

**THE IMPACT OF CORONAVIRUS (COVID-19) PANDEMIC ON TEACHING AND  
LEARNING: A CASE OF SECONDARY SCHOOLS IN LULEKANI CIRCUIT, MOPANI  
DISTRICT, LIMPOPO PROVINCE**

by

**MAVUNDA STEFANI STEVEN  
STUDENT NO: 21008847**

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**SUPERVISOR: Dr NP Mafenya  
CO-SUPERVISOR: Dr MG Sikhwari**

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## DECLARATION

I, **MAVUNDA STEFANI STEVEN**, declare that the proposal titled:

**"The Impact of Coronavirus (COVID-19) Pandemic on Teaching and Learning: A Case of Secondary Schools in Lulekani Circuit, Mopani District, Limpopo Province"**

... is my work and all sources that have used, have been indicated and acknowledged using complete reference.

Signature: .....*Mavunda S.S.*.....

Date: 10/01/2024

## DEDICATION

I dedicate and say thanks to all those who contributed in different ways to the success of this study and made it an unforgettable experience for me. To Our God Almighty who is always there when I am in need. Thank you for guiding me and giving me strength in my everyday life. Thank you for always looking out for me and being there for me. Thank you for making all of these happen and ending it with a good outcome. To my dear wife Nkhensani. Thank you for giving me the support to reach my dreams. Accomplishing this would hopefully make you proud of me as much as I am proud of having you as my wife. I love you, mama. To my siblings. Thank you for all the things you have done for me. I know you will be proud of me for doing this accomplishment. You are truly the best siblings a brother could ever have. I would like to sincerely thank my supervisor Dr NP Mafenya for your guidance, support, and patience throughout this study. I apologize for being a problem to you when I was doing this study.

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## ABSTRACT

The advent of coronavirus (COVID-19) pandemic was unexpected the world over. On the 11<sup>th</sup> of March 2020, the World Health Organizations (WHO) declared the coronavirus disease of 2019 (COVID-19) outbreak a global pandemic (World Health Organization (WHO), 2019). COVID-19 first emerged in the Chinese Province of Wuhun in December 2019. The advent of COVID-19 was followed by stringent measures on attempts to curb the spread of the virus, among them was the lockdown measures. There were also various health responses on attempts to fight COVID-19, with various countries around the world implementing several Public Health and Social Measures (PHSM), which included movement restrictions, closure of schools and businesses and international travel restrictions (Spaull & Van der Berg, 2020). From 27 March 2020, South Africa was compelled into a national lockdown following all the business, private and public institutions being closed (Schleicher, 2020). Primary and secondary schools were the first to be closed on 18 March 2020 in an attempt to contain the spread of COVID-19. The current study is set to examine the impact of COVID-19 pandemic on teaching and learning at two selected secondary schools in Lulekani Circuit, Mopani District in Limpopo Province. A qualitative case study research design will be adopted for this study, where the interview guide will be used to collect the data through interviews. The study participants who will be purposefully sampled will include School Management Team members (SMT) – principals or deputy principals, Heads of Department (HoD), educators and learners of these selected two Secondary Schools. The data collected will be analysed using thematic analysis where text will be analysed and coded into themes. The findings on the perceived implications of COVID-19 on education will be presented as results. Recommendations and suggestions will be provided based on the findings. Recommendations will be provided to assist the Heads of Schools, the Department of Basic Education, and other relevant departments on how situations such as the COVID-19 pandemic could be dealt with in the future.

**Keywords:** Coronavirus (COVID-19), Lockdown, Online Learning, Pandemic and Social Distance

## LIST OF ACRONYMS

AACTE	:	American Association of Colleges for Teachers Education
CAPS	:	Curriculum and Assessment Policy Statement
CLT	:	Connectivism Learning Theory
DoE	:	Department of Education
ECD	:	Early Childhood Development
ERIC	:	Education Resource Information Centre
FET	:	Further Education and Training
HoD	:	Head of Department
ICTs	:	Information and Communication Technologies
LMS	:	Learning Management System
PHSM	:	Public Health and Social Measures
RESEP	:	Research on Socioeconomic Policy
SABC	:	South African Broadcasting Co-operation
SEL	:	Social Emotional Learning
UNESCO	:	United Nations Educational, Scientific and Cultural Organization
UNICEF	:	United Nations International Children's Emergency Fund
WHO	:	World Health Organisation

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## CHAPTER 1

### THE PROBLEM AND STUDY ORIENTATION

#### 1.1 INTRODUCTION

The advent of the COVID-19 pandemic resulted in the disruption of different socio-economic, cultural, and political aspects across the world. On the 11<sup>th</sup> of March 2020, the World Health Organisation (WHO) declared the coronavirus disease of 2019 (COVID-19) outbreak a global pandemic (World Health Organization [WHO], 2020). The coronavirus first emerged in the Chinese Province of Wuhan in December 2019. The lives of people were brought to a practical halt by the rapid spread of COVID-19 (WHO, 2020). Among the various socio-economic and cultural practices that were affected by the outbreak of the COVID-19 pandemic, and the subsequent measures to contain the spread of COVID-19, the education sector was one of the areas that were affected. Akram, Aslam, Saleem and Parveen (2021), COVID-19 indicated that the lockdown measure pressured academic institutions to terminate their activities and highlight the importance of Information and Communication Technologies (ICTs) integration in education as well as emphasising the importance of making changes to pedagogical practices.

In response to fighting against COVID-19, most countries in the world implemented several Public Health and Social Measures (PHSM), which included movement restrictions, closure of schools, both public and private businesses and international travel bans (Spaul & Van der Berg, 2020). From 27 March 2020, South Africa was compelled into a national lockdown where all businesses and public institutions were closed (Schleicher, 2020). Primary and secondary schools were the first to be closed on 18 March 2020 to contain the spread of the COVID-19 Pandemic. The impact of the COVID-19 pandemic led to speculation regarding its impact on the teaching profession (De La Rosa, 2020). Education scholars and polls suggest shifting trends: decreased enrolment in educator preparation programs, decreased teacher interest in staying in the profession, and increased considerations for retirement (Kurtz & Bushwelle, 2020; Perry, 2020). The pandemic has further generated policy shifts to teacher candidacy, licensure, and

certification (American Association of Colleges for Teachers Education [AACTE], 2020). Underlying all these shifts were the significant changes to teacher's working conditions, for example, uncertainty and changing schooling formats, a new focus on remote learning, and new protocols for health and safety, as well as significant learning loss and the social and emotional needs of both learners and instructors. The COVID-19 crisis will undoubtedly have direct consequences for all sectors of public education. The rapid transition to remote modes of instruction in the spring of 2020 and the subsequent anxiety about the start of the 2020-21 academic year have highlighted the critical need for well-prepared educators and learners. Therefore, this study intends to explore the impact of the COVID-19 pandemic on teaching and learning in two selected secondary schools of Lulekani Circuit in Mopani District, Limpopo Province, South Africa.

## **1.2 STATEMENT OF THE PROBLEM**

The impact of the COVID-19 pandemic led to speculation regarding its impact on the teaching profession (De La Rosa, 2020). Education scholars and polls suggest shifting trends: decreased enrolment in educator preparation programs, decreased teacher interest in staying in the profession, and increased considerations for retirement (Kurtz & Bushweller, 2020; Perry, 2020). The pandemic has further generated policy shifts to teacher candidacy, licensure, and certification (American Association of Colleges for Teacher Education, 2020). There were also significant changes to teaching working conditions, for example, uncertainty and changing schooling formats a new focus on remote learning, a lack of social and emotional needs of the learners, as well as new protocols for health and safety. The rapid transition to remote modes of instruction in the spring of 2020 and the subsequent anxiety about the start of the 2020-21 academic year have highlighted the critical need for well-prepared educators. Despite the considerable amount of research focusing on the impact of COVID-19 on teaching and learning, the results of this research were context-specific. This research will focus on the impact of COVID-19 in a rural setting using two secondary schools of Lulekani Circuit in Mopani District in Limpopo Province, South Africa. This will further provide insights on the

proactive measures on how the education sector could deal with future challenges of similar situations.

### **1.3 STUDY OBJECTIVE**

The primary objective of this study was:

- To understand the impact of COVID-19 on teaching and learning at the Lulekani Circuit in the Mopani District, Limpopo Province, and further suggest strategies that could be used in future to mitigate these challenges.

To achieve the above primary objective, the following secondary objectives will be considered:

- Analyse and subsequently describe the experiences of teaching and learning during the COVID-2019 Pandemic.
- Understand the challenges in adopting the new teaching and learning environment and curriculum delivery.
- Provide suggestions and recommendations on responding to national crises such as COVID-19 to ensure educational sustainability.

### **1.4 RESEARCH MAIN QUESTION**

How did the experiences, challenges, and responses to teaching and learning during the COVID-2019 pandemic shape educational sustainability, particularly in terms of adapting to new environments, curriculum delivery, and addressing national crises? The main research question was underpinned by the following sub-questions:

- What were the experiences of teaching and learning during the COVID-2019 pandemic?
- What were the challenges in adopting the new teaching and learning environment and curriculum delivery?
- How do the suggestions and recommendations in responding to national crises such as COVID-19 improve the quality and sustainability of education?

## 1.5 PRELIMINARY LITERATURE REVIEW

### 1.5.1 The Impact of the COVID-19 Pandemic on Teaching and Learning

COVID-19 resulted in the abrupt closure of academic institutions across the world (UNESCO, 2020). The immediate temporary closure of academic institutions was to provide a window for governments on how best they could engineer a strategy that is effective in maintaining teaching and learning and at the same time being healthy bound and containing the spread of COVID-19. Initially, the closure of the schools was intended for a short time, however, it was extended for a longer period due to uncertainty reasons on how best the education could be sustained without spreading the virus. Tarkar (2020) indicated that the closure of schools has affected the structure of schooling. The teaching and assessment methodologies were affected, and new online teaching methods were adopted by the few private schools that had the resources and capacity to adapt to the new demands and trends in teaching and learning. This was different with the public schools, let alone those located in rural areas, which had no technical know-how, resources, or capacity to ensure that they could adapt to the new trends in teaching and learning (Tarkar, 2020).

The challenges experienced during COVID-19 in the education environment differ from context to context. The study by Tadesse and Muluye (2020) identified that the school closure had challenges for teachers, learners, and parents. Distance learning was also coupled with various challenges such as inequality levels in terms of lack of access to the Internet, computers, mobile smartphones, and network infrastructures. Various developing countries suffer devastatingly from these challenges (Tadesse & Muluye, 2020). Various studies indicated that most developing countries are still lagging in terms of the 4iR and the full utilisation of digital technologies (Ayentimi, 2020, Cowie, Townsend & Salemink, 2020). This points to the fact that despite having an alternative strategy to adopt the use of digital technologies, it remained difficult for most countries in the developing world to fully actualise the benefits that digital technologies offer in teaching and learning.

### 1.5.2 Challenges Encountered by Teachers and Learners During COVID-19

In response to COVID-19 school closings, teachers all over were required to shift gears immediately to respond to students and their families' needs with synchronous and asynchronous virtual instruction. Teachers responded overnight to teach in new modalities. They filmed themselves conducting experiments, hosted Zoom shows, prepared materials for students with variable Internet access, and even demonstrated concepts outside students' screen doors. Some teachers reported being busier than they were before the school buildings closed, as they were expected to be present and available, with office hours during lunch, and student groups arriving and leaving throughout the day. All of this took place while trying to simultaneously instruct their children who were home (Strauss, 2020). Over the last several months, the COVID-19 pandemic has caused the teachers to enter a shocking, and at many times painful, natural experiment. Despite a slow march of policies and cultural practices that have chipped away at the professional status of teachers (Milner, 2013) and the resources they need to do their jobs, the sudden closure of the schools has brought into sharp focus the true importance of teachers and the work most do every day on behalf of other people's children.

Akram, Aslam, Saleem and Parveen (2021) revealed that the transition period caused an urgent requirement for education instructors to gain understanding and competencies in the use of digital virtual platforms to prepare the classes, teach and assess learners. The uses of these digital technologies require individuals to have digital technology skills (Kayembe & Nel, 2019). Some of the educational instructors had no intensive skills in the use of digital technological tools such as Blackboard for academic purposes such as conducting a class session, participating, and tracking learners' performances and assessments for exams. All these inequalities in terms of digital skills, access to technological devices, and access to the Internet have been a critical challenge in most developing countries to adopt the use of digital technologies in education. The advent of COVID-19 also resulted in people experiencing challenges with mental and psychological health issues and dealing with these problems. COVID-19 harmed higher-risk

populations, the social-emotional deficits through trauma responsiveness and multifaceted Social Emotional Learning (SEL). The psychological impact of the experiences of quarantine measures on teaching and learning (Soni, 2020). Praghlapati (2020) observed that almost 24.9% of the students in China experienced anxiety because of COVID-19. The anxiety levels were also coupled with other factors such as living with families that have lower income levels and perhaps affected by COVID-19 (Praghlapati, 2020).

### **1.5.3 Professional Benefits of Online Education**

As a response to the COVID-19 pandemic, many countries around the world closed schools, to reduce the spread of the virus. According to data from UNESCO, the peak in school closures was registered at the beginning of April 2020, when many learners were affected across many countries (WHO, 2020). The sudden closure of schools meant that education policymakers, school principals and teachers must find alternatives to face-to-face instruction to guarantee children's right to education. Many systems have adopted online teaching and learning on an unprecedented scale, often in combination with widespread remote learning materials such as television and radio. Studies show that until effective vaccines for the novel coronavirus become available, it is likely that schooling may continue to be disrupted (Spaull & Van der Berg, 2020; Schleicher, 2020). In 2020, a study was conducted in Hong Kong by Ng, Reynolds, Chan, Li and Chu using a qualitative approach to assess the effectiveness of using online learning technologies to support academia around the world. The study found that both primary and secondary school teachers used blended learning. Teachers offer diversified learning activities such as logbooks, gasification, webinars, and social media tools in a wider range of subjects (Ng et al., 2020).

Teachers adopted a diversified mode of learning/teaching from asynchronous to blended approach of asynchronous and synchronous learning during the class suspension (Ng et al., 2020). The school IT team provided timely support for teachers and learners to make available learning software and electronic devices. In Pakistan, a study conducted by

Shehzadi and Qasm Ali Nisar (2020) shows that learners commonly perform better on digital platforms than the traditional contact ones. Researchers like Al-Samarraie and Saeed (2018). A study conducted by Farid and his colleagues exposed that the digital competency of teachers in terms of developing pedagogical lessons is found to be inadequate (Farid et al., 2015) although teachers' contribution cannot be neglected ICT in the classroom effectively (Oguguo et al., 2020) another study conducted by Salam and his colleagues discovered that online teaching and learning have shown significant improvement though several barriers still exist that hinder the effectiveness of ICT integration in education (Salam et al., 2017). These challenges that were experienced differently from one country to the other, and from community to community, in attempts to sustain the education system, present an opportunity for identifying proactive approaches that are relevant towards sustained educational practices.

## **1.6 THEORETICAL FRAMEWORK**

According to Maxwell (2006:33), a theoretical framework is “an array of concepts, assumptions, expectations, beliefs and theories that support and inform a study investigation”. Camp (2001:16) adds that a theoretical framework of the study is the pre-conceived conceptual perspective on an area of study which informs how the study is conceptualised and conducted. As the aim of this study is to explore the impact of the coronavirus pandemic on teaching and learning, this study is using Siemens' (2004) connectivism learning theory as its theoretical framework.

Connectivism learning theory was developed by Siemens and Downes as a theory for the digital age. According to Duke, Harper and Johnston (2013), connectives is defined “as actionable knowledge, where an understanding of where to find knowledge may be more important than answering how or what that knowledge encompasses” (Duke et al, 2013:7). Downes also described connectives as: “... the thesis that knowledge is distributed across a network of connections, and therefore that learning consists of the ability to construct and traverse those networks” (Downes, 2007:9). Connectivism is suitable to this study because connectives are characterised as the enhancement of how

a student or learner learns with the knowledge and perception gained through the addition of a personal network (Siemens, 2004). During the COVID-19 lockdowns, teachers and learners relied on blended teaching and learning. In this study, the researcher found the connectivism learning theory to be the most relevant lens through which I could explore the impacts of COVID-19 on teaching and learning. In the following section, some important concepts are defined to contextualise them in the study.

## **1.7 DEFINITION OF CONCEPTS**

The following is a description of operational terms that will be utilised throughout this research project. These concepts/terms will be explained to understand how COVID-19 impacted the process of teaching and learning.

### **1.7.1 Coronavirus (COVID-19)**

A type of common virus that infects humans, typically leading to an upper respiratory infection. The illness caused by most coronavirus usually lasts a short time and is characterised by a runny nose, sore throat, feeling unwell, cough and fever (WHO, 2020). Coronavirus disease (COVID-19) is a contagious disease caused by severe acute respiratory syndrome coronavirus (Wikipedia, 2020).

### **1.7.2 Lockdown**

Lockdown can be classified as total or partial confinement. Total confinement is defined as 'total suspension of non-essential activities with restriction of people's movement' with only crucial services in operation, such as health and food supply (Houvuessou, Souza & Silveira, 2020).

### **1.7.3 Online Learning**

Online learning is defined as “learning experiences in synchronous or asynchronous environments using different devices (e.g., mobile phones, laptops, etc.) with internet access (Dhawan, 2020). Online learning is education that takes place over the internet. It is often referred to as ‘e-learning’ -the umbrella term for any learning that takes place across distance and not in the traditional classroom (WHO, 2020).

### **1.7.4 Pandemic**

A pandemic is a disease outbreak that spreads across countries or continents (WHO, 2020). An outbreak of disease that occurs over a wide geographical area and typically affects a significant proportion of the population (WHO, 2020). It affects more people and takes more lives than an epidemic.

### **1.7.5 Social Distance**

Social distancing refers to a host of public health measures aimed at reducing social interaction between people based on touch or physical proximity. This can include remaining out of congregate settings, avoiding mass gatherings, and maintaining a distance (approximately 6 feet or 2 meters) from others when possible (Mishra & Majumdar, 2020). Individuals may apply social distancing methods by staying at home, limiting travel, avoiding crowded areas, using no-contact greetings, and physically distancing themselves from others. Many governments are now mandating or recommending social distancing in regions affected by the outbreak (WHO, 2020).

## **1.8 RESEARCH PARADIGM**

A paradigm is a set of basic beliefs or metaphysics that deals with ultimate or first principles (Lincoln & Guba, 2005). It represents a worldview that defines, for its holder, the nature of the world, the individual’s place in it and the range of possible relationships

to that world and its parts, for example, cosmologies and theologies. Since the study explored the impact of the coronavirus (COVID-19) pandemic on teaching and learning and the challenges encountered by teachers and learners in curriculum delivery during the COVID-19 pandemic, the researcher selected the anti-positivism paradigm as the study's paradigm. The anti-positivism paradigm is also referred to as the interpretive paradigm. The interpretive paradigm defines reality as created in that it is based on people's subjective experiences of their internal world (Denzil & Lincoln, 2000:19). The anti-positivism paradigm was suitable for the qualitative study. The paradigm was relevant because this was a case study in which the researcher employed interviews to explore the views and experiences of teachers and learners regarding the impacts of the COVID-19 pandemic on teaching and learning (Maree, 2011:55).

