

**The challenges of teachers during Covid-19
in rural secondary schools in the
Rustenburg area, North West Province**

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requirements for the degree [Master of Business
Administration](#) at the North-West University

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Graduation: April 2024

DECLARATION

I, **Omphemetse Kathleen Mmekoa**, declare that the dissertation

“The challenges of teachers during Covid-19, in rural secondary schools in the Rustenburg area, North West Province” is my own work apart from where sources are acknowledged.

This study is for the degree Master of Business Administration, submitted to the Faculty of Economic and Management Sciences, North-West University. It has not been previously submitted by me or any other person for a degree at any alternative institute.



Ms. OK Mmekoa

Date: September 2023

DEDICATION

This dissertation is dedicated to my family for their unending love, support, teachings and wisdom throughout this journey.

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ABSTRACT

The study aims to explore the challenges that educators in rural secondary schools experienced during Covid-19 in the Rustenburg area of South Africa, in the North-West Province. The outbreak of the pandemic in South Africa has led to South Africans having to alter a number of aspects pertaining to their daily activities, including teaching and learning practices. The purpose in this study is to understand the effects of the pandemic on the education system, and especially on the tasks that educators have to perform on a daily basis.

The study is qualitative in nature and is guided by a phenomenological approach. The researcher purposefully sampled 12 participants of different designations within the teaching industry who also have to teach learners on a daily basis and held semi-structured interviews with them. The sample consists of educators, heads of departments and principals who also facilitate classes in their respective schools. Data was collected by means of online platforms, namely Zoom and Microsoft Teams. The researcher made use of thematic analysis to and transcribed the data verbatim. From the thematic analysis stemmed nine themes, and twenty-three categories.

From these interviews, a number of findings were deduced, which are discussed in more detail in the study. The researcher followed all the necessary protocols regarding the Protection of Personal Information (POPI) Act-mandated. The researcher also obtained ethical clearance from the relevant authorities before conducting research.

Based on the findings, the following recommendations were made by the participants, the Department of Basic Education should provide learners and educators in rural areas with adequate skills and resources in order for schools to run smoothly, even in the event of a crisis. The DBE should look into providing compulsory training for all educators to learn about the basic use of technology and online platforms in the classroom.

Key terms: Communication Technology, Covid-19, Development, Educators, Online Learning, Rural Education, Skills Training.

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CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The purpose of this study was to explore the challenges that educators in rural secondary schools experienced during COVID-19 in the Rustenburg area of South Africa, in the North-West Province.

On the 11th March 2020, the World Health Organization declared COVID-19 as a pandemic. The outbreak of the pandemic evolved in the city of Wuhan, in China. The pandemic has had a rather negative impact on the growth of many countries. To curb the spread of the coronavirus, countries had to implement measures such as a total lockdown (in South Africa, March 2020) as well as the temporary closure of schools (Takar, 2020)

As a result of these circumstances, the South African education sector had to introduce online learning as a new mode of delivery. Certain schools suffered complete closures and the number of school days that were lost due to these closures varied because of the way in which the lockdown was imposed, as well as differences in how the return to school process was scheduled and managed (Van den Berg *et al.*, 2020).

In this study, the researcher gained an understanding of the impact of the pandemic on teaching and learning activities, specifically from the educators' point of view.

1.2 PROBLEM STATEMENT

The outbreak of the coronavirus lead to several changes that not only impacted the day-to-day lives of South Africans, but also the economy at large. One of the sectors that had to adapt rather haphazardly and implement rather extreme measures, is the education sector, particularly, the Department of Basic Education (DBE). Van der Walt and Oosthuizen (2021)

state that the DBE implemented the following measures to prevent the outbreak and spread of the virus within schools:

- Educators and learners had to maintain social distancing at all times.
- Learners attended school on different days on the week, in order to allow for the adherence of Covid-19 regulations-mainly social distancing. Due to infrastructure challenges that do not allow for all learners to sit at least 1.5 meters apart from each other, as per Covid-19 regulations.
- The regular sanitation of school premises.
- Postpone examinations, especially during the higher stages of national state of emergency. Extension of the school year.
- A delay in the release of matric results, and schools reopening even later in the year.
- Educators with comorbidities being allowed to work from home. This implied that there were less educators physically present on school premises. Not only did this put pressure on the remaining educators, but it could also have a negative impact on learner performance.
- Online modes of delivery during the first three stages of national state of emergency. Due to a lack of resources, not only within rural communities, but within the schools as well, this might pose a challenge for both learners and educators.

Du Plessis and Mestry (2019) indicate that poverty is rather common in most African countries, and this has a serious impact on the provision of quality education in the affected areas. Rural schools are confronted with severe challenges that are unique to their environment. A lack of parental interest in their children's education, insufficient government funding, the lack of resources, under-skilled teachers, and multi-grade teaching due to a shortage qualified of teachers are some of the barriers to quality education in rural areas. These challenges can be attributed to numerous sources, from the internal and external environment, including local communities and education authorities. Another challenge that needs urgent attention, is the rate at which learners are dropping out of school. It was reported in May 2021 that an estimate of 750 000 learners across South Africa, had dropped out of school. This number was a rather significant increase from the 300 000 that had been reported in November 2020 (Mlaba, 2021). During a pandemic, such as Covid-19, one can

only imagine how amplified these challenges are, and that they would probably also give rise to more challenges.

The DBE, together with the Department of Health, have worked tirelessly to ensure that the health and safety measures are implemented, and regulations adhered to. One cannot be oblivious to the fact that the educators and SMTs are at the forefront of this entire process. It is of utmost importance that their challenges and experiences are explored so as to assist and bridge the gaps that currently exist.

1.3 RATIONALE AND SIGNIFICANCE OF THE STUDY

The purpose of the study was to assist the Department of Basic Education in the following ways:

- For the department to gain a better understanding of the ground level challenges educators had to deal with in their schools.
- Make recommendations on how to better assist and capacitate educators to deal with those challenges.

To contribute to the current body of knowledge regarding how teachers experience the pandemic.

1.4 AIMS AND OBJECTIVES OF THE STUDY

Main aim:

The main aim of the study was to investigate the challenges the educators experienced during Covid-19, specifically in rural secondary schools in the Rustenburg area of South Africa.

Sub-aims

The objectives of the study are the following:

- To determine the different challenges that were experienced by educators in the rural secondary schools.
- To explore how teachers were responding to the challenges they experienced.
- To suggest recommendations to the Department of Basic Education to overcome these challenges in rural areas.

To explore what the effects of Covid-19 are on education in general, particularly, teaching and learning processes

1.5 RESEARCH QUESTIONS

Main Research question:

What are the challenges the educators are experiencing during Covid-19, in rural schools in the Rustenburg area?

Sub-questions:

- What are the different challenges experienced by educators in the rural areas?
- How are the educators responding to these challenges?
- What are the effects of Covid-19 on education?
- What can be done to overcome these challenges?

1.6 LITERATURE REVIEW

The purpose of a literature review is to provide a theoretical base to an investigation. This is a brief analysis of work, pertaining to your study that has already been published. This is not the section where the researcher presents their findings or data (Hofstee, 2018). This study intended to focus on the challenges experienced by educators and learners, in rural secondary schools in the Rustenburg area that were brought on by Covid-19.

From the onset of the Covid-19 pandemic, educators around the globe have had to adjust their teaching methods in order to comply with stay-at-home mandates. The prevalence of the pandemic has led to a transition from the traditional face-to-face method of teaching to an online format in a short period of time (Doris & Tekenate, 2020). This transition on its own not only posed challenges for the educators, but it also became quite a challenging process for the learners as well. After conducting a study in Nigeria, in a town named Abuja, Doris and Tekenate (2020) further explain some of the general challenges that arose, because of online learning.

Divided attention

Since the learners were attending classes from home, in their natural surroundings where most of their daily activities take place, learners were easily distracted. There was a lack of interest from the learners, due to the virtual space, the learners were not drawn to the lessons being taught, nor the educators. Presentation of instructions, the traditional ways of teaching were not suitable for this method of delivery since every activity was done in a virtual space.

Exchange of information between the teacher and the learners

Since the teachers made use of different platforms, such as WhatsApp, Zoom and Google classroom, students applied the norm of using informal language which created a language barrier between the two parties. Learner evaluation was also greatly affected, due to the above-mentioned barriers. Another contributing factor was that most of the learners from disadvantaged schools do not have the means to acquire these "tools" and their educators were also never trained to teach online.

While the transition to online teaching and learning, as opposed to the traditional method of delivery, was inevitable, learners in rural areas now find themselves segregated from schooling activities and do not have immediate access online resources, due to a lack of infrastructure, the deficit in the supply of electricity, no electronic gadgets, and a scarcity of qualified teachers who are not technologically challenged (Dube, 2020).

San Lau *et al.*, (cited by Nyashanu *et al.*, 2020) indicate that there are a significant number of challenges affecting informal settlements that come with having to constrain the spread

of Covid-19. The lockdown had a direct impact on communities living in informal settlements.

UNESCO (cited by Onyema *et al.*, 2020) shares some of the harmful effects of school closures during the pandemic:

Interrupted learning, learners not being able to attend school resulted in learning loss and deprives them of opportunities for growth and development.

Nutrition

Over nine million learners rely on school feeding schemes that are run within the schools. School closures pose a challenge because this means that these learners no longer had access to those daily meals provided by the schools.

Continued learning during school closures

There was increased pressure on schools to remain open, bearing in mind the risk it posed for learners and educators. The risk of infection and continued spread of the virus remained high under these circumstances.

Social Isolation

Educational institutions are the central meeting hubs for social activity and human interactions, school closures deprived the youth and children of constructive social activities and environments that are essential to learning, development and creativity. The above study was conducted by Onyema *et al.*, (2020) in the informal settlements of the city of Tshwane, in the Gauteng Province- South Africa. The study highlights most challenges applicable to the learners and the Department of Basic Education. This indicates again that there is still room for research to be conducted regarding the challenges that educators encounter.

Pozo-Rico *et al.*, (2020) conducted a study on teacher training in the United States. The purpose of this study was to evaluate the effectiveness of a teacher preparation program designed to assist primary school teachers in four major areas: enhancing ICT skills, preventing burnout, managing stress, and integrating emotional intelligence (EI) into the classroom. It was found that the pandemic has a clear impact on the educational setting of

schools; practical teaching strategies and methodologies are required to challenge and overcome this new threat to health, social development, and education.

Learners who attend school often find that the curriculum is irrelevant to their lives and their learning is not supported at home, thus, teachers are challenged two fold, to not only accommodate learners in the classroom, but to also support their learning needs virtually. The economic limitations of governments to provide free basic education to all its citizens and the low socio-economic (education levels, household income and occupation) status of parents are significant barriers that are preventing children from receiving a high standard of education and quality of life (Pozo-Rico *et al.*, 2020).

This is particularly common in developing nations like Africa, where the vast majority of people live in extreme poverty and lack access to high-quality education. Governments are becoming more concerned with issues related to the professional development of teachers, but they often concentrate more on urban schools, which means that rural schools are overlooked. (Du Plessis & Maestry, 2019). The literature above indicates the most commonly shared challenges experienced within the department of education, both at national and international level. It is also suggested that urban schools are given more attention as compared to rural schools.

Findings in the literature above, by Dube (2020), also indicate that rural schools are underdeveloped, and the educators need to be capacitated to better facilitate online learning, using the relevant technology and online platforms. The aspect of teacher training, however, has not been fully researched and explored within South Africa and so this aspect was also considered in this study as it is one of the rather significant challenges that educators were faced with, because of the changes brought by the pandemic. This study is thus relevant to schools, policy makers and other stakeholders as it will assist them with future decision-making and strategy implementation processes.

Theoretical framework

In a research investigation, the theoretical framework offers the basis upon which all knowledge is built. It aids in developing the framework and supporting evidence for the study's rationalization, problem statement, objective, significance, and research questions. The theoretical framework of this study is guided by learner theories since the

study focuses on aspects of teaching and learning in the basic education sector. The two learning theories are constructivism and cognitivism.

Constructivism

Constructivism implies that we construct learning new ideas through our own prior/existing knowledge or experiences. This means that everyone's learning experience is unique to them. Students/ learners adapt their models of comprehension either by reflecting on known theories or resolving misconceptions (Fullbrook, 2019). The application of constructivism in online learning will be explored in this study. Lynch (2021) indicates that constructivism can be applied in online learning, as this learning theory is mainly characterized by active learning where students/ learners can engage with their material and retain it in a way that is not possible with traditional teaching methods.

Cognitivism

According to Rhalmi (2011), cognitivism is a learning theory that focuses on the processes that are involved in learning, it goes beyond the observed behavior. It focuses on how the mind receives, organizes, stores and retrieves information. In this theory, learning is viewed as an internal mental process. Similar to constructivism, cognitive learners are perceived to be active participants in the learning process. They make use of various strategies to process and shape their personal understanding of the content they are exposed to. Considering the elements of cognitivism, it is safe to say that this theory creates a basis for learning to take place and can be applied to both the conventional, traditional classroom mode of delivery, as well as online learning. The researcher further explored the application of this theory individually and in contrast to constructivism.

1.7 DEFINITIONS OF KEY CONCEPTS

Coronavirus (Covid-19)

A recently identified coronavirus is the cause of the infectious disease known as coronavirus disease (Covid-19). When exposed to the virus, most people only get mild to severe respiratory infection and recover without the need for special care. Serious sickness is more

likely to strike the elderly and those with underlying medical conditions such as cancer, diabetes, cardiovascular disease, and chronic respiratory disorders. (World Health Organisation, 2020).

Pandemic

Bonneux and Van Damme (2006) define a pandemic as an epidemic that occurs worldwide, or over a large area, across international borders, which usually affects a large number of people. This definition does not include anything about population immunity, virology, or disease severity. Based on this definition, it is safe to say that pandemics may occur annually in each of the temperate southern and northern hemispheres, given that seasonal epidemics far exceed international borders and affect quite a large number of individuals.

Challenges

A situation where you are faced with something that needs great mental or physical effort in order to be completed successfully and therefore tests one's ability (Cambridge dictionary 2021).

1.8 PARADIGM

Creswell (2009) describes a paradigm as a word that is well rooted in scientific history. It refers to a collection of presumptions and conventions that scientists in a given field have that have an impact on what should be researched, how research should be carried out, how results ought to be comprehended, and how matters should be solved.

The different philosophical worldviews are the postpositivist worldview, the social constructivist worldview, the advocacy/participatory and the pragmatic worldview.

A social constructivist worldview was considered in this study. The assumption under this worldview is that individuals seek understanding of the world in which they live and work and develop subjective meanings of their experiences. The study is reliant on the participants' views of the phenomena being studied. Questions to the participants are rather broad. The aim was to obtain the required answers to the questions asked, as well as to allow the participants to fully express themselves. This perspective focuses on the contexts

in which people live and work, in order to gain understanding of the historical and cultural settings of the participants (Creswell, 2009).

This worldview is most suited to the study as the researcher aimed to gain a deeper understanding of the common challenges experienced by educators in rural areas. The aim was to also obtain their perspectives on how the challenges can be dealt with. The participants shared their experiences of their workplace. The type of questions asked allowed the participants to be rather vocal about their experiences.

1.9 RESEARCH METHOD

A qualitative approach was employed, together with a phenomenological design. According to Denzin and Lincoln (2011) (cited by Creswell & Poth, 2018), qualitative research comprises a set of interpretive, material practices that create a clearer vision of the world. They depict the world in a series of representations such as field notes, interviews, conversations, photographs and recordings. This type of research is an interpretive, naturalistic approach to the world. As a result, it is safe to say that qualitative researchers study things in their natural settings, in an attempt to interpret phenomena in terms of the meanings people bring to them.

Qualitative research focuses on developing explanations of social phenomena. This means it aims to help understand the social world in which we live and why things are the way they are. It is concerned with the social aspects of the world and seeks to answer questions one might have about them (Hancock *et al.*, 2009). In this study, the main aim is to understand the challenges faced by educators, how they have been tackling them individually and systematically and to also explore how they believe these challenges could be combatted

1.10 RESEARCH DESIGN

For the purpose of this study, a phenomenological approach was followed. A phenomenological study encompasses a common meaning for several individuals, in light of their lived experiences of a phenomenon. The researcher focused on describing what all

participants have in common, through a particular phenomenon (Creswell & Poth 2018). Given that this study aimed to explore and gain an understanding of the perspectives of the educators regarding the COVID-19 pandemic, a phenomenological approach was best suited for the study.

1.11 DEMARCATION OF STUDY

The study was conducted in a town named Rustenburg, in the Bojanala district of the North-West Province. The main focus was on schools in surrounding villages named Pella (Tamosstad) and Phokeng. The population comprises primarily of the Batswana culture. Rustenburg is partially owned by the Royal Bafokeng tribe, who are landowners earning royalties from mining operations. The Royal Bafokeng nation are mainly situated in the Phokeng village- very close to the Rustenburg town. Popular tourist attractions and entertainment venues in the area include the Royal Bafokeng Stadium, and The Royal Marang Hotel. The Royal Bafokeng nation also owns one of the most elite schools in South Africa, named Lebone College. Rustenburg is most popularly known as the platinum city, as the mineral is mainly mined in the area. The main tribes that occupy this area are the Bakwena, Bafokeng and Bakgatlha tribes.

