study participants show that they have e-learning resources as they use Moodle and other e-learning resources that connect to Moodle. They do have the necessary knowledge as well as the technical teams with contact persons who they can call or email or even contact in person at the university.

7.6 Technology use

This is the perceived actual use of e-learning resources by participants (Jacob & Pattusamy, 2020). The study found that participants use a variety of e-learning resources. They use these e-learning resources based on their exposure to them. P1 uses Moodle, cell phones, laptops, Google, a data projector, and email as e-learning resources; to project what needs to be projected at a particular time, he always uses his laptop. P2 uses Moodle, Moodle ICS, a smart phone, computer, email, internet, LAN, LAN 2021, laptop, PowerPoint, video, WhatsApp, Zoom, Wi-Fi and SMS as e-learning resources. He uses Moodle as a basic e-learning resource, supplemented with WhatsApp and email, and he relies on his laptop while mobile as he uses it with PowerPoint wherever he goes. P3 uses Moodle, laptop, video, audio, computer, and the phone as her e-learning resources. She emphasises that she uses different applications that link to Moodle, and most importantly, she uses a laptop. P4 uses computers, laptop, tablet, smartphone, the internet, YouTube, PowerPoint, videos, voice notes, websites, and Moodle. This suggests that she uses e-learning resources extensively for the benefit of students.

P5 uses Zoom, video, WhatsApp, student portal, cell phones, voice notes, laptop, and PowerPoint. She prefers using Moodle, but normally she uses Zoom for live sessions while recording as she presents using PowerPoint. P6 uses Moodle, Zoom, video, laptop, WhatsApp, student portal, cell phones, voice note, Microsoft Teams, the internet, Microsoft Office, Word documents and a data projector, and uses Microsoft most often. Participants used different e-learning resources with thoughtful consideration, and this reflects Van Manen's (2014) that there needs to be a thoughtful understanding of the meaningful aspects of the experience of interacting online involving email, texting, or social networks of value to professional practitioners. The use of various e-learning resources suggests flexibility and easier interconnectivity in the institution. It suggests connection to the structural identity of institutionalisation. The study reveals that participants enjoy the flexibility of using various e-learning resources, but Moodle is always central to this flexibility because it is an institutional e-learning platform. It is also central because of its pedagogical value.

The Moodle design is built on an accessible second language theoretical socio-pedagogic approach (Brandl, 2005). Moodle's global status and licence free learning environment all favourable for acceptance and use by most globally (Brandl, 2005). Moreover, the use of Moodle is prescribed by various higher education institutions (Khoza, 2021). However, some students experience challenges with access, and they struggle to use their devices to download documents or material. Participants also experienced some challenges with attendance of e-learning sessions. They could not use their preferred methods to teach. This suggests that there are some gaps regarding e-learning resources where there is room for improvement. It is possible to have the current e-learning systems, but the fundamental question is how it influences the behaviour for acceptance and use by users, because they need to be able to access and afford using e-learning resources. If e-learning resources are used because institutions save on costs it is good, but the saving needs to be balanced with the pedagogical needs. Gaebel et al. (2014) reported 87% of participants perceived e-learning as of benefit to the revision of teaching methods.

There are successes reported in other places, with Gonzalez et al. (2020) claiming that continuation with e-learning resources improved performance; however, Coman et al. (2020) claimed that e-learning was not working in the case of two Romanian universities. The reason for this is the lack of use of e-learning pedagogical strategies. Participants will use contact class strategies because that is how they were trained to teach. Participants said the training they received was merely technical training on how to use the technical features of Moodle. They also said that they received no training

on the theory of using e-learning resources. Some participants said they do not need to be trained on theory, because they use e-learning resources as a matter of fact like the normal use of cell phones. As P5 said, “You don’t necessarily need to go to ... or to get a class or to take a course for it, it’s user friendly, it operates normally, it’s more in line with what you use on your cell phone”. P3 stated: “I give them a chance to communicate, so as they were getting a chance when we were communication in contact sessions ... let me make an example that I just want to sign in to Face-book...”. This suggests that participants use social network communication skills to e-learning approaches.