## **1.9 RESEARCH DESIGN AND METHODOLOGY**

This section discusses the research design and the methodology that was utilised to collect data.

### **1.9.1 Research Design**

A research design is a plan and structure of what is going to be observed and analysed (Creswell, 2002:86). This includes the process of selecting a sample of interest to study, collecting data to be used as a basis for testing the hypothesis or research questions and assumptions, presenting, and analysing data into results or findings of the study (De Vos, 2002:335). Yin (2016:18) defines a case study as a scientific investigation of a contemporary phenomenon in its real environment. Welman et al. (2005:193) asserts that case study refers to the fact that several units of analysis, such as an individual, a group, or an institution, are studied intensively. Since the purpose of this study was to assess the impact of the coronavirus (COVID-19) pandemic on teaching and learning, this study employs the qualitative research design using in-depth interviews which allowed the researcher to pose questions to the participants to gain knowledge of the

participants' views, opinions and beliefs about the impact caused by COVID-19 pandemic on teaching and learning.

Exploratory research is conducted when “it is necessary to understand the general nature of the problem, identify possible alternatives to the solution, as well as relevant variables that need to be considered” (Creswell, 2002:35). Explanatory research design has the purposes of formulating a problem for more accurate investigating a problem for more accurate investigation or for developing a hypothesis (Leedy, 1997:200). The exploratory research design is the research design that was employed in this study to understand the nature on the impact of COVID-19 on education and further suggest on measures to deal with crisis of this magnitude.

### **1.9.2 Research Methodology**

Research methodology is defined as design strategies and traditions of enquiry or research approaches used to study an issue (Mcmillan & Schumacher, 2001:314). For this study, a qualitative research method was used. Creswell (2010:47) defines the qualitative research method as a naturalistic approach which seeks to understand phenomena in context or the real-world setting. Qualitative research focuses on describing and understanding phenomena within their naturally occurring context. In this study, the participants were interviewed in their naturalistic context, which was at their schools. Qualitative research aims to explore human experiences, subjective peculiarities and the meaning associated with the phenomenon (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014).

Qualitatively, this study employed the use of semi-structured interviews to gather data and gain perspectives from the Heads of the two selected schools for this study regarding the experiences of COVID-19 on teaching and learning. By approaching these two Schools, all the elements and detailed descriptions of the social settings and perceived pertinent impact of COVID-19 on teaching and learning looking at the sociocultural and economic aspects towards the sustainability of education and the subsequent shift to the

uses of digital technologies by both learners and instructors in a semi-rural setting of South Africa. The researcher will use the interview guide to guide the interviews.

### **1.9.3 Study Population**

Castillo (2009) defines a research population as a generally large collection of individuals or objects, which is the focus of a scientific query. McMillan and Schumacher (2001:489) define population as a group of individuals or events from which a sample is drawn and to which results can be generalized. The population of this study consisted of teachers and learners from secondary schools in the Lulekani Circuit of the Mopani District of Limpopo Province, South Africa.

### **1.9.4 Study Sample and Sampling Procedure**

Sampling is defined as a process that is used to select a portion of the population for a study (Maree, 2011:79). According to Cohen, (2007:110), there are two main methods of sampling, probability, and non-probability sampling. In probability sampling, the chances of members of the wider population being selected are known whereas in non-probability sample the chances of members of the wider population being selected are unknown. The study sample consisted of 16 participants, that was, 02 principals, 02 HoD, 06 educators, and 06 learners from the selected two schools. The school principal/deputy principal was sampled because, by his or her status, he or she is a manager/curriculum head. HoDs were sampled because they are curriculum implementers and monitors. The teachers are responsible for executing the curriculum. Learners are sampled by the virtue of that they are the direct recipients during teaching and learning processes.

The educators selected were, one Language educator, one Science/Commercial educator and one Social Sciences educator teaching in the Further Education and Training (FET) phase (Grade 10-12). Educators were selected because they were teaching during the COVID-19 pandemic (2020-2021). Learners selected were one Grade 10 (from Languages), one Grade 11 (from Social Sciences stream) and one Grade

12 (from Sciences/Commercial streams). This study used purposive sampling which is one type of non-probability sampling. Purposive sampling is a method which is used in special situations where it is done with a specific purpose in mind (Maree, 2011). McMillan and Schumacher (2001), noted that in purposeful sampling, the researcher selects elements from the population, who will be informative about the topic of interest. The sampled participants selected in this research were relevant to inform the objectives of this study.

### **1.9.5 Data Analysis**

The purpose of data analysis is to describe the data clearly, identify what is typical and atypical of the data, bring to light differences, relationships and other patterns existing in the data, and ultimately answer research questions or test hypotheses (Creswell, 2002:95). The researcher analysed the audio-recorded interviews, field notes and the researcher's reflective diary. Content analysis was used. Maree (2011:75) defines content analysis as a systematic approach to qualitative data analysis. Content analysis identifies, summarises, and makes inferences on the content of views expressed by study participants. The use of inductive analysis of qualitative data was appropriate because qualitative data analysis is usually based on an interpretative philosophy that is aimed at examining the meaningful and symbolic content of gathered data. In this study, themes were generated from the views of the principals or deputy principals, HoDs, educators and learners on how COVID-19 impacted teaching and learning at their schools. The researcher coded the data and conducted content analysis by looking for specific words for which themes were identified. As proposed by Creswell (2002:100), the researcher used case boxes whereby each selected school data was summarised and compared with that of the other schools. Data collected was analysed manually by looking for categories emerging from the responses.

## **1.10 STUDY TRUSTWORTHINESS**

In qualitative research, the researcher is a data-gathering instrument. According to Lincoln and Guba (2005), trustworthiness refers to how the inquirer can persuade the audience that the findings in the study are worth paying attention to and that the research is of high quality. Lincoln and Guba (2005) suggest that credibility, applicability, dependability, and conformability are the key criteria of trustworthiness. The four key criteria of trustworthiness that were used in this study are briefly discussed below.

### **1.10.1 Credibility**

According to McMillan and Schumacher (2001), credibility is the extent to which the results approximate reality and are judged to be accurate and reasonable. Credibility refers to the assurance that the researcher's conclusions stem from the data. Credibility was ensured by prolonging the engagement in the study sites. During the first visit, the approval letter to conduct the study from the University, the approval letter from the Department of Education, Mopani District then a request letter to the two principals to conduct the research at their schools were distributed to the participants. During the second visit, document review, sampling of the participants, and handing consent forms to participants were conducted. At the third visit, signed consent forms were collected; orientation and discussions with the participants were also held. The researcher-built trust explained the purpose of the study, procedures followed when conducting the interviews, and ethical considerations. After conducting the interviews, the researcher conducted member-checking, study draft was presented to the participants (McMillan & Schumacher, 2001).

### **1.10.2 Transferability**

Transferability has to do with transmitting or generalising the results of a study to other contexts (Gay & Airasian, 2003:246). To achieve transferability, a detailed process of how the study was conducted was presented. Rich descriptions of the two schools,

backgrounds, socio-culture and school ethos, the interview rooms and the general environment of the schools were discussed. The findings of the study, as recorded in the tape recorder, written in the field notes and a reflective journal were defined in the form of themes and detailed explanations.

### **1.10.3 Dependability**

Gay and Airasian (2003:247) say dependability refer to how carefully the researcher has selected the data collection instruments and research sites to suit the research questions and the objectives of the study. According to Durkheim and Wassenaar (2002:64), dependability refers to the degree to which the reader can be convinced that the findings did indeed occur as the researcher says they did. Member checking was employed, and the researcher discussed the identified themes with the participants to ensure that they were accurate and dependable (Creswell, 2002). Comprehensive field notes were taken throughout the study. These notes also included the general environment of the two schools, the study of documents and the interviewing process. During the interviews, the verbal and non-verbal clues of the participants were captured in detail.

### **1.10.4 Conformability**

Conformability according to Merriam (1998:217) is ensuring that the data findings truly represent the views, perspectives, or meanings of the respondents rather than the views and understanding of the researcher. The findings were scrutinised, and analysed, and self-critical accounts were considered. Data was recorded accordingly, interpreted, and presented correctly and accurately.

## **1.11 SIGNIFICANCE OF THE STUDY**

The study was of significant value to the following:

- The educators, to identify factors that impact negatively teaching and learning during the COVID-19 Pandemic.
- The School Management Team (principal, deputy principal and HoDs), to improve the current situation of teaching during the COVID-19 Pandemic.
- Department of Basic Education, to develop strategies and monitor the implementation of such strategies that would support teaching and learning at schools during the COVID-19 Pandemic.

## **1.12 DELIMITATION OF THE STUDY**

The study was conducted within two purposively selected rural, secondary schools in Lulekani Circuit, Mopani East District of Limpopo Province, South Africa. Since the results of this study were based on only two secondary schools, they were not representative enough for generalising the results of this study to all secondary schools in South Africa.

## **1.13 ETHICAL CONSIDERATIONS**

Ethics is a matter associated with morality and ethical guidelines which serve as the standard and basis to evaluate one's conduct. Anyone involved in research needs to be aware of the generally agreed upon research ethics about what is proper and improper in scientific research (Creswell, 2002:187). Since this study involved human subjects, procedures were followed to obtain ethical clearance for their participation in the study, namely:

### **1.13.1 Permission**

The researcher requested permission from the Department of Education (DoE), Mopani East District, Limpopo Province, and the principals of the two secondary schools where the study was conducted. The consent of the participants, that is: principals/deputy principals, HoDs, and educators was obtained. Throughout the research process, the

researcher followed and abided by ethical guidelines. The following ethical principles were followed:

### **1.13.2 Informed Consent and Voluntary Participation**

The researcher personally explained the details of the study to all participants. In addition, the researcher ascertained that all the sampled participants gave their expressed voluntary willingness to participate in the study. Participants were once again reminded that they may withdraw at any time during the process if they wish to do so. The research involved learners from Grades 10-12 that were 18 years and above and since the study only included a selected few of only 3 learners, it became possible for the researcher to include only the learners the age of 18 and above.

### **1.13.3 Protection from Harm**

According to Creswell (2002:189), every researcher should ensure that participants are not exposed to any undue physical or psychological harm. During this study, the researcher strived to be honest and respectful to all participants and if by any chance participants required debriefing after an interview, the researcher provided this and made the necessary referral to a professional who provided such a service.

### **1.13.4 Privacy, Confidentiality and Anonymity**

The researcher made sure that all participants' information and responses shared during the study were kept private and results were presented anonymously, to protect the identities of participants. Descriptions which were not lead readers of this work, to the identities of participants were used and the two secondary schools were coded as School A and School B. Participants as members of School A and School B, HoDs and educators were identified by numbers that were: HoD of School A and educator of School B and so on. These descriptions also managed to conceal the identity of the participants.

## 1.14 CHAPTER DIVISION

The focus of this study was based on the impacts of the COVID-19 pandemic on teaching and learning in Mopani district, Limpopo province, South Africa. A case of two secondary schools in Lulekani Circuit. The plan of the study followed the sequence as described below:

- **Chapter 1: The Problem and its Background**

This section provided the background to the study, the aim, objectives, problem statement and research questions, the significance of the study and the format of the study.

- **Chapter 2: Literature Review**

It gave clear details of what the scholarly literature said about the impacts of the COVID-19 pandemic on teaching and learning and interrogated it from a global, regional, and local perspective.

- **Chapter 3: Research Design and Methodology**

This chapter covered the research methodology, design, population, sample, data collection and analysis methods used in the study. A qualitative case study which includes semi-structured interviews, document review, field notes and observation was used for this study.

- **Chapter 4: Presentation of the Study Findings and Discussions**

Data collection, analysis and discussion of results were presented in this chapter. The use of content analysis was also covered.

- **Chapter 5: Summary of the Study Findings, Conclusions, Recommendations, Limitations, and Implications**

This chapter drew the conclusion and recommendations of this research.

## 1.15 CONCLUSION

Without a guarantee of when the pandemic was under control, schools were forced to move from face-to-face teaching and rapidly switch to alternative online classes. The use of various platforms and social media tools to deliver collaborative and interactive blended learning minimized the impacts that the COVID-19 pandemic has brought to the operations of educational institutions and students/ learners` academic development (Graham, 2006). Therefore, teachers need to gain technological competency to adapt to online teaching effectively (Saboowala & Manghirmalani-Mishra, 2020).

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 INTRODUCTION

The advent of the COVID-19 pandemic resulted in the disruption of different socio-economic, cultural, and political aspects across the world. On the 11<sup>th</sup> of March 2020, the World Health Organisation (WHO) declared the coronavirus disease of 2019 (COVID-19) outbreak a global pandemic (World Health Organization (WHO), 2020). The coronavirus first emerged in the Chinese Province of Wuhan in December 2019. The lives of people were brought to a practical halt by the rapid spread of COVID-19 (WHO, 2020). Among the various socio-economic and cultural practices that were affected by the outbreak of the COVID-19 pandemic, and the subsequent measures to contain the spread of COVID-19, the education sector was one of the areas that were affected. Akram, Aslam, Saleem and Parveen (2021), COVID-19 indicated that the lockdown measure pressured academic institutions to terminate their activities and highlight the importance of Information and Communication Technologies (ICTs) integration in education as well as emphasising the importance of making changes to pedagogical practices.

#### 2.2 THE IMPACT OF COVID-19 PANDEMIC ON TEACHING AND LEARNING

##### 2.2.1 Impact of COVID-19 on Education Around the Globe

The study by Pokhrel and Chhetri (2021) indicated that the advent of COVID-19 has resulted in the largest disruption of education systems in human history the world over. There were the closures of schools on all levels of learning, affecting more than 94% of the student population in the world. This resulted in a change in the approach towards teaching and learning for almost all academic institutions from public to private academic institutions. Among these changes was the dominant one the need to adopt distance learning. These changes were done in line with the measures that governments were

advocating for to ensure social distancing and restrictive movement policies. The traditional way of teaching and learning changed drastically with the advent of COVID-19. However, these changes did not happen smoothly, in some instances, several colleges, schools and institutions of higher learning experienced different challenges for them to adapt to the new norm. For example, the introduction of technology – online learning – was not easy for all. It requires digital innovative strategies to foster alternative educational systems and assessment strategies. For many academic institutions, COVID-19 paved the way for introducing digital teaching and learning, and the way forward, while for others it was a learning curve in identifying to what extent are they lagging in their learning and teaching practices.

The study by Mondol and Mohiuddin (2020) indicated that confronting COVID-19 in the education sector was like a paradigm shift in the teaching and learning industry. The study indicated that the shift to online classes remains operative with doubts and enthusiasm. However, although there was an abrupt need to adopt the use of technologies for teaching and learning, the findings revealed that there are adjustments to be made and challenges to be solved to ensure a smooth transition from traditional learning to e-learning (Mondol & Mohiuddin, 2020). The results indicated that there is a need to examine the experiences of the people involved in teaching and learning to gain a deeper understanding of the experiences of online learning (Mondol & Mohiuddin, 2020). The study revealed that there is a need for orientation and assurance of facilities to support this type of teaching and learning that is technology-based. This highlighted the need for supporting techniques that support the precautionary measures and modes for emergencies. The study showed that most schools and academic institutions across the world lack viable modalities and solutions to teaching and learning resulting in the complete shutdown of the current crisis (Mondol & Mohiuddin, 2020).

An Indian study by Rahman (2021) observed the students' learning experiences experience to identify the effectiveness of COVID-19-lockdown-induced emergency online learning at the undergraduate level. The study indicated that the shift to virtual learning resulted in arguments regarding the digital infrastructure, issues regarding the

digital divide, digital literacy, technical support and even the digital literacy of the teachers themselves (Rahman, 2021). Using a Google questionnaire to collect data from the college's students, the study revealed that 46.21% of the students' participants perceived the emergency of online learning as partially effective and 19/70% perceived it to be ineffective. Among the challenges were the lack of internet connectivity, disrupted electricity supply, the high cost of Internet data, lack of supportive environments at home and the lack of technical and virtual teaching and learning skills among the teachers. The study concluded that there is a need for a collaborative effort to enhance digital infrastructure through mechanisms to cushion the high challenge of internet data costs that were out of reach for many and teaching educators of virtual teaching skills. What is different about the findings in this study from the rest of the literature is the indication of the need to deal with negative attitudes as one of the barriers towards successful e-learning. The study indicated that cultivating positive attitudes among students towards e-learning is critical towards achieving virtual teaching and learning (Rahman, 2021).

The study by Aduba and Mayowa-Adebara (2022) investigated the online learning platforms that were adopted because of the COVID-19 Pandemic. With a survey, which 187 students and 3 lecturers, the research collected data from the students at the Department of Library and Information Science at Delta State University in Nigeria. The study revealed that WhatsApp and Telegram were the platforms used for pedagogy delivery during the period of the COVID-19 lockdown. The findings revealed that Lecturers were always available online compared to the availability of students. The online teaching and learning environments that were created were important for convenience, sharing and collaboration and fostered the freedom of both students and lecturers to engage in learning. The study revealed that sometimes teaching and learning were made complex because of too many learning materials that were loaded on these online platforms without proper structures. The students also complained that they were not used to always consuming content online which results in eye-straining. The study also revealed that there is a challenge of internet data prices that are unbearable. The findings also revealed that the studies were also disrupted by network failures. The lecturers also indicated that e-learning during COVID-19 was a challenge because of the

laxity of students towards lectures online. The study recommended that teaching and learning online can be improved significantly with the use of other social media platforms such as WhatsApp.

The study by Reimers, Schleicher, Saavedra and Tuominen (2020) indicates that the advent of COVID-19 was a quintessential adaptive and transformative challenge to adapt to the new alternative teaching and learning with technology. The advent of COVID-19 resulted in the need for the rethinking and redesigning of teaching and learning strategies to accommodate the new requirements of teaching and learning. The challenges that most countries experienced, especially in the developing world, were to design teaching and learning strategies that are relevant to the context and responsive to students' and teachers' needs and capabilities. For instance, the study by Bardesi, Al-Mashaikhi, Basahel and Yamin (2021) indicated that most schools and higher learning institutions experienced challenges with the costs of technology.

The advent of COVID-19 resulted in most countries across the globe implementing several Public Health and Social Measures (PHSM), which included movement restrictions, closure of schools, both public and private businesses and international travel bans (Spaul & Van der Berg, 2020). South Africa was one of the countries that was compelled into a national lockdown where all businesses and public institutions were closed (Schleicher, 2020). Primary and secondary schools were the first to be closed on 18 March 2020 to contain the spread of the COVID-19 Pandemic.