Rustenburg accounts for 93 secondary schools. There are 14 former model C schools, 22 township schools and the rest are rural schools. These schools all fall under the Bojanala district. According to the World Population Review (2021), the population of Rustenburg as a whole, is estimated at 532 711 residents. Surrounding areas include Boshhoek, Brits, Derby, Hartebeespoort Dam, Kroondal, Magaliesberg, Mogwase, Silverkraans, Tamosstad, Madikwe, Pilanesberg, Sun City, Swartruggens and Phokeng.

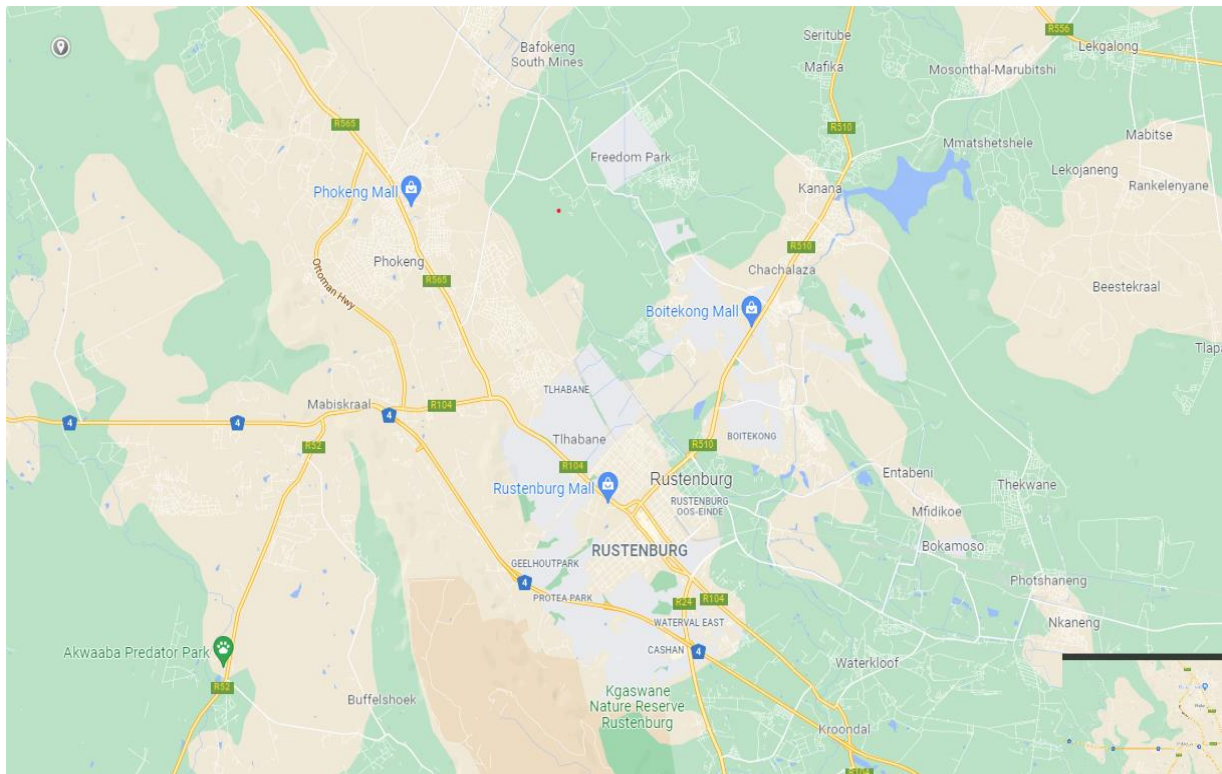


Figure 1-1: Map of Rustenburg (Google Maps)

1.12 RESEARCH METHODOLOGIES

1.12.1 Population

A population refers to the study object and comprises individuals, groups, organisations, human products and events or the conditions to which they are exposed (Welman *et al.*, 2005). The Rustenburg area accounts for 93 secondary schools, 22 of which are township schools and 14 are former model C schools. The rest are rural schools.

The study consisted of 12 educators from different secondary schools, meaning, 3 educators from 4 different schools. The study only focused on educators, no learners or any other stakeholders were included. Suitable participants were educators who had been teaching for at least over a year, prior to the pandemic as they were best suited to make comparisons between prior experiences and their situation during the pandemic. The researcher saw it best to collect data from schools that are the further away from town as

those were the schools that were already facing substantial challenges in terms of the basic resources needed to run their schools.

1.12.2 Sample

A sample is the segment of the population that is selected for research purposes. Either a probability-based or non-probability-based methodology could guide this selection process. The listing frame of every unit in the population from which the sample will be drawn is known as the sampling frame. Probability sampling is the process of choosing a sample through random selection, with each unit in the population having a known probability of being chosen. The goal of probability sampling is to reduce the amount of sampling error. The process of selecting a sample without using the random selection method is known as non-probability sampling. This means that certain units in the population are more likely to be selected, over others (Bryman *et al.*, 2007). The different kinds of sampling are simple random sampling, systematic sampling, cluster sampling, which are all probability types of sampling. Non-probability sampling includes convenience sampling, snowballing, quota sampling and purposive sampling.

The researcher purposively sampled 12 participants to participate in the study. The data collection process continued, until the point of saturation had been reached. Bryman *et al.*, (2017), explain that purposive sampling is a non-probability form of sampling, where participants are not selected on a random basis. By applying this approach, the goal is to strategically sample people in order to find those who are most pertinent to the study. It was the responsibility of the principal of each school to list teachers who had been employed there for longer than a year and who would be willing and able to take part in the research.

1.12.3 Data collection instruments

For the purpose of this study, the researcher will be made use of semi-structured interviews where an interview guide was also used. The researcher also conducted a literature search on the different aspects relating to the topic at hand, which informs the relevant questions that were posed to the participants during the interviews.

Interviews may be structured, with pre-set questions presented to each participant. This type of interview takes a strict and rigid format. An unstructured interview is like a free-flowing conversation, without any rigid, pre-set questions or an interview guide. An interview may also take the form of a semi-structured interview and is preferred by most qualitative researchers. In this type of interview, the researcher poses open-ended questions to the participants with the intention to allow participants to go into as much detail as possible. In this type of interview, the interviewer is able to probe the interviewee to elaborate on his/her initial response (Hancock *et.al*: 2009).

Welman *et al.*, (2010), inform that for semi-structured interviews, the researcher compiles a list of themes and questions to be covered, that have a bearing on the topic. This instrument allows for follow-up questions by the interviewer, as well as more detailed responses by the interviewee.

1.12.4 Data collection

Due to the COVID-19 restrictions, interviews were conducted via media conferencing platforms, namely Zoom or Microsoft Teams, as these platforms also allow for the recording of sessions. These calls were audio calls only, and the recordings were audio recordings. The researcher initiated the calls with each participant.

The participants were notified beforehand of the types of interviews and what they entail. They were also notified that participation is optional and that they were not forced (this was also included in the consent form). The researcher obtained permission from participants, to record the interviews. Once the district had granted the researcher permission to conduct the research, the researcher also liaised with the relevant principals regarding the times that the educators would be allowed to the interviews and schedule them accordingly.

1.12.5 Data coding and analysis

For the purpose of this study, the data was analyzed manually. The researcher transcribed the data collected from the recorded semi-structured interviews with the participants. During the interview, the researcher recorded the interviews, make notes, and wrote down important aspects mentioned by the participant. Welman *et al.*, (2005) refer to these as field

notes and observations. Field notes were utilized in addition to the transcribed data that was compiled by the researcher.

The process of methodically locating, classifying, and providing context for themes within a dataset is known as thematic analysis. It helps the researcher to assign value to shared ideas and experiences by focusing on meaning across the data collection. Finding distinctive and peculiar meanings and experiences within a single data item is not its main objective. With this approach, one can determine and analyze the commonalities in the way a topic is written about. Thematic analysis introduces new qualitative researchers to a way of doing research that teaches the mechanics of systematically coding and analyzing qualitative data, which can be linked to broader theoretical issues which will assist in reporting on themes found within the data set (Braun *et al.*, 2012).

Coding was incorporated. The researcher made use of the NVIVO software to create themes and categories from the data during analysis, the scripts will also be compiled in a format that can be easily imported into the relevant package (Hancock *et al.*, 2009).

Trustworthiness of the study

According to Lincoln and Guba (cited by Lorelli *et.al.*, 2017), trustworthiness allows for researchers to demonstrate the validity of their research findings. They indicate that trustworthiness consists of the following criteria, credibility, transferability, dependability, and confirmability. For the purpose of this study all criteria will be considered, including reflexivity.

Credibility

According to Polit and Beck (cited by Diane *et al.*, 2014), credibility refers to the validity of the data or the views of the participants, and the interpretation and representation of them by the researcher. Sandelowski (cited by Diane *et al.*, 2014), teaches that a qualitative study is deemed credible, when the descriptions of human experience are immediately recognized by individuals who share the same experience. Ultimately, the study must be relatable to its targeted audience.

Transferability

Tobin and Begley (cited by Lorelli *et al.*, 2017) refer to transferability as the generalizability of inquiry, meaning that the findings of the research can be applied to other groups or settings. If the research findings are significant to individuals who are not involved in the study, and the readers are able to associate the results with their own experiences, then it means the study has met the criteria of being transferable (Diane *et al.*, 2014).

Dependability

For a researcher to achieve dependability, the researcher must ensure that the research process is logical, traceable and clearly documented Tobin and Begley (cited by Lorelli *et al.*, 2017). Dependability speaks to the reliability of the data which can also be utilized by future researchers.

Confirmability

The purpose of confirmability is to establish that the researcher's interpretations and findings are clearly derived from the data, this requires the researcher to demonstrate how conclusions and interpretations were reached Tobin and Begley (cited by Lorelli *et al.*, 2017).

Reflexivity

A reflexive journal is used by the researcher to record the day-to-day logistics, methodological decisions, and rationales regarding the study. This journal is also used to record the researcher's personal reflections of their values, interests and insights about themselves Lincoln and Guba (cited by Lorelli *et al.*, 2017).

1.13 ETHICAL CONSIDERATION

The researcher ensured that the research was conducted in an ethical manner. The researcher was also mindful of the fact that she may only conduct the research once the NWU Business school ethics committee had approved the study and granted permission.

Creswell (2009) states that when collecting data, researchers ought to respect the participants and their sites for research. The participants should not be put at risk. He further

stresses the importance of an informed consent form. This form indicates that the rights of the participants are acknowledged and will be protected during data collection.

The researcher maintained ethical practices in the following ways:

- The researcher obtained permission to conduct the research from NWU Business school ethics committee as well the North West Department of Education, Provincial Office.
- Once the Superintendent General had granted permission, the researcher obtained permission from school principals to conduct the research within the schools. The principal was also requested to identify suitable participants.
- Anonymity of the participants was protected at all times.
- Participants signed a consent form, stating that they were aware of what was expected of them and that they were participating out of their own free will.
- Participants were also aware that they were not forced to participate in the study and that they may recuse themselves at any stage in the process. Voluntary participation, confidentiality, no harm.

The rights of participants were respected throughout the process.

1.14 OUTLINE OF THE STUDY

Chapter 1: Overview of the Study

The purpose of this chapter is to introduce the topic and to give an overview of the study. In this chapter, the researcher briefly discusses how the research project was conducted. This includes the introduction, the problem statement, the rationale of the study, the research questions, the literature review, the research methodology and design, as well as the ethical considerations.

Chapter 2: Theoretical Framework

This chapter contains a theoretical framework on the challenges of teachers during COVID-19, in rural secondary schools in the Rustenburg area: North West Province. The theoretical framework of this study is guided by learner theories since the study focuses on aspects of teaching and learning in the basic education sector. The two learning theories are constructivism and cognitivism.

Chapter 3: Methodology

A complete layout of the processes that were followed to collect data is discussed in this chapter. The research methodologies used in this study are thoroughly analysed in this chapter. It also provides an outline and justification of the study methodology, objectives, and questions, as well as the techniques for data collection..

Chapter 4: Findings

The purpose of this chapter is to present the findings of the analysis of the twelve semi-structured interviews that were conducted for purposes of this study. Nine themes, and twenty-three categories were defined and discussed using pertinent literature as support.

Chapter 5: Conclusion and Recommendations

This chapter will provide a summary of the previous chapters. The purpose of this chapter is to provide a summary of the entire study. The chapter comprises a summary of the research findings as per chapter four and is substantiated by the information obtained in the literature review. This chapter will also address the limitations of the study, recommendations of the study, as well as recommendations for future research.

1.15 LIMITATIONS OF THE RESEARCH

A limitation is not necessarily anything inimical or negative about the project. Limitations of the study refer to issues that are usually beyond the control of researchers but affect the outcome of the research in certain ways (Akanle *et al.*, 2020).

The topic of this study is rather straightforward and uncomplicated. The population does not consist of any minors where parents or guardians would have to grant permission for them to participate in the study.

Given that the study takes a qualitative approach, the study does not aim for generalization. The study is also limited to one specific region, future comparative work amongst contexts will hold future research value.

Foreseeably, a comparison between school contexts will also be limited as teachers will be sampled from different schools.

1.16 CHAPTER SUMMARY

The purpose of this chapter was to provide an overview of the study. The chapter comprises of an introduction, a problem statement, which lead to well formulated research questions. The chapter also includes the rationale of the study. The chapter provides a brief literature review of the phenomena in question, along with the definition of the key concepts of the study. The text also consists of a brief discussion of the research paradigm, methodology and design, as well as data collection methods and instruments. Included in this chapter, are the ethical considerations undertaken by the researcher, as well as the outline of the study. The following chapter consists of the literature review, as well as the theoretical framework of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of the literature review is to provide evidence for the rationale and research problem, it gives the context and history of the topic. It offers a methodological framework for reference, dictates the selection of data collection techniques, and, after the data has been obtained, gives you the chance to demonstrate how your study adds to the body of current literature (Hart, 2018).

2.2 BASIC EDUCATION IN SOUTH AFRICA

The Department of Basic Education (DBE), together with the Department of Higher Education and Training (DHET) are jointly accountable for the education system in South Africa. The DBE is responsible for the schools from grade R to grade 12, and all other post-school education and training, as well as the coordination of the Human Resource Development Strategy for South Africa (HRDSSA).

The DBE develops, maintains and supports a South African school education system where all citizens have access to lifelong learning, education and training which will ultimately contribute towards improved quality of life for South Africans (Department of Basic Education, 2021).

For the purpose of this study, the researcher will focus on basic education in South Africa, which is governed by the DBE. The DBE falls under the administration of the Minister of Basic Education. As with any other organisation, there are different levels of management within the DBE. The highest level is the national office, which is above the provincial education departments (PEDs), who are above the district offices and the district offices

serve as the links between the provincial departments and the education institutions that fall within their scope. As a result, we can safely say that the district offices are the direct reporting lines to the local schools. District offices, work together with the circuit offices to ensure that there is compliance within the schools, together with the school principals. This assists in achieving the ultimate goal of ensuring that all learners have access to education that is of progressively high quality (Department of Basic Education, 2021)

The role of the DBE is a rather crucial one, as it they are responsible for catering to the most basic and fundamental educational needs of all South African citizens. The success of a task of this magnitude can only be achieved through governance and guidance by strict laws and policies. In this instance, the DBE is guided by quite a number of these policies, however, the focus will be on The National Education Policy, 1996 (Act No 27 of 1996): Policy on the organisation, roles and responsibilities of education districts. The policy explicitly states that the mandate of the district office is to collaborate with school principals and teachers, with the vital aid of circuit offices, to enhance educational access and retention, offer professional management support, and assist schools in achieving excellence in teaching and learning. With the necessary support from their circuit offices, district offices have four main roles to execute, with due priority being given to the schools most in need of these services:

- **Planning**

- To collect and analyse school, circuit and district data for planning purposes.
- Assist schools with the compilation of school improvement or development plans.
- Integrating school improvement or development plans into district plans.

- **Support**

- The district's educational institutions will receive targeted support and an enabling environment to enable them to carry out their work in accordance with education law and policy.
- Principals and teachers will receive assistance in enhancing the quality of teaching and learning in their institutions through school visits, classroom observations, consultations, cluster meetings, constructive feedback reports, and other means.

- The district's educational institutions will receive information on education law, policy, and administration from this information hub.
 - All of the district's institutions will benefit from ICT connectivity.
 - Finally, the district will be able to provide an enabling environment and organize professional development opportunities for managers, educators, and administrative staff members.
- **Oversight and accountability**
 - Hold district administrators responsible for the performance of their schools;
 - Report to the PED on the district's educational institutions' performance; and
 - Submit reports to the PED based on performance agreements that outline the duties, responsibilities, and roles of district officials in accordance with applicable policies.
 - **Public engagement**
 - Inform and consult with the public in an open and transparent manner; and
 - Uphold Batho Pele principles in all dealings with the public.