Participants used a variety of e-learning resources without a clear theoretical approach on the use of e-learning resources for teaching and learning. This is referred to as intuitive teaching (Starkey, 2020). It is compounded by a surge of other related issues, like massive technological innovation. Massive innovation in technology is putting pressure on lecturers to teach intuitively (Starkey, 2020). In similar institutions where teaching and learning is the core function, technical systems need constant updates to a number of technologies, based on what they do. In a different study where UTAUT variables were used, performance was considered to be the highest on the list of offerings. Almetere et al. (2020) applied the UTAUT model to determine factors that influence and their relationship to adoption of the Internet of Things (IoT) technologies in Saudi public education. The findings suggest that performance expectancy and effort expectancy are those most considered by lecturers to be associated with any type of technology or e-learning resources. This shows that different variables will apply to different contexts. So, in this study it is also the performance expectancy and effort expectancy, showing that some variables can match while others do not, depending on the context and perceived variables.

7.7 Social influence

This is about the influence from other people in the use or intention to use and accept e-learning resources (Alsheri et al., 2019). Participants revealed that background disadvantages students in the use of e-learning resources. This also reflects in the participants’ responses that students’ lack of exposure and their environmental background are disadvantages to them. The level of social influence is low, and this shows by impacting negatively on students’ behavioural intention to accept and use by not attending e-learning sessions. P1 says that Moodle is new to the students, but the technology background that they already have makes it easier for them to cope. However, some of them are disadvantaged by it. P2 mentioned that some of the students had never really touched a computer before and do not know how to open an email account or send an email as they do not have an email

address. P3 said that they used to be physically interacting with their students, but now they cannot do that. COVID-19 regulations mean that she is now forced to use e-learning resources and they are working remotely. She said their students do not come from the same background and that there are some challenges that they face.

P4 stated that has noticed that when their students just arrive at tertiary education institutions as undergrads, they have not previously been exposed to e-learning resources in most cases. She mentions the environment and the background that they come from, saying a few are at a higher level of using e-learning resources, but most are at a lower level of doing so. P5 mentioned that the use of e-learning resources and the background of the students go hand to hand; for example, when a learner is from a rural area and comes to the university, most of the electronic devices are new to them. P6 mentioned that just as ‘we’ are BBT [born before technology], there are also some students that are lost when it comes to using e-learning resources. The lecturers will make use of both face-to-face and e-learning because they have seen them used like that. Ja’ashan (2020) recommended that a blended approach be used at the beginning of implementation of e-learning, before a full-scale e-learning. This suggests use of facilitating conditions to effect social influence in the acceptance and use of e-learning resources.

The study shows that participants’ use of e-learning resources has an influence on those who see them being used with ease and they start using it as well. The use of Moodle and other related e-learning resources influenced students’ levels of confidence. This finding is different to those of Jacob’s (2020) study, which concluded that social influence and facilitating conditions influence the behavioural intention in the e-learning resources adoption and usage. The findings in this study could be the same as those of Alsheri et al. (2019), where analysis indicates the presence of performance expectancy and effort expectancy having an influence on the use of the Blackboard system, because facilitating conditions was the strongest predictor for such use. Findings in this study suggests that performance expectancy and effort expectancy are supported by facilitating conditions with Moodle, then influencing behavioural intention in the acceptance and use of e-learning resources. The use of Moodle by participants has an influence on students’ acceptance and use of e-learning resources. The situation is the same in Alsheri et al.’s (2019) study, where social influence in the use of e-learning resources is low. In this study Moodle is used in universities as making for facilitating conditions which influence the acceptance and use of e-learning resources in students’ behavioural intentions.

In turn this may lead to social influence when influential people are perceived to be accepting and using e-learning resources by the users, mostly students.

7.8 Summary of the chapter

This chapter presented an introduction reflecting on the significance of e-learning theories in the teaching and learning of History in the 21st century. The chapter briefly highlighted the impact of the socio-economic and COVID-19 pandemic pressures on higher education institutions, which compelled to offer teaching and learning through e-learning resources. The chapter presented participants philosophical thinking in theorising the findings employing the UTAUT and UTAUT2 theoretical model (Venkatesh et al., 2016). Participants' experiences of e-learning resources reflected six UTAUT and UTAUT2 variables: performance expectancy, effort expectancy, behavioural intention, facilitating conditions, technology use and social influence. The chapter finds that participants use disciplinary pedagogical strategies and social communication skills with e-learning resources in the teaching of History. Participants draw from subjectivisation (personal), socialisation (social) and institutionalisation (professional) continuous everyday experiences with e-learning resources. The following chapter presents propositions that emerged from the findings of the study. It addresses the title of the study; reflects on the implications of the study and for the future, and provides the conclusion to the study.