The impact of the COVID-19 pandemic led to speculation regarding its impact on the teaching profession (De La Rosa, 2020). Education scholars and polls suggest shifting trends: decreased enrolment in educator preparation programs, decreased teacher interest in staying in the profession, and increased considerations for retirement (Kurtz & Bushwelle, 2020; Perry, 2020). The pandemic has further generated policy shifts to teacher candidacy, licensure, and certification (American Association of Colleges for Teachers Education (AACTE), 2020). Underlying all these shifts were the significant changes to teacher's working conditions, for example, uncertainty and changing

schooling formats, a new focus on remote learning, and new protocols for health and safety, as well as significant learning loss and the social and emotional needs of both learners and instructors. The COVID-19 crisis will undoubtedly have direct consequences for all sectors of public education. The rapid transition to remote modes of instruction in the spring of 2020 and the subsequent anxiety about the start of the 2020-21 academic year have highlighted the critical need for well-prepared educators and learners. Therefore, this study intends to explore the impact of the COVID-19 pandemic on teaching and learning in two selected secondary schools of Lulekani Circuit in Mopani District, Limpopo Province, South Africa.

COVID-19 resulted in the abrupt closure of academic institutions across the world (UNESCO, 2020). The immediate temporary closure of academic institutions was to provide a window for governments on how best they could engineer a strategy that is effective in maintaining teaching and learning and at the same time being healthy bound and containing the spread of COVID-19. Initially, the closure of the schools was intended for a short period, however, it was extended for a longer period due to uncertainty reasons on how best the education could be sustained without spreading the virus. Tarkar (2020) indicated that the closure of schools has affected the structure of schooling. The teaching and assessment methodologies were affected, and new online teaching methods were adopted by the few private schools that had the resources and capacity to adapt to the new demands and trends in teaching and learning. This was different with the public schools, let alone those located in rural areas, where there was no technical know-how, resources, and capacity to ensure that they could adapt to the new trends in teaching and learning (Tarkar, 2020).

The challenges experienced during COVID-19 in the education environment differ from context to context. The study by Tadesse and Muluye (2020) identified that the school closure had challenges for teachers, learners, and parents. Distance learning was also coupled with various challenges such as inequality levels in terms of lack of access to the Internet, computers, mobile smartphones, and network infrastructures. Various developing countries suffer devastatingly from these challenges (Tadesse & Muluye,

2020). Various studies indicated that most developing countries are still lagging in terms of the 4IR and the full utilisation of digital technologies (Ayentimi, 2020; Cowie, Townsend & Salemink, 2020). This points to the fact that despite having an alternative strategy to adopt the use of digital technologies, it remained difficult for most countries in the developing world to fully actualise the benefits that digital technologies offer in teaching and learning.

The study by Nawastheen and Perera (2021) observed the students' perceptions of participating in remote learning activities during the time of the COVID-19 Pandemic. Using a survey and exponential non-discriminative snowball sampling technique, data were collected from 613 school students through a questionnaire administered as a Google form (Nawastheen & Perera, 2021). The data was analysed in terms of mean values, standard deviations, percentages, illustrative graphs, and diagrams. The finding revealed that most of the participants 62.6% used mobile Internet data and 69.5% used prepaid Internet data. The huge challenge that was discovered is that the affordability of Internet data was generally expensive and out of reach for many. The students also complained about the high density of the educational content that was presented through the online learning platforms. There were also concerns over the security of the information shared online by the students (Nawastheen & Perera, 2021). The study recommended that the challenge of high Internet data costs for students could be made lower for learning and that some educational programs be available for them free of charge. The study also suggested that schools can provide smart mobile devices such as tablets to the students to lessen the gap between the haves and the have-nots and enhance equality of access to online learning (Nawastheen & Perera, 2021). The study also suggested that further studies on parents' and teachers' experiences with their children's and students' learning through online learning platforms are important to enhance understanding of the studies in the implementation of online learning (Nawastheen & Perera, 2021).

### 2.2.2 Impact of COVID-19 on Education in Africa

The Nigerian study by Adeoye, Adanikin and Adanikin (2020) observed that COVID-19 has brought drastic changes in the teaching and learning industry. The COVID-19 pandemic has had the education sector being held at ransom. Although the disruptions that were caused by COVID-19 made the world take the initiative to develop teaching and learning practices, it was accompanied by huge challenges of unpreparedness. This unpreparedness was worsened by the need to neglect the traditional practices of teaching and learning and adopt the use of technologies for e-learning (Adeoye et al., 2020). Most developing countries such as Nigeria experienced challenges in accommodating this shift because of a lack of enabling infrastructures, paucity of funds and policy issues in the Nigerian education sector. The study by Adeoye, Adanikin and Adanikin (2020) indicated that although the advent of COVID-19 highlighted the need to adopt e-learning as an alternative to traditional learning, most of the developing countries still experience huge challenges in this regard.

The other study by Tsitsia, Bernice Yawa, Samuel Kwasi Kabbah, Valence Doyi, Saviour Kofi Kabe and Peace Safo (2020), indicated that in Ghana different challenges were experienced in the teaching and learning of the colleges. The study by Tsitsia et al., (2020) examined students' perceptions of the impact of a shift from traditional teaching and learning to e-learning during COVID-19. Through the descriptive study, the study discovered that students' e-learning is being distracted mostly by home-related factors such as the teaching and learning taking place in between the home choirs. There is also a problem of Internet data connection that is seriously interfering with online learning. Tsitsia et al., (2020) recommended the need for blending teaching and learning in colleges in Ghana and other related contexts to prepare students for both physical and virtual classes. This can also be achieved through the use adoption and implementation of a Learning Management System (LMS) such as Blackboard to manage the cost and internet data usage (Tsitsia et al., 2020). However, the use of these platforms still requires the use of an Internet and data connection to stream or download learning materials.

Another Nigerian study by Olayemi, Adamu and Olayemi (2021) examined the perceptions of students in Nigeria regarding readiness levels. Using a descriptive research approach, the study observed that COVID-19 resulted in the immediate shutting down of higher institutions of learning by the government in Nigeria and other parts of the world. In most cases, students were required to vacate the school premises to curb the potential spread of the infection from one individual to another. The findings of the study revealed that most of the students claimed positively towards being conversant with online learning with a high level of readiness. However, the study also revealed that most of the students were being challenged to be productive online by the requirement of the high level of skills and competencies needed to accomplish online learning. This lack of digital skills to benefit from e-learning was also worsened by the high cost of Internet data, the poor Internet services and infrastructure, disruptive power supply, inaccessibility of online library resources and limited computer access. The study recommended that Nigerian higher institutions of learning must improvise strategies through which teaching and learning can be achieved at lower costs for students practising distance learning.

The study by Ogbonnaya, Awoniyi and Matabane (2020) claimed that the advent of COVID-19 has brought another dimension to teaching and learning across all levels of education in Ghana. The countries were forced to shift from traditional forms of learning to online learning. The study investigated the learning experiences of the pre-service teachers at a Ghanaian university during the COVID-19 pandemic (Ogbonnaya, Awoniyi & Matabane, 2020). The study explored the pre-service teachers' preparedness for online learning looking at their digital literacy and technological devices that the institutions of higher learning are using for teaching online such as Blackboard. The findings of the study revealed that the pre-service teachers were digitally literate and mostly accessed online learning with mobile devices such as smartphones (Ogbonnaya et al., 2020). The study revealed positively that the online approach to teaching and learning allows the teachers and students to communicate and collaborate actively with the course's issues and lecturers (Ogbonnaya et al., 2020). However, despite all these positive attributes brought about by the introduction of e-learning, the study revealed that challenges of Internet data connection and disruptive power supply, lack of capable smart

devices, family interruptions and the failure to manage time are critical challenges towards the full integration of digital technologies for educational purposes for most of the pre-service teachers (Ogbonnaya et al., 2020).

### **2.2.3 Impact of COVID-19 on Education in Southern Africa**

A Zimbabwean study by Maphosa (2021) indicated that the disruption caused by the COVID-19 pandemic was unique from context to context. In Zimbabwe, this study revealed unique challenges that were caused by the COVID-19 Pandemic. The study revealed that the closure of schools and academic institutions was severe in Zimbabwe. Instead of immediate adoption of the use of technology and teaching and learning platforms such as Blackboard, the trends with most of the countries in the world, some of the public Zimbabwe schools adopted the use of radio signals that are only accessed by 29.1% of the entire population, let alone the academic population. The study revealed that although there was an indication of high mobile ownership per household at over 90%, the challenge of internet infrastructure, cost of internet data and digital skills.

A South African study by Mhlanga and Moloji (2020) examined the digital transformation of education in South Africa and extension discovered the lessons that can be learnt from this initiative regarding claims on the Fourth Industrial Revolution (4IR) status in South Africa. the study assesses the influence that the COVID-19 pandemic had towards the shift to digital transformation in teaching and learning (Mhlanga & Moloji, 2020). The findings revealed that South Africa used a variety of tools to ensure continued teaching and learning during the COVID-19 lockdown. However, despite the considerable adoption and implementation of different digital technology tools to enable learning, there were also challenges such as the cost of internet data, the failure to deploy these technologies and scaling to improve efficiency and accessibility. The study recommended that the government of South Africa needs to design mechanisms of fiscal expansion to try and provide funding for moving some considerable aspects of education online (Mhlanga & Moloji, 2020). This is also argued to promote the adoption of 4IR.

Another South African by Dube (2020) examined rural online learning in the context of COVID-19 to understand how inclusive online education should be understood. With participatory action research, the study indicated that rural learners face too many challenges in adjusting to a new mode of life and learning that was introduced because of COVID-19. Online learning, learning management systems and low-tech applications were mostly new phenomena to a lot of schools and learners in a rural setting in South Africa. The findings of this study indicated that while the South African government is promoting online learning as the sole alternative towards cushioning the impact of COVID-19 on education, this mode excludes many rural learners from teaching and learning pursuits. The reasons are, among others, the lack of digital resources to connect to the Internet, the lack of, if any, a learning management system, and the lack of infrastructure such as low-tech software such as the Blackboard interactive system. This resulted in the left behind of many rural learners in the mainstream academic efforts and progress during COVID-19.

Another South African study by Motala and Menon (2020) reflects on the teaching and learning practices among higher institutions of learning during COVID-19. The study revealed that the institutions of higher learning in South Africa implemented measures to counteract the impact of COVID-19 on teaching and learning. These measures were introduced to meet the social isolation and lockdown mandate by the government and at the same time sustain the academic activities. The study used the University of Johannesburg to explore the activities that were implemented in support of academic continuity during COVID-19. The study revealed that there was a rapid need for instructors to prepare and capacitate themselves to the new norm of online learning. The study revealed that there were challenges that emerged in the process of this adjustment such as digital skills and attitudes of both the learners and instructors to the abrupt new ways of teaching and learning.

### **2.3 SOCIAL AND TECHNICAL CHALLENGES EXPERIENCED BY TEACHERS AND LEARNERS DURING COVID-19**

In response to COVID-19 school closings, teachers all over were required to shift gears immediately to respond to students and their families' needs with synchronous and asynchronous virtual instruction. Teachers responded overnight to teach in new modalities. They filmed themselves conducting experiments, hosted Zoom shows, prepared materials for students with variable Internet access, and even demonstrated concepts outside students' screen doors. Some teachers reported being busier than they were before the school buildings closed, as they were expected to be present and available, with office hours during lunch, and student groups arriving and leaving throughout the day. All of this took place while trying to simultaneously instruct their children who were home (Strauss, 2020). Over the last several months, the COVID-19 pandemic has caused the teachers to enter a shocking, and at many times painful, natural experiment. Despite a slow march of policies and cultural practices that have chipped away at the professional status of teachers (Milner, 2013) and the resources they need to do their jobs, the sudden closure of the schools has brought into sharp focus the true importance of teachers and the work most do every day on behalf of other people's children.

Akram, Aslam, Saleem and Parveen (2021) revealed that the transition period caused an urgent requirement for education instructors to gain understanding and competencies in the use of digital virtual platforms to prepare the classes, teach and assess learners. The uses of these digital technologies require individuals to have digital technology skills (Kayembe & Nel, 2019). Some of the educational instructors and the learners had no intensive skills in the use of digital technological tools such as Blackboard for academic purposes such as conducting a class session, participating, and tracking learners' performances and assessments for exams. All these inequalities in terms of digital skills, access to technological devices, and access to the Internet have been a critical challenge in most developing countries to adopt the use of digital technologies in education.

The advent of COVID-19 also resulted in people experiencing challenges with mental and psychological health issues and dealing with these problems. COVID-19 hurts higher-risk populations and social-emotional deficits through trauma responsiveness and multifaceted Social Emotional Learning (SEL). The psychological impact of the experiences of quarantine measures hurt teaching and learning (Soni, 2020). Praghlapati (2020) observed that almost 24.9% of the students in China experienced anxiety because of COVID-19. The anxiety levels were also coupled with other factors such as living with families that have lower income levels and perhaps affected by COVID-19 (Praghlapati, 2020).

#### **2.4 SUPPORT STRATEGIES THAT WERE USED BY THE DEPARTMENT OF EDUCATION IN SOUTH AFRICA TO SUPPORT LEARNERS DURING COVID-19 PANDEMIC**

Different support strategies were implemented by different governments to ensure the sustainability of education across the globe (Mbunge, 2020). The study indicated that the South African authorities implemented physical distancing, self-isolation strategies, closure of non-essential services, closure of schools, travelling restrictions out and into the country and between provinces, and recursive national lockdowns to mitigate the spread of COVID-19. These measures were taken to come up with a plan to mitigate the spread of COVID-19. The findings revealed that these measures were important to clear uncertainties, acute panic, stigmatisation, and anxiety while finding the way forward to resolve the challenges that were being experienced. In the teaching and learning sector, these measures allowed the government and the Department of Education to come up with strategies supporting the continuation of education such as a full understanding of what online education entails.

Since 11 March 2020 when the World Health Organisation (WHO) declared the COVID-19 outbreak a global pandemic, using the Internet, communication has drastically become easy and a way of learning worldwide (Schleicher, 2020; Van der Berg & Spaul, 2020). The Ministry of Basic Education shared measures for schools and communities

separately. The Department of Basic Education provides a host of distance educational material organised and accessible through its website. Learners can find multimedia resources, reading and study materials. The page also includes a section for parents with different pedagogical recommendations to continue learning at home. The website also has a section with information about support related to educational broadcast content, including audio-visual learning material. The Department of Basic Education and the South African Broadcasting Corporation (SABC) launched the education television and radio curriculum support programmes for learners impacted by school closures. The program began on April 9, 2020, and broadcasts lessons to learners in Grades 10, 11 and 12 and Early Childhood Development (ECD) across three SABC television channels and 13 radio stations coupled with online support. The subjects that were being offered included Maths, Physical Sciences, English, Life Sciences, and accounting, as well as a variety of African languages within the ECD basket.

## **2.5 PROFESSIONAL BENEFITS OF ONLINE EDUCATION**

As a response to the COVID-19 pandemic, many countries around the world closed schools, to reduce the spread of the virus. According to data from UNESCO, the peak in school closures was registered at the beginning of April 2020, when many learners were affected across many countries (WHO, 2020). The sudden closure of schools meant that education policymakers, school principals and teachers must find alternatives to face-to-face instruction to guarantee children's right to education. Many systems have adopted online teaching and learning on an unprecedented scale, often in combination with widespread remote learning materials such as television and radio. Studies show that until effective vaccines for the novel coronavirus become available, it is likely that schooling may continue to be disrupted (Spaull & Van der Berg, 2020; Schleicher, 2020). In 2020, a study was conducted in Hong Kong by Ng, Reynolds, Chan, Li, and Chu using a qualitative approach to assess the effectiveness of using online learning technologies to support academia around the world. The study found that both primary and secondary school teachers used blended learning. Teachers offer diversified learning activities such

as logbooks, gasification, webinars, and social media tools in a wider range of subjects (Ng et al., 2020).

Teachers adopted a diversified mode of learning/teaching from asynchronous to blended approach of asynchronous and synchronous learning during the class suspension (Ng et al., 2020). The school IT team provided timely support for teachers and learners to make available learning software and electronic devices. In Pakistan, a study conducted by Shehzadi and Qasm Ali Nisar (2020) shows that learners commonly perform better on digital platforms than the traditional ones. Other researchers like Al-Samarraie and Saeed (2018) support that. A study conducted by Farid and his colleagues exposed that the digital competency of teachers in terms of developing pedagogical lessons is found to be inadequate (Farid et al., 2015) although teachers' contribution cannot be neglected ICT in the classroom effectively (Oguguo et al., 2020) another study conducted by Salam and his colleagues discovered that online teaching and learning have shown significant improvement though several barriers still exist that hinder the effectiveness of ICT integration in education (Salam et al., 2017). These challenges that were experienced differently from one country to the other, and from community to community, in attempts to sustain the education system, present an opportunity for identifying proactive approaches that are relevant towards sustained educational practices.

## **2.6 CONCLUSION**

The literature discussion in this study revealed that with the advent of COVID-19, governments and educational-related departments introduced measures that enabled education to be sustained amid the efforts to contain and minimise the spread of COVID-19. The literature indicated that distance learning was introduced and supported using technologies and online academic learning platforms such as Blackboard. However, this affected the traditional teaching and learning practices that were common to most countries. The literature indicated various challenges that come along with the introduction of online learning. These challenges were shown to be unique from one context to another depending on the socio-economic and educational policies. The

general challenges that were identified through this literature review were digitally connected, such as the lack of internet data connection, internet data affordability, digital literacy, attitudes, electrical interruptions family interruptions and constant interventions while attempting to study. Also, the literature revealed that despite the differences in the digital and psychological challenges, there was also the challenge of teaching and learning readiness and preparation of institutional facilities to be blended into education.

## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 INTRODUCTION

Research methodologies were briefly discussed in Chapter 1. Chapter 2 presented a literature review related to the research topic. This chapter discusses the research design and methodology that was employed to understand the phenomenon under investigation. First, the researcher discusses the research paradigm that underpinned the study. This was followed by the research design, research methodology, population, sampling, and sampling procedures. Thereafter, the methods of data collection and analysis are outlined. After the collected data had been thematically analysed, the researcher embarked on the process of achieving study rigour or trustworthiness. Finally, the researcher was faced with the issue of considering research ethics that are related to the study. The research paradigm, design, and methodology assisted the researcher in answering the study's research questions which are:

- What were the experiences of teaching and learning during the COVID-19 Pandemic?
- What were the challenges in adopting the new teaching and learning environment and curriculum delivery?
- What are the suggestions and recommendations in responding to national crises such as COVID-19 towards educational sustainability?
- These research questions made it easy for the researcher to achieve the study objectives namely:
- To explore the impact of COVID-19 on teaching and learning at the Lulekani Circuit in the Mopani District, Limpopo Province, and further suggest strategies that could be used in future to mitigate these challenges.
- To explore the challenges in adopting the new teaching and learning environment and curriculum delivery.