Rural secondary schools in South Africa refer to educational institutions that provide secondary-level education (high school education) in rural areas of the country. These schools are located outside urban centers and often face unique challenges due to their remote locations, limited resources, and socio-economic conditions. They play a crucial role in providing education and opportunities for students in rural communities, although they might face difficulties such as insufficient infrastructure, teacher shortages, and limited access to advanced educational resources (DBE, 2019).

The adoption of the severe lockdown during the pandemic helped save a significant amount of lives, however, it also highlighted a large number of shortcomings within our education system which ultimately posed a number of challenges for educators in the basic education system. Dube-Xaba (2022) reminds us that the transition to online or digital learning for secondary school learners was a means of facilitating the teaching and learning process and providing educational support to learners so as to allow them to learn from home during

the lockdown period. She further highlights that for many teachers and learners in rural schools, accessing online teaching and learning platforms was new and for many this led to fear and anxiety, given the poor infrastructure in rural schools and communities. For the purpose of this study, we will focus on rural secondary schools.

2.3 THE CHALLENGES FACED BY EDUCATORS DURING COVID-19

In 2020, the COVID-19 epidemic changed not only our way of life but also our educational system, even if knowledge of education is regarded as a fundamental human right. It was obvious that novices would approach learning very differently than seasoned students. In South Africa, school closures were announced on March 18, 2020, affecting around 17 million students from pre-kindergarten to high school. The implementation of the stringent lockdown protocols affected around 2,3 million students enrolled in post-secondary education and training establishments. (Aloka & Mukuna,2020).

In order to address the needs of the education sector, new laws and regulations had to be created and put into place. These included modifications to the academic schedule, new programs for teaching, new delivery methods, catch-up curricula, safety and health measures, and financial aid packages (DBE, 2019).

Although programs for remote learning were developed, this did not ensure that the learners took part in the classes. Only 11,7% of schools nationwide offered remote learning choices. The majority of schools offered rotation based learning, rather than remote learning, this resulted in a rather significant split in the urban-rural divide, given that twice as many people in urban areas were given the choice of distant learning as there were in rural regions (STATS SA, 2022). This section aims to discuss the challenges faced by educators during Covid-19, as well as their effects on the education system.

In the year 2020, a study was conducted by (Aloka & Mukuna,2020) , in the Free State, in the Thabo Mofutsanyana District. The purpose of this study was to explore the challenges of educators, regarding online learning during the COVID-19 era, at a rural school. The study yielded the following results:

2.3.1 Poor quality of work and incomplete submissions

Through various technologies and media platforms for the various subjects and grades, the DBE and Provincial Education Departments (PEDs) presented students with educational programs and other curriculum support resources during the school closures. However, not all learners had access to both these programs and the educational resources. (Maluleke, 2022)

Educators complained about the poor work submissions due to the new mode of online teaching and learning which had been introduced during hard lockdown times. Parents were unable to assist their children in delivering quality work. They stated that most children/learners struggled even under normal circumstances because they live with elderly people who are technologically challenged. It was further indicated that while most learners produced and submitted incomplete and low quality submissions, others could not even attempt the tasks given to them because of their situation at home.

Most of the parents living in rural communities are uneducated, unemployed and faced with serious challenges of limited infrastructure, making it difficult for teaching and learning to occur effectively.

Similar to many developing and some developed countries, South Africa's rural inhabitants continue suffering from disadvantages when compared to their metropolitan counterparts. It appears that the issues facing our rural areas lie behind the successes of our fledgling democracy (Hlalele, 2014).

2.3.2 Insufficient Personal Equipment and Poor Network Access

Educators lacked sufficient personal equipment, such as personal laptops/computers and or smartphones. This is also the same case for the learners. During this time, these devices have become crucial resources for classroom and home-schooling/ learning. Out of 48 learners, 28 of their parents have cellphones, which are smartphones but do not really know how to use them for such purposes. The rest have ordinary phones which are only used for phone calls and SMS' (Aloka & Mukuna, 2020).

2.3.3 Lack of Learning Devices

When COVID-19 first emerged, the world was already facing significant challenges related to the fourth and upcoming fifth industrial revolutions' potential to widen the gap between the prospects for success of those who lack access to adequate support systems and resources and those who do not. Those who have access to these resources and structures are at an advantage and are not as negatively affected (Maree, 2021).

The aftermath of the COVID-19 pandemic has caused schools to reorganize their teaching and learning environments, and sufficient internet resources for these purposes will soon be available. This indicates that in order for students to keep up with their urban peers, they must have access to personal electronic and internet gadgets.

2.3.4 Increased Dropout Rates

In July 2021, Unicef announced that the impact of the COVID-19 outbreak resulted in learners being 75%- to a full year of school work behind. Rotational attendance, sporadic school closures and days off for certain grades resulted in school children losing 54% of learning time. During this period, the department of education was also confronted with an increase in the number of learners dropping out, particularly, 400 -500 thousand in total. Most of these learners live in informal urban and rural settings, where poverty is also rife. The number of dropouts has now risen to 750 thousand (Unicef, 2021)

2.3.5 Exchange of information between the teacher and learners

During this time, learner evaluation and assessment also suffered great deal. Given that the educators had to make use of many different platforms such as WhatsApp, Zoom, and Google classroom to communicate with the learners. This also created room for the use of informal language, thus creating language barriers between the teachers and the learners (Dube, 2020).

Online student assessments are conducted with significant experimentation, leading to confusion and uncertainty among teachers, students, and parents. The method of

administering online exams varies depending on the comfort and skills of educators, as well as the adaptability of learners. Many schools and institutions have not yet implemented effective plagiarism detection measures, primarily due to the large student population (Phokhrel & Chhetri, 2021).

2.3.6 Social Isolation

Educational institutions are hubs for social activity and human interactions, school closures deprive youth and children of some social activities and environments that are essential to learning, development and creativity. The above study was conducted by Onyema *et al.*, (2020) in the informal settlements of the city of Tshwane, in the Gauteng Province- South Africa. The study highlights most challenges applicable to the learners and the Department of Basic Education. This indicates again that there is still room for research to be conducted regarding the challenges that educators encounter.

Pozo-Rico *et al.*, (2020) conducted a study on teacher training in the United States. This research aimed to reflect the efficacy of a teacher training program intended to support primary school teachers in four key areas, namely, coping with stress, the prevention of burnout, improving information and communications technology (ICT) skills, and the introduction of emotional intelligence (EI) in the classroom. It was found that the pandemic has a clear impact on the educational setting of schools; practical teaching strategies and methodologies are required to challenge and overcome this new threat to health, social development, and education. Learners who attend school often find that the curriculum is irrelevant to their lives and their learning is not supported at home, thus, teachers are challenged two fold, to not only accommodate learners in the classroom, but to also support their learning needs virtually. The economic limitations of governments to provide free basic education to all its citizens and the low socio-economic (education levels, household income and occupation) status of parents are significant barriers that are preventing children from receiving a high standard of education and quality of life.

This is mainly prevalent in Africa and other developing countries around the world, where the majority of the population are poverty stricken and do not have access to quality education. Although governments are increasingly concerned with issues regarding the development of educators, the focus is usually more on urban schools, resulting in rural

schools being neglected (Du Plessis & Maestry, 2019). The literature above indicates the most commonly shared challenges experienced within the department of education, both at national and international level. It is also suggested that urban schools are given more attention as compared to rural schools.

Findings in the literature above, by Dube (2020), also indicate that rural schools are underdeveloped, and the educators need to be capacitated to better facilitate online learning, using the relevant technology and online platforms. Dube (2020) further indicates that the aspect of teacher training, however, has not been fully researched and explored within South Africa and so this aspect will also be considered in this study as it is one of the challenges that educators are faced with, because of the changes brought by the pandemic. This study will thus be relevant to schools, policy makers and other stakeholders as it will assist them with future decision-making and strategy implementation processes.

2.3.7 Nutrition

The primary objective of the national school nutrition program was to feed South Africa's impoverished schoolchildren. In 2015, 62% of children in South Africa between the ages of 0 and 17 were classified as multi-dimensionally impoverished; in 2018, 68,2% of those same youngsters were granted child support grants. This implies that the majority of learners were likely to have eaten their main meal of the day at school and participated in the national school nutrition program. The conditional grant that finances the program is managed by the Provincial and National Departments of Basic Education (Stats SA, 2022).

In September 2020, the ANC branch in Limpopo held a meeting to discuss the challenges that were posed by the pandemic to the local schools in the rural areas. The Chairperson of the party, raised a number of concerns that were brought to his attention by the school management teams. He indicated that one of the main challenges for most schools in this regard, was the low turn up by learners, caused by rotational attendance, as well as complete school closures. In order to mitigate this, and to keep the National School Nutrition Programme running in most schools, the DBE had to constantly communicate with the learners and their parents to collect food from school (Nchabeleng, 2020).

2.3.8 General challenges of E-Learning

The National School of Government (2021), defines e-learning as the process of choosing, creating, delivering, managing, facilitating, and supporting learning through the use of technology. This phrase encompasses a wide range of methods and procedures, such as computer-based, web-based, and mobile learning. In 2020, when the nation was placed under complete lockdown, all schools were forced to switch to this method of instruction right away.

The purpose of this change was so that learners would not fall too far behind on their school work. Due to the challenges that this mode of delivery posed, other schools opted for rotation based learning and so the concept of blended learning also became more of a reality in basic education system. Blended learning refers to an educational approach that combines both traditional ways of teaching (e.g., inside the classroom) and online ways of teaching through a series of online educational materials and interactive activities (Raouna, 2022).

Enlisted below, are the benefits of E-learning according to The National School of Government (2021). These benefits are for both the educators (as facilitators and learners of the method of delivery), as well as the learners:

Training and learning needs can be identified and recorded through online questionnaires and/or surveys.

- ❖ Participants have access to learning resources and training opportunities at all times, particularly at remote sites.
- ❖ Access to standardized training opportunities and resources is available to participants.
- ❖ There is a reduction in the amount of time needed for travel and organizing training sessions for numerous attendees.
- ❖ Individuals have the flexibility to enroll in classes that suit their individual needs at their convenience.
- ❖ It is possible to swiftly and effortlessly implement training for a sizable participant base.

- ❖ Assessment opportunities can be automatically marked, allowing for regular evaluation and fast feedback.
- ❖ Feedback from tracking and reporting systems can be utilized to enhance training interventions over time.
- ❖ Online collaboration can make it easier to share resources, knowledge, and information for sustainable development, regardless of location or time.
- ❖ Participant progress may be tracked and training participation can be readily verified.
- ❖ Mechanisms for tracking and reporting offer input that can be utilized to continuously enhance training programs.

The above mentioned benefits indicate that E-learning would benefit both the educators and the learners, provided, there is sufficient provision of equipment and infrastructure to all schools (The National School of Government, 2021).

Given that many of the educators in rural areas are rather technologically challenged, this also means that they will definitely experience more challenges than those in urban areas and some of those challenges would be more basic/general than others. These challenges include:

- Minimal, to no formal training at all.
- Maintaining online engagement with the learners. Involving the learners and keeping them interested in the work would be challenging.
- Increased workload. Having to prepare content for classes, and then having to deliver the content online, as well as providing soft copies or versions of the content.
- Difficulty observing and paying attention to all the learners. The educators would be expected to multitask during class, constantly ensuring that all learners remain connected in class and that they are following, while also ensuring that the material is made available to them.
- As previously mentioned, challenges with assessments.
- Time management.

The above challenges were identified by Aini, *et al*, 2020, in a study conducted in Indonesia, during the COVID-19 Pandemic.

2.3.10 The utilization of Information Communication Technologies

A study conducted by Chisango et.,al (2020) in the rural Eastern Cape secondary schools also yielded results highlighting that not all educators had efficient knowledge and/ or training in the use of Information Communication Technology (ICT). This was the first point of departure in terms of analyzing why communication between teachers and learners would tend to be problematic. Below are the challenges that were rather prevalent in the schools in these areas:

- **The availability of ICT infrastructure.** Due to poor ICT infrastructure, only Computer Application Technology (CAT) students were taught computer skills at one of the schools, while other schools had no computers at all. There is already a digital divide in these institutions since it is implied that educators and students are not exposed to technology during the teaching and learning process.
- **The perceptions of educators regarding the adoption of ICT infrastructure.** Educators who already knew the benefits of using ICT were ready for the change and willing to adapt. Those who were not so familiar and had already been in the field for quite a long time, had no interest in altering their teaching methods and viewed this change as a waste of time. Those who did not want to adopt this new way of doing things, believed that ICT would only be disruptive and lead to the learners socializing instead of paying attention in class. Hence, it would be a waste of time (Chisango et.,al ,2020).

2.3.11 Shortage of basic resources

In the year 2020, a study was conducted in the Kwa-Zulu Natal Province, by Gamede and Uleanya (2020). The purpose of the study was to investigate the teaching and learning challenges that educators had to face during the pandemic. One of the main themes under the study, was focused on the factors affecting education in the selected rural communities. The results were as follows:

- **Shortage of teachers to teach in rural communities (Human resources).** This implies that most educators prefer to teach in urban schools instead of rural schools.

However, the shortage of educators in rural schools is likely to increase the workload of the few educators. This will consequently affect their output.

- **Lack of textbooks in rural communities.** Many rural schools in South Africa and Africa at large are under-provisioned with educational resources. The lack of provision of educational resources affects the quality of education provided for learners in the selected rural community.
- **There are no supporting materials for rural education.** It is important that the Department of Basic Education provides more materials not just textbooks but also computers, radios, TVs and CD ROMs. Resources and materials are needed in order to improve rural education.
- **Long-distance travelled by learners to and from school.** In remote areas, there is a noticeable scarcity of educational institutions. In order to prevent students from having to make lengthy commutes, the department must establish schools in every community. Numerous schools are overcrowded as a result. Since parents lack the means to get their children to and from school, the government should construct new schools that are closer to communities and teach worthwhile and significant subjects (Gamede & Uleanya ,2020).

2.4 THEORETICAL FRAMEWORK

As mentioned in chapter 1, the theoretical framework is the structure that supports the theory of a research study. The theoretical framework introduces and explains the theory which substantiates why the research problem under study exists (Sacred Heart University, 2006).

Given that this study focuses on elements of teaching and learning in the basic education sector, learner theories will serve as the theoretical foundation for the investigation. Theories about learning describe how pupils absorb and remember knowledge. Teachers can use these ideas as a basis to create different frameworks that meet the unique learning styles and academic needs of their pupils (National University, 2023). According to Fairbanks, (2021), there are five primary educational learning theories: behaviorism, cognitive, constructivism, humanism, and connectivism. Additional learning theories

include transformative, social, and experiential. Below, is a tabulated summary of the five learning theories, in Table 2.1.

Table 2-1: The five main learning theories

THEORY	EXPLANATION	APPLICATION
Behaviourism	As Simply Psychology puts it: "Behaviourism is only concerned with observable stimulus-response behaviours, as they can be studied in a systematic and observable manner."	Learning is based on a system of routines that "drill" information into a student's memory bank, as well as positive feedback from teachers and an educational institution itself. If students do an excellent job, they receive positive reinforcement and are signalled out for recognition.
Cognitivism	Learning relies on both external factors (like information or data) and the internal thought process	Developed in the 1950s, this theory moves away from behaviourism to focus on the mind's role in learning. According to the International Bureau of Education: "In cognitive psychology, learning is understood as the acquisition of knowledge: the learner is an information-processor who absorbs information, undertakes cognitive operations on it and stocks it in memory."
Constructivism	The learner builds upon his or her previous experience and understanding to "construct" a new understanding.	"The passive view of teaching views the learner as 'an empty vessel' to be filled with knowledge," explains Simply Psychology, "whereas constructivism states that learners construct meaning only through active engagement with the world (such as experiments or real-world problem solving)."
Humanism	A "learner-centric approach" in which the potential is the focus rather than the method or materials.	With the understanding that people are inherently good, humanism focuses on creating an environment conducive to self-actualization. In doing so, learners' needs are met and they are then free to determine their own goals while the teacher assists in meeting those learning goals.
Connectivism	Informed by the digital age, connectivism departs from constructivism by identifying and remediating gaps in knowledge.	Strongly influenced by technology, connectivism focuses on a learner's ability to frequently source and update accurate information. Knowing how and where to find the best information is as important as the information itself.

Source: University of Phoenix, 2021.

For the purpose of this study, we will explore only two learning theories, namely, cognitivism and constructivism.

2.4.1 Cognitivism

According to Morales (2021), The learning theory of cognitivism is centered on mental processes. According to cognitivist learning theory, our ability to learn is based on how our minds take in, organize, process, and subsequently use information. Our brains are able to transfer and apply the knowledge we have learnt to new settings and challenges when we are learning new things. The majority of learning theories aim to do this. Because cognitivism draws on research on the brain and the mental processes involved in learning and applying new information, it helps to build better learning programs for students.