CHAPTER EIGHT

Propositions from the findings of the study

8.1 Introduction

This chapter reflects on the title of the study and its main research questions and findings from participants in their responses to these. It reflects on the UTAUT and UTAUT 2 theoretical analysis of e-learning resources to analyse participants' experiences of e-learning resources. The title of the study is to explore lecturers' experiences of e-learning resources in the teaching of History. The chapter reflects on Chapter Five's descriptive analysis of participants' experiences of e-learning resources presented as three themes involving expository, empirical, and scientific experiences. These findings were in response to the three main research questions: What e-learning resources do lecturers use in the teaching of History? How do lecturers use e-learning resources in the teaching of History? Why do lecturers use e-learning resources in the way they do in the teaching of History? This chapter reflects on Chapter Six's philosophical thinking and interpretation of participants' experiences of e-learning resources using the UTAUT and UTAUT2 theoretical analysis. Reflection on philosophical themes that emerged involve subjectivisation (personal), socialisation (social) and institutionalisation (professional) as an overlapping continuous ongoing processing of experiencing by participants.

Chapter Seven, which theorises the findings of participants' experiences of e-learning resources using the UTAUT and UTAUT2 theoretical models, is reflected upon. This analysis reflects six variables of UTAUT and UTAUT2: performance expectancy, effort expectancy, behavioural intention, facilitating conditions, technology use and social influence. There are four propositions which emerged in this study, based on the findings presented in this chapter. These propositions are: use of UTAUT analytical strategies, enhancing phenomenological experiences, analysis of e-learning pedagogical strategies, and supportive management delivery of mobile e-learning connectivity, and are presented here with recommendations. The chapter also presents its implications and future implications in general for higher education institutions regarding the use and acceptance of e-learning resources. Finally, the chapter presents the conclusion to the study.

8.2 Proposition one: Use of UTUAT analytical strategies to determine performance expectancy in the acceptance and use of e-learning resources

This study described participants' experiences of e-learning resources based on three main research questions. In their own descriptions participants revealed the subjectivisation (personal), socialisation (social) and institutionalisation (professional) experiences of e-learning resources. Teichler (2017) claims that the university setting consists of a vertical (formal) discourse and a horizontal (informal) discourse. Khoza (2019) concurs with this view, asserting that vertical and horizontal factors reflect the personal, professional and social aspects of lecturers in the teaching and supervision of students. The latter and the former support Zhou and Brown's (2015, 2017) views on the cognitive development in teaching and learning that promotes a variety of experiences consistent with the level of learners' development. Di Stefano et al. (2016) concur that cognitive aspects enhance task understanding while emotional aspects enhance self-efficacy, and both contribute to articulating and codifying previous experiences, adding to the present experiences.

Participants' experiences are embedded in one another on a continuous basis. In theorising its findings this study employs the UTAUT and UTAUT2 (Venkatesh et al., 2016) e-learning theory analytical strategies. Participants' experiences reflect History teaching and learning disciplinary experiences which are fundamental for any university offering disciplines or modules as fields of study in the academic sense in its vertical form. However, methodological issues on how to teach and learn the discipline become critical in relation to performance in the horizontal form. The use of orthodox conventional contact and e-learning remote teaching and learning strategies makes it more critical to analyse and understand performance. Performance in orthodox conventional teaching and learning applies the ordinary pedagogical analytical methodologies of contact sessions. Performance in the use of e-learning resources requires e-learning pedagogical analysis in the use of e-learning resources in the teaching and learning. In this study participants reflected ordinary pedagogical analytical methodologies of contact sessions, but in the use of e-learning resources. This means that they did not apply the e-learning theoretical analysis for performance expectancy as suggested in UTAUT and UTAUT2.

Performance expectancy is participants' perception about the benefits of acceptance and use of e-learning resources in terms of the task (Alsheri, et al., 2019; Almaiah, et al., 2017). Findings show that performance expectancy is highly considered by participants, but in orthodox conventional pedagogies methodologies. All participants emphasised their role of teaching as individuals, which

is subjective, and their role as lecturers or teachers, which is institutional. Participants emphasised their role of teaching History content, which is social, and based on ideological assumptions of being content worth teaching. Teaching and learning of the History discipline need to promote multiple reflective perspectives. This multiperspectivity involves acceptance and use of e-learning resources. Reflective e-learning experiences of the self, social and professional are supportive of the 21st century teaching and learning. This study proposes the use UTAUT analytical strategies to determine performance expectancy in the acceptance and use of e-learning resources.