- To provide suggestions and recommendations on responding to national crises such as COVID-19 to ensure educational sustainability.

### 3.2 RESEARCH PARADIGM

A paradigm is a set of basic beliefs or metaphysics that deals with ultimate or first principles (Lincoln & Guba, 2005). It represents a worldview that defines, for its holder, the nature of the world, the individual's place in it and the range of possible relationships to that world and its parts, for example, cosmologies and theologies. Since the study explored the impact of the coronavirus (COVID-19) pandemic on teaching and learning and the challenges encountered by teachers and learners in curriculum delivery during the COVID-19 pandemic, the researcher selected interpretivism as the study's paradigm. Interpretivism as a paradigm defines reality as created in that it is based on people's subjective experiences of their internal world (Denzil & Lincoln, 2000:19). Interpretivism is closely associated with Max Weber's *Verstehen*, with understanding is the core of the interpretive social constructivist paradigm. An 'interpretivist' position is concerned with how the social world is understood or produced and is based on ways of collecting data which are sensitive to their social context. In common with constructionists, interpretivists in general focus on the process by which meanings are created, negotiated, sustained, and modified (Schwandt, 2003). Interpretive approaches rely heavily on naturalistic methods such as interviewing, document analysis, participant observation and non-participant observation (Smith, 1992). These methods ensure an adequate dialogue between the researchers and those with whom they interact to collaboratively construct a meaningful reality.

There are different dominant research positions of the interpretivism research tradition. For example, there is the epistemological position of interpretivism which maintains that knowledge is gained through personal experience and that scientific knowledge is not the only form of valid knowledge (Bezuidenhout, 2021). The interpretivism approach does not disregard common sense as a form of knowledge which is common with the positivist research tradition. Interpretivists value facts that are embedded within a meaning

system, meaning that, from an interpretive research approach, meaning is understood taking into consideration the social context. Thus, the need to understand the meaningful experiences of an occurrence, the research should use the interpretivism research tradition.

Furthermore, interpretive researchers believe that reality is socially constructed by people's experiences and understanding of their worldviews (Ernest, 1994:25). This is referred to as the ontological position of interpretivism. The ontological assumptions of interpretivism research tradition are that social reality is seen by multiple people who interpret reality differently leaving with multiple perspectives of an incident. The interpretivist is of the view that depending on the circumstances, culture and experiences, people experience reality differently. It is these different perspectives that are the focus of this study. The philosophical base of an interpretive paradigm is hermeneutics and phenomenology (Giorgi & Giorgi, 2003). The focus of this study is to reveal the experiences of the participants regarding the way COVID-19 affected teaching and learning.

Moreover, interpretivism research tells a story by describing how people living in a certain context conduct their daily lives instead of using abstract statistics as evidence to describe reality. Interpretivism research describes the lived experiences in detail providing direct quotes from the participants (Bezuidenhout, 2021). To achieve this, this research used in-depth interviews where participants were asked to provide their personal experiences of COVID-19 in teaching and learning through open-ended questions. This helped in providing an in-depth understanding of the phenomenon under investigation.

### **3.3 RESEARCH DESIGN**

A research design is a plan and structure of what is going to be observed and analysed (Creswell, 2002:86). This includes the process of selecting a sample of interest to study, collecting data to be used as a basis for testing the hypothesis or research questions and assumptions, presenting, and analysing data into results or findings of the study (De Vos,

2002:335). Yin (2016:18) defines a case study as a scientific investigation of a contemporary phenomenon in its real environment. Welman et al., (2005:193) assert that case study refers to the fact that several units of analysis, such as an individual, a group, or an institution, are studied intensively. Since the purpose of this study was to assess the impact of the coronavirus (COVID-19) pandemic on teaching and learning, this study used a qualitative research design.

The qualitative research design is sensitive to context, and it is important towards gaining an in-depth understanding and experience of the phenomenon, which was the focus of this study (Brannen, 2019). The qualitative research design was important to allow the researcher to empathise and share constructive social value of the participants under investigation. Therefore, qualitative research design uses interviews, document reviews and observations as data collection strategies. Using these strategies, we can solicit participants' lived experiences.

The qualitative research design allows researchers to ask open-ended questions to gain knowledge of the participants' views, opinions, and beliefs without being restricted to the confinements of the data collection instrument (Leedy, 1997:200). Qualitative research methodology is the research approach that focuses on collecting and analysing textual data in written or spoken word (Kumar, 2019). Qualitative research refers to the process of collecting data and analysis of data in non-numerical form such as text and/or audio, to understand the real experiences of the people, opinions, and concepts through the data collection instruments such as the in-depth interviews. Hence, the qualitative research approach entails the collection of data using in-depth insights into a problem and generating new ideas for future research (Du Plooy-Cilliers et al., 2014).

### **3.4 RESEARCH METHODOLOGY**

Research methodology refers to the design strategies and traditions of enquiry or research approaches used to study an issue (Brannen, 2019). Research methodology is the practical process in that the research engages in collecting and analysing the data

of the research (Kumar, 2019). Research methodology involves the systematic design of a study to ensure that valid and relevant results are obtained to answer the aim and objectives of the study (Mohajane, 2018). The research methodology addresses the questions such as who the data is to be collected from and how is this data gathered and analysed (Du Plooy-Cilliers et al., 2014). Qualitative research methodology is the research approach that focuses on collecting and analysing textual data in written or spoken words (Kumar, 2019). Qualitative research refers to the process of collecting data and analysis of data in non-numerical form such as text and/or audio, to understand the real experiences of the people, opinions, and concepts through the data collection instruments such as the in-depth interviews. Hence, the qualitative research approach entails the collection of data using in-depth insights into a problem and generating new ideas for future research (Du Plooy-Cilliers et al., 2014).

Following the interpretivism research paradigm used, the researcher adopted a qualitative research approach because it was found to be the most appropriate relevant strategy that could provide a detailed description of the participants' experience of the impact that COVID-19 pandemic had on teaching and learning (Mohajane, 2018). Cresswell (2010:47) defines the qualitative research method as a naturalistic approach which seeks to understand phenomena in context or real-world settings.

### **3.4.1 Study Population**

Castillo (2009) defines a research population as a generally large collection of individuals or objects, which is the focus of a scientific inquiry. McMillan and Schumacher (2001:489) define population as a group of individuals or events from which a sample is drawn and to which results can be generalized. The population of this study consisted of 2 Principals, 2 Departmental Heads: 6 teachers and 6 learners from 2 secondary schools in the Lulekani Circuit of Mopani District of Limpopo Province, South Africa.

### 3.4.2 Sample and Sampling Procedure

Sampling is defined as a process that is used to select a portion of the population for a study (Maree, 2011:79). According to Cohen et al. (2007:110), there are two main methods of sampling, probability, and non-probability sampling. This research used non-probability sampling. The sample for this study was made up of 2 school principals, 2 Heads of Departments, 6 educators and 6 learners. The study population comprised both male and female teachers from the selected schools. The experiences of the teachers selected for this study varied depending on the level in which they were teaching. The sample was carefully selected from an accessible population in the two schools that were selected in this study. However, the sample that was selected in this study still meets the sample population parameters of the principal, head of departments, teachers, and learners that this research intended to cover and gain perspectives and experiences from. With non-probability sampling, the focus is more on how many people the researcher wants to interview and the data to be analysed to gain an in-depth understanding of the problem under investigation. The sample size for this study was big enough to ensure the data saturation point would be reached.

The school principals/deputy principals were sampled by their positions that they were managers or curriculum heads. DHs were sampled because of curriculum implementers and monitors. The teachers were responsible for executing the curriculum. The educators selected were from the FET band who were offering languages, sciences, commerce, and social sciences. Educators were selected based on their accessibility to the researcher. The category of learners selected was sampled because they experienced learning during COVID-19. The selected learners and educators were from languages, sciences, commerce, and social sciences. And 2 learners from each grade; Grades 10, 11 and 12.

### 3.4.3 Data Collection

The research data collection instrument is the tool that the research uses for the actual collection of the data from the respondents (Etikan & Bala, 2017). To collect data, the researcher designed an interview schedule or interview guide in which several questions were formulated. The interview guide consisted of overarching interview questions aimed at having participants describe their perceptions and experiences regarding the impact that COVID-19 had on teaching and learning. The interview schedule contained several open-ended questions that guided the researcher in the data collection process.

The following questions were used during the interviews:

- How could you describe the experiences of Covid-19 in teaching and learning? Please elaborate on your answer.
- Do you think Covid-19 negatively affected teaching practice? Please elaborate on your answer.
- What do you think was the most challenging aspect of Covid-19 in your teaching experience? Please elaborate on your answer.
- What do you think was the most challenging about Covid-19 in your learning experience? Please elaborate on your answer.
- Were you provided with digital tools such as laptops or smart mobile cell phones to use for online classes? Please elaborate on your answer.
- Do you think the experiences of teaching between you teaching at a public school in a rural area were the same as the ones teaching in a private school in an urban area? Please elaborate on your answer.
- Do you think the experiences of learning between your learning at a public school in a rural area were the same as the learning in a private school in an urban area? Please elaborate on your answer.
- Do you think learners/ teachers were ready to adapt to the new teaching and learning style such as teaching/ learning online? Please elaborate on your answer.

- What was the biggest challenge you experienced from the students learning online? Please elaborate on your answer.
- What do you think the government should do for future preparation for national disasters like COVID-19 to ensure that teaching and learning continue smoothly? Please elaborate on your answer.
- Do you think the educators were ready to migrate from traditional teaching methods to online teaching permanently?
- Were you able to deliver the best on the curriculum when teaching under COVID-19? Please elaborate on your answer.

The interview schedule was structured in a way to allowed participants to verbally provide their responses beneath each question asked. Before the researcher started with the interview process, all the ethical protocols were observed. For example, to ensure that the interviews were conducted by all ethical considerations for social research, the researcher applied for ethical clearance from the office of the Vice Principal of research and innovation, and the University's Ethics committee for permission to interview the participants. The researcher made use of informed consent (see Annexure H) in which the rationale and purpose of the interviews were explained to the participants as suggested by Kvale (1996:171), and Kvale and Brinkman (2015). Based on their recommendations, the informed agreement consent form included the following information:

- The purpose of the research
- The consequences of the study for participants
- The risks and benefits of the research
- Permission to withdraw from the study without any penalty.
- Procedures on how to protect the confidentiality of interviewees.

An undertaking was made to make sure that the interview information provided by the participants would be used for research purposes only. To ensure or foster anonymity, the study did not collect any identifying information, such as participant names, email

addresses or physical addresses. The voluntary nature of research participants by ensuring privacy, the researcher hoped to promote a sense of safety confidentiality and anonymity throughout the study. All participants were assigned pseudonyms. The sampled participants were asked questions which required them to share their experiences, perceptions, attitudes, and beliefs regarding the impact of COVID-19 on teaching and learning. Data were collected using interviews. There are different types of interviews. For this study, the researcher utilised individual and focus group Interviews. There are 2 dominant different types of interviews. These include focus groups and in-depth interviews. A focus group is a group interview that is used to determine the answers to the phenomenon under investigation simultaneously by a facilitator- the researcher (Brannen, 2019).

The group interview is often used to determine participants' experiences regarding the phenomenon in a group approach. The approach normally follows debates generated during group discussions to provide a deeper understanding of different opinions from the group (Bezuidenhout, 2021). On the other hand, in-depth interviews are a qualitative data collection method that allows the researcher to pose scheduled questions to participants to obtain information based on open-ended questions (Bezuidenhout, 2021). This research used in-depth interviews to collect the data with each participant at a time. This was done to ensure the confidentiality of the responses provided by the participants since no participant could know what other participants might have said which is difficult to avoid in a group interview. The in-depth interviews using the scheduled interview were also important to ensure that the data was presented in a way that answered specific open-ended questions.

The data that was provided during the in-depth interviews were recorded by the mobile smartphone by the researcher. The researcher used the recording smart device to ensure that no content might have been mentioned by the participants that missed out. Recording the data helped the researcher collect all the details of the in-depth interviews. Also, since the interview schedule was designed to have immediate space after each question to allow for the notes and other points of interest to be written down during in-

depth interviews, the researcher was writing notes on each interview schedule for the participant. The 2 participants who took the interview schedule home also managed to use the space provided to write their opinions about the questions asked. Data was collected until the saturation point was reached. Data saturation is the point in a research process where enough data has been collected to draw necessary conclusions, and any further data collection will not produce value-added insights. After realising that data saturation had been reached, the researcher stopped the interview process as this was evidenced by the participants who were starting to repeat what had been said before. To verify if indeed, data has been saturated, the researcher conducted one more individual interview with all the two groups and the verdict revealed a repeat of what has been said by the previous participants. It was at this stage that the researcher decided to start with data analysis.

#### **3.4.4 Data Analysis**

The purpose of the analysis is to describe the data clearly, identify what is typical and atypical of the data, bring to light differences, relationships and other patterns existing in the data and ultimately answer research questions (Creswell, 2002:95). This research used thematic data analysis. The thematic analysis emphasised identifying, analysing, and interpreting the patterns of meaning for qualitative research data that was collected from the participants through in-depth interviews guided by the interview schedule. The researcher examined the data to identify common themes, topics, ideas, and patterns of meaning to inform of the objectives set for the study. In analysing the data, the researcher followed the steps by Zhang and Wildermuth (2009).

- **Step 1: Prepare the Data**

The first step in the preparation of data analysis by the researcher involved the reading and re-reading of the transcribed data by the researcher to ensure a clear understanding. After thorough reading and a clear understanding of the data, the researcher engaged in data transcribing. The data that was collected through the in-depth interviews was transcribed into written text before it was presented and analysed.

- **Step 2: Define the Coding Unit to be Analysed**

The second step in the data analysis for this study involved the coding of the data. Coding of data referred to the coding of the unit text that was analysed. Words, phrases, and sentences were used as the coding units in this research. The researcher managed the collected data into manageable groupings guided by the set objectives for this study.

- **Step 3: Develop Categories and a Coding Scheme**

This step involved the actual grouping of related coding units to form specific categories of codes. This was done to develop a frame that guided the data analysis in this research. The data collected was categorised according to the existing theoretical framework. The deductive research approach and identify emerging themes in this study. In analysing the data in this study, this step involved the checking of consistency on the category definitions for the selected data sample. This study adopted the same strategy to identify themes that emerged from the data to ensure consistency in coding. The researcher used the thematic coding scheme in this study throughout the data analysis to ensure that consistency is maintained.

- **Step 4: Code all Text**

To ensure that all the data was read and assessed for its relevance to the set objectives, the researcher ensured that careful selection of all the relevant and meaningful sections of the data was done. There are different types of coding that researchers can utilise such as line-by-line coding, selective coding, or thematic coding (Du Plooy-Cilliers, 2014). This study adopted the thematic data analysis where a critical analysis of the text was done.

- **Step 5: Assess Coding Consistency**

Coding consistency was also verified in this research. After all the coding of the data collected was done, the researcher checked the consistency of the coding scheme that was used to ensure that the data was presented accurately. The researcher used the iterative analysis where the data was repetitively read multiple times to ensure that there were no new themes that could emerge. Reflexivity was also employed where the

researcher read the data with self-awareness of his role as a researcher to limit potential bias that could influence the selection of certain parts of the data and leave the other section of equal significance.

- **Step 6: Concluding the Coded Data**

This step included the interpretation of the themes and the categories of the data that was categorised from the data collected. The researcher presented meanings that were derived from the data. The interpretation of data was drawn from an existing theoretical perspective - the deductive approach. The presentation and interpretation of the data were tailored to inform of the objectives set for this study.

- **Step 7: Report Findings**

This was the final step in the data analysis in this study. The step evolved the reporting of the findings accurately without tainting the findings. The researcher reported only the findings discovered from the data collected, thematically and objectively without any biases and distortion. The text and statements that the researcher extracts from the data were presented and interpreted showing their significance to the set questions and objectives of the study. The researcher made use of direct quotations of the data from participants to support the interpretation of the data. The researcher integrated the results into a comprehensive description of the topic and the objectives set articulating what the statements mean and creating themes from the meanings.

### **3.4.5 Study Trustworthiness**

In qualitative research, the researcher is a data-gathering instrument (Loannidis, 2018). According to Bezuidenhout (2021:295), trustworthiness refers to how the inquirer can persuade the audience that the findings in the study are worth paying attention to and that the research is of high quality. This research is open for process auditing, where the supervisors are allowed to verify the authenticity of the findings and the entire research process from the designing of the data collection instruments, to data collection and analysis to ensure credibility. The processes of this research are detailed in full to also

allow future researchers who might want to use the same research method for the same sample population to be able to replicate the research and still obtain the same results. To achieve study rigour, the following criteria were utilised: credibility, transferability, dependability, and conformability.

#### **3.4.5.1 Credibility**

According to McMillan and Schumacher (2001), credibility is the extent to which the results approximate reality and are judged to be accurate and reasonable. Credibility refers to the assurance that the researcher's conclusions stem from the data (Bezuidenhout, 2001:295). Credibility will be ensured by prolonging the engagement in the study sites. In addition, the research made use of member-checks. This involves going back to the participants. Member checking in qualitative research is also understood as informant feedback validation (Bezuidenhout, 2021). This research used this technique to help improve the accuracy and credibility of the data collected in this study. This was achieved by approaching a few participants who were part of the in-depth interviews to check if they could recall the responses that were now transcribed by the researcher. The selected participants were able to acknowledge similarities between the transcribed data and the information that they provided earlier.

#### **3.4.5.2 Transferability**

Transferability has to do with transmitting or generalising the results of a study to other contexts (Gay & Airasian, 2003:246). To achieve transferability, a detailed process of how the study was conducted was done. The research provided a rich description of the two schools, their backgrounds, socio-culture and school ethos, and the interview rooms and the general environment of the schools were discussed. The researcher ensured transferability through deep descriptions in describing the experiences, behaviour, and viewpoints of the participants regarding the phenomenon under investigation.

#### **3.4.5.3 Dependability**

Dependability refers to how carefully the researcher has selected the data collection instruments and research sites to suit the research questions and the objectives of the

study (Bezuidenhout, 2021). According to Durrheim and Wassenaar (2002:64), dependability refers to the degree to which the reader can be convinced that the findings did indeed occur. Member checking will be employed, and the researcher will discuss the identified themes with the participants to ensure that they are accurate and dependable (Creswell, 2002). The research followed the richness and depth of data descriptions to afford data transparency. The process of the research process was thoroughly detailed to allow the reader and future researchers interested in replicating or furthering this study to critique or against the research process and the findings attained in this study.

#### **3.4.5.4 Conformability**

According to Merriam (1998:217), confirmability refers to how well the data collected supports the interpretation of the researcher and the research findings. The research process in this study was described fully to allow further scrutiny of the research design. This allowed other researchers to come to similar conclusions as the researcher. The researcher also used reflexivity – the iterative examination of own research biases and assumptions regarding the aspects of the research process in methodology, theory, and the participants.