Morales (2021) adds that anyone who seeks to educate others with new information or ideas can benefit greatly from gaining a solid understanding of cognitivism. Even when a learner is making an effort to learn something new, they typically have some kind of prior understanding that they may use to anchor the new material and finally make the connection between it and the new knowledge. That is the basic function of cognitivism. The mind is an internal processor that uses our internally stored information and connects it to external factors in order to create new learning. Cognitivists contend that their theory serves as the main theoretical framework for logically explaining how humans learn things since learning entails using prior knowledge that has been activated and information acquired from past experiences to make sense of the universe. Cognitivism is considered to be the mainstream for all research and foundations of learning design.

2.4.1.1 Principles of cognitivism

Main (2022) indicates that cognitivism principles intend to optimize how adult learners can understand, think about, integrate and process new information. Enlisted below, are the main principles of cognitivism that Main deems to be crucial for more effective human learning in academic settings:

- ❖ Learning must be purposeful and focused.
- ❖ Learning must be self-directed;
- ❖ Learning must come from Analysis to Discovery.

- ❖ Layouts support the development of conceptual models in students.
- ❖ Enabling students to organize and encode learning material improves their long-term memory.
- ❖ The content of the curriculum needs to be clearly organized and comprehended in relation to the larger picture.

2.4.1.2 The advantages and disadvantages of Cognitivism

Morales (2021) further states the advantages and disadvantages of cognitivism:

Advantages

- **Encourages critical thinking skills** – By forcing the learner to do more than merely retain facts, cognitive learning theory helps to build critical thinking abilities.
- **Enhances problem-solving abilities** – Because it encourages students to approach problems using logic and reasoning, this theory also enhances their ability to solve problems.
- **Encourages self-learning** – It encourages learners to seek out information on their own, which encourages self-learning.
- **Improves memory retention** – It promotes improved memory retention and makes it simpler for students to retain what they have learned by relating new material to what they already know.
- **Strengthens understanding of concepts** – The theory also improves conceptual understanding since it stresses knowing the "why" and "how," rather than just the "what," of information.

Disadvantages

- **Ignores emotional influence on learning** – The influence of emotions on learning is frequently ignored by cognitive learning theory. How we process and remember information can be significantly impacted by emotions.
- **Overemphasis on mental processes** – While other parts of learning may be just as crucial, it frequently places an excessive amount of emphasis on mental functions like thinking and memorization.

- **Lacks cultural considerations** – This idea might not properly take into account cultural influences. There can be differences in how people learn and process information in different cultures.
- **Difficult to measure cognitive changes** – It can be hard to gauge cognitive changes. It's challenging to put thoughts and understanding into a definite numerical value.

2.4.2 Constructivism

Constructivism is a theory of learning that places a strong emphasis on how actively students construct their own understanding. Learners make mental images, integrate new information into pre-existing patterns, and reflect on their experiences rather than just taking in information passively. This results in deeper learning and understanding.

The primary concept posits that human knowledge is built, with learners building new information on top of previously acquired knowledge. The second idea is that learning is a process that is active as opposed to inert. This essentially indicates that students can only create meaning by actively engaging with the environment and the world, such as via experiments or solving real-world problems. (Guy-Evans, 2023). Constructivism is about building new ideas and concepts based on your own discoveries (Lee, 2016).

2.4.2.1 Principles of Constructivism

Burns et al., (2002) indicate that there are principles of constructivism that characterize constructivism in education and how to practically apply it to everyday teaching and learning. The first essential piece to this application is learning what it entails, including the guiding principles below:

- ❖ Learners contribute their distinct historical knowledge, experiences, and beliefs to a learning environment.
- ❖ Knowledge is created in many different ways, both individually and uniquely, using a range of real-world tools, resources, experiences, and situations.

- ❖ Education is a reflective and active process.
- ❖ Developing new conceptual frameworks, meaningful representations, or mental models through tolerance, assimilation, or rejection is the process of learning.
- ❖ Social interaction facilitates the introduction of diverse perspectives by means of introspection, cooperation, compromise, and mutual understanding.
- ❖ The learner is the one who mediates and controls their own learning.

2.4.2.2 The Advantages and disadvantages of Constructivism

Below is a list of advantages and disadvantages of the constructive learning theory, according to McLeod (2019).

Advantages

- Learning happens most effectively when pupils are actively engaged in the process, as opposed to just receiving information. Students' experiences with the learning process and evaluation are unique.
- As students and teachers collaborate to develop knowledge while forming social connections, learning develops into a social process since it is integrated within a social environment.
- A constructivist method of instruction gives students practical experiences that aid in the creation of knowledge. Teachers share authority with students and serve as facilitators or guides.
- As surroundings change, knowledge transforms into a dynamic, ever-changing idea. By accepting and digesting new information and by maintaining a healthy, useful state of disequilibrium, learners can create a variety of different mental models and schemas.

Disadvantages

- For students who need a highly organized learning environment in order to learn and perform at their best, a constructivist learning setting is ineffective.

- Students in a constructivist atmosphere are expected to assess their own development, which may not be acceptable for those who rely on exams and conventional teacher evaluations. They can lag behind as a result of this.
- If instructors don't carefully organize and build a constructivist learning plan with frequent check points for student engagement and understanding (via discussions, reflections, meetings, etc.), they may not be aware of whether or not their students are having difficulty in class.

Given the above information, the researcher believes that for the betterment of the learners, it would be rather advantageous if educators leaned more towards constructivism which encourages the learner to be more active in the learning process and to apply themselves more. Should the DBE also decide to adopt or incorporate E-learning into the system, then this theory would definitely compliment that change.

2.5 CONCLUSION

The purpose of this chapter was to give a brief overview of rural secondary schools in South Africa, and to discuss the challenges- according to existing literature, posed by the COVID-19 pandemic within the basic education system.

This chapter also includes a discussion of the two underlying learning theories that serve to guide this study.

The next chapter will discuss the research design and methodology applied in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The purpose of this chapter is to explore the research methodology, as well as the research design of this study. Research methodology refers to the systematic approach and set of procedures that a researcher employs to conduct, gather, analyze, and interpret data in a scientific investigation (Kumar, 2019). It encompasses the strategies, techniques, tools, and frameworks used to answer research questions or test hypotheses, ensuring the reliability, validity, and rigor of the study.

A well-defined research methodology provides a structured framework for the entire research process, from the selection of the research design to the collection and analysis of data (Creswell, 2014). The researcher will further explain the data collection instruments and methods that were utilized.

3.2 RESEARCH QUESTIONS

The research questions were formulated based on the research objectives and problem statement.

Main Research question:

What are the challenges the educators are experiencing during Covid-19, in rural schools in the Rustenburg area?

Sub-questions:

- What are the different challenges experienced by educators in the rural areas?
- How are the educators responding to these challenges?
- What are the effects of Covid-19 on education?

- What can be done to overcome these challenges in rural areas?

3.3 RESEARCH PARADIGM

The study is guided by a social constructivist worldview. A social constructivist worldview is a theoretical perspective within the field of social sciences that emphasizes the role of human interactions, culture, and language in shaping individuals' understanding of reality. According to social constructivism, knowledge and meaning are not fixed or objective truths, but are rather constructed through social interactions, shared beliefs, and cultural contexts. This perspective posits that individuals actively participate in creating their own understanding of the world based on their experiences and interactions with others (Vygotsky, 1978).

Social constructivism challenges the notion of a single, objective reality and highlights the diversity of perspectives and interpretations that emerge from different social and cultural contexts. This perspective is particularly relevant in fields such as sociology, anthropology, education, and psychology, where researchers examine how people's beliefs, values, and behaviors are influenced by their social environment (Burr, 2015).

3.4 RESEARCH APPROACH

The research is of a qualitative nature. Qualitative research is a research approach that aims to explore and understand complex phenomena in-depth by examining the subjective experiences, perspectives, and meanings that individuals attach to those phenomena (Creswell, 2013). Qualitative research aims to provide rich and in-depth insights into human experiences, behaviors, and social interactions, often employing methods like interviews, observations, focus groups, and content analysis. It is for this reason that the researcher made use of this approach for this study, and conducted semi-structured interviews to collect data (Creswell, 2013).

3.5 RESEARCH DESIGN

Research design refers to the blueprint or plan that outlines the overall structure and strategy of a research study. It encompasses the framework, structure, and specific methods that will be used to collect and analyze data in order to address the research questions or objectives (Leedy & Ormrod 2019). A research design helps guide researchers in making decisions about the type of data to be collected, the methods to be employed, the sampling strategy, and the overall approach to conducting the study (Robson 2011).

As mentioned in chapter one, this study is guided by a phenomenological approach. This approach, allows the researcher to discover and describe what all participants have in common, through a particular phenomenon (Creswell & Poth, 2018). This being applicable to the investigation of the challenges experienced by educators in rural schools, during the COVID-19 pandemic.

According to Moustakas (cited by Creswell, 2017), A method of investigation known as phenomenology research involves the researcher extracting the core of common human experiences regarding a topic from the participants' descriptions. Phenomenology is both a philosophy and a method that is distinguished by its understanding of participants' lived experiences. The process entails researching a small number of subjects through in-depth, sustained interaction in order to establish patterns and relationships of significance.

3.6 DATA COLLECTION

Data collection is the process of obtaining and examining information or data from various sources in order to evaluate findings, predict patterns and probabilities, and find answers to research issues. In various types of analysis, research, and decision-making, including work in the social sciences, business, and medical domains, it is an essential stage. (Simplilearn, 2023).

The general procedure of gathering data is the same regardless of the methods and objectives that differ between the many fields. Prior to starting the data collection process, you should be aware of the purpose of the study, the kind of information you plan to gather,

and the techniques and protocols that will be used to gather, store, and process the information. (Bhandari, 2023).

According to Bhat (2023), The process of acquiring non-numerical data, such as words, pictures, and observations, in order to comprehend people's attitudes, behaviors, beliefs, and motives in a particular setting is known as qualitative data collection. It's a method applied in qualitative research. It makes an effort to comprehend social processes by thoroughly examining and analyzing the viewpoints, experiences, and narratives of individuals. It's critical to recognize the differences between numerical and categorical data while doing statistical analysis. Categorical data is composed of quantifiable values, but numerical data needs distinct categories or labels. Qualitative approaches yield subjective, open-ended, and unstructured data that can offer a deep and intricate comprehension of intricate social phenomena (Bhat, 2023).

3.6.1 Population

The study population refers to the group of individuals who meet the criteria for inclusion in a research study. It represents the larger target group from which the researcher wants to draw conclusions and form generalizations (Neuman, 2014). The formation of the study population is a critical aspect of research design, as it determines the external validity or generalizability of the study findings. The study population should be clearly defined to ensure that the sample selected for the study is representative of the broader population in question (Babbie, 2016).

The Rustenburg accounts for 93 secondary schools, 22 of which are township schools, and 14 are former model C schools. The remaining 57 are rural schools. The study, however, only targeted the educators at rural secondary schools.

3.6.2 Sampling

The preferred sampling technique for this study is purposive sampling. Purposive sampling, also known as purposeful sampling, is a non-probability sampling technique used in research to select participants based on specific characteristics or qualities that are relevant to the research objectives (Patton, 2015). This sampling method is commonly used in

qualitative research and in cases where researchers seek to target specific groups or individuals who can provide valuable insights into the research topic (Creswell, 2013).

The sample of this study consists of 12 educators from rural schools in the surrounding areas. The 12 educators are all educators who have been in the industry for over a year and were also employed in these schools during the pandemic. The educators are also of different ages, and backgrounds. The researcher contacted their line managers (principals) and provided the criteria, and the line managers then assisted the researcher to identify the relevant participants for the study.

The researcher then conducted interviews via Zoom and Teams, and transcribed the data. Prior to the interviews, the researcher ensured to obtain consent from the participants and informed them of the ethical considerations that guide this study, namely that all feedback would be anonymous and that no one other than the researcher would have access to the recordings and that they would be destroyed once the study had been completed. They were also made aware that they had the right to withdraw from the interview at any stage during the interview and that there would be no consequences. The interviews continued until saturation was achieved.

3.6.3 Data collection instrument

A data collection instrument is a tool used by researchers to obtain information from study participants. These instruments can take various forms, including surveys, questionnaires, interviews, observations, and tests (Dillman *et al.*, 2014). The choice of a data collection instrument depends on the research objectives, the nature of the data needed, and the characteristics of the study population. The design and construction of a data collection instrument are crucial to ensure the reliability and validity of the collected data (Creswell & Creswell, 2017).

The data collection instrument referred to in this study, in known as the interview guide, and was designed to align the research questions with the study objectives by means of open-ended questions. The interview guides consists of questions that seek to provide answers to the research questions. The questions in section A of the interview guide relating to demographic data, include questions relating to district, years of experience as an educator,

as well as their designation within their schools. The demographic data gives the researcher an overview of the individuals' backgrounds. By providing context for the data gathered, these questions enable the researcher to characterize the participants and carry out a more thorough data analysis.. Section B of the interview guides consists of study-specific questions which aim to address the objectives of the study. The interview guide is included as Annexure D.

3.6.4 Interview schedule

During an interview, the respondent and the researcher speak with each other directly. They can be conducted in person, over the phone, or by video conferencing. Interviews can be unstructured, more conversational, or semi-structured, with predefined questions. Semi-structured interviews allow for some flexibility (Simplilearn, 2023). For the purpose of this study, the researcher made use of semi-structured interviews.

The interviews were conducted via Microsoft Teams and WhatsApp for those who did not have access to Microsoft Teams. All of these interviews were recorded and transcribed manually, for the WhatsApp calls, the researcher made use of an additional recording device as the app cannot record calls. The interviews were scheduled so as to suit the schedules of the participants. Each interview was scheduled for 30 minutes. The first 3-5 minutes of the interviews consisted of the researcher informing the participants of their right to disengage from the interview at any point during the interview if they deemed it necessary. This also involved a brief overview of the interview process, as well as the discussion of confidentiality matters between the participant and the researcher.

The researcher ensured to follow the interview guide as is, so as to ensure that all the necessary information is gathered and in a timely manner. All of the participants consented to the interviews being recorded and they were all comfortable with the questions asked. They all responded with ease and enjoyed the engagements as they needed an outlet, or a neutral platform where they could voice their opinions and concerns regarding the matter at hand.

The interview schedule is depicted in the table below:

Table 3-1: Interview Schedule

DATE	TIME	PARTICIPANT	VENUE
20/03/2023	14:00-14:30	Participant 1 (P1)	Online MS Teams recording
20/03/2023	14:40-15:10	Participant 2 (P2)	Online MS Teams recording
20/03/2023	15:15-15:45	Participant 3 (P3)	Online MS Teams recording
20/03/2023	15:50-16:20	Participant 4 (P4)	WhatsApp Voice Call
20/03/2023	16:25-16:55	Participant 5 (P5)	Online MS Teams recording
21/03/2023	14:00-14:30	Participant 6 (P6)	Online MS Teams recording
21/03/2023	14:40-15:10	Participant 7 (P7)	WhatsApp Voice Call
21/03/2023	15:15-15:45	Participant 8 (P8)	Online MS Teams recording
21/03/2023	15:50-16:20	Participant 9 (P9)	Online MS Teams recording
21/03/2023	16:25-16:55	Participant 10 (P10)	Online MS Teams recording
22/03/2023	14:00-14:30	Participant 11 (P11)	WhatsApp Video Call
22/03/2023	14:40-15:10	Participant 12 (P12)	Online MS Teams recording

Source: Authors own

3.6.5 Role of the Researcher

The onus is on the researcher to ensure that all aspects of the study are well coordinated. Below is a discussion of the role of the researcher in this process:

- The researcher obtained permission to conduct the research, from NWU Business school ethics committee as well the North West Department of Education, Provincial office.
- The researcher then approached the school principals, to obtain permission to conduct the research within their schools. The principals were then requested to identify suitable participants amongst their staff members.
- Each participant received and signed a consent form, stating that they are aware of what is expected of them and that they are participating out of their own free will.
- Participants were also reassured that they were not, under any circumstances obliged to participate in the study and that they may recuse themselves at any stage in the process.
- As agreed with the participants, the researcher ensured to maintain anonymity and confidentiality throughout the entire process.
- A researcher's involvement in collecting data is essential to maintaining the validity, consistency, and ethics of the study process. Researchers are essential to the process since they determine the data collection techniques, collect data, and oversee the entire process (Neuman, 2014).

3.7 DATA ANALYSIS

The process of examining, filtration of, converting, and modeling raw data in order to find relevant information, make inferences, and aid in decision-making is known as data analysis. In order to analyze and assess the patterns and trends in the data, systematic, statistical and mathematical methods are applied. Data analysis is an essential element in the research process that is used in many different fields, such as business, science, social sciences and statistics (Hair *et al.*, 2018). There are different types of data analysis, namely, statistical analysis, content analysis, discourse analysis and thematic analysis (Caulfield, 2019) but for this study, the researcher applied thematic analysis.