8.3 Proposition two: The use of e-learning resources to enhance phenomenological experiences in the acceptance and use of e-learning resources

This study found that effort in determining effectiveness of teaching and learning is linked to performance. However, an implicit determination of effort expectancy reflected the acceptance and use of e-learning resources without participants being aware of the e-learning theoretical analysis of e-learning effort expectancy. All participants use Moodle for assessment, but their acceptance and use of Moodle is influenced by the institution, as it is mandatory for them to use Moodle (Khoza, 2021). The use of Moodle makes participants perceive it as easy to use e-learning resources for assessment (Chumo & Kessio, 2015). There is not much effort on their side to put in extra effort, other than using the e-learning resources put in place for them through Moodle. Participants mentioned that they assess online, and students receive their results and feedback immediately after they completed the assessment. The study finds that participants rely on facilitating conditions within their institutions. They did not show awareness of performance expectancy from the e-learning theoretical understanding of perspectives as per UTAUT variables.

The study finds that participants' effort expectancy is informed by their disciplinary assessment requirements, which reflect the socialisation or standardisation of performance and institutional conditions. It shows that their subjectivisation process of experiencing is influenced by the other two forms of experiences. The use of e-learning resources in the teaching and learning of History is not supported by e-learning resources that are specific to the e-learning analytical performance expectancy in the teaching and learning of History. There is a need for an e-learning theoretical model that supports multiple reflective perspectives. The UTAUT and UTAUT2 theoretical model is an e-learning theoretical model reflective of the three philosophical perspectives in support of 21st century teaching and learning. Experiences are phenomenological in their manifestations; they are context

based and the context within which they are unfolding is multidimensional. A scientific experience in the Social Sciences or Humanities is context based on the experiences of their disciplines.

In Chumo and Kessio (2015) students who were studying for ICT related courses showed a high rate of acceptance and use of e-learning resources. However, in this study, in the Social Sciences and Humanities where History teaching and learning is located, scientific understanding is phenomenological understanding (De Regt & Baumberger, 2019). Phenomenological understanding in the acceptance and use of e-learning resources involves the meaningful aspects of the experience of interacting online involving email, texting, or social networks of value to professional practitioners (Van Manen, 2014). It is critical that effort expectancy in the use of e-learning resources reflects theoretical analytical experiences as suggested in the UTAUT and UTAUT2. This suggests that disciplinary experiences are critical to the acceptance and use of e-learning resources. This study argues that the use of e-learning resources is meant to enhance phenomenological experiences in the acceptance and use of e-learning resources.

8.4 Proposition three: A need for e-learning pedagogical analysis

The findings of this study show that participants use different e-learning resources, based on their exposure to those e-learning resources. It is revealed that their acceptance and use of these e-learning resources is the same as in the orthodox traditional conventional pedagogic disciplinary methods. P2 said they infuse e-learning methods into different modules, and they learnt using e-learning methods through History teaching and learning from different literature. This shows awareness and intention in acceptance and use of e-learning resources. However, it needs e-learning theoretical understanding that supports the disciplinary understanding. P1 said e-learning resources cut across methods, but methods are context based. This suggests that he makes assumptions that disciplinary methods are the same as e-learning pedagogical methods. P3, P5 and P6 said they use social communication skills with e-learning resources. This suggests that they perceive social communication skills to be the same as e-learning skills. P4 mentioned that she is using contact session methods and e-learning theory will be decided as she continues using e-learning resources. This suggests that participants are not using e-learning pedagogical and methodological strategies.

In Ja'ashan's (2020) study it was recommended that comprehensive e-learning training is required, and preparation should be made for compulsory e-learning courses, because e-learning is different from traditional learning. There is a need for e-learning pedagogical theory and practices that will

enhance the acceptance and use of e-learning resources that are reflective of the contextual, personal, social, and professional experiences. Gaebel et al. (2014) found that 87% of participants perceived the gains of digital learning to be critical for the review of teaching and learning. The study further found that 70% perceive e-learning to be bringing changes to teaching and learning approaches. This suggests a need to accept and use e-learning resources for e-learning pedagogical analysis.