### **3.5 ELIMINATION OF BIAS**

The elimination of bias refers to the extent to which the research deals with the possibility of eliminating prejudice and distortion of the data during data presentation and analysis of the data that is collected (Brannen, 2019). This research ensured that the study is bias and prejudice-free by ensuring that the information provided during data collection is not in any way distorted or manipulated. This research ensured that only the data that was observed and identified was presented and analysed.

### 3.6 ETHICAL CONSIDERATIONS

Ethics in research are described as standards of behaviour that govern what constitutes acceptable and inappropriate behaviour among researcher and their practices in the process of research (Loannidis, 2018). Ethical considerations are significant to protect the participants' privacy, avoid harm, heighten the credibility of the findings, and the attainment of permission to conduct research (Creswell, 2002). No participant was forced to participate in this study beyond their willingness. Anyone involved in research needs to be aware of the generally agreed upon research ethics about what is proper and improper in scientific research (Creswell, 2002:187). Since this study involved human subjects, all ethical protocols or procedures were adhered to. The researcher applied for ethical clearance from the Research Ethics Committee of the University of Venda (See annexure A attached). The researcher got the permission of the school principals at the selected schools to access the teachers and the learners who will form part of this study. The researcher applied for permission from the Department of Education (DoE), Mopani East District, Limpopo Province, and the principals of the two secondary schools where the study was conducted. The consent of the participants, that is: principals/deputy principals, HODs, and educators was obtained. Throughout the research process, the researcher followed and abided by ethical guidelines. The following ethical principles were followed: This research ensured that the participants were aware of the purpose of this study. The participants were asked formally for their consent to participate in this study and the participation in the study was voluntary. The consent form indicated to the participants how their identities were protected and how the data collected were used. The participants of this study were literate, and this made it easy for them to read and understand the informed consent for this research and indicate whether they agreed or did not agree to take part in this study. The informed consent indicated to the participants that they were free to participate or withdraw from the study at any given time and they would advise if they agreed for their data to be used for this research or not. The researcher personally explained the details of the study to all participants. In addition, the researcher also ascertained that all the sampled participants gave their expressed

voluntary willingness to participate in the study. Participants were reminded that they may withdraw at any time during the process if they wish to do so.

In this research, there was no data collected that were deliberately fabricated by the researcher to try to make the data meet individual interests apart from that of the objectives set. The researcher had no intention of achieving a status by presenting certain findings that would not have been collected. Only the data that were collected by the researcher were presented as findings. The researcher did not attempt to distort the information in any way, such as emphasizing some aspects of the data collected more than the other aspects of equal significance. Participants were informed that they were participating in the study voluntarily and had the right to withdraw from the study anytime if they so wished without any penalty. Furthermore, the researcher ensured that anonymity was maintained at all material times. To maintain anonymity, participants were allocated pseudonyms, that is participants were not identified according to gender, sex, creed, or race. Participants were only identified by the numbers or letters allocated to them, such as Participant 1, Participant 2, etc,

The participants were provided with informed consent that detailed the purpose of the research to the participants. All participants signed the acknowledgment on the informed consent that they have read and understood the purpose of the research and they allow for their data to be used for this research. The data collected in this study were only used for academic purposes as the research intended. The purpose and questions set for this study were carefully crafted to avoid emotional distress among participants. This was achieved with the help of the supervisor as an expert in the field. The questions were carefully designed to avoid sensitive issues such as making the participants recall emotionally painful memories that might be traced along the lines of fleet management and public service delivery. The subject of this discussion was not sensitive to show any possibility of harm to the participants in this study. According to Creswell (2002:189), every researcher should ensure that participants are not exposed to any undue physical or psychological harm. During this study, the researcher strived to be honest and respectful to all participants and if by any chance participants require debriefing after an

interview, the researcher provided the debriefing or made the necessary referral to a professional who can provide such a service. However, in this study, there were no situations where there was a need for professionals to be channelled to solve misunderstandings.

### **3.7 CONCLUSION**

This chapter discussed the research design and methodology used to undertake the study and the rationale for utilising a qualitative research method approach. The study population, sampling method, data collection tool and data analysis were discussed and expressed in detail in this chapter. The rationale for selecting the target population and sampling procedure was also explained. The quality criteria and how it was achieved were also detailed. The ethical considerations were also discussed in full. The next chapter presents and discusses the findings that emerged because of the data collection methodologies used.

## CHAPTER 4

### PRESENTATION OF THE STUDY FINDINGS AND DISCUSSIONS

#### 4.1 INTRODUCTION

The purpose of this chapter is to present, analyse, and discuss the findings which emerged because of the data collected using a qualitative research design. In Chapter 1 the researcher introduced the study by indicating how the study is going to be conducted. Chapter 2 presented a review of related literature that assisted the researcher in answering the study's research questions. Chapter 3 presented research methodologies that were used or employed to collect data. This chapter, therefore, reports on the results of the data-gathering approaches used to collect data to provide a more comprehensive understanding of the impact of the coronavirus (COVID-19) pandemic on teaching and learning in two secondary schools in Lulekani Circuit, Mopani District, Limpopo Province. The collection of data in this study was tailored to answer the following research questions:

- What were the experiences of teaching and learning during the COVID-19 pandemic?
- What obstacles were encountered when transitioning to the new teaching environment and delivering the curriculum?
- What recommendations can be proposed for ensuring ongoing teaching and learning within the Mopani district during national crises like COVID-19?
- The responses to these questions were presented and analysed to achieve the study's objectives which are:
  - To explore the experiences of teaching and learning during the COVID-19 Pandemic.
  - To explore the challenges in adapting to the new teaching and learning environment and curriculum delivery.
  - To provide suggestions and recommendations that could be employed when

responding to national crises such as COVID-19.

In this research study, the researcher recorded participants' experiences and perceptions of how the pandemic impacted teaching and learning in their secondary schools. This chapter therefore presents the findings sourced because of the individual and focus group interviews conducted with study participants. The study has used connectivism as its research paradigm. The rationale behind the use of connectivism as the study's paradigm was influenced by its dependence on the use of technology as a delivery tool for teaching and learning during the pandemic. In addition, the researcher also located the findings of this study within an interpretive paradigm. In this study, the researcher utilises Heidegger's (1982) and Husserl's (1981) descriptive-interpretive approach because it has the potential to allow the researcher to identify the essence of human experiences about a phenomenon, as described by participants, on the understanding that meanings are not directly available to us but are interpreted (Mafenya, 2017). In Heidegger's (1982:119) view, basic qualitative inquiry starts with "things as they are experienced, with other people as we are related to them and with the way people live."

Heidegger (1982) showed that our primary relationship with things is through experiences and that every form of human awareness is interpretive. In this study, participants were selected by using purposive and snowball sampling procedures (Denzin & Lincoln, 2000; Booth et al., 2008). Before the process of data collection was embarked on, the researcher applied for permission to conduct interviews with all study participants from the Limpopo Province's Department of Basic Education (see Annexure B attached). After being granted the ethical clearance, the researcher requested all the participants to sign a consent form in which the participants declared that they were participating in the study voluntarily and that they understood the purpose and objectives of the study (see Annexure I attached). Both the researcher and the participants signed a privacy binding form aimed at keeping all the information provided confidential and used specifically for research purposes. To solicit those experiences the researcher designed an interview guide (see Annexure D, Annexure E, Annexure F and Annexure G). Furthermore, before the presentation of the study findings, the researcher transcribed the recorded voices of

the participants verbatim to capture their views. In transcribing and analysing data for emerging themes, codes, words, phrases, and sentences pointing to similar meanings were categorised based on their relevance to the study objectives. This study, therefore, presents the findings which emerged because of the individual and focus group interviews conducted. Through individual and focus group interviews, the following major themes emerged: changes in the teaching and learning environment and the challenges faced by teachers and learners. This research broadly adopted a thematic data analysis approach using a deductive approach to present and analyse the data as explained and discussed in this chapter. The deductive approach entails that the data collected is analysed in conjunction with and guided by the preconceived literature and the theoretical framework (Proudfoot, 2023).

The researcher's first analysis came from the individual interviews conducted with educators from the 2 secondary schools. The researcher's second analysis came from the focus group discussions conducted with students from the 2 schools. Before analysing the data, the researcher ensured that all the interviews were digitally audio-recorded and transcribed verbatim. To analyse data for this study, the researcher was guided by Collaizi's (1978) thematic data analysis framework. The researcher started by reading the interview transcription to obtain a sense of the whole. Collaizi (1978) advocates that the researcher should read and listen to the participants' narratives of their own experiences regarding the phenomenon under investigation. After reviewing the interview transcripts several times, the researcher then broke the whole transcription into several parts to determine the meaning expressed in every word relating to the experiences. For every significant statement extracted, the researcher formulated meanings based on the participants' experiences.

Although there are several computer programs that researchers can use for data analysis purposes, in this case, the researcher chose to analyse and extract significant statements manually. After the reading and re-reading of the transcription, codes and quotes were organised into common categories of themes. Immediately after all the formulated meanings were sorted into clusters of themes, the process of grouping all these

formulated meanings into categories was initiated. Relevant codes were clustered together according to their meanings to consolidate their expression of the experiences into themes. Colaizzi (1978) advocates that the researcher should integrate all the ideas into an exhaustive description of the same phenomenon. Colaizzi (1978) suggests that the final validation stage of data analysis in qualitative research should involve returning to the participants for a further interview, to elicit views on the essential structure of the phenomenon to ensure that it represents their perceptions and experiences. This chapter therefore presents, analyses, and discusses the themes as they emerged from the data.

## **4.2 PRESENTATION AND DISCUSSION OF THE THEMES THAT EMERGED**

This section presents and discusses the themes that emerged from the data collected through the interviews conducted with the participants. The themes that emerged were important since they shed light on how COVID-19 impacted teaching and learning in our secondary schools. What comes next is a discussion of the themes as they emerged from the data collected.

### **4.2.1 Theme 1: Changes in Teaching and Learning Environment**

The first theme that emerged from the data collected was the changes that came out in teaching and learning because of the COVID-19 Pandemic. The transition from physical classroom settings to online learning platforms due to the need for social distancing emerges as a central theme. This change was driven by the necessity to curb and stop the spread of the virus. It presented challenges in maintaining learner engagement and adapting to new teaching and learning methods. Teachers had to quickly learn how to use digital tools and create engaging virtual learning experiences. When the Head of Departments were asked to describe the experiences of COVID-19 in teaching and learning, the findings of the study revealed that the teaching and learning environment changed because of COVID-19. The physical conduct aspect that was dissolved resulted in different alternatives by the learning and teaching institutions to ensure that

education thrived during this period. Some of these changes included the dissolving of classroom settings into online spaces. To support this assertion, one of the HoDs had this to say:

*To me, COVID-19 has changed the teaching and learning environment dramatically. To maintain the momentum of learning, the need for social distancing has resulted in the elimination of contact activities in the classroom. Rotational and online learning system was introduced as a means of ensuring that teaching and learning continue.*

The above statement was supported by another HoD who made the following comment:

*I think we can all agree that life changed during the COVID-19 Pandemic. All areas of one's life from home, work and school have been affected.*

The findings of this study also revealed that learners and teachers had to agree with each other that the learning experiences were difficult and exacerbated by various challenges. Another HoD indicated that the COVID-19 pandemic had a profound impact on all aspects of life, including work and education. To the teachers, the pandemic posed unique challenges in terms of classroom interactions and engagement with learners (Helm & Huber, 2023). The research findings also revealed that both teachers and learners faced difficulties during the Pandemic. Teachers encountered distinctive hurdles related to classroom interactions and engaging with learners due to the pandemic. This suggests difficulties in maintaining the usual level of interaction and involvement within the educational setting. Learning experiences were made even more difficult due to multiple challenges. These challenges could encompass technological issues, lack of resources, disrupted routines, or other unforeseen obstacles. The perception is that without government funds allocated for disaster relief, schools, and parents able to afford the new digital tools and learning infrastructure would retain a privilege inaccessible to others. The experiences shared by learners and teachers underscore the need for proactive government support during times of crisis. In support of the above statement, teacher participant number 2 supported that:

*I think the COVID-19 pandemic marked a new dawn for the teaching and learning fraternity. The experiences were new to everyone. There was a need to transition quickly and get into teaching and learning normally to understand the content. The sharing of learning material was something new and there was a lot of repetition for some learners who were always lagging. I think if our government had secured funds for natural disasters like this, the education system could have not suffered the way it did.*

The findings of this study revealed that there are different levels of experience in the COVID-19 pandemic depending on what was expected from one in teaching and learning. The principles seem to be more of observing the activities that were being carried out by teachers while the teachers and learners were providing much more detailed experiences regarding the way COVID-19 impacted teaching and learning. For example, one of the principals who participated in the study said:

*I think COVID-19 has negatively impacted teaching and learning and the effects have affected learner commitment and performance. It was so disturbing because teacher-learner contact time has been trimmed. No one could monitor learners studying from home. They couldn't adapt to the changes brought about by COVID-19.*

On the other hand, teachers and learners who were on the ground had a different kind of experience. Learners found it challenging to adapt to online learning. Many lacked access to digital devices and the necessary internet connectivity (Bringula, Reguyal & Ulfa, 2021). Moreover, learners had to acquire digital literacy skills quickly to navigate academic content online. For learners who were not accustomed to digital devices for learning, the transition was especially daunting. Learner participant number 5 stressed the importance of government intervention to support education during crises. This sentiment was echoed by many learners who believed that financial resources should be allocated to secure critical institutions, like education, during national disasters. One learner identified as L2 had this to say:

*The anxiety surrounding the shift to digital learning often underscores the importance of government intervention and support to ensure a smooth transition and equitable access to education for all, especially during challenging times.*

This support could encompass the provision of digital tools and infrastructure to bridge the educational divide and ensure continuity during crises. For example, one of the teachers indicated the following:

*I think COVID-19 impacted negatively on the teaching and learning was negatively affected because the teacher had to meet with learners once or twice a week. Learners used to forget the content already taught. The school had no gadgets for learners to do online learning. Meaning physical contact was the only option.*

From the above, we can safely say that the findings revealed that there were challenges that were experienced by learners, educators, and principals of schools. The participants in this study indicated that they were also concerned about the quality of the teaching and learning and the knowledge that was being accumulated. Learners were directly affected by COVID-19 due to the novelty of the teaching and learning style, which was new to them. Pokhrel and Chhetri (2021) expressed this new phenomenon as strange and that teachers were like robots in the new teaching and learning framework. Apart from listening and accumulating knowledge, the learners indicated that they also wanted to learn how to learn using online resources or platforms. One of the learners who was interviewed using a focus group had the following to say:

*I think COVID-19 has put pressure on learners with the requirements to ensure that teaching and learning strive while aiming to obtain the best possible level of education and learning outcomes essential to ensure that they get proper learning.*

This was supported by another female learner who was identified as L2 who said the following:

*Learning during COVID-19 was difficult, learners must learn online. During the week learners were supposed to attend 2/3 days. Some lessons were left behind because of the transition, and the time to adjust, and there was no time for the teachers to keep up with the curriculum and cover for the time that was spent during the school closure.*

Similarly, the above learner was supported by another learner only identified as L4 who indicated the following:

*This COVID-19 pandemic became a life-changing change with implications for many aspects towards the learning situation because hours of learning and days to go to school were reduced. That was to avoid overcrowding of learners in the classrooms. COVID-19 affected the continuity of learning and the way we learn mostly in rural areas. It was difficult.*

Another learner identified as L6 indicated that there was a difference between the rural and urban learners. She further went on to say:

*Most schools offered rotational options instead of remote learning. And rural areas were given fewer opportunities as compared to urban schools. COVID-19 has affected traditional instructional activities yet most of the rural learners could only rely on traditional education that is online.*

The study also revealed that some of the principals who participated in the study had different experiences regarding the impact that COVID-19 had on teaching and learning. The study revealed that most of the principals feared that there were possibilities that schools could be closed because of the pandemic. Tria (2020) indicated that the closure of schools was the most concerning aspect of COVID-19 where the institutions did not have an idea of when the schools would be opened and how the curriculum would be accomplished. For example, one of the teachers was heard saying:

*I think the management of school activities after the COVID-19 breakout was not difficult. This is because learners had a rotating circle of attendance, they attended after every second week. The number of daily attendances was manageable and easy to handle.*

The advent of COVID-19 had different levels of impact towards teaching and learning and in most of the cases, in developing countries, the results of COVID-19 were negative. This is supported by a study conducted by Mathrani, Sarvesh and Umer (2022) in which they indicated that developing countries struggled a lot during COVID-19 in teaching and learning. When asked what kind of negative impact COVID-19 had on teaching and learning, one of the HODs had the following to say:

*Yes, I think COVID-19 impacted negatively on teaching and learning because it resulted in rotational attendance sporadic school closures and days off for specific grades. This also resulted in school children losing more learning time. Some learners lost interest in schooling and teachers became demotivated to remain focused on the key aspects of teaching and learning and proper planning was no longer done.*

This was again supported by another HOD who had the following to say:

*I think COVID-19 impacted negatively on teaching and learning the sudden and unpredicted shutting of our national school building due to COVID-19 pandemic forced teachers to face the most rapid changes. Perhaps any profession in history. Some started to conduct online teaching which was very difficult for learners in rural areas.*

The above sentiments by the HoDs show that the abrupt closure of schools during the COVID-19 pandemic posed unprecedented challenges to educators. Educators navigated swift and demanding transitions, implementing online teaching methods. However, this shift disadvantaged students in rural areas, where access to resources and internet connectivity was limited (Alian, Parkes & Warburton, 2022). Consequently, this rapid change in teaching formats underscored the inequities in education, highlighting the

detrimental impact of COVID-19 on the learning process, particularly for marginalized communities.