Thematic analysis is a suitable research method when analyzing people's ideas, opinions, knowledge, experiences, or values utilizing a collection of qualitative data, such as survey responses, social media profiles, or interview transcripts. (2019, Caulfield). Interviews and focus groups can be transcribed verbatim, with or without behavioral annotations, with or without phonetic transcription of dialects and filler words, depending on what is known or expected to be significant for the analysis. Following that, one or more succinct descriptions of the sentence or paragraph's substance are appended to the protocols and transcripts before they are coded. They are also known as themes (Punch, 2013). The steps that were followed in the application of the above-mentioned data analysis method, according to Braun & Clarke (2006) are listed and briefly discussed below:

3.7.1 Organizing and transcribing the raw data

The first step would be to “get to know the data”. It is imperative for one to obtain a thorough overview of all the data that has been collected before analyzing individual items. This includes transcribing audios, reading through the text and taking initial notes, and generally looking through the data to get acquainted with it (Braun & Clarke, 2006). The researcher transcribed the data manually, as some of the participants would tend to speak in their home-languages (Setswana and isiZulu) and so Microsoft Teams could not accurately pick up on those parts of the conversation.

The researcher did, however, compare the transcription from MS Teams to her notes in order to consolidate and ensure that what was compiled was in line with the recordings. For the interviews conducted via WhatsApp, the researcher had to transcribe manually as well. The data was transcribed verbatim, as this data formed the basis for the analysis. The next step would be to code the data and classify it according to the different themes.

3.7.2. Coding and creation of themes

Coding in qualitative research is a systematic and iterative process of categorizing and labelling data to identify patterns, themes, and concepts within the dataset. It involves breaking down the raw data—often in the form of text, images, or other non-numeric information—into discrete units, referred to as codes (Miles *et al.*, 2019). Codes are then organized based on similarities or relationships, creating a structure that captures the essence of the data. The process of coding is central to the analysis and interpretation of

qualitative data, allowing researchers to distill meaning, uncover insights, and develop a conceptual framework (Charmaz, 2014).

The researcher created the themes based on the participant responses reflected in the transcriptions. From these themes, emerged categories which further consisted of the different responses, verbatim. These responses are detailed descriptions of the participants' experiences of the phenomena in question. From this study, there emerged nine themes, and twenty-three categories.

3.7.3. Interpretation of the themes

As with any other academic work, creating an analysis of themes begins with an introduction that outlines the research topic, goals, and methods. Included should be a methodology section that describes the theme analysis procedure as well as the data gathering techniques (such as semi-structured interviews or open-ended survey questions) (Braun & Clarke, 2006). The results or findings section usually addresses each theme in turn. Included, is a description of how often the themes recur and what they mean, including examples from the data as evidence. Finally, the conclusion explains the main key points and shows how the analysis has answered the research questions (Braun & Clarke, 2006).

A comparison of the results with the relevant literature, is included in the interpretation, along with recommendations for additional or further research. In order to verify already published data and contribute new insight to the corpus of knowledge, the analyzed data was consequently placed in the context of already-published theory and literature.

3.8 ETHICAL CONSIDERATIONS

A set of guidelines that direct your research ideas and procedures are known as ethical considerations in research. There is a code of behavior that researchers must always follow when gathering information and collaborating with others. Understanding real-life occurrences, researching effective therapies, examining behaviors, and enhancing the lives of others are frequently the primary goals of human research. There are important ethical considerations in both what you choose to research and how you perform it. These considerations work to protect the rights of research participants, enhance research validity and to maintain academic integrity (Bhandari, 2023).

The following standards have been met in accordance with the North-West University research ethics guidelines:

- • In order to get permission to conduct research, an application for ethical clearance at the appropriate ethics committee (EMS-REC) was made to the institution.
- The ethics approval letter is included in Annexure A. The EMS- REC deemed this study to be low risk.
- To obtain permission to proceed with the research, the researcher obtained permission from the Superintendent General, of the North West Department of Education. The permission letter from the Department of Education is supplied as Annexure B.
- Written informed consent was obtained from participants before to the start of the interviews, after ethical clearance and notification of the research's objective.
- The informed consent document is provided as Annexure C.
- Participants were informed that their participation was voluntary and that they had the right to withdraw from the study at any time that they deemed necessary during the research process.
- The participants' verbal consent to record the interviews was obtained at the beginning of each interview.
- Participants were informed that they were not required to share the information if doing so made them feel uncomfortable.
- To safeguard the anonymity of participants, neither the transcriptions nor the research report contained any specific or identifying information. Alias names were created to protect the identities.
- The interviewer conducting the semi-structured interviews with participants was not allowed to seek out or get in touch with possible participants in order to maintain compliance with the POPI Act and minimize any potential bias or conflicts of interest. Rather, a document outlining the study's specifics and the participant criteria was sent to the principals, enabling them to recognize and extend invitations to their employees to partake in the research. Following the completion of this step in the process, the principals gave the researcher their

contact information so that

- The researcher could schedule the interviews, as per the interview schedule.
- The participant's right to privacy, dignity, and reputation was always maintained.
- The researcher strictly adhered to the questions outlined in the interview guide (Annexure D) and utilised probing questions only to clarify information and eliminate ambiguity.
- The researcher promised to tell the truth and present the data objectively.
- The researcher will reveal all study findings and report from multiple angles.
- The citing standards of North-West University were followed for all references used in this research.

3.9 CONCLUSION

The purpose of this chapter was to explore the research methodology, as well as the research design of this study. The researcher further elaborated on the data collection instruments and methods that were utilized. The researcher will further discuss data analysis and findings in chapter 4.

CHAPTER 4

PRESENTATION OF DATA

4.1 INTRODUCTION

The purpose of this study is to investigate the challenges that educators faced during the Covid-19 pandemic. The aim is to assist the Department of Basic Education to gain a better understanding of the ground level challenges currently faced by educators within their schools, to make recommendations on how to better assist and capacitate educators to deal with those challenges and to contribute to the current body of knowledge regarding how teachers experienced the pandemic. This will also assist the DBE in future decision making, as well as policy formulation process.

In this chapter, the researcher will present the analysis of the information that was collected in the previous chapter through the semi-structured interviews that were held with 12 participants. In these interviews, participants were allowed to express themselves freely, under the knowledge of all ethical protocols that were observed by the researcher. Upon completion of the interviews, the researcher transcribed the raw data and organized the outputs into themes and categories. The themes represent the most common responses, ideas or meanings to the research questions posed to the participants and the categories represent the responses to the research questions.

The main purpose of the study, is to address the following research questions:

Main Research question:

What are the challenges that the educators experienced during COVID-19, in rural and urban schools in the Rustenburg area?

Sub-questions:

- What are the different challenges experienced by educators in the rural areas?
- How are the educators responding to these challenges?

- What are the effects of COVID-19 on education?
- What can be done to overcome these challenges in rural areas?

4.2 DISCUSSION OF THEMES AND CATEGORIES

The discussion of the themes and categories includes the discussion of the demographic information, as well as the themes and categories that emerged from the study.

4.2.1 Demographics

Demographic details refer to specific characteristics and information about a population or a sample group that is typically collected in research studies or surveys. These details include a wide range of factors that describe the individuals being studied, such as age, gender, ethnicity, education level, income, marital status, occupation, and other socio-economic variables (Babbie, 2015).

Demographic information provides a comprehensive understanding of the composition and diversity within a population, enabling researchers to draw meaningful conclusions, identify patterns, and make informed decisions based on the specific characteristics of different groups (Fowler, 2009).

Below, is a summary of the demographic details of the participants in the study.

Table 4-1: Participant demographics

Participant	Participant designation	Number of years in service	District
P1	Educator	5 years	Bojanala
P2	Educator	13	Bojanala
P3	Educator	28	Bojanala
P4	Educator	17 years	Bojanala
P5	Departmental Head	32	Bojanala
P6	Head of department	32	Bojanala
P7	Head of Department	34	Bojanala
P8	Deputy principal	30	Bojanala
P9	Deputy principal	28	Bojanala
P10	Educator	5 years	Bojanala
P11	Principal	28	Bojanala
P12	Educator	1 year	Bojanala

Source: Authors own.

The above table is a representation of the group of participants who participated in the study.

In order to obtain well-rounded and unbiased results, the researcher saw it fit to ensure that the population consists of individuals of different designations and number of years in service. As previously mentioned, the aim is to be able to compare responses or behaviours across demographics, and identify disparities or similarities, which can inform policies or interventions.

As reflected, the researcher interviewed 12 participants, 6 educators, 3 departmental heads, 2 deputy principals and 1 principal. The group's distribution of the years of service is as follows:

- 3 participants, 0-10 years of experience.
- 2 participants, 10-20 years of experience.
- 3 participants, 20-30 years of experience.
- 4 participants, 30-40 years of experience.

All of the above mentioned participants, are also involved in the daily teaching and learning activities of their schools. As per table 4.1, all participants are from the Bojanala district in the North West.

4.2.2 Theme 1: Impact of the new way of teaching on Teaching and Learning Activities

Table 4-2: Summary of theme 1: The new way of teaching since the onset of the pandemic has had a significant impact on teaching and learning activities.

Theme : The new way of teaching since the onset of the pandemic has had a significant impact on teaching and learning activities	
Categories:	
4.2.2.1	Increase used of technology.
4.2.2.2	Overall significant impact.

Source: Authors own.

The onset of the pandemic in the year 2020 led to a number of changes in the way that we do things, one of the majorly impacted aspects of our daily lives, was the manner in which teaching and learning takes place in educational institutions, in South Africa and around the world. The spread of the pandemic led to the country having to adopt emergency remote learning practices. For the education sector, new educational policies and regulations had to be developed and implemented, including the adjustment of the academic timetable, new teaching programs, mode of delivery, catch-up curriculum, health and safety precautions, and financial relief packages (DBE, 2019).

Theme 4.2.2 addresses how teaching and learning practices were affected during this time through the categories below, as per table 4.2:

4.2.2.1 Increase in the use of technology

Remote teaching and learning, also meant that the educators would have to incorporate the use of technology in their teaching methods. For some, this was a choice, and others not. When the country went into total lockdown in the year 2020, all schools had no choice, but to immediately adopt this as a mode of delivery. The purpose of this change was so that learners would not fall too far behind on their school work. Due to the challenges that this mode of delivery posed, other schools opted for rotation based learning and so the concept of blended learning also became more of a reality in basic education system (The National School of Government,2021),. This is what the educators had to say about the above:

P1: “Yes, it did. I had to learn very quickly how to make use of online platforms”

P2: “During Covid we tried using google classroom to assist learners with learning and activities but unfortunately too many learners did not have phones or data to participate and would only buy WhatsApp data. We went back to using only WhatsApp to communicate with learners. Even then a lot of learners did not participate as they either didn't have data or a phone or just chose not to do the activities.”

P11: "It taught us to use modern and scientific method of teaching and learning."

P12: "We had to become more technologically inclined."

All three participants indicated that they had to gravitate more towards the use of technology, or rather an increase thereof. Meaning that they had to make use of electronic platforms, ICT and have access to the internet. The same applied to the learners because this was also how they attended class, received their assignments etc. This was all done in an attempt to address the challenges posed by school closures and social distancing measures. This is all confirmed by Soudien et al. (2021) where they indicate that multimedia materials supported by mobile applications were made available on the DBE website, Email and WhatsApp feeds were sent to teachers who were responsible for teaching reading and for the management of their schools with advice about how to manage their children's learning challenges.

4.2.2.2 Overall significant impact

Online learning has had a significant overall impact on education, changing the field by offering continued accessibility, flexibility, and variety of learning options. Online learning has made education more accessible than ever before, enabling students to complete their courses from anywhere in the world. While this has been true for developed countries, and some of our more developed schools in South Africa, this is unfortunately not the case for our rural schools (Hlalele, 2014). The rest of the participants only indicated that there was indeed a significant impact on the manner in which they had conducted their classes. They all responded by simply confirming the above.

P3: "Yes, I had to spend even more hours preparing for my lessons. Delivering the content also had its own challenges, on the part of learners attending class online, and submitting their work"

P4-P7: "Yes."

We saw this being confirmed by Chisango et al. (2020) where they concluded, based on a study in the Eastern Cape that the schools under study had inadequate computers; some teachers had limited ICT skills; and there was poor internet connectivity. Some learners were also computer illiterate. Here, an attempt should be made to combine present "best practice" with what might be best practice in the short, long, and medium terms. This endeavour should be founded on solid research on the most effective approaches to integrating in-person and online instruction in a variety of settings (Maree, 2021)

4.2.3 Theme 2: Ways in which teachers have had to adjust their teaching and learning methods?

Table 4-3: Summary of theme 2: Ways in which teachers have had to adjust their teaching and learning methods?

Theme: Ways in which teachers have had to adjust their teaching and learning methods?	
Categories:	
4.2.3.1	The use of different platforms
4.2.3.2	Prioritise the main topics in the curriculum
4.2.3.3	Rotational class attendance

Source: Authors own.

Educators in South Africa, like their counterparts worldwide, had to make significant adjustments to their teaching and learning methods during the COVID-19 pandemic. The shift to online and remote learning necessitated creative solutions and innovative approaches to ensure educational continuity. Here are ways in which educators adjusted their methods, according to Khoza (2021):

- Digital Content Creation: Teachers adapted their teaching materials for digital consumption, creating multimedia content such as video lectures, interactive quizzes, and online assignments to engage students effectively in a virtual environment.

- **Synchronous and Asynchronous Learning:** Educators utilized both synchronous (real-time) and asynchronous (self-paced) learning methods. Synchronous sessions allowed for live interaction, while asynchronous activities provided flexibility for students to engage with course materials at their own pace.
- **Communication and Support:** Regular communication between educators and students became essential. Educators used email, discussion forums, chat platforms, and virtual office hours to provide academic support, answer questions, and address concerns.
- **Assessment Adaptation:** Traditional exams and assessments were adapted to online formats, including open-book exams, online quizzes, and project-based assessments. Educators explored alternative assessment methods that could be effectively implemented in a remote setting.
- **Professional Development:** Many educators participated in online workshops and training sessions to enhance their digital teaching skills. Professional development programs aimed to equip teachers with the necessary tools and techniques for online instruction.
- **Focus on Student Engagement:** Educators implemented interactive methods to engage students, such as online polls, group discussions, and collaborative projects. Maintaining student engagement and motivation in a virtual environment became a key focus.
- **Transition to Online Platforms:** In order to provide remote instruction and communicate with students, educators had to quickly adjust to online platforms, learning management systems, and video conferencing technologies. They have to acquire the skills necessary to produce dynamic, interesting web material for a range of topic areas and academic levels (Hodges et al., 2020)

Within this theme emerged the 3 categories reflected in table 4.3, that will be discussed in the section below.

4.2.3.1 The use of different platforms

Online platforms allow for educators to interact with the learners irrespective of where they are, provided they have access to a stable internet connection. Online platforms usually include multimedia elements, interactive quizzes, and discussion forums,

fostering engaging learning experiences. Interactive content keeps students involved and enhances their understanding of the subject matter.

When asked how they had adjusted their teaching and learning methods, the participants responded as follows:

P1: "Due to the inability to see learners during the pandemic, teachers were forced to take teaching to the online platform, which provided challenges. Teaching was conducted through WhatsApp groups and Google classrooms."

P2: "I've had the opportunity to explore the different ways of teaching during Covid and found that there are a lot of online programmes and videos available that makes teaching easier."

P3: "Virtual activities that include zoom participation."

P4: "There was a huge shift towards the use of technology in teaching. Information had to be relayed remotely to learners with less direct contact and so we had to adapt."

P6: "I had to move away from the traditional teaching methods and engage with online teaching."

P8: "Encouraging online learning."

P9: "ICT, WhatsApp group, research projects."

P10: "Teaching has become more technologically advanced. Platforms like google classroom, WhatsApp groups have become the norm in the classroom."

It makes it easier for students to always refer to these platforms to check previous work that has been done."

P11: "The use of modern and scientific method of teaching and learning."

P12: "Online learning"

The above responses reflect that 9 out of the 12 participants had to be creative in terms of how to reach out and appeal to their learners. The participants put in the time and effort to digitise the work and make it available on different platforms to ensure that their

learners remain abreast with their school work irrespective of the circumstances. These methods also guarantee increased interaction from the learners due to their fascination and excitement around these platforms. This is confirmed by Montrieux et al. (2015), who state that rather significant benefits of integrating ICTs into teaching and learning resources have been proposed in the body of existing literature. Thanks to technology, education may now happen anywhere, at any time, and is no longer limited to "brick and mortar" establishments. Students can work together, access instructional resources, and conduct information searches with ease.

4.2.3.2 Prioritise the main topics in the curriculum

The pandemic posed a number of challenges for the DBE, we see most of them being mentioned in chapter 2 of this study. The literature states that UNICEF announced in July 2021 that the impact of the COVID-19 outbreak resulted in learners being 75%- to a full year of school work behind. Rotational attendance, sporadic school closures and days off for certain grades resulted in school children losing 54% of learning time. Another challenge within the schools in question, is the limited resources that they have for both the learners and educators, which lead to poor submissions or no submissions at all by the learners. As a result, educators had to be proactive and respond to the challenges as they saw fit. This is what one of the participants had to say about the matter:

P5: "Teaching only specific aspects e.g.p1 English, excluding the summary, shortening the comprehension passage. Overall marks making 40 instead of 80."