8.5 Proposition four: A need for supportive management delivery of mobile e-learning connectivity for quality e-learning resource material

The study shows that the use of e-learning resources is linked to the contextual background and exposure to e-learning resources. All participants reflected on their background of students in the use of e-learning resources. P1 said students are disadvantaged by their background, and P2 mentioned that some students were never previously exposed to e-learning resources. P3 alluded to their students not coming from the same background and some having challenges with e-learning resources. P4 articulated that they only have their cell phones with them when they enrol at university. P5 said the background of the students does not go hand to hand with expectations, as some of them come from distant rural areas which are not familiar with university contexts. P6 mentioned that some of the students come from a background of BBTs (born before technology), and they struggle with e-learning resources. All of the participants reflect on the acceptance and use of mobile e-learning resources. Almaiah et al.'s (2017) study using UTAUT to find out about the acceptance and use of mobile learning concluded that performance expectancy, effort expectancy and facilitating conditions determine the acceptance and use of mobile learning. The study shows that there are also other external factors that support the UTAUT variables.

In this study participants' use of e-learning resources like cell phones or tablets and the social communication skills are perceived to be external determinants that influence to the acceptance and use of e-learning resources. Moreover, disciplinary teaching and assessment requirements are perceived to be external factors influencing consideration in the use of e-learning resources. Findings suggest that it is critical to accept and use the UTAUT theoretical model to determine perceived e-learning resources for the teaching and learning of History. Improvement of the behavioural intention of both participants and students could be promoted in the adoption of e-learning resources. A need for supportive management delivery of mobile e-learning connectivity for quality e-learning resource material is critical in this regard. This will support e-learning pedagogical strategies developing visual e-learning and teaching strategies in response to excessive use of listening skills, as mentioned by P2

and P6. It will also promote e-learning pedagogical skills on developing students' epistemologies as mentioned by P1. This enhances the multiperspectivity of pedagogical strategies in the History discipline.

8.6 Addressing the title of the study: Lecturers' experiences of e-learning resources in the teaching of History

This study was guided by three main research questions, as follows:

- What e-learning resources do lectures use in the teaching of History?
- How do lecturers use e-learning resources in the teaching of History?
- Why do lecturers use e-learning resources in the way they do in the teaching of History?

The three main research questions guided the study in its approach to understanding lecturers' experiences of e-learning resources. Chapter Five presented descriptive responses of the participants to the three main research questions. Participants responded to the first research question by giving descriptive experiences that revealed a variety of e-learning resources which they are exposed to. Participants' exposure to e-learning resources led to the emergence of an expository theme that reflected their everyday exposure to e-learning resources. This theme was generated by three categories reflecting participants' experiences, and they involve the extensive use of Moodle where a variety of other e-learning resources are connected. Teaching and learning, assessment and communication are interactive experiences of participants in the use of e-learning resources.

In their response to the second main research question, participants reflected an actual use of e-learning resources. Participants experiences led to the emergence of theme two, empirical experiences. This theme is generated by categories involving features, delivery, material, and interaction in the use of e-learning resources. Participants' experiences are within the scope of their work environment, which is practically and physically where they are using e-learning resources to teach their students.

The third research question led to the emergence of a third theme, scientific experiences of participants. This theme emerged from categories involving discipline or content, the specific or particular, rationale or purpose, methods or strategies, continuation and flexibility in the use of e-learning resources. All of these themes with their categories were presented in Chapter Five of the study as findings from participants' response to the three main research questions.

In Chapter Six the study generated participants' philosophical standing through the interpretation and analysis of participants' experiences of e-learning resources. This led to the emergence of three philosophical themes involving subjectivisation (personal), socialisation (social) and institutionalisation (professional). Participants revealed continuation in these experiences as they all overlap over each other at the same time. Continuation of experiences reveals the conscious and subconscious experiences as they use different e-learning resources (Khoza, 2021). Khoza (2021) argues that the combination of needs using learning management systems (LMS) and the Short Message Service (SMS) leads to pragmatic reflection on the needs of the users, where everyday experiences fuse with cognitive teaching and learning experiences.

In their response to the third main research question "why", participants revealed their personal, social, and professional identity in two ways, conscious and subconscious. In their responses they referred to themselves personally as "I" and professionally as "lecturer" or "teacher" in relation to their personal and professional responsibilities to the institution as "teaching History modules or discipline". In this study their identity of the self which is permanent in them is their subconscious identity, and by reflecting on their roles as lecturers or teachers they reflected their conscious identity of "intellectual process" (Khoza, 2021, p. 15). In their preparations for the use of e-learning resources for teaching and learning as well as assessment, participants reflected the conscious identity of their professional responsibility and the subconscious identity of themselves personally involved in the preparation of their lessons.