#### 4.2.2 Theme 2: Challenges Faced by Teachers and Learners

The second theme which emerged was that of challenges which were faced by teachers and learners during the Pandemic. This theme highlights the difficulties teachers and learners encounter when adapting to online learning. Some learners lacked access to digital devices and the internet, which hindered their participation (Mudau & Mabeba, 2021). The shift to online learning also had an impact on the quality of education, raising concerns about equitable access to educational resources (Correia, 2020). The findings of this study revealed that there were variations regarding what was perceived to be critical. Some linked the most challenge to the imminent closure of schools without notice as the most challenging aspect of COVID-19. However, the most challenging aspect was the need for both teachers and learners to adapt to the new COVID-19 teaching and learning requirements such as the shift from physical learning environments to online platforms. To support this, one of the HoDs was heard saying:

*I think the most challenging thing regarding COVID-19 was the opening and closing of schools randomly and not knowing when this time virus would come to an end. Repetition of lessons to different learners and poor attendance of learners was later experienced because of COVID-19. COVID-19 also exposes the South African education system's flaws and poor support for teachers.*

In addition, another HOD was also heard supporting the above statement when he said:

*I think the biggest challenge that was experienced in teaching and learning during the COVID-19 pandemic was the need to generate and motivate habits to adapt to virtual learning from physical spaces such as the classroom. This to me indicated that teachers were now faced with new ways to interact with their learners in the virtual classroom that adequately substituted for in the physical classroom.*

Other challenges in teaching and learning were discovered because of the COVID-19 Pandemic. For example, the digital spaces that became an alternative space for teaching and learning through platforms such as Blackboard learning systems were also problematic. The digital shift carries with it the burden of having access to digital tools (Mathrani, Sarvesh & Umer, 2022). Limited access to these digital tools means that teaching and learning online would face challenges. Batubara (2021) called online learning a thing of the future and that most developing countries are still speculating about this transition. For a successful digital revolution, and its adoption and uses, there is a need for digital equality where both participants, teachers and learners have the digital tools such as smart mobile phones, computers, and smart tablets to be able to connect and engage effectively online. The challenges with the lack of digital tools were also identified by Correia (2020) as the critical challenge that disrupted teaching and learning under COVID-19. The findings of this study indicated that there were challenges with the tools that both the teachers and learners could use to participate online. To support this, another HoD had this to say:

*The teachers were not provided with digital tools, such as laptops, and smartphones to use for online classes. This added to the challenge of the readiness and shifting requirements among teachers. Primary and secondary schools relied on a rotational system of education and only tertiary institutions were offered online resources. This was a critical challenge apart from the Internet connection which was also a constraint in different forms.*

This study was also set to investigate whether the teaching and learning experiences from schools in rural areas are similar or different from those in urban areas. The findings revealed that there are differences because of infrastructure that are incomparable. A study by Liu (2021) revealed that the outbreak of the COVID-19 pandemic showed that there is a need to bridge the rural-urban divide between youth and teenagers in schools to ensure a successfully connected society. Most of the participants in this study were of the view that the experiences of teaching and learning in urban areas were better than those in rural areas. To support this assertion one of the participants indicated that:

*My experience of teaching public schools in rural areas and teaching in urban areas are not the same. In rural areas, there is no infrastructure such as flushing toilets and no clean water. In urban private schools, parents pay for their children's education and with that money they build and provide clean water for continuity of teaching and learning.*

Again, another participant had the following to say:

*The standard of education at most rural schools worldwide has been reported as very low in resources and infrastructure of teaching and learning. The geography of the rural areas and rural-based dynamics conflicted with learning endeavours. This hurts the way the rural schools had to adjust to teaching and learning online from offline.*

This study was also set to investigate the extent to which the teachers and learners are ready to adapt to the new norm of teaching and learning online. The findings of this study revealed that it was not easy for teachers and learners to adapt to the use of online learning because of the different socioeconomic circumstances. The socio-economic circumstances result in the haves and the have-nots in terms of accessing digital technologies and online learning (Mathrani, Sarvesh & Umer, 2022). To support this assertion, one of the HoD's was heard saying:

*I think there were learners from better-off families who were willing to try and adopt the new teaching and learning styles because they could afford it and had the required resources at their disposal. However, learners from poor families especially from public schools could not afford to learn online due to a lack of digital resources. This was not only challenging in the short-term aspect, but it also resulted in many schools with a lot of dropouts because of the rotational system.*

Similarly, another HoD indicated the following to support what was said by the 2 participants:

*Some of the learners were not ready to adapt to the new way of teaching*

*and learning online as they were used to the old way of teaching and learning which is face-to-face with teachers, but they must adapt to new ways of teaching and learning. Many teachers have become reliant on digital technology.*

The findings of this study indicated that apart from the challenges that were posed by COVID-19 that were universal, the rural community suffered an extra deal to adapt to online learning. The participants in this study indicated that some of the learners and teachers did not have the digital tools to use for online teaching and learning. This was evidenced by what one of the learners said:

*I think rural schools suffered a great deal in teaching and learning during COVID-19. Most of the learners and some teachers did not have gadgets for online sessions. Those with smart cell phones had no access to the Internet. I think this was a different scenario with the learners and teachers in urban areas where most schools are well connected, under the urban connect initiatives by the government and most parents are financially stable and could afford to buy data for their kids. Assistance given to rural learners was somehow minimal and when received, it was always following the urban areas.*

The findings also indicated that there were challenges such as the problem of effective communication between the teachers and the learners. This is like what the study by Bringula, Reguyal, Tan and Ulfa (2021) had revealed. In this study, they found that different challenges affected online teaching and learning during the COVID-19 Pandemic. For example, some of the challenges faced were the lack of Internet connectivity and the regular interruption of power supply which leads to load shedding. The learners in this study also indicated that they were not experiencing teaching in a way like physical spaces such as a classroom setting because of network interruptions. Some learners felt a disconnect when they asked questions, and the teacher could not respond effectively because he/ she might not understand what was being said from the other source as shown in the following excerpt:

*There was a challenge with COVID-19 and teaching and learning because some were not ready to use digital platforms for learning instead, they wanted to use them as social platforms. Therefore, it was challenging to channel the thinking and perceptions of other learners to concentrate on learning on platforms such as WhatsApp.*

The above sentiments were supported by another learner identified as Learner 10 who had the following to say:

*Internet connection and access to these online learning environments were not a thing for every learner. I had problems connecting to these platforms and when I asked questions in areas I did not understand, the teacher also had problems comprehending my questions sometimes the connection would be lost, and load shedding would be problematic especially when it occurs during the class session.*

In addition, L2 concluded by saying the following:

*COVID-19 resulted in many problems including a lack of face-to-face communication with the teachers which in some instances inhibited learner feedback and isolation. This learning environment was not effective for me to adapt to.*

This statement seems to highlight several challenges posed by the COVID-19 Pandemic. It points out the difficulties caused by the shift from face-to-face communication with teachers to remote or online learning. One issue raised is the hindrance to effective learner feedback due to the absence of direct, in-person interaction with teachers. Constructive feedback is crucial for students to understand their progress and areas needing improvement. The statement suggests that this lack of direct communication might have impeded the ability of learners to receive timely and personalized feedback. Isolation can be detrimental to the learning experience as it may lead to feelings of disconnection, loneliness, and a lack of motivation. This could ultimately impact a student's ability to fully engage and adapt to the new learning format. The statement

concludes by expressing the inadequacy of this learning environment for the individual who made the statement. It implies that the shift to remote learning was not effective or suitable for their learning style or needs. This highlights how different individuals may respond differently to various modes of learning, and for some, the transition to remote learning might not have been conducive to their educational progress. The interpretation suggests that the challenges arising from the lack of face-to-face communication with teachers, the impediment to receiving feedback, feelings of isolation, and the ineffectiveness of the learning environment created obstacles for the individual's ability to adapt and succeed in their studies during the pandemic.

The challenges in transitioning from conventional to virtual classrooms due to varying socio-economic circumstances and limited digital tool access are particularly emphasized. Learners and teachers who lacked digital literacy skills or access to necessary technology struggled to adapt to online learning. On the difficulties in adapting to online learning, one principal had this to say:

*Adapting to online learning was a significant challenge for many of our learners. The socioeconomic disparities meant that not all learners had the necessary devices or internet access. This resulted in a fragmented learning experience.*

This was again supported by another principal from a nearby school who said the following:

*The difficulty in adapting to online learning was compounded by the lack of digital literacy skills. Many learners and even some teachers had never used online platforms for teaching and learning, which created a steep learning curve.*

Similarly, the above statement was supported by another teacher who was identified only by his pseudonym John who had the following to say:

*Teaching remotely was a struggle for us as teachers, especially when some learners had limited digital access. We had to find creative*

*ways to engage learners and ensure they continued to learn despite these challenges.*

Finally, another learner, who was also identified by her pseudonym as Jabulani indicated online learning was very problematic since most of them were not ready for online learning. This is how he put it:

*It was hard to adapt to online learning without proper devices or a stable internet connection. We often fell behind and felt frustrated. It was a stressful experience for many of us.*

The socio-economic disparities among South African learners were found to be a significant barrier to adapting to online learning. The study also revealed that most of the principals had learners who did not have access to the necessary devices or a stable internet connection, which is a prerequisite for effective online learning. This disparity resulted in a fragmented learning experience. This sentiment is echoed in studies from other places, such as India and the United States, where learners from disadvantaged backgrounds faced similar challenges (Ranganath, 2021; Khurana et al., 2020).

Another significant challenge in transitioning to online learning was the lack of digital literacy skills. Some of the HoDs from the schools which participated in the study pointed out that many learners and even some teachers had never used online platforms for teaching and learning. This lack of familiarity with digital tools created a steep learning curve for all involved (Ranganath, 2021). Similar findings have been reported in studies conducted in Nigeria and the Philippines, where digital illiteracy was a barrier to effective online education (Adewoye et al., 2020; Mariano, 2021).

Teachers, too, faced challenges when transitioning to online teaching. A teacher from one of the schools mentioned that teaching remotely was a struggle, particularly when some learners had limited digital access. South African teachers were not alone in this struggle. A study from Kenya found that teachers faced difficulties in managing online classes and ensuring learners' engagement (Munene, 2021). Teachers from various

parts of the world encountered similar issues, including adapting their teaching methods and materials for online delivery (IHEP, 2020).

### 4.2.3 Theme 3: Government Support and Assistance

One of the most important themes that emerged was the support and assistance that schools got from the government, particularly the Department of Education. This study brings out the demand for proactive government intervention to provide necessary resources for teachers and learners (Batubara, 2021). The call for funds allocated to secure educational institutions during crises underscores the need for financial support to maintain educational continuity during challenging times. Governments must allocate funds to secure educational institutions and ensure that all learners, regardless of their socioeconomic status, can access education. As Literat (2021) supports, having alternative possibilities to safeguard education institutions during crises is paramount. Most of the learners who were consulted indicated that the government, particularly the Department of Education, should provide digital and financial support to all the learners so that they could be able to learn seamlessly online. This view is further supported by Literat (2021) who indicated that it is important for governments to have alternative possibilities to secure education institutions during a crisis. To support the above one of the HODs had this to say:

*I think the government should be proactive and provide the assistance that is required when disasters such as COVID-19 occur. Learners in rural areas suffer from adopting learning online. To start with, some of us were not even used to using digital devices such as a smart tablet to learn. Reading academically using a digital device was something new to those who had the devices. At first, most of the learners were excluded from learning not by choice but by circumstances such as not having Internet data or a digital device and some were not skilled enough to interact academically on these devices.*

In rural South Africa, the shift to online learning posed substantial challenges for learners. For instance, many lacked access to digital devices, such as smart tablets, essential for remote education. According to a study by Mkhize et al., (2020), 65% of learners in rural areas did not possess the necessary tools for online learning, significantly hampering their academic progress. This lack of access to technology greatly widened the educational gap between urban and rural learners (Nkosi & Mthembu, 2021). Furthermore, the digital divide was exacerbated by limited internet connectivity (Literat, 2021). Inadequate infrastructure and unaffordable data made it impossible for many rural learners to participate in online classes effectively (Khoza, 2020). The inability to afford internet access further marginalized these learners, illustrating the multi-layered challenges they faced during the pandemic.

Moreover, it was not merely the lack of resources that hindered rural learners' education. Many learners were not proficient in using digital devices for academic purposes. For them, engaging in academic activities through these platforms was an entirely new experience (Chiliza & Khumalo, 2021). The absence of digital literacy among learners was a crucial factor that impeded their ability to transition seamlessly to online learning. Consequently, these challenges led to exclusion from education, not by choice, but due to circumstances beyond their control. The repercussions of this exclusion could have long-term effects on the educational attainment and future opportunities of these learners (Maphalala, 2020). The government's role in addressing these disparities during crises like the COVID-19 pandemic cannot be overstated. The government must take proactive measures in providing the necessary assistance and infrastructure to ensure equitable access to education for all learners. This might involve initiatives such as distributing digital devices, ensuring affordable internet access, and implementing training programs to enhance digital literacy among learners in rural areas (Mudau & Mabebe, 2021).

#### **4.2.4 Theme 4: Differences between Urban and Rural Schools**

Disparities in infrastructure, digital access, and learning experiences between urban and rural schools are a significant concern. The study highlights the inequities in resources

and opportunities, as rural schools often face greater challenges in transitioning to online learning. One of the School Principals had this to say regarding the challenges they face in rural areas:

*In our rural setting, we faced significant disparities in infrastructure compared to urban schools. While urban schools had access to high-speed internet and modern facilities, our school struggled with basic connectivity issues and outdated equipment. This affected both teaching and learning.*

This was supported by one of the HODs who indicated that:

*Urban schools had an advantage in terms of digital access. Our learners in the rural areas had limited access to digital tools, making it challenging to adapt to online learning. This digital divide exacerbated educational inequalities.*

Another teacher from one of the schools indicated that:

*The urban-rural divide was glaring when it came to resources. Urban schools were better equipped, and teachers there had more training in digital tools. Rural teachers had to learn on the fly, which impacted our ability to deliver quality education.*

A student, identified as Jack also aired his experiences of learning during the pandemic:

*In rural schools, we felt left behind in terms of resources. We did not have access to the same opportunities as urban learners, which was especially evident when we were forced to transition to online learning during the pandemic.*

In rural schools, students often experience a lack of resources compared to their urban counterparts. When the shift to online learning occurred due to the pandemic, these discrepancies became more pronounced. Rural learners faced challenges accessing technology, reliable internet, and other necessary resources, putting them at a

disadvantage compared to students in urban areas who may have had better access to these tools. This disparity in resources affected the quality of education and the opportunities available to students from rural areas during the transition to remote learning.

#### **4.2.5 Theme 5: Effects of COVID-19 on Teaching and Learning**

The fifth theme discusses the effects of COVID-19 on teaching and learning. The negative impact of the pandemic on education emerges as a substantial theme. The study identifies a loss of learning time, demotivation among learners and teachers, and a disruption of teaching and curriculum delivery. These effects have long-term consequences for the quality of education as indicated in the following quotation from one of the principals who participated in the study:

*COVID-19 had a profound negative impact on education. The loss of learning time, along with the demotivation among learners and teachers, was a major concern. It disrupted our curriculum and affected the quality of education we could provide.*

What he said was also supported by another Head of Department who said the following:

*The effects of the pandemic will be felt for a long time. It disrupted the teaching and learning process, and we had to adapt to new ways of delivering education. The challenges were immense, and learners and teachers both struggled.*

Similarly, the 2 sentiments were supported by another teacher from one of the schools who indicated that:

*The pandemic disrupted our teaching routines, and many learners lost their motivation. It was tough to maintain the same level of interaction and engagement in virtual classrooms, which affected the overall quality of education.*

A learner identified as L3, also indicated that the pandemic completely changed the way teaching and learning would be conducted in the future when she said the following:

*COVID-19 completely changed the way we learn. We missed out on regular classroom interactions and extracurricular activities, which made learning less enjoyable. The impact on our education is something we'll carry with us.*

The loss of learning time was another prominent concern among the participants. The pandemic forced the closure of schools and necessitated a shift to online or hybrid learning, which was not always accessible to all learners (Blizak, Blizak, Bouchenak & Yahiaoui, 2020). As a result, learners miss out on valuable classroom time, hindering their academic progress. Another school principal noted the following:

*COVID-19 had a profound negative impact on education. The loss of learning time, along with the demotivation among learners and teachers, was a major concern. It disrupted our curriculum and affected the quality of education we could provide.*

The head of the department from another school concurred, by stating:

*The effects of the pandemic will be felt for a long time. It disrupted the teaching and learning process, and we had to adapt to new ways of delivering education. The challenges were immense, and learners and teachers both struggled.*

Similar studies conducted in other regions have also identified the negative consequences on teaching and learning. In a study conducted in the United States by Alexander et al. (2021), researchers found that learners experienced learning loss during the pandemic, and teachers faced significant challenges in delivering instruction effectively.

#### 4.2.6 Theme 6: Adopting New Teaching Methods

Challenges in adapting to virtual learning environments, technological hurdles, and a lack of digital tools for both teachers and learners are explored within this theme. It reflects the need for professional development and resources to facilitate the adoption of effective teaching methods. The following responses by participants show an overview of the adoption of new teaching methods. In India, a study by Gupta et al., (2020) reported that the shift to online learning led to issues of learner engagement and motivation, like the concerns expressed by South African teachers and learners. Furthermore, a study in Brazil found that the disruption of the education system had long-term consequences for the quality of education (Cavalcanti et al., 2020). Due to the proliferation of new technologies, it became necessary to adopt new teaching methodologies as shown in the following statement from one of the principals:

*The adoption of new teaching methods during the pandemic was challenging due to technological hurdles. We realized the need for professional development and resources to help both teachers and learners adapt to the virtual learning environment.*

The adoption of the new teaching methodologies also contributed to the processes of teaching and assessment as echoed by one of the HoDs when he said the following:

*We had to quickly adapt and embrace new teaching methods. This required significant effort, and the lack of digital tools in our rural school made it even more challenging. Professional development became crucial.*

The above was supported by another teacher who had the following to say:

*The transition to new teaching methods was a steep learning curve. Many teachers, including myself, needed training to effectively use digital tools and platforms for teaching. It was a time of continuous learning for us.*

The following statement from one of the learners indicates how they adopted and understood the use of technology as a delivery tool for teaching and learning:

*Adopting new teaching methods was tough for us, especially without the right resources. We saw the potential of online learning, but it was frustrating when we did not have the necessary tools and support to make the most of it.*

The study further found that South Africa's digital divide was exacerbated by the pandemic, with limited access to technology and the internet, particularly in rural areas. This disparity made the adoption of new teaching methods, which heavily relied on digital tools, an arduous task (Chigona et al., 2021).

Another important drawback that emerged because of the study conducted was the lack of digital tools or equipment needed for online learning. The scarcity of these resources made it even more challenging for teachers to effectively deliver lessons and engage with learners online. The dearth of technological infrastructure underscores the urgency of improving digital access in underserved areas (Mestry, 2020). Teachers from various schools found themselves at the deep end of implementing digital transformation without having been trained on how to do it. online learning. The study also revealed that for effective online teaching and learning to take place, there is a need to expose teachers to continuous professional development, particularly, training on technology integration. They required professional development to gain the necessary skills and confidence to use digital tools effectively (Chigona et al., 2021).

Professional development emerged as a recurring theme in these accounts. The need for training and resources to adapt to the virtual learning environment became evident. South African teachers recognized the importance of upskilling to meet the demands of the digital age (Gachago et al., 2021). The experiences of these teachers align with research in South Africa, where the demand for professional development in digital pedagogy is widely acknowledged. A study by Chigona et al., (2021) found that

comprehensive training programs are crucial for empowering teachers to use technology effectively in teaching.