P5 stated that they only taught the core topics in the curriculum. Given the circumstances where they had limited time with their learners and the learners did not have enough time to process everything. This was the best they could do. Most schools in rural areas are also comprised of large classes and very few educators, or rather less than is actually needed. Having to teach large volumes of work to a large number of students can be overwhelming for both the learners and the educators. As a result, most schools end up having a disrupted year and marking increases because there are few qualified educators

in rural areas. This implies that most educators prefer urban schools to rural schools (Maila & Ross, 2018).

4.2.3.3 Rotational class attendance

The primary goal of this method of delivery was to discourage students from regularly attending class. In order to prevent the virus from spreading, social separation had to be implemented in thousands of South African schools, but these institutions were overcrowded and neglected to do so. The DBE declared that in order to facilitate social separation in the classroom, schools would need to use a rotation system. The majority of those impacted were free institutions with shoddy facilities and considerably fewer resources. It also meant that students might only come to class once a week in some situations. Grade 12 is the only one in which the rotation system had no effect. (Ximba, 2021)

P7: “Grouping of learners to learn on alternative days or weeks so that we can adhere to social distancing rules.”

P7 indicates that they did indeed have different groups of learners attend on different days of the week. Meaning they also had to repeat the same work a number of times in order to reach all the learners. This was all in attempt to allow for Covid-19 protocols to be observed. Schools that could not cross-over entirely to online learning, later on adopted rotational based attendance. Many schools found it difficult to create enough space in their classrooms to accommodate more students during the pandemic. Some schools were allowed to reconstruct their classrooms or rearrange the school tables in many of them because students were obliged to maintain a social distance of one meter while sat and one and a half meters when standing or walking. Careful design and precise measurements were used to reduce the amount of area occupied by desks and create space for social distancing (Maree, 2021)

4.2.4 Theme 3: Experience of online teaching.

Table 4-4: Summary of theme 3: Brief descriptions of experience of online teaching

Theme: Brief descriptions of experience of online teaching.	
Categories:	
4.2.4.1	Limited internet access
4.2.4.2	Limited interaction between learners and educators
4.2.4.3	Inadequate skills
4.2.4.4	Effective and Efficient

Source: Authors own.

We saw in the literature in chapter 2 where the pros and cons of online learning were discussed. It was highlighted that online learning would be rather effective for both the learner and the educator. According to The National School of Government (2021) the purpose of this change was so that learners would not fall too far behind on their school work, and ultimately educators would get through the syllabus in a timely fashion. The literature further indicates that this mode of delivery allows for great opportunities of growth and development for both parties. This means that they would have access to their assessments, extra learning materials, all while enhancing their technological skills (The National School of Government, 2021). It would also be beneficial for the DBE to adopt this method and further improve on it as educators would be able to conduct all teaching and learning processes electronically, and they would also be able to further improve their technological skills (The National School of Government, 2021)..

Within this theme emerged the 3 categories reflected in table 4.4, which will be discussed in the section below:

4.2.4.1 Limited internet access

Limited internet access, among other scarce resources, has indeed been flagged by many authors who have conducted similar studies around the pandemic and the impact

thereof on the education system. It has indeed been noted that this posed a challenge to many schools around the country and other underprivileged educational institutions around the world. This is definitely something that the DBE has to work towards resolving, not only for purposes of online learning, but also to enhance methods of blended learning, as well as the facilities of the schools in question. Below are the responses of the participants regarding this matter:

P1: "As stated before, it was very challenging. Teachers had to set different tests for learners, and taught the same topics multiple times. The most challenging part was learners not being able to access the internet."

P3: "It is effective but always benefit those who have access to the internet. "

P8: "Not easy as expected as my school is situated in rural area where majority of parents are unemployed and learners cannot easily access network."

P9: "Very challenging, most learners do not have access let alone data to connect for online learning."

P1 indicated that online learning was rather challenging for them as their workload increased, there was a lot of repetition in their work and learners did not have internet access. P3 also highlighted that the lack of internet access posed a significant challenge in the adoption of this new method. P8 and P9 also reiterated on these points, however P8 also highlighted one of the causes thereof being that the learners are from disadvantaged homes where internet access would be a luxury that they could not afford. These views are supported by Chigona *et al* (2020) who state that online learning came with many advantages, challenges such as internet connectivity issues, lack of digital literacy, and difficulties in student/learner engagement existed. Efforts were made to address these challenges through collaborations between government, educational institutions, and private organizations and this is still a work in progress.

4.2.4.2 Limited interaction between learners and educators

In order for teaching and learning to take place effectively, there has to be a certain level of interaction between the educator and the learner, as well as amongst learners. This allows for sharing of ideas, and for the educator to assess the level of progress being made during the lesson. One of the concerns raised about online learning, by 2 participants is that this method takes away from learner-educator interaction. Positive interactions with educators provide a supportive learning environment, which increases the students' motivation to participate actively in class activities and discussions (Reeve, 2006). They also foster positive relationships and trust between educators and students, thus creating a safe space for learning. A supportive classroom atmosphere is conducive to effective learning (Roorda *et al.*, 2011).

Below are the responses of what the participants had to say about the lack of interaction during online learning:

P4: "It was a great learning experience although it lacked the personal touch with the learners."

P7: "Online learning wasn't meant for all, only those advantaged schools could do it but indeed learners perform much better during face to face interactions. Some learners lose focus or even sleep during the lesson because nobody sees them."

P4 indicated that online learning was a great learning experience for the educator, however they felt "out of touch" with the learners. P7 felt that classroom-based sessions are better than online learning as it allows the educator to better monitor the learners and keep them focussed. Also, P7 mentioned that online learning would not be a good fit for disadvantaged schools, compared to their slightly more advanced urban counterparts.

Successful online learning requires a sufficient technology infrastructure and internet access, which presents difficulties in places with limited resources (Chigona *et al.*, 2012). According to Ng'ambi and Bozalek (2013), online learning platforms provide flexibility with regard to the timing and location of learning, catering to a range of schedules and learning preferences. The quality of peer and student-teacher interactions may be impacted by virtual interactions in online contexts, which may lack the spontaneity and

immediacy of in-person interactions. Ultimately, online learning can be as effective as traditional classroom learning when well-designed and facilitated (Means et al., 2010).

4.2.4.3 Inadequate skills

The onset of the pandemic gave rise to the use of technology in almost every aspect of our lives. This includes, but was not limited to doctors' visits, working from home, as well as teaching and learning at all levels. All of these required at least some sort of technological skills. As a result, the technologically challenged individuals were rather frustrated by this, as this forced them to upskill and better their technological abilities. Below is a response, verbatim from one of the participants regarding this matter:

P5: "Not beneficial to a person who cannot use a laptops Load shedding, data or Wi-Fi shortage also a disadvantage."

P5 mentioned that the use of technology is what posed a challenge, the participant mentioned issues of computer literacy, internet access, as well as load shedding (which refers to the scheduled power outages that we tend to experience in South Africa). These are all challenges that can easily be dealt with, provided the educators are also willing to play their part. For instance, the government could implement regular, targeted skills development programs for educators, with a focus on modern teaching methodologies, classroom management, and digital literacy skills (Mestry & Leibowitz, 2019). Thus providing educators with the necessary professional skills to carry out their tasks.

4.2.4.4 Effective and Efficient

Generally speaking, "efficient" describes something that may achieve desired outcomes without wasting resources like time, energy, or materials. Although the word can be used to refer to both people and things, it is most frequently used to refer to objects, including organizations, machines, systems, and processes. The word emphasizes how little is lost or wasted while the intended outcomes are achieved. (Merriam-Webster Inc., 2023). The term "effective" typically describes things—such as policies, treatments, arguments, and

techniques—that do exactly what they are intended to do (Merriam-Webster Inc., 2023). In this category, the participants indicated that online learning is rather effective and efficient and that it helped them to easily conduct their work. Below are the responses from the participants:

P2: “Except for using online websites and videos I don't really make use of online learning and I find that this really works for me.”

P6: “At first it was not very easy but I later found it very helpful and learners do participate maximally.”

P10: “I use platforms like google classroom, to assess learners in an interactive way. They instantly get their results and both teachers and students see immediately what needs to be reinforced.”

P11: “Online learning is effective and convenient. I find that learners are more productive and actually produce better results.”

P12: “Very effective and efficient.”

P2 indicated that they actually apply blended learning, as opposed to online learning. The participant incorporated the use of electronic materials and certain platforms into their classroom sessions. P6 stated that they experienced some difficulties at first, but later eased into it and found it to be rather useful, as it also helped the students to open up and participate more during sessions. P10 shared that they completely shifted over to E-learning during this time. They made use of online to facilitate all teaching and learning processes, including evaluation, assessment and feedback. P11 and 12 also indicated that this mode of delivery is rather effective and efficient. The above views are in accordance with the advantages of e-learning that were shared in the literature in chapter 2 where The National School of Government (2021) state that e-learning benefits are for both the educators (as facilitators and learners of the method of delivery), travel time contact sessions, as well as scheduling of multiple contact sessions is reduced.

Assessments are rolled out much easier, to larger groups of learners, and automated marking systems allow for more regular assessment with immediate feedback.

4.2.5 Theme 4: The level to which teachers are equipped to facilitate classes by means of online learning. References to aspects regarding the provision of technological resources, as well as knowledge of how to make use of those resources.

Table 4-5: Summary of theme 4: The level to which teachers are equipped to facilitate classes by means of online learning. References to aspects regarding the provision of technological resources, as well as knowledge of how to make use of those resources.

Theme: The level to which teachers are equipped to facilitate classes by means of online learning References to aspects regarding the provision of technological resources, as well as knowledge of how to make use of those resources.	
Categories:	
4.2.5.1	Fully equipped
4.2.5.2	Partially equipped

Source: Authors own.

Educators in South Africa faced significant challenges during the COVID-19 pandemic, particularly in terms of being well-equipped and prepared to facilitate online learning. While South Africa has made strides in addressing the challenges posed by the pandemic, further investment in digital infrastructure, digital literacy programs, and continuous educator training is essential to ensuring the country's preparedness for online learning, especially in the face of future disruptions. The purpose of this theme is to establish how far prepared the participants felt they were.

Within this theme emerged the 3 categories reflected in table 4.5 which will be discussed in the section below:

4.2.5.1 Fully equipped

Ensuring equitable access to technological resources and training opportunities for all educators, regardless of their location or school setting, was a persistent challenge (Maharaj & Msila, 2021). The few participants who did not have barriers to accessing the relevant ICT are a reflection that there is indeed a forward progression in resolving the matters of training and access. The participants share their views in the responses below:

P1: “Yes, one had device/ technological background knowledge. The problem was mainly from the receiving side (learners).”

P10: “Yes, there were new platforms that I had to learn how to use effectively, but generally my studies at university integrated technology for learning.”

P11: “Yes. Attending workshops and the provision of electronic devices and laptops by the Department assisted in effective teaching and learning through technical resources.”

P12: “Yes, I had been trying it prior to the outbreak.”

The above responses are a true reflection of the literature in chapter 2 by Chisango et.,al (2020) which states that very few educators have access to ICT and actually have the knowledge and skills to utilize it . P1 stated that they are indeed computer literate and that the problem was with the learners as most of them did not even have access to any devices. P10 also indicated having prior knowledge and computer skills, as well as knowledge on online platforms. P12 had also been applying this approach. P11 indicated that they attended workshops and were provided with the necessary devices and equipment. Overall, the above participants did not have as much barriers to conducting their work, compared to their colleagues in the next category.

4.2.5.2 Partially equipped

Limited access to devices and internet connectivity among students and educators, especially in rural and disadvantaged areas, hindered the seamless transition to online learning (DeWaal, 2020). The number of respondents who fall within this category are a true reflection of how much work still needs to be done by the DBE in terms of mandatory training programmes and workshops, provision or at least the provision of subsidies for devices.

P2: "In the past yes, But since technology has improved so much it is difficult to stay up to date with all the different resources."

P3: "No, my resources were minimal and I needed training."

P4: "Partially equipped. Google classroom seemed a bit challenging Videos cascaded on WhatsApp groups were a bit easy in terms of access to majority of learners."

P5: "No, I have not been fully equipped, unable to use PowerPoint and excel. Provision of resources is also limited. Overhead projector could be of great assistance."

P6: "I have not been well equipped to use technological resources since these resources have not been available in my school."

P7: "Not entirely, as I've already indicated, it favoured the advantaged schools, I did not have the facilities for online learning so it wasn't working for me."

P8: "Not much. I am able to do the basics, however I am not comfortable yet."

P9: "No, educators have not entirely been trained/equipped to handle and facilitate online learning and teaching. We could do with a bit more training and facilities."

The 8 participants who fall within this category, all indicate that they were all partially equipped to facilitate online learning. Given that many of the educators in rural areas are rather technologically challenged, this also means that they will definitely experience more challenges than those in urban areas and some of those challenges would be more

basic/general than others (Aini, *et al*, 2020). P2 indicates that the knowledge that they had of previous techniques was outdated and that they were struggling to keep up . P3- P6 and P9 indicated that they had a minor issue regarding access to their equipment and that they definitely had a need for training. It is quite likely that It's possible that many South African rural communities lack the essential technology infrastructure, like dependable internet access and device availability (Chigona *et al*, 2012). P7 and P8 indicated that they somewhat have knowledge and basic skills to conduct online learning, but they choose not to. A study conducted by Chisango *et.,al* (2020) in the rural Eastern Cape secondary schools also yielded results highlighting that not all educators had efficient knowledge and/ or training in the use of Information Communication Technology (ICT). It is further indicated that those who were not so familiar and had already been in the field for quite a long time, had no interest in altering their teaching methods and viewed this change as a waste of time.

4.2.6 Theme 5: Challenges encountered while having to adapt to the new method of delivery

Table 4-6: Summary of theme 5: Challenges encountered while having to adapt to the new method of delivery

Theme: Challenges encountered while having to adapt to the new method of delivery	
Categories:	
4.2.6.1	Lack of resources
4.2.6.2	Learner participation

Source: Authors own.

The purpose of this study is to explore the challenges experienced by educators during Covid-19, part of those challenges include those that came with adopting online learning as the new mode of delivery. Most of these challenges were discussed in the literature in chapter 2. These included social isolation for the learners, school absenteeism and increased dropout rates, a shortage in available ICT for those in rural areas etc. Given

that educational institutions are hubs for social activity and human interactions, school closures deprived youth and children of some social activities and environments that are essential to learning, development and creativity (Onyema *et al.*, 2020). Along with the deprivation of peer-to-peer interaction, and interaction with their educators, most learners could not access the educational programmes and other curriculum support materials that were provided by the DBE and Provincial Education Departments (PEDs) using different tools and media platforms (Maluleke, 2022). This was due to a lack of the relevant devices, as well as little to no access to a reliable internet connection.

Within this theme emerged the 3 categories reflected in table 4.6, that will be discussed in the section below

4.2.6.1 Lack of resources

The notion around the lack of resources in rural areas is a recurring theme in this study, as well as other studies that focus on rural education. As per the literature in chapter, this also seems to be the case, not only in South Africa, but in Africa as well.

Educators encounter a series of challenges which are mostly undermined because they are expected to overcome such and ensure that teaching and learning activities are duly carried out (Uleanya & Gamede, 2020). Below are the responses from the participants regarding this challenge:

P1: "Learners not being able to access the internet. This was a great problem as some learners were left behind, some deliberately ignored instructions with the notion that there was no proper accountability structure in place."

P2: "Not all Learners do not have access to phones or data. Some learners don't want to use data for academics some learners get very distracted with phones."

P3: "Lack of resources and contextual factors like coverage and loadshedding."

P4: "Not being able to access all learners as others were disadvantaged."

P5: "Loadshedding, no resources like laptops and data or Wi-Fi."

P6: "Lack of data to connect at any given time."

P8: "Poor network services and loadshedding."

P10: "Not all learners had access to internet all the time and thus they were sometimes behind in the 'digital classroom'."

P11: "Load shedding. Lack of data."

P12: "Internet access."

P1-P6, P8-P12 all mention the lack of ICT that need to be addressed. The above responses all echo the literature, as well as the findings of various studies which flag this as an active issue within rural communities. Not all learners have access to data, relevant devices, a stable internet connection and the online platforms. According to Dube (2020), many learners in rural schools in South African were excluded from teaching and learning during the pandemic due to the availability of online learning alternatives. This is due to inadequate resources for Internet access, low-tech software, and the learning management system. Although governments are increasingly concerned with issues regarding the development of educators, the focus is usually more on urban schools, resulting in rural schools being neglected (Du Plessis & Maestry, 2019).