They revealed the time that it takes them to prepare for the lesson, the presentation of the lesson and the assessment using e-learning resources; this shows personal, social, and professional reflections. Participants were pragmatic in their preparations, presentations, and assessment in the use of e-learning resources (Khoza, 2021). Khoza (2021) argues that a pragmatic identity needs to be supported by a digitalised curriculum. Participants alluded to challenges with accommodating a certain number of students, as articulated by P1; P2 said he experienced problems with students' attendance. The most common challenge was the students' background and their exposure to using e-learning resources.

Khoza (2020) argues that questions that address "how" digital technologies are used reflect the knowledge of societal social messaging sites, and that leads to self-actualisation when combined with the personal and professional questions that address "what". In this study the question of "why" led

participants to subconsciously reflect on the empirical dynamics of teaching and learning using e-learning resources. P2 mentioned that he cannot complete his sessions because students lose concentration. P4 said students become passive and she cannot ask probing questions as she would in contact sessions. This shows their interaction with, and empirical use of e-learning resources compels them to use e-learning resources in the way they do. This suggests a need to employ e-learning analytical strategies for e-learning methods, to address e-learning contextual pedagogical challenges.

Some external factors contribute to the use of e-learning resources by participants. These pointed to personal reasons, as P1 mentioned that he needed to be on par with the Fourth Industrial Revolution, while P2 said it was for self-empowerment and research; all other participants reflected on their skills and expertise in the use of e-learning resources for teaching and learning. P3, P5 and P6 do not think they need more training, as their social skills enable them to use e-learning resources in the way they do. Khoza (2021) argues that the COVID-19 pandemic forced the development of the Fifth Industrial Revolution in recognition of the natural identity where human actions are driven by nature. This new identity is revealed by all of the participants when they reflect on the changes imposed by the COVID-19 pandemic, and their resorting to social communication skills for e-learning resources. Khoza (2021) argues that pragmatic identities can function optimally when supported by relevant theories or pedagogies for e-learning resources. This study argues that the use social communication skills needs to be improved with quality management delivery systems to enhance the acceptance and use of e-learning resources to address the disadvantaged background of users.

8.7 Implications of the study

Participants are exposed to e-learning resources, and their exposure is informed by facilitating conditions from the university technical support team. This suggests that IT specialists determine the acceptance and use of e-learning resources for the users; users only get exposed to those e-learning resources, without them determining the acceptance and use of e-learning resources. This study will contribute to the user deciding on the acceptance and use of e-learning resources in relation to the tasks they want e-learning resources to perform.

The study found that participants use disciplinary pedagogic methodologies for teaching and learning using e-learning resources. This suggests that they do not have a theoretical background of the use of e-learning to support disciplinary pedagogic methodologies. This study can contribute to adding the

theoretical understanding of accepting and using e-learning resources in support of disciplinary methodologies. This will enhance more users' experiences of e-learning resources.

The findings of the study show that there is poor social influence on the acceptance and use of e-learning resources. Participants use Short Message Services (SMS) skills for teaching and learning using e-learning resources. This suggests that social influence is based more on the SMS skills, which are for social communication. This study suggests the provision of quality mobile e-learning sites with e-learning pedagogical influences to close the gap between learning management systems (LMS) and the SMS to ensure continuity in the acceptance and use of e-learning resources.

The study found that participants reflect on three continuous interrelated experiences involving their personal, social, and professional identities. However, these experiences are articulated within the disciplinary teaching and learning experiences. This study will add more e-learning pedagogical experiences in the acceptance and use of e-learning resources in support of the disciplinary experiences. This study recommends the use of e-learning pedagogical strategies where e-learning resources are used for teaching and learning.

8.8 Implications for the future

The focus of this study was on lecturers' experiences of e-learning resources in the teaching of History at universities in South Africa. The findings have wider implications for the acceptance and use of e-learning resources in higher education institutions. This suggests that more research needs to be conducted on the acceptance and use of e-learning resources in higher education institutions. Higher education institutions enrol students from different backgrounds in different disciplines taught by different discipline lecturers. The study found that students' background may disadvantage them when they enrol at universities. This recommends that the findings of the study be considered for future acceptance and use of e-learning resources for more in-depth and wider understanding at different levels of e-learning resources. External factors like the impact of globalisation, Fourth Industrial Revolution and COVID-19 pandemic are some of the experiences that 21st century teaching and learning is going through. These external factors need more understanding of the acceptance and use of e-learning resources at higher education institutions.