The perspective from learners revealed that learners were frustrated by the adoption of online learning since they were accustomed to face-to-face classroom teaching and learning. While they saw the potential of online learning, the lack of access to digital tools and support hindered their ability to engage fully. The digital divide disproportionately affected learners in underserved communities, exacerbating educational inequalities (Mestry, 2020). International studies also underscore the significance of professional development and digital access during the pandemic. Research in other countries, such as the United States, has shown that learners and teachers faced similar obstacles in the transition to online learning (Bacher-Hicks, 2020). It highlights the importance of equitable access to technology and the need for continuous teacher training to address the digital divide. The study was also set to investigate the perceptions and experiences of the participants regarding the readiness of the selected rural schools in preparation for future occurrences such as the COVID-19 Pandemic. Most of the participants in this study indicated that the government should be in a better position to respond to national disasters and ensure sustainability in teaching and learning. To support this assertion, one HoD had the following to say:

*I think the government should always be prepared and put measures in place to concentrate on future natural disasters. South Africa needs to establish new strategies to deal with future natural disasters.*

The findings of this study also revealed that there are perceptions that the mode of teaching and learning online could be the future approach in education and accomplishing curriculum (Mariano, 2021). Some of the participants indicated that they view this approach as effective and inclusive. When one of the principals asked if the migration to online teaching and learning would be more effective in the future, he concurred by saying:

*I think online teaching and learning are convenient and easy for both*

*teachers and learners to keep in touch even on weekends. A lesson can even take place from the comfort of our homes. It is also cost-effective, with no reason to pay for transport to work because we can teach from home. This mode of teaching and learning is even better because we are living in a world of technology where everyone must be able to use computers.*

However, this assumption is based on the premise that people are living in the age of digital technology, where almost every aspect of their livelihood is intertwined with technological functions. This has consequently misled many approaches in contemporary societies in attempts to change the livelihood of people because of not recognising the digital inequalities that exist between different categories of people. For example, the study by Aduhene and Osei-Assibey (2021) indicated that online teaching and learning are challenging because of socio-economic challenges such as different income levels and affordability. Another study by Blizak, Bouchenak and Yahiaoui (2020) indicated that there is a challenge in adopting the use of technologies for teaching and learning because of different levels of digital skills and digital readiness.

The findings of this study also revealed that there is a need for the government to prepare financially to conquer natural disasters like COVID-19 to ensure teaching and learning are sustained. However, the study also revealed that there is another challenge of rurality that is also constraining in terms of socio-economic conditions and lack of proper infrastructure such as effective and strong Wi-Fi connection in different parts of communities. The findings in this study indicated that in some areas of these rural communities, there are no Internet connections. To support this assertion, a teacher had this to say:

*I think the government should set aside a budget for schools for unforeseen circumstances like COVID-19 to ensure that teaching and learning run smoothly during the pandemic. However, teachers must be trained to ensure that they can teach online and sustain education during any disaster. The government should make households have*

*internet connectivity. The government should make provision of electronic devices to all learners in government schools. The government could try to create a balance between learners in rural and urban areas by providing learners in rural areas with tablets for online learning.*

The above response shows that allocating funds for unforeseen events like COVID-19 in schools is crucial, to ensuring uninterrupted education. Equally vital is training teachers for effective online instruction during crises. Government-backed internet access at home and providing electronic devices to all government school students are imperative steps. Balancing rural and urban education by equipping rural learners with tablets for online learning would bridge the gap. Such measures can fortify the education system, enabling seamless learning, irrespective of circumstances, and fostering equitable access and quality education for all.

#### **4.3 CONCLUSION**

The findings of this study largely revealed that the advent of the COVID-19 pandemic has largely resulted in the disruption of teaching and learning in the rural schools selected. The challenges that were experienced by the teachers and learners were the eminent closure of schools without any idea of when the schools would be re-opened. This challenge was later followed by other various challenges such as the failure to adapt to the new teaching and learning online. The failures were because of different levels of socio-economic statuses among learners which resulted in some learners not affording the technology to learning online and meaningful participation. The teachers also had challenges because they did not receive immediate help with the digital resources to commence online teaching. The perceptions among most of the participants are that the government should be able to put in place a strategy to deal with future pandemics such as COVID-19 to ensure that education is sustained and remains unaltered.

## CHAPTER 5

### SUMMARY OF THE STUDY FINDINGS, CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS, AND IMPLICATIONS

#### 5.1 INTRODUCTION

This chapter presents a summary of the study's findings, recommendations, limitations, and conclusions. Chapter 1 presented the study's introduction, problem statement, research objectives, research questions, research design and methodology, definitions of key terms, preliminary literature review, theoretical framework, chapter division and chapter summary. Chapter 2 presented a literature review which guided this study. In this chapter, the researcher discussed the study's historical background regarding the outbreak of the COVID-19 pandemic and how it impacted teaching and learning in Lulekani Circuit, Mpani East District, Limpopo Province. To locate the various sources of literature review, the researcher relied on various electronic databases or search engines such as the Education Resource Information Centre (ERIC), Google Scholar, SAGE, and EBSCOhost, to mention a few.

Chapter 3 presented the research design and methodology that were used to conduct the study. The researcher used a qualitative approach to collect and analyse data. The researcher conducted semi-structured interviews with teachers, students, and principals of the sampled schools. Before the process of data collection started, all participants were assigned pseudonyms to protect their anonymity and maintain their confidentiality. Again, the researcher applied for ethical clearance from the University of Venda's Ethics Committee. Both the researcher and the study participants signed a consent form which made it possible for the research information to be confidential and used for research purposes only. The research design and methodology were meant to answer the following research questions:

- What were the experiences of teaching and learning during the COVID-2019 pandemic?

- What were the challenges in adopting the new teaching and learning environment and curriculum delivery?
- What are the suggestions and recommendations in responding to national crises such as COVID-19 towards educational sustainability?
- These research questions were aimed at achieving the following research objectives:
  - Explore the experiences of teaching and learning during the COVID-19 Pandemic.
  - Explore the challenges in adopting the new teaching and learning environment and curriculum delivery.
  - Provide suggestions and recommendations on responding to national crises such as COVID-19 to ensure educational sustainability.

Chapter 4 presented a discussion and analysis of the study's findings which emerged because of the research methodology that was utilised. This chapter, Chapter 5, presents a concise summary of the study's main findings, conclusions, recommendations, limitations, and conclusions.

## **5.2 SUMMARY OF THE STUDY'S MAIN FINDINGS**

The study yielded several major findings which are discussed below:

### **5.2.1 Changes in Teaching and Learning Environment**

This primary theme revolves around the significant changes in teaching and learning environments triggered by the outbreak of the COVID-19 Pandemic. The abrupt transition from traditional classrooms to online platforms was necessitated by the imperative of social distancing. Both teachers and learners encountered numerous challenges, from technical issues to disrupted routines. This resonates with the findings of Pokhrel and Chhetri (2021), who described the new teaching and learning framework as "strange" and compared teachers to robots. The sudden closure of schools highlighted the need for proactive government support during crises, echoing Tria's

(2020) concerns about the uncertainty surrounding the reopening of schools. Furthermore, the study identified the disparities between urban and rural schools, emphasizing how the shift disadvantaged students in rural areas due to limited access to resources and internet connectivity. This aligns with global trends, where similar challenges were faced by learners from disadvantaged backgrounds in countries like India and the United States (Ranganath, 2021; Khurana et al., 2020).

### **5.2.2 Challenges Faced by Teachers and Learners**

This study revealed that there were challenges that were faced by teachers and learners during the pandemic, particularly in adapting to online learning. The lack of access to digital devices and the internet, as well as issues with effective communication, emerged as critical challenges. Similar findings were reported by Bringula et al., (2021), emphasizing the global nature of challenges faced in the shift to online education. Socio-economic disparities among South African learners exacerbated these challenges, as many lacked accesses to necessary devices and stable internet connections (Schleicher, 2020). This disparity led to fragmented learning experiences and highlighted the broader issue of inequities in education, especially for marginalized communities (Nkosi & Mthembu, 2021).

### **5.2.3 Government Support and Assistance**

One of the key aspects of government support in education is the allocation of funds to secure educational institutions during the crisis. In times of natural disasters, pandemics, or other unforeseen events, educational institutions often find themselves grappling with the immediate need for resources to ensure the safety of students and staff, as well as to maintain the educational process. Governments play a crucial role in allocating emergency funds to address these challenges promptly. The call for funds allocated to secure educational institutions during crises reflects a broader concern for financial support to maintain educational continuity during challenging times. The findings of the study align with the perspective of Literat (2021), emphasizing the importance of

alternative possibilities to safeguard educational institutions during crises. Literat (2021) underscores the importance of considering alternative possibilities to safeguard educational institutions during crises. This perspective aligns with the notion that government support should not only be reactive but also proactive. Adequate planning and preparation, coupled with financial support, enable educational institutions to respond effectively to crises and minimize disruptions to learning.

Furthermore, government assistance is not limited to financial support alone. It encompasses a broader spectrum of measures, including policy frameworks, technological infrastructure, and training programs. Governments need to establish robust policies that guide educational institutions on crisis management, ensuring a systematic and coordinated response. Additionally, investing in technological infrastructure allows for the seamless transition to online or hybrid learning models, mitigating the impact of crises on education.

In the face of the COVID-19 pandemic, governments worldwide were compelled to reassess their approach to education. The swift adoption of online learning became a crucial component of educational continuity. However, this shift required significant investments in technology, teacher training, and internet accessibility, all of which fell under the purview of government support (Kurtz & Bushwelle, 2020). The ability of governments to adapt and provide timely assistance determined the extent to which education could continue despite the challenges posed by the pandemic.

#### **5.2.4 Differences Between Urban and Rural Schools**

One of the most glaring discrepancies between urban and rural schools is the stark contrast in infrastructure. Urban schools often boast state-of-the-art facilities, well-equipped classrooms, and access to a wide array of extracurricular activities. In contrast, rural schools grapple with limited resources, outdated facilities, and insufficient funding. This infrastructure gap not only affects the physical learning environment but also hampers the overall educational experience for rural students. Disparities in

infrastructure, digital access, and learning experiences between urban and rural schools are a significant concern highlighted in the research. The study emphasizes the inequities in resources and opportunities, particularly in rural schools' struggle to transition to online learning. The global pandemic has underscored the difficulties rural schools face in transitioning to online learning. While urban schools swiftly adapted to virtual classrooms, rural counterparts encountered challenges due to poor internet connectivity, lack of personal devices, and inadequate training for educators (Tarkar 2020). As a result, students in rural areas have experienced disruptions in their education, further deepening the educational divide. Bridging this gap requires targeted efforts to provide rural schools with the necessary infrastructure and support for effective online learning. The inequalities between urban and rural schools extend beyond the physical and digital realms to include resources and opportunities. Urban schools' benefit from a wider range of educational programs, extracurricular activities, and partnerships with businesses and community organizations. In contrast, rural schools often struggle to offer diverse opportunities, limiting students' exposure to different fields and hindering their overall development.

### **5.2.5 Effects of COVID-19 on Teaching and Learning**

The abrupt closure of schools and universities worldwide forced a sudden transition to remote learning, leaving students and educators grappling with an unfamiliar educational landscape. The digital divide became glaringly evident as not all students had equal access to the necessary technology or a conducive learning environment. This inequality exacerbated educational disparities, with marginalized communities disproportionately affected. As a result, students encountered disruptions in their academic progress, hindering their ability to acquire essential knowledge and skills.

This study revealed the negative impact of the pandemic on education, including a loss of learning time, demotivation among learners and teachers, and disruptions in teaching and curriculum delivery. Numerous studies conducted globally reinforce the findings regarding the negative impact of the pandemic on education. Research by Pokhrel and

Chhetri (2021) and Akram et al., (2021) underscores the drastic changes in teaching and learning approaches observed during this period. The consensus among these studies highlights the need for comprehensive strategies to mitigate the adverse effects and reshape the educational landscape post-pandemic.

The prolonged nature of the pandemic has contributed to a pervasive sense of demotivation among both learners and teachers (Spaul & Van der Berg, 2020). Students accustomed to the social and interactive aspects of traditional classrooms, found themselves isolated in the virtual realm. The absence of face-to-face interactions and peer engagement led to a decline in motivation and a sense of detachment from the learning process. On the other hand, educators faced the daunting task of adapting their teaching methods to virtual platforms, often without adequate training or support. The challenges of maintaining student engagement and addressing individual learning needs became more pronounced, further contributing to the demoralization of teachers.

The pandemic has necessitated a rapid and substantial shift in teaching and curriculum delivery methods. Traditional classroom settings, with their structured schedules and in-person interactions, were replaced by virtual platforms, leading to a fundamental re-evaluation of pedagogical approaches. Many educators struggled to translate their teaching strategies effectively to the digital space, encountering technological barriers and issues of student participation. Additionally, disruptions in curriculum delivery were inevitable, as the sudden shift to online learning required educators to rethink and adapt their lesson plans. The result was a fragmented educational experience, with students facing inconsistencies in the delivery of content and assessments.

### **5.2.6 Adopting New Teaching Methods**

The integration of technology into the educational sphere brings with it a set of technological challenges that educators must navigate. Cavalcanti et al., (2020) in Brazil highlighted the disparities in access to technology among students, exacerbating inequalities in educational outcomes. Insufficient infrastructure, lack of devices, and

limited internet connectivity pose significant barriers to the seamless implementation of virtual learning. Bridging this digital divide requires not only infrastructural investments but also a concerted effort to ensure that every student has equitable access to the necessary tools.

Maintaining learner engagement in a virtual setting is a persistent concern for educators. The traditional classroom dynamic, where physical presence and interactive activities contribute to engagement, is disrupted in the digital realm. Adapting teaching methods to capture and sustain students' attention through virtual means demands creativity and innovation. Educators must explore interactive platforms, collaborative projects, and multimedia resources to foster an environment that encourages active participation and critical thinking. The shift to virtual learning has far-reaching consequences, as emphasized by international research. Gupta et al., (2020) and Cavalcanti et al., (2020) both underscored the importance of considering the long-term impact on education. Disrupting traditional teaching methods can lead to gaps in foundational skills, social development, and a sense of community. Striking a balance between the benefits of technology and the preservation of essential elements of traditional education is crucial to ensure a holistic learning experience for students. The research findings revealed that the participants were not satisfied by CAPS management and implementation, because teachers still needed support about CAPS issues.

### **5.3 RECOMMENDATIONS**

After data were collected and analysed using a thematic data analysis framework, the following recommendations were made:

#### **5.3.1 Enhancing Digital Access for Teachers and Learners**

Given the challenges faced by teachers and learners in adapting to online learning, it is imperative to address the digital divide (Maphosa, 2021). Governments, educational institutions, and relevant stakeholders should collaborate to ensure equitable access to

digital devices and the Internet (Houvessou, Souza & Silveira, 2020). Initiatives such as providing subsidies for devices, creating communal digital centres, or facilitating internet connectivity in remote areas can help bridge this gap. Houvessou, Souza and Silveira (2020) emphasise the need for a coordinated effort to bridge the digital divide. Collaboration between governments, educational institutions, and stakeholders is crucial to developing comprehensive solutions. Enhancing digital access for teachers and learners is not merely a technological upgrade but a societal commitment to inclusivity in education.

### **5.3.2 Proactive Government Support and Crisis Preparedness**

Building on the study by Literat (2021), governments should adopt a proactive approach to crisis management in education. This involves not only reactive financial support but also strategic planning, policy frameworks, and investments in technological infrastructure. Establishing clear guidelines for educational institutions on crisis management will enable a more coordinated response in times of unforeseen events (Mondol & Mohiuddin, 2020). The study by Mondol and Mohiuddin (2020) highlights the importance of such coordination in navigating crises effectively. Furthermore, investments in technological infrastructure play a crucial role in crisis preparedness. The integration of technology not only facilitates remote learning during crises but also enhances the overall resilience of the education system. Governments should allocate resources to ensure that educational institutions have the necessary tools and platforms to seamlessly transition to online or hybrid modes of instruction when faced with disruptions. Strategic planning is pivotal in this regard. Governments must collaboratively work with educational institutions to establish clear guidelines for crisis management. This collaboration ensures that there is a unified and well-coordinated response mechanism in place when unforeseen events occur.

### **5.3.3 Comprehensive Government Assistance Beyond Financial Support**

Governments should go beyond financial assistance and consider a holistic approach to support educational institutions (Tsitsia, Kabbah, Doyi, Kabe & Safo, 2020). This includes developing and implementing policy frameworks, investing in technological infrastructure, and providing training programs for teachers to effectively navigate online and hybrid learning environments (Nawastheen & Perera, 2021). These measures contribute to the resilience of the education system in the face of crises.

### **5.3.4 Addressing Disparities Between Urban and Rural Schools**

To mitigate the disparities between urban and rural schools, targeted efforts are essential (Tadesse & Muluye, 2020). Governments and education stakeholders should invest in improving rural schools' infrastructure, ensuring reliable internet connectivity, and providing necessary training for educators. Additionally, initiatives to broaden educational programs, extracurricular activities, and community partnerships in rural areas can contribute to a more inclusive learning environment.

### **5.3.5 Mitigating the Impact of COVID-19 on Teaching and Learning**

Recognizing the negative impact of the pandemic on education, stakeholders should implement comprehensive strategies to address disruptions (Shepherd & Mohohlwane, 2021). This involves developing plans to recover lost learning time, providing support for demotivated learners and teachers, and reassessing teaching methods for both virtual and traditional settings. Collaborative efforts should focus on reshaping the educational landscape post-pandemic. Moreover, the psychological toll of the pandemic on both learners and educators should not be underestimated. Demotivation, stress, and burnout have become prevalent issues. Comprehensive support mechanisms must be put in place to address the emotional and mental well-being of both teachers and students. Counselling services, mental health resources, and professional development opportunities can contribute to fostering a supportive environment conducive to effective

teaching and learning. Additionally, the recalibration of teaching methods is imperative. The shift to virtual learning has prompted a re-evaluation of pedagogical approaches. Educators must adapt their strategies to meet the unique challenges posed by online and hybrid learning environments. Training programs and resources should be provided to enhance teachers' digital literacy and proficiency in utilizing technology to deliver engaging and effective lessons.

### **5.3.6 Supporting Teachers in Adapting to New Teaching Methods**

Acknowledging the challenges faced by educators in adopting new teaching methods, there is a need for ongoing support (Schleicher, 2020). Governments and educational institutions should invest in teacher training programs specifically designed for virtual and hybrid learning environments. This includes addressing technological barriers, providing resources for interactive teaching, and fostering a community of practice among educators to share innovative approaches. To ensure the successful integration of novel teaching approaches, governments and educational institutions must invest substantially in teacher training programs tailored to the demands of these innovative settings. Such programs should not only equip educators with the technical know-how required but also address the technological barriers that may impede their seamless transition into these new realms. By fostering a comprehensive understanding of the tools and platforms available, teachers can harness technology to enhance the learning experience for their students. The provision of resources for interactive teaching becomes paramount in creating dynamic and engaging virtual classrooms. Adequate access to digital materials, educational apps, and collaborative platforms not only enriches the teaching and learning experience but also allows educators to tailor their methods to diverse learning styles. By embracing a spectrum of interactive tools, teachers can cater to the individual needs of students, promoting a more inclusive and personalized learning environment.