4.2.6.2 Learner participation

One of the challenges that we saw being prevalent in chapter 2, is that of social isolation. Online learning is of such a nature that learners get to see each other online only, and not actually be together in person. Interpersonal interactions contribute to students' social and emotional development, teaching them essential life skills such as empathy, communication, and conflict resolution (Elias *et al.*, 1997). Educator interactions also offer personalized feedback, helping students recognize their strengths and areas for improvement. Constructive feedback is crucial for student growth and development (Hattie & Timperley, 2007). Below is a list of responses from the participants regarding the above:

P4: “Not being able to access all learners as others were disadvantaged.”

P7: “Repeating the same topics for a period of 2 weeks was tiring, learners also got bored by the slow progression through the work and interaction was low.”

P9: “Not being able to reach all learners, learners not doing the assigned online activities.”

P4 and P9 both highlight that they were unable to reach all of their learners due to them not having access to the online classes. Valen and Graven (2023) indicate that the educators in the different schools in the Eastern Cape provided extra classes as a measure to assist those who fell behind and could not access the online classes. P7 indicated that the repetition of work caused a slight stagnation in delivery of the content, thus negatively affecting learner performance, and participation in the class. Since students do not attend class every day, it can be difficult for teachers to keep track of each student's progress and give timely feedback, which could have an effect on how well formative assessment works (Bergmann & Sams, 2012).

4.2.7 Theme 6: Teachers responses to challenges

Table 4-7: Summary of theme 6: Teachers responses to challenges

Theme: Teachers responses to challenges	
Categories:	
4.2.7.1	Parental involvement
4.2.7.2	Acquired the necessary resources
4.2.7.3	Diverse teaching methods

Source: Authors own.

It is important for us to also recognise and acknowledge that the responsibility does not lie solely and entirely with the DBE to improve the conditions within the schools, but that

each individual also needs adopt a solution driven mind-set. Being proactive and solution-driven are highly essential traits in various aspects of our daily lives, including personal development, professional success, and problem-solving. Proactive individuals tend to anticipate challenges, take initiative, and actively seek solutions to the different issues they encounter. This approach not only helps in overcoming obstacles but also fosters a proactive mind-set, empowering individuals to navigate complexities effectively. Proactive individuals approach problems with a solution-driven mind-set. They analyse challenges, identify root causes, and actively work towards finding viable solutions, leading to more effective and efficient problem-solving outcomes (Dweck, 2006). People that take initiative and are solution-oriented excite and inspire others. Their proactive stance promotes an innovative and problem-solving culture in groups and communities (Pink, 2011).

Within this theme emerged the 3 categories reflected in table 4.7, that will be discussed in the section below

4.2.7.1 Parental involvement

Parental involvement is the term used to describe a parent or primary caregiver's continuous, active involvement in their child's education. Offering to assist with homework, conversing about school-related issues, participating in school events like parent-teacher conferences, and offering genuine assistance with school-related duties are all ways that parents can show their involvement at home (The Annie E. Casey Foundation, 2022).

Studies consistently reflect that parental involvement positively correlates with higher academic performance among students. When parents are engaged in their children's education, students are more likely to attend school regularly, complete homework, and strive to achieve better grades (Fan & Chen, 2001). Below are responses from the educators on how they utilised this approach as a response to the challenges they experienced with the learners.

P1: "Contacted parents to request assistance with the learners at home, to help with homework, check on their assignments etc."

P4: “Reached out to parents to provide the necessities to their kids for online learning.”

P1 and P4 had previously indicated in theme 5 that they were fully equipped to apply the online teaching method, however, the challenge was that their learners did not have access to the relevant tools. How they responded to the matter, was to involve the parents of said learners and request them to ensure or at least work towards ensuring that the learners have access to those tools. In the event of a crisis one ought to explore all avenues to find viable solutions. Parental engagement not only leads to improved academic performance, but it also contributes towards improved behaviour and social skills in the learners. According to Valen and Graven (2020), 80% of the teachers stated that engaging in dialogue is essential to facilitating learning in the home (despite the fact that there was disparity in the students' progress due to various resource limitations in the households). Active parental involvement fosters a sense of responsibility, discipline, and positive social interactions, leading to a conducive learning environment (Hill & Tyson, 2009).

4.2.7.2 Acquired the necessary resources

Under normal circumstances, the expectation would be that the relevant authorities would have to ensure that processes of teaching and learning are not affecting in any way by unforeseen circumstances or unplanned events. However, in this instance, educators, together with their principals took matters into their own hands to manage the situation. The participants shared the practical ways in which they did so in the responses below:

P5: “Managed to procure a laptop, there’s a monthly data package also from the SGB.”

P6: “I bought a router so that I could have unlimited internet access, I already had a personal laptop so that already made things easier.”

P10: “The school created free Wi-Fi drive in's that the learners could connect to.”

P11: “School installed Wi-Fi. Generator used in case of load shedding.”

The participants indicated that they came up with solutions and implemented them where they saw fit. P5 mentioned that they purchased a device (laptop) that they could use for work, and the school governing body provided them with a data package so that they could have internet access. From the beginning of the first lockdown, all of the marginally wealthier schools put systems for ongoing education into place. To reach the student in their home, these schools and the teachers used a greater variety of strategies, most of which relied on different technologies. (Valen & Graven, 2023). P6 shared that they bought a router which would allow them to have internet access. P10 and P11 were fortunate enough that their schools could afford to provide connectivity access for them, as well as a backup power connection in the case of power outages and load shedding.

4.2.7.3 Diverse teaching methods

As mentioned in the literature in chapter 2, Blended learning combines traditional in-person instruction with online learning. Even while blended learning was already in place before to the Covid-19 outbreak, the pandemic has led to an increase in its use by colleges and institutions. Because blended learning strikes a balance between traditional and technology-based approaches, it can be beneficial for educators and students alike. It makes use of just enough technology to keep students engaged and focused, but it also gives them the chance to interact face-to-face with classmates and teachers, which can be really beneficial. (Fran, 2021). Below is a list of responses from the participants on how they applied different teaching techniques and strategies during the pandemic:

P2: "Phones may only be used with my permission. It is used as an incentive for learners who perform well."

P3: "I tried my best but it was not enough because this method of teaching always left disadvantaged learners behind."

P7: "I tried different techniques for delivering the subject matter."

P8: "Providing paper based material for some of the learners who cannot access technology."

P9: "Using hard copies and encouraged learners to participate in online learning."

P12: "I ensured that I provide hardcopies of the most important work in the subject matter-this was at my own cost as the school does not have the means."

P2 indicated that they allowed for the use of learners' personal devices as a reward for good academic performance. P3 emphasised that they were able to get through the work with learners who had access to the relevant devices, however, this was not the case with those who did not. P7, P8, P9 and P12 made use of different strategies to deliver the contents of their subjects. A study conducted in the Eastern Cape regarding the techniques employed by South African educators to encourage ongoing learning in mathematics at home during the COVID-19 pandemic in a variety of contexts and at different phases of the response effort reflected that strategies focused on engaging caregivers through various technologies and getting resources into the home.

WhatsApp, a free internet-based messaging service, was the most frequently used communication app across all types of schools for both messaging parents and sending instructional material and support in the form of videos, pictures and text messages (Vale & Graven, 2023). They mentioned that they provided paper based materials (worksheets) for those who could not participate in online learning Vale and Graven (2023) also indicate that the department of education in the Eastern Cape also issued workbooks and teacher designed work packs were key resources sent to homes.

4.2.8 Theme 7: What the Department of Basic Education authorities, as well as school management do to help make the teaching experience much easier.

Table 4-8: Summary of theme 7: What the Department of Basic Education authorities, as well as school management do to help make the teaching experience much easier.

Theme: 10. What the Department of Basic Education authorities, as well as school management could do to help make the teaching experience much easier	
Categories:	
4.2.8.1	Skills development/ Training
4.2.8.2	Provision of resources

Source: Authors own.

As per the discussion in chapter 2 regarding the role of the DBE, it is their responsibility, together with the principals of the schools in question to see to it that the educators are well equipped and fully qualified to do their jobs. As stated in The National Education Policy, 1996 (Act No 27 of 1996) as part of their duty, they out to help administrators and teachers in schools enhance the quality of instruction in their establishments by means of school visits, classroom observations, consultations, cluster meetings, reports with constructive criticism, and other tools. The most crucial thing is to organize resources and assistance for managers, teachers, and administrative staff members' professional growth, as well as to create an environment that supports it. The role of the DBE in schools is comprehensive, covering various aspects of education policy, curriculum, quality assurance, and support for educators and learners (DBE, 2011).

Within this theme emerged the 2 categories reflected in table 4.8, that will be discussed in the section below

4.2.8.1 Skills development/ Training

Skills development is a crucial tool in human resources (HR) management and ultimately, in education. It involves enhancing the abilities of educators by means of professional training and development programs. A more formal definition is that it refers to acquiring the ability or capacity through sustained and systematic efforts, in order to carry out

complex activities or job functions smoothly and adaptively, in other words, identifying the skills gap and making efforts to improve them (Axen,2023). Needless to say, that this will not only benefit the trainees/educators, but the learners as well. The benefits will include, but not be limited to, the technological proficiency, which will allow them to gain digital literacy skills and integrate technology into their teaching methods, thus making the learning experience more interactive and engaging. This will also foster a lifelong learning culture amongst educators (Darling-Hammond, 2017). The participants mentioned this as a need for most educators, if not all, and this is what they had to say:

P1: "By providing guidelines on how to handle issues such as discipline, as well as how to handle learners wanting to drop out of school in times like these because the drop-out rate was quite high."

P2: "Practical courses in making use of technology. Assisting with IT personnel that can help with blocking of websites that waste time."

P3: "Put systems in place where educators would be empowered and well equipped for the benefit of all learners, rich or poor."

P9: "Provide training and resources including data."

P10: "More mandatory courses to help improve the skills of teachers so that we are better prepared for situations like these and to help improve on our teaching skills."

P12: "More training."

P1 indicated that one of the interventions needed from the authorities, included guiding policies on how to mitigate the increasing dropout rates as this became more prevalent during the pandemic. According to level Runhare *et al.*, cited by (Duby *et al.*, 2022), the term "dropout," refers to leaving education without obtaining minimal academic certification, which should not be understood as a single event, but as a cumulative process of disengagement, with multiple causal factors at the individual, social and institutional. P2, P3, P9, P10 and P12 all mentioned that there is a need for more training, particularly in the use of technology and online platforms in education. The majority of

South African rural teachers, according to current research, are unable to use online learning applications, which makes it challenging for them to assist students (Dube, 2020).

4.2.8.2 Provision of resources

In order to improve the teaching experience for educators in South Africa, the DBE should consider exploring a multifaceted approach of combining supportive policies, professional development opportunities, infrastructural enhancements as well as the provision of resources. We saw in the literature, by Gamede and Uleanya (2020), as well as in some of the previous themes that the lack of resources is a common characteristic amongst most rural schools, and so this contributes as a hindrance towards the productivity and progress of the educators, and ultimately, the learners. The participants had a couple of suggestions on how to remedy this situation, below is a list of their responses verbatim:

P2: "...Assisting with IT personnel that can help with blocking of websites that waste time."

P4: "Help schools with resources and equipment to deliver online teaching Training on the use of such techniques to access learners was also very significant."

P5: "The department can also help by providing enough tablets for learners, make sure that Educators are trained and certified regarding technology."

P6: "Learners should be allocated tablets with adequate data for connectivity instead of text books. These gadgets should be installed with all the learning materials and tools that will assist learners even when they are at home."

P7: "I would recommend that the Department of Basic education should balance things and must try to deal with the imbalances of the past, provide a better infrastructure for all and supply all schools with the necessary equipment, no school should be better than the other."

P8: "Provide schools with backup facilities and improve infrastructure. Provision of computer labs and free Wi- fi."

P9: "Provide training and resources including data."

P11: "Provide both the Teachers and Learners with technological teaching and learning aids."

All of the participants have similar responses, in that they all would like to see the government provide them and the learners with the relevant devices, as well as reliable internet access. Chisango et al., (2020) also reiterates that the responsible authorities should ensure that ICT infrastructures are adequate in schools to encourage blended Learning. P2 further indicates that along with the provision of these devices would be the need to block out/ban irrelevant websites. Thus will prohibiting learners from misusing the school's resources. Along with the provision of devices, is the provision of training for all educators on the use of the devices, as well as the online platforms to be employed in the teaching and learning process. This was expressed by P4, P5, P9 and P11. As a result, the main concept in this category is that the government should, as a matter of urgency, rescue the learners living in rural communities by providing adequate resources in the form of internet access and ICT devices (Aloka, 2020).

4.2.9 Theme 8: The Department of Basic Education should maintain and continue to improve on the current mode of delivery, or go back to the traditional classroom method

Table 4-9: Summary of theme 8: The Department of Basic Education should maintain and continue to improve on the current mode of delivery, or go back to the traditional classroom method

Theme: The Department of Basic Education should maintain and continue to improve on the current mode of delivery, or go back to the traditional classroom method	
Categories:	
4.2.9.1	Blended learning
4.2.9.2	Online learning

Source: Authors own.

As discussed in chapter 2, there is a difference between blended learning and online learning. Online learning, or E-learning, refers to educational experiences delivered entirely via the internet. Students are given access to course materials, lectures, discussions, and assessments through online platforms without the need for physical presence or contact in a classroom (Allen & Seaman, 2017). Online learning is asynchronous, meaning students are able to engage with the content at their own pace and time. Interaction with instructors and peers often occurs through discussion forums, emails, or virtual chats (Bozkurt *et al.* 2017).

Blended learning on the other hand, is a combination of traditional face-to-face instruction with online learning experiences. In a blended learning environment, students attend some classes in person and complete the rest of the coursework online, or in other instances, they attend contact classes where the educator makes use of multimedia, electronic platforms etc. (Graham, 2006). The categories that emerged from this theme are discussed below. Blended learning incorporates both synchronous (in-person) and asynchronous (online) components. It yields the benefits of personal interaction with instructors and peers during contact sessions while allowing for the flexibility of online learning for certain modules or activities.

Within this theme emerged the 3 categories reflected in table 4.9, that will be discussed in the section below

4.2.9.1 Blended learning

We have established that blended learning is simply a combination of traditional face-to-face instruction and online learning, and that it was employed to adapt to the challenges posed by the pandemic. Additionally, the implementation of blended learning aligns with the Fourth Industrial Revolution (4IR) technologies, integrating digital advancements into the education system. The study has also revealed that a half of the participants are in agreement with the practices of blended learning being incorporated into the system. Below are the responses of the participants verbatim:

P1: "I believe that there is a need to adopt and apply technology to the classroom. In this way, we will be catering for the modern child, who is exposed and surrounded by technology."

P3: "I think both methods of teaching complement each other. Both can be integrated because we live in modern times where 4th industrial revolution is essential in our everyday lives."

P7: "I think that it should make a room for all the methods, we are in changing times right now so we have familiarize ourselves with the new changes and still use the old ones if they work for us."

P9: "Use both traditional classroom method and incorporate online learning and teaching."

P10: "An integration of both could work as the traditional methods did yield results but also advancements in technology means that we are teaching students that relate better to technology."

P12: "Go back to the traditional classroom method and incorporate the use of technology and online learning platforms."

The participants indicated that the traditional method of teaching, goes hand in hand with the use of modern day technology and that it will provide a well-rounded opportunity for learning, for all learners. P3 also highlighted that it is of paramount importance that the system gravitates towards embracing 4IR technologies as we also apply them in our daily lives. This is confirmed by Intel.com (2023), that teaching in the Fourth Industrial Revolution so requires that instructional practices change. Teaching must adapt so that students learn how to apply, evaluate, and create utilizing what they learn in the classroom instead of just memorizing and comprehending a particular curriculum topic. Personalized learning is a tool to help achieve those results, not an end in and of itself (Intel.com, 2023)

The objective is to develop students' abilities and problem-solving techniques by giving them access to technological resources that enable them to tackle problems in previously unthinkable ways.

4.2.9.2 Online learning

Online learning can be a practical and beneficial choice for learners, since it provides flexibility, access to a larger selection of courses, and the chance to gain critical technical skills. It caters largely to their inquisitive minds and allows them to learn a lot more on their own. We saw in the literature in chapter 2 the numerous benefits of online or E-learning. It is indicated that this mode of delivery provides a more convenient and innovative way of doing things which will benefit both the learners and the educators. Both parties will become more technologically inclined, learners will have continuous access to their learning materials, while educators can make use of electronic software to create, distribute and evaluate learners' assignments. The remaining half of the participants agree with this, and this is what they had to say about the matter:

P2: "We must always try to improve and adjust. Moving towards online learning would benefit the learners"

P4: "Times are changing. The department should continue to improve on the current mode of delivery as it also appeal to learners with various cognitive abilities."

P5: “Improve, the world is changing, traditional classroom methods will have no space in the near future. Technology is the way to go.”

P6: “DBE should maintain and find ways to improve online teaching and learning approach.”

P8: “There is a higher need for improvement on the current mode of delivery.”

P11: “New method is the best.”