8.9 Conclusion

The study explored lecturers' experiences of e-learning resources in the teaching of History at universities in South Africa. Participants in the study reflected lecturers' experiences of e-learning resources, with three descriptive experiences from an individual participant, involving expository, empirical, and scientific experiences as findings revealed in Chapter Five. In Chapter Six, the findings in Chapter Five were interpreted and analysed to reveal the philosophical standing of the study. The philosophical themes that emerged involve subjectivisation (personal), socialisation (social) and institutionalisation (professional) as the ongoing processing of experience by participants. The UTAUT and UTAUT2 theoretical model was used to understand the e-learning experiences of participants. In Chapter Seven the findings of theoretical analysis in Chapter Six were theorised using the UTAUT and UTAUT2 theoretical model and the results showed that six variables of UTAUT and UTAUT2 were reflected in participants e-learning experiences. The UTAUT and UTAUT2 variables reflected include performance expectancy, effort expectancy, behavioural intention, facilitating conditions, technology use and social influence.

Chapter Eight of the study is the final chapter that presented four propositions of the study based on its findings. The title of the study and its main research questions and findings from participants in their responses to the main research questions are reflected upon. The chapter presented implications of the study and its recommendations to the readers, and it recommends for the use of e-learning pedagogical strategies where e-learning resources are used for teaching and learning. Finally, the chapter reflected on the future implications at higher education institutions in general on the use and acceptance of e-learning resources, and it recommends that the findings be considered for future acceptance and use of e-learning resources for more in-depth and wider understanding at different levels of e-learning resources.

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Annexure A: Interview schedule

Data Generation Instrument: Semi-structure interviews

Name of participant:

Gender:

Number of years in teaching:

Faculty:

1. What e-learning resources are you using in the teaching of History?

2. Where do you use e-learning resources in the teaching of History?

3. What makes you teach History with e-learning resources?

4. When do you use e-learning resources in the teaching of History?

5. How often do you use e-learning resources in the teaching of History?
6. How long does it take for you to use e-learning resources in the teaching of each session of History including preparation?
7. Who helps you with the preparation to use e-learning resources in the teaching of History?
8. How do you use e-learning resources in the teaching of History?
9. Why do you use e-learning resources the way you do in the teaching of History?

Annexure B: Observation schedule

Data Generation Instrument: Observation Schedule

Reception	Interaction	Resources	Activities

Annexure C: Document analysis schedule

Data Generation Instrument: Document Analysis Schedule

Type of document	Content of the document	Date of the document	Quality of the document	Purpose of the document

Annexure D: Participant consent letter

Consent form for lecturers

D.T Tshabalala (Mr)

P.O Box 855

Pinetown

3600

09 November 2020

Dear Participant (Lecturer)

INFORMED CONSENT LETTER

My name is Dongwa Timothy Tshabalala I am a student at the University of KwaZulu-Natal, Edgewood Campus. I am studying for PhD degree of Education in curriculum studies under the supervision of Prof. S.B. Khoza. The title of my study is about exploring lecturers' experiences of e-learning resources in the teaching of History at universities in South Africa. I have attached my ethical clearance certificate, gate keeper's permission to conduct research and questions pertaining to the subject of research. I am kindly requesting you to answer some of the questions based on your experiences of using e-learning resources in the teaching of History. Your participation in this study entails document analysis which could be emailed or collected as per arrangement. It will also include observation and interview sessions that may take 30-45 minutes each. Please note that:

- Your confidentiality is guaranteed as your contribution will not be attributed to you in person, but reported only as population member option.
- Document analysis, observation and semi-structured interviews may last for about 30-45 minutes
- Any information given cannot be used against the university, and the collected data will ONLY be used for the purposes of this study.
- There will be no limit on any benefit that you may receive as a participant in this study.
- Data will be stored in secure storage and destroyed after five years

- You have choice to participate, not participate or stop participating in the study. You will not be penalized for taking such an action.
- You are free to withdraw from the study at any time without any negative or undesirable consequences.
- Your real names will not be used, but symbols such as A, B, C, D, E, F, G, H, I and J.
- The study aims at understanding the lecturer's e-learning experiences in the teaching of History at universities in South Africa.
- University and lecturers' involvement is purely for academic purpose only, and there are no financial benefits involved.
- If you agree to be interviewed and to be observed, please indicate by ticking whether you agree or do not agree to be recorded by the following equipment:

The following work plan will be used to complete this research project:

Equipment	Willing	Not Willing
Tape recorder		

My contact details:

Cell phone: 084 420 9018

E-mail address: dongwat@gmail.com. Any questions or concerns regarding your rights as a participant in the study which you may not feel comfortable to discuss with me could be directed to my supervisor, Prof. S.B. Khoza