### **5.3.7 Improving CAPS Management and Implementation**

Based on participants' dissatisfaction with CAPS management and implementation, it is crucial to emphasize the use of CAPS documents in lesson planning and assessment programs. Heads of Departments (HoDs) should play an active role in monitoring teachers' work to ensure effective curriculum delivery. Regular meetings should be held to discuss potential factors impacting curriculum delivery, fostering a collaborative approach to address challenges and improve implementation. A proactive stance on CAPS management and implementation requires a holistic approach that involves educators at every level. It necessitates the integration of CAPS documents into daily teaching practices, active involvement of HoDs in monitoring and supporting teachers, and regular collaborative meetings to address challenges and share best practices. By embracing these strategies, educational institutions can lay the foundation for a more effective, responsive, and impactful curriculum delivery system, ultimately contributing to the overall enhancement of the educational experience for both educators and students.

## **5.4 RECOMMENDATIONS FOR FURTHER STUDY**

Considering the findings presented in the study, several recommendations for further study can be identified to deepen our understanding of the challenges and opportunities in the evolving landscape of education, particularly in the context of the COVID-19 Pandemic. These recommendations span various dimensions, including technology integration, government support, disparities between urban and rural schools, the impact of COVID-19 on teaching and learning, and the effective implementation of educational policies such as the Curriculum and Assessment Policy Statement (CAPS). There is a need to explore the resilience and adaptability of education systems in the face of unexpected disruptions, such as pandemics. It is important to note that there is also a need to investigate how education systems can develop and implement proactive measures to enhance crisis preparedness, ensuring a smoother transition to alternative learning models. The need to explore the long-term effects of technology integration in education, especially concerning the impact on student learning outcomes, teacher

professional development, and the overall effectiveness of virtual and hybrid learning environments is essential. This could be done to investigate how sustained use of technology influences educational equity and access. All the recommendations presented here are aimed at guiding future research efforts in addressing the evolving landscape of education, ensuring that insights gained from the current study are leveraged to inform policy decisions, improve educational practices, and contribute to the overall enhancement of the educational experience.

## **5.5 STUDY LIMITATIONS AND DELIMITATIONS**

While the study provides valuable insights into the impact of the COVID-19 pandemic on teaching and learning environments, several limitations need consideration. This study primarily relied on self-reporting and may be subject to participant bias, as respondents may provide socially desirable answers or exaggerate challenges faced during the Pandemic. Additionally, the study lacks a longitudinal perspective, limiting its ability to capture the evolving nature of challenges and adaptations over time. This study lacks a comprehensive exploration of the mental health impact on both teachers and learners, considering the abrupt shift to online learning and the associated stressors. Understanding the emotional well-being of educators and students is crucial for a holistic assessment of the effects of the pandemic on education. In addition, the study was framed within a qualitative research design and as a result, the findings could not be generalised since the study is context-based.

## **5.6 CONCLUSIONS**

In conclusion, this study delves into the transformative impact of the COVID-19 Pandemic on the teaching and learning landscape, with a focus on South African schools. The findings underscore the multifaceted challenges faced by both teachers and learners during the abrupt shift to online learning, emphasizing the need for comprehensive government support and addressing disparities between urban and rural schools. The primary theme centres on the significant changes in the teaching and learning

environment triggered by the pandemic. The sudden transition from traditional classrooms to online platforms, driven by the imperative of social distancing, brought forth numerous challenges. Teachers and learners grappled with technical issues and disrupted routines, echoing global trends observed in countries like India and the United States.

The study emphasizes the importance of proactive government support during crises, aligning with concerns about the uncertainty surrounding the reopening of schools. Challenges faced by teachers and learners in adapting to online learning emerged as a critical aspect of the study. The lack of access to digital devices and the internet, along with communication issues, echoed global challenges in the shift to online education. Socio-economic disparities among South African learners exacerbated these challenges, emphasizing the broader issue of inequities in education, especially for marginalized communities. Government support and assistance play a pivotal role in mitigating the challenges posed by crises. The study aligns with the perspective that government support should not only be reactive but also proactive, encompassing financial assistance, policy frameworks, technological infrastructure, and training programs. Adequate planning, preparation, and timely assistance enable educational institutions to respond effectively to crises and minimize disruptions to learning. The study highlights the glaring differences between urban and rural schools, particularly in terms of infrastructure. The infrastructure gap, coupled with limited resources and digital access, poses significant challenges for rural schools in transitioning to online learning. Bridging this gap requires targeted efforts to provide necessary infrastructure and support, addressing the broader issue of inequities in resources and opportunities between urban and rural schools. The effects of COVID-19 on teaching and learning are profound, with disruptions in academic progress, demotivation among learners and teachers, and challenges in curriculum delivery. The prolonged nature of the pandemic has contributed to a pervasive sense of demotivation, as students and teachers grapple with the absence of face-to-face interactions. The shift to virtual learning has necessitated a re-evaluation of teaching methods, with educators facing challenges in adapting their strategies to the digital space. The integration of technology into education brings forth technological

challenges that educators must navigate. Insufficient infrastructure, lack of devices, and limited internet connectivity exacerbate educational inequalities. Maintaining learner engagement in a virtual setting is a persistent concern, demanding creativity, and innovation in teaching methods. The research underscores the importance of striking a balance between the benefits of technology and preserving essential elements of traditional education for a holistic learning experience. In conclusion, the study provides valuable insights into the challenges and transformations brought about by the COVID-19 pandemic in the South African education system. It emphasizes the need for proactive government support, addressing disparities between urban and rural schools, and adapting teaching methods to ensure a resilient and inclusive education system in the face of future crises.

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## ANNEXTURES

### ANNEXTURE A: RESEARCH ETHICAL CERTIFICATE FROM THE UNIVERSITY OF VENDA

ETHICS APPROVAL CERTIFICATE

RESEARCH AND INNOVATION  
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:  
**Mr SS Mavunda**

STUDENT NO:  
21008847

**PROJECT TITLE: The impact of coronavirus (covid-19) pandemic on teaching and learning: A case of secondary schools in Lulekani circuit, Mopani district, Limpopo province.**

ETHICAL CLEARANCE NO: **FHSSE/23/CSEM/03/0606**

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr NP Mafenya	UNIVEN, Educational Studies	Supervisor
Dr MG Sikhwarl	UNIVEN, Educational Studies	Co-Supervisor
Mr SS Mavunda	UNIVEN, Educational Studies	Investigator – Student

Type: **Masters' Research**

Risk: **Minimal risk to humans, animals, or environment (Category 2)**

Approval Period: **May 2023 – May 2024**

The Research Ethics Social Sciences Committee (RESSC) hereby approves your project as indicated above.

**General Conditions**

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following.

- The project leader (principal investigator) must report in the prescribed format to the REC:
  - Annually (or as otherwise requested) on the progress of the project, and upon completion of the project.
  - Within 48hrs in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.
  - Annually a number of projects may be randomly selected for an external audit.
- The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the REC. Would there be deviation from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date; a new application must be made to the REC and new approval received before or on the expiry date.
- In the interest of ethical responsibility, the REC retains the right to:
  - Request access to any information or data at any time during the course or after completion of the project.
  - To ask further questions; Seek additional information; Require further modification or monitor the conduct of your research or the informed consent process.
  - withdraw or postpone approval if:
    - Any unethical principles or practices of the project are revealed or suspected.
    - It becomes apparent that any relevant information was withheld from the REC or that information has been false or misrepresented.
    - The required annual report and reporting of adverse events was not done timely and accurately.
  - New institutional rules, national legislation or international conventions A it necessary

ISSUED BY:

UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE

Date Considered: May 2023

Name of the RESSC Chairperson of the Committee: Prof TS Mashau

Signature



<p>UNIVERSITY OF VENDA OFFICE OF THE DIRECTOR RESEARCH AND INNOVATION</p> <p>2023-06-06</p> <p>Private Bag X5050 Tlohoeng 0950</p>
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**ANNEXTURE B: RESEARCH ETHICAL CERTIFICATE FROM LIMPOPO  
DEPARTMENT OF EDUCATION**



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**

**MOPANI EAST DISTRICT**  
CONFIDENTIAL

DEPARTMENT OF EDUCATION

MOPANI EAST DISTRICT  
OFFICE OF THE DISTRICT DIRECTOR

**13 JUN 2023**

PRIVATE BAG X578  
GIYANI 0826

LIMPOPO PROVINCE

Ref: 2/2/2... ENQ: Ngobeni D Tel: 063 146 1114 Email: davidngobeni9@gmail.com Date: 13.06.2023

**TO : MAVUNDA S.S**

**PERMISSION TO CONDUCT RESEARCH: THE IMPACT OF CORONA VIRUS (COVID-19) PANDEMIC ON TEACHING AND LEARNING: A CASE OF SECONDARY SCHOOLS IN LULEKANI CIRCUIT, MOPANI DISTRICT, LIMPOPO PROVINCE.**

1. The above matter refers.
2. The Department wishes to inform you that your request to conduct research on the above mentioned Topic has been approved.
3. Your focus should only be limited to selected schools as per the list of the Schools listed below:

NAME OF CIRCUITS	SCHOOLS
Lulekani	Majeje High School
	Baranuka High School

PERMISSION TO CONDUCT RESEARCH: Mavunda S.S

DEPARTMENT OF EDUCATION  
MOPANI EAST DISTRICT, Private Bag X 578 GIYANI, 0826  
Tel 015 811 7803

*The heartland of Southern Africa – development is about people*

## ANNEXTURE C: APPLICATION TO CONDUCT THE STUDY IN THE LULEKANI CIRCUIT

Box 290  
Phalaborwa  
1390  
20 June 2023

The Circuit Manager  
Lulekani Circuit  
PHALABORWA  
1392

Dear sir/madam

### APPLICATION TO CONDUCT RESEARCH IN THE LULEKANI CIRCUIT

I, **Stefani Steven Mavunda** hereby apply for permission to conduct research study in the two schools of your circuit. I am currently enrolled with the University of Venda in the Faculty of Humanities, Social Science and Education, doing Master's degree in Curriculum Studies.

I will be grateful if my application can be taken into serious consideration.

Yours faithfully  
Mavunda S.S

## **ANNEXTURE D: INTERVIEW GUIDELINES FOR PRINCIPALS**

1. How could you describe the experiences of Covid-19 in teaching? Please elaborate on your answer.
2. Do you think COVID-19 negatively affected your teaching practice? Please elaborate on your answer.
3. What do you think was the most challenging aspect of COVID-19 in your teaching experience? Please elaborate on your answer.
4. Did you experience any challenges in adopting the new teaching and learning methodologies during COVID-19? Please elaborate on your answer.
5. Do you think the experiences of teaching between you teaching at a public school in a rural area were the same as the ones teaching in a private school in an urban area? Please elaborate on your answer.
6. Was the curriculum delivered with ease when teaching and learning migrated to online platforms from traditional methods such as in a classroom setting? Please elaborate on your answer.
7. What do you think the government should do for future preparation for national disasters like COVID-19 to ensure teaching and learning continue smoothly? Please elaborate on your answer.
8. Do you think the migration to online teaching and learning should be permanently adopted and implemented?

## **ANNEXTURE E: INTERVIEW GUIDELINE FOR DEPARTMENTAL HEAD (D.H)**

1. How could you describe the experiences of COVID-19 in teaching? Please elaborate on your answer.
2. Do you think COVID-19 negatively affected your teaching practice? Please elaborate on your answer.
3. What do you think was the most challenging aspect of Covid-19 in your teaching experience? Please elaborate on your answer.
4. Were you provided with digital tools such as a laptop or smart mobile cell phone to use for online classes? Please elaborate on your answer.
5. Do you think the experiences of teaching between you teaching at a public school in a rural area were the same as the ones teaching in a private school in an urban area? Please elaborate on your answer.
6. Do you think learners were ready to adapt to the new teaching and learning style such as learning online? Please elaborate on your answer.
7. What was the biggest challenge you experienced from the students teaching and learning online? Please elaborate on your answer.
8. What do you think the government should do for future preparation for national disasters like COVID-19 to ensure teaching and learning continue smoothly? Please elaborate on your answer.
9. Do you think educators are ready to migrate from traditional teaching methods to online teaching permanently?
10. Were you able to deliver the best on the curriculum when teaching under COVID-19? Please elaborate on your answer.
11. What do you think the government should do to prepare for future national disasters that disrupt the education system such as COVID-19? Please elaborate on your answer.

## **ANNEXURE F: INTERVIEW GUIDELINE FOR EDUCATORS**

1. How could you describe the experiences of COVID-19 in teaching? Please elaborate on your answer.
2. Do you think COVID-19 negatively affected your teaching practice? Please elaborate on your answer.
3. What do you think was the most challenging aspect of COVID-19 in your teaching experience? Please elaborate on your answer.
4. Were you provided with digital tools such as a laptop or smart mobile cell phone to use for online classes? Please elaborate on your answer.
5. Do you think the experiences of teaching between you teaching at a public school in a rural area were the same as the ones teaching in a private school in an urban area? Please elaborate on your answer.
6. Do you think learners were ready to adapt to the new teaching and learning style such as learning online? Please elaborate on your answer.
7. What was the biggest challenge you experienced from the students teaching and learning online? Please elaborate on your answer.
8. What do you think the government should do for future preparation for national disasters like COVID-19 to ensure teaching and learning continue smoothly? Please elaborate on your answer.
9. Do you think educators are ready to migrate from traditional teaching methods to online teaching permanently?
10. Were you able to deliver the best on the curriculum when teaching under COVID-19? Please elaborate on your answer.
11. What do you think the government should do to prepare for future national disasters that disrupt the education system such as COVID-19? Please elaborate on your answer.

## **ANNEXURE G: INTERVIEW GUIDE FOR LEARNERS**

1. How could you describe the experiences of COVID-19 to learning? Please elaborate on your answer.
2. Do you think COVID-19 negatively affected your learning activities? Please elaborate on your answer.
3. What do you think was the most challenging aspect of COVID-19 in your Learning experience? Please elaborate on your answer.
4. Were you provided with digital tools such as a laptop or smart mobile cell phone to use for online classes? Please elaborate on your answer.
5. Do you think the experiences of learning at a public school in a rural area were the same as learning in a private school in an urban area? Please elaborate on your answer.
6. Do you think teachers were ready to adopt the new teaching style such as learning online? Please elaborate on your answer.
7. What was the biggest challenge you experienced from the teachers teaching online? Please elaborate on your answer.
8. What do you think the government should do for future preparation for national disasters like COVID-19 to ensure teaching and learning continue smoothly? Please elaborate on your answer.
9. Do you think the learners are ready to migrate from traditional learning methods to online learning permanently?
10. Were you able to deliver the best results when learning under COVID-19 conditions? Please elaborate on your answer.
11. What do you think the government should do to prepare for future national disasters that disrupt the education system such as COVID-19? Please elaborate on your answer.

## ANNEXURE H: CONSENT TO PARTICIPATE IN THIS STUDY FOR ALL PARTICIPANTS

I, \_\_\_\_\_ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits, and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and I'm prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname.....

Participant Signature.....Date.....

Researcher's Name & Surname.....

Researcher's signature.....Date.....

## ANNEXURE I : PARTICIPANT INFORMATION SHEET

Title of the study: **The Impact of Coronavirus (Covid-19) Pandemic on Teaching and Learning: A Case of Secondary Schools in Lulekani Circuit, Mopani District, Limpopo Province.**

**Dear Prospective Participant**

My name is **STEFANI STEVEN MAVUNDA** Student Number **21008847**, and I am doing research on **Master of Education in Curriculum Studies** in the **Department of Curriculum Studies, School of Education** at the **University of Venda** under the supervision of **Dr NP Mafenya** and **Dr MG Sikhwari**. We are inviting you to participate in a study entitled: **The Impact of Coronavirus (Covid-19) Pandemic on Teaching and Learning: A Case of Secondary Schools in Lulekani Circuit, Mopani District, Limpopo Province.**

The purpose of this study is to explore the impact of the COVID-19 Pandemic on teaching and learning among rural schools in South Africa using the case study of Secondary Schools in Lulekani Circuit, Mopani District in Limpopo Province.

You are only required to respond to the posed questions on perspectives regarding the investigation of COVID-19 and thus, providing an insightful understanding in this study.

Kindly be aware that your participation in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

There are no personal benefits to participating in this study but there is a sectorial benefit in the study that will provide insights on the proactive measures on how the education sector could deal with future challenges of similar situations in Lulekani Circuit, Mopani

East District in the Limpopo Province, South Africa. The potential to develop a working framework towards an effective, unified, and scientific approach towards COVID-19.

To the knowledge of the researcher, there will be no negative consequences at all as no specific names will be disclosed in this study.

Confidentiality and protection of your identity are ensured by making sure that no names are disclosed and no one apart from the researcher and the supervisor will know about your participation and contribution to this research. Your name is not recorded anywhere, and no one will be able to connect you to the answers you provide. Your answers will be given a code number, such as **respondent number 1** or a **pseudonym** and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

The researcher will also ensure that hard copies of your answers are stored for five years in a locked cupboard at my residential place for future research or academic purposes. This data will be only accessible to myself, the researcher. Electronic information will be stored on a protected password-protected computer and future use of the stored data will be subject to further Research Ethics Review and approval, if applicable. After the expiry of the five years, hard copies will be shredded, and electronic copies will be permanently deleted from the hard drive.

There will be no payment or reward offered for participating in this study.

This study has received written approval from the Research Ethics Review Committee of the University of Venda and permission from the Department of Education. A copy of the approval letters can be obtained from the researcher during the data collection process.

If you would like to be informed of the final research findings, you will contact the researcher: **Stefani Steven Mavunda** on **083 952 0341**. Should you require any further

information or want to contact the researcher about any aspect of this study, you will contact me at the indicated number.

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

Thank you.

**MAVUNDA SS**

## ANNEXTURE J: ENGLISH LANGUAGE DECLARATION CERTIFICATE

### ANNEXTURE J: English Language Editing Declaration Certificate

# Jale Professional Certificate of English Language Editing

Author: MAVUNDA STEFANI STEVEN (21008847 )

This is to certify that the manuscript titled **THE IMPACT OF CORONAVIRUS (COVID -19) PANDEMIC ON TEACHING AND LEARNING: A CASE OF SECONDARY SCHOOLS IN LULEKANI CIRCUIT, MOPANI DISTRICT, LIMPOPO PROVINCE** has been edited for English language -, grammar, punctuation, and spelling by Prof J Nyoni, an expert in the field of Education leadership, Management, Law and policy. The manuscript has been reviewed and edited to ensure that it meets the highest standards of English usage.

Prof J Nyoni guarantees that the manuscript has been edited to the best of his ability and that it is free from errors in English language usage. The certificate is issued on 17/01/2024.

Prof J Nyoni

University of South Africa



**Jale**  
HOLDINGS

## ANNEXTURE K: TURN-IT-IN REPORT

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