Supervisor: Prof. S.B. Khoza

Tel: 031 260 7595

E-mail Address: khozas@ukzn.ac.za

School of Education, Edgewood Campus, University of KwaZulu-Natal

Discipline Coordinator: Dr N.M Nzimande

Curriculum Studies, School of Education,

Edgewood Campus, University of KwaZulu-Natal

Tel: 031 260 2470

Cell: 082 202 2524

E-mail: nzimandem2@ukzn.ac.za

You may as well contact the Research Office:

Ms Simangele Shezi
HSSREC Research Office,
Tel: 031 260 3587
E-mail: SheziS2@ukzn.ac.za

DECLARATION

I _____ (Full names of Participant) hereby confirm
that I understand the contents of this document and the nature of the research project, and I consent
to participate in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I desire.

SIGNATURE OF PARTICIPANT

DATE

Annexure E: Ethical clearance



UNIVERSITY OF
KWAZULU-NATAL

INYUVESI
YAKWAZUW.NATALI

14 November 2019

Mr Dongwa Timothy Tshabalala (9151615)
School of Education
Edgewood Campus

Dear Mr Tshabalala,

Protocol reference number: HSS/0234/019D

Project title: Exploring lecturers' experiences of e-learning Resources in the teaching of History at Universities in South Africa

Approval Notification — Expedited Application

In response to your application received 23 March 2019, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

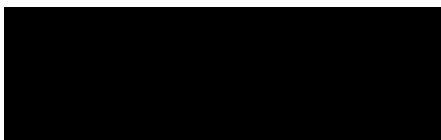
Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment [modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



Professor Urmilla Bob
University Dean of Research

Humanities & Social Sciences Research Ethics Committee Dr Rosemary
Sibanda (Chair)
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001 , Durban 4000
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses: Edgewood College Medical School Pietermaritzburg Westville

INSPIRING GREATNESS

Annexure F: Gate keeper's letter



4 February 2019

Mr Dongwa Timothy Tshabalala (SN 9151615)
School of Education
College of Humanities
Edgewood Campus
UKZN
Email: dongwat@gmail.com

Dear Mr Tshabalala

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 studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"Exploring Lecturers' Experiences of e-Learning Resources in the Teaching of History at Universities in South Africa."

It is noted that you will be constituting your sample by conducting interviews and/or using semi-structured observation on academic staff members in the College of Humanities at UKZN.

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 '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

PER JO MURRAY
REGISTRAR

Office of the Registrar

Postal Address: Private Bag 3054001, Durban, South Africa

Telephone: +27 (0) 31 260 8556/2206 Facsimile: +27 (0) 31 260 7524/2204 Email: registrar@ukzn.ac.za

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ZULULAND

Office of the Deputy Vice-Chancellor: Research & Innovation

D.T Tshabalala
Faculty of Education
Department of Human and Social Sciences University of KwaZulu-Natal

26 January 2021

per email: dongwat@gmail.com

Dear Mr Tshabalala

Request to conduct a research study on: "Exploring lecturers' experiences of eLearning resources in the teaching of History at universities in South Africa"

Your letter to me refers.

The University of Zululand's Research Ethics Committee (UZREC) hereby grants approval for you to conduct part of your research at UNIZULU, as per the methodologies stated in your research proposal and in terms of the data collection instruments that you have submitted.

We note also that University of KwaZulu-Natal (UKZN) has issued an ethical clearance certificate and, having read the documentation, we accept the submission in good faith.

You may use this letter as authorization when you approach the relevant persons. Please note that the permission is based on the documentation that you have submitted. Should you revise your research instruments, or use additional instruments, you must submit all the changes to the University of Zululand Research Ethics Committee (UZREC).

The UZREC wishes you well in conducting your research.

Yours


Professor Mashupye R. Kgaphola
Chairperson: University Research Ethics Committee
Deputy Vice-Chancellor: Research & innovation

Annexure G: Turnitin

Submission ID: 1736510226

Exploring Lecturers' Experiences of e-Learning Resources in the Teaching of History
at Universities in South Africa

By
9151815

A thesis submitted in fulfillment of the requirements for a Doctor of Philosophy
degree in Curriculum Studies

School of Education, College of Humanities, University of KwaZulu-Natal

Durban, South Africa

Supervisor: Professor Simon Shikwi Kwaqa

Submission date: 17 December 2021

Declaration of authenticity

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11