The participants each indicated that they believe in online learning as the new and most suitable method of teaching. Online platforms provide a variety of multimedia resources, interactive content, and collaborative tools, enhancing the learning experience (Garrison & Kanuka, 2004). They also indicated that this would be in alignment with the changes times of modern technology. They believe that the DBE needs to also embrace this method and work continuously to improve on it and ensure that it is accessible and available to all learners. This means that the DBE needs to work a bit harder towards addressing the challenges and disparities that are hindering the progressive and effective implementation of this practice.

4.2.10 Theme 9: Modes of delivery to make the learners respond better

Table 4-10: Summary of theme 9: Modes of delivery to make the learners respond better

Theme: Modes of delivery to make the learners respond better to.	
Categories:	
4.2.10.1	Traditional classroom method
4.2.10.2	Online learning
4.2.10.3	Blended learning

Source: Authors own.

The role of an educator is to not only deliver the content and leave it up to the learners to process and understand and apply themselves, however, their role includes observation of the learners and how they respond to the content, as well as the mode of delivery being explored. Educators are responsible for planning and delivering instruction, facilitating learning experiences, and helping students acquire knowledge and skills (Darling-Hammond, 2017). The educator also plays a vital role in ensuring that their classroom is a conducive environment for teaching and learning by encouraging and creating such an atmosphere. Educators establish and maintain a positive and organized classroom environment, implementing strategies to manage behaviour and promote a conducive learning atmosphere (Marzano *et al.*, 2003).

This theme is similar to the previous one (theme 8), however theme 9 is in a different context and is aimed at exploring how the educators believe the students respond to the different modes of delivery. In South Africa, selecting between face-to-face classes and virtual learning necessitates taking into account aspects like accessibility, adaptability, and cultural background is rather essential. Combining the benefits of both modalities into blended learning strategies may offer a well-rounded approach to a range of educational demands (Ng'ambi & Bozalek, 2013). Theme 9 also has an additional category.

Within this theme emerged the 3 categories reflected in table 4.10, which will be discussed in the section below:

4.2.10.1 Traditional classroom method

The traditional classroom method of teaching has always been the main mode of delivery across the globe, since the beginning of time. It is a mode of delivery that has also been employed by most educational institutions. It has also been a rather effective method of delivery as it has always yielded favourable results given the advantages that it carries. Those advantages include social interaction for the learners, which allows for collaboration in learning, group discussions, sharing knowledge (Vygotsky, 1987). Another advantage is that it provides a firm structured environment for the learners, ensuring students stay focused on the lesson. The physical presence of educators helps in maintaining discipline and attention among students (Goodlad, 1984). A total of 7

participants indicated that their learners respond better to this mode of delivery, their responses are presented below:

P2: “The rational day to day classroom method”

P4: “Day to day classroom method. Most of our learners require constant monitoring and attention from teachers rather than rotational or online learning.”

P5: “Rotational learning in groups. The groups are smaller and so there is cooperation, better understanding, and they get to have day offs.”

P7: “The traditional day-to- day classroom attendance method because when learning is done face to face they can respond positively and focus better.”

P8: “Traditional day to day classroom method you give equal access to learning.”

P9: “Traditional day to day classroom method learners are task focussed.”

P12: “The day to day classroom method helps improve the learner holistically.”

The above responses are a reflection that this mode of delivery is still quite relevant, even in this day and age. P4 indicated that there are a number of learners that still need to be monitored. This speaks to the above-mentioned advantage of structured learning by Goodlad (1984). P7 and P9 indicate that this mode of learning works better as the learners are task oriented and the classroom provides a suitable environment for that. P5 mentions that this method is suitable, however, it should be on a rotational basis. The breaks in between certain days provides a bit more time for the learners to process what they had previously learned, this also means that the learners attend in smaller groups. Smaller groups allow for the educator to give the learners individual.

4.2.10.2 Online learning

We saw in the literature that online learning will provide liberation for both the educator and the learner, and that learners stand to continuously gain new knowledge and practical skills through this mode of learning. We also have to bear in mind the level of independence and discipline that comes with a fair share of self-directed learning. This

view is supported by Hrastinski *et al.* (2010) who state that some learners, if not most actively engage with online learning platforms, and usually appreciate the flexibility and interactive features they offer. This creates opportunity for boundless learning and exploration of academic apps and software. Two participants indicated that learners responded better to online learning:

P6: "Online learning, they participate freely and openly."

P11: "Online learning is effective. Learners are not afraid to share in class, they take part and they ask questions without hesitation. They also take more time to familiarise themselves with the work because they have limited time with the teacher."

P6 indicated that the learners do indeed feel liberated to participate and share their knowledge with their peers during online. While adapting to the new changes, staff and student readiness needs to be gauged and supported accordingly. The learners with a fixed mindset find it difficult to adapt and adjust, whereas the learners with a growth mindset quickly adapt to a new learning environment (Pokhrel *et al.*, 2021). While P11 highlighted that this mode of delivery is rather effective as learners also participate in class, but this is mostly attributed to the learners having prepared for class and also working more independently. While working online, students may hone their communication, flexibility, time management, critical thinking, and self-management abilities. They can also work autonomously, which is essential for giving them control over their activities (Ahmadi & Ameri, 2021). This is a reflection of the learning theory of cognitivism-that was discussed in chapter 2 being present, as learners are taking in what they have been taught and processing it, and also building onto that knowledge (Morales, 2021).

4.2.10.3 Blended learning

We have established in the literature in chapter 2, as well as in the previous sections of this chapter that blended learning provides the "best of both worlds", meaning that learners have the opportunity to explore the use of different technologies, while attending contact, class-based sessions. This is especially beneficial for subjects that require a more hands-on and physical approach. This is evident in subjects such as science and

art, often require hands-on experiences. Classroom learning allows for practical demonstrations, experiments, and artistic activities that are rather difficult to replicate in an online environment (Bransford, 2000). Below are the responses from the participants regarding blended learning:

P1: "Most of our teachers and learners have a fixed mind-set. Therefore, they will clinch on the traditional day-to-day classroom method. Yet, I believe we need both online learning and traditional teaching."

P3: "It depends entirely on the demographics. Learners in urban areas benefit in all the aspects while those in poor rural areas struggle. Whichever is best suited for the learners in their respective areas. "

P10: "Traditional day to day using technology with them in the classroom."

All 3 participants are in support of the blended learning method and that the learners stand to benefit from it, however there are some reservations. P1 highlights that educators would have to be more open minded about this method. Blended learning, as we know, incorporates the use of technology in the daily teaching and learning activities. Educators in rural areas may need training to enhance their digital literacy skills, including proficiency in using digital devices, software, and online platforms (De Oliveira *et al*, 2015). Ultimately, this means that most educators would have to undergo training for the use ICT. For some of the more experienced educators, this might be a bit problematic, for the new entrants, it might even be an advantage. According to Ertmer, (cited by Chisango *et al.*, 2020), some educators believe that integrating technology into the classroom implies giving up authority and control. These are referred to as intrinsic second-order barriers, and they include instructors' attitudes and reluctance.

P3 indicated that this is entirely dependent on demographics, we've seen in the literature that schools in rural areas have more difficulty accessing ICT than in urban areas. During the school closures, the DBE and Provincial Education Departments (PEDs) provided learners with education programmes and other curriculum support materials using different tools and media platforms for the different subjects and grades. However, not all learners were able to access these programmes as well as the school support materials (Maluleke, 2022). The government is faced with a rather substantial task in

terms of remedying this matter as the onus is on them to ensure that the implementation of this method of delivery is a success.

P10 is also in agreement that blended learning is a suitable method of delivery for the learners.

4.3 CHAPTER SUMMARY

The purpose of this chapter was to present the findings of the analysis of the twelve semi-structured interviews that were conducted for purposes of this study. Nine themes, and twenty-three categories were defined and discussed using pertinent literature as support.

Participants shared their experience of having to adopt blended learning and online learning as their mode of delivery. They all shared on the challenges they experienced and how they responded to these challenges. They also shared on how the DBE and all relevant authorities would best be able to assist them. More importantly, they also shared on which modes of delivery would be suitable for the learners, as per their responses to the different modes.

The next chapter presents the conclusions, recommendations, and limitations of the study.

CHAPTER 5

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

5.1 INTRODUCTION

This chapter will provide a summary of the previous chapters. The purpose of this chapter is to provide a summary of the entire study. The chapter comprises a summary of the research findings as per chapter four and is substantiated by the information obtained in the literature review. This chapter will also address the limitations of the study, recommendations of the study, as well as recommendations for future research. The main objective of the study was to explore the challenges of teacher during Covid-19 in rural secondary schools in the Rustenburg area, North West Province.

The recommendations are based on the findings of the research questions below:

Main Research question:

What are the challenges the educators are experiencing during Covid-19, in rural schools in the Rustenburg area?

Sub-questions:

- What are the different challenges experienced by educators in the rural areas?
- How are the educators responding to these challenges?
- What are the effects of Covid-19 on education?
- What can be done to overcome these challenges in rural areas?

5.2 CHAPTER SUMMARIES

Chapter one serves as the introductory chapter which introduced the topic of the study, background information to the phenomena in question, the problem statement, the aim and objectives of the study, the research questions, as well as an overview of how the

study will be conducted. This chapter also consists of a brief overview of the chapters in the study.

Chapter two provided an overview of rural secondary schools in South Africa, and discussed the challenges- according to existing literature, posed by the Covid-19 pandemic within the basic education system. This chapter also includes a discussion of the two underlying learning theories that serve to guide this study, namely the cognitivism and constructivism.

Chapter three describes the research design and methodology that were applied in the study. For the purpose of this study, the researcher opted for the qualitative, phenomenological research approach. Moreover, the study is guided by a constructivist worldview. A total of twelve participants were interviewed, and the interviews were transcribed as per the participants' responses. The researcher also made use of thematic analysis and these themes consisted of different categories.

In chapter four, the researcher presented the analysis of the information that was collected in chapter three through the semi-structured interviews that were held with the twelve participants. In these interviews, participants were allowed to express themselves freely, under the knowledge of all ethical protocols that were observed by the researcher. Upon completion of the interviews, the researcher transcribed the raw data and organized the outputs into themes and categories. The themes represent the most common responses, ideas or meanings to the research questions posed to the participants and the categories represent the responses to the research questions.

Chapter five, the current chapter, provides a summary of all the previous chapters. This chapter also discusses the findings from the study, as well as recommendations for the institutions in question, as well as for further research.

5.3 SUMMARY OF FINDINGS

The purpose of this study was to explore the challenges experienced by educators in rural secondary schools during Covid-19, in Rustenburg, in the North West Province. The findings presented below, are in response to the research questions of the study.

5.3.1 Challenges experienced by educators in the rural areas

This section aimed to seek understanding of what educators experienced during this time. The purpose was for them to share the adversities and the hindrances that they had to deal with. The educators indicated that the cross over to online and blended learning posed quite a number of challenges. There was a lack of resources, namely devices for the learners, and in some cases, for the educators. They struggled with internet connectivity. Given that the schools also had to observe all Covid-19 protocols, this resulted in a decline in learner-to-learner and well as educator-to-learner interaction. The participants also indicated that they were rather under skilled and not well equipped to facilitate online learning. The above is substantiated by Aloka & Mukuna (2020) who state that during the COVID-19 pandemic, rural communities faced several obstacles, including inadequate parental involvement in their children's homework, incomplete and low-quality academic work, inadequate personal protective equipment, limited network connection, and a shortage of educational technology.

5.3.2 Responses by educators to the challenges

The participants indicated that there were a number of measures put in place, so as to assist with the issues at hand, and to ensure that all teaching and learning activities continued irrespective of the circumstances. The schools who could afford WiFi installations in their schools, went ahead and implemented those action plans. The participants who could afford to purchase the relevant devices did so as well. Certain school governing bodies also subsidised their school staff members. Parents were requested to also make an effort to ensure that their children could at least access the necessary devices so they could access the provided study materials and submit their assignments, and those who were able to, obliged to those requests. Some of the participants also mentioned that they were already making use of blended learning and so they didn't really struggle with the adoption of this method on a larger scale. The responses of educators differed, as they all shared different views regarding the adoption of technology in the classroom.

5.3.3 Effects of Covid-19 on education

Unicef announced In July 2021, that the impact of the Covid-19 outbreak resulted in learners being 75%- to a full year of school work behind. Rotational attendance, sporadic school closures and days off for certain grades resulted in school children losing 54% of learning time. The participants who applied the blended learning approach had to also participate in rotation based attendance, meaning that the learners were placed in different groups and had to attend school in their groups on certain days, according to the set timetable. This resulted in a decline in the academic performance of many learners, a decline in attendance, and ultimately the number of drop outs as mentioned above. Most of these learners live in informal urban and rural settings, where poverty is also rife. The number of dropouts had risen to 750 000 (Unicef, 2021).

5.3.4 Measures to overcome the challenges in rural areas

There are a number of proactive measures that can be put in place in order to ensure the smooth running of schools in the rural areas, and to also bring them on par with the more advantaged schools of their counterparts in urban areas and these will be discussed in more detail, in the following section. However the participants did make a few suggestions on how to remedy this situation, these include the provision of the relevant ICT for all educators and learners, compulsory training for all educators on the use of online teaching platforms and tools, and the provision of the relevant infrastructure within schools. Instead of being prepared for an environment that is either soon to be extinct or becoming less relevant, learners should be ready for a teaching and learning (and vocational) environment that is always changing. In light of this, the secret to success is continuously updating teaching and learning methodologies at all educational levels while also providing educators with the necessary training and professional development (Maree, 2021).

5.4 RECOMMENDATIONS FROM THE STUDY

The purpose of this section is to provide the recommendations that stemmed from the research findings, as well as recommendations for researchers who might want to pursue a similar study in the future.

5.4.1 General Recommendations

The purpose of this study, as stated in chapter one, is to assist the Department of Basic Education to gain a better understanding of the ground level challenges that were faced by educators within their schools, to make recommendations on how to better assist and capacitate educators to deal with those challenges and to contribute to the current body of knowledge regarding how teachers experienced the pandemic.

Below is a list of the recommendations that emerged from the study:

- **Skills development and training:** The DBE should provide continuous compulsory skills training for all educators on new and improved teaching methods. The department consists of educators of all ages and experience, some, especially those of the older generation are technologically challenged, while others are more knowledgeable regarding the use of technology. This will help alleviate this skills disparity and improve the quality of our education system. This will not only benefit the educators, but the learners as well. The use of technology caters to all learners, especially those who are rather inquisitive and are technologically inclined.
- **The provision of ICT:** Over time, basic gadgets have developed into global communication networks. The ease of sending communications has been facilitated by four primary forms of communication technology: internet, radio, television, and telephone (Novak, 2019). The application of online learning, as well as blended learning, both require the use of ICT, especially online learning. One of the main concerns in the study was that learners and educators did not have access to the relevant devices. The DBE should look into providing these devices for the schools. The provision of said devices should also not be seen as a liability or a cost, but rather as an investment into our future labour force. The DBE could

also consider approaching the relevant external stakeholders (network providers, laptop and cell phone manufacturers) to assist with the provision of the devices in question.

- The DBE could also consider hiring more IT personnel within schools once these devices and infrastructure have been made available to the schools. Technological infrastructure such as Wifi, networks etc require maintenance and constant monitoring and it would be rather convenient for them to have designated technicians and specialists onsite to manage them.

5.4.2 Recommendations for further Research

The following recommendations are posed for future research:

- The study was conducted in the Rustenburg area in the North West, future researchers could possibly consider conducting the study in other areas of the province. This kind of research, could also be conducted at provincial level.
- The study only focused on educators, perhaps future researchers could also include other stakeholders such as the learners and the parents

5.5 LIMITATIONS OF THE STUDY

Given that the study takes a qualitative approach, the study does not aim for generalization. The study is also limited to one specific region, future comparative work amongst contexts will hold future research value. A comparison between school contexts is limited as teachers were sampled from different schools.

The study only focused on rural schools, which limited the study's findings, while the researcher appreciates that some urban schools also face the issues noted in the report. Given the study's contextual limitations, it is advised that quantitative research be done in more rural schools in order to enable the results to be applied to a wider range of educational settings.

5.6 EXPECTED CONTRIBUTION OF THE STUDY

The findings of this study will contribute towards the current body of knowledge within the DBE. This study speaks to policies regarding the use of ICT in education, the benefits and challenges of online and blended learning. It will also serve to inform the policies regarding skills development and training of educators. It will also help educators in identifying the room for improvement in their teaching methods, as well as their training needs.

5.7 CHAPTER SUMMARY

The purpose of this chapter was to discuss the chapter summaries of the previous chapters, a summary of the findings from the study. Furthermore, the recommendations that emerged from the study were also addressed, as well as study's expected contribution and limitations.

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LIST OF ANNEXURES

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ANNEXURE A – ETHICS APPROVAL LETTER

2 June 2022

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Economic and Management Sciences Research Ethics Committee (EMS-REC)** on 26 November 2021, Round Robin, the Economic and Management Sciences Research Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-RERC) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: The challenges of teachers regarding the Covid-19 situation in rural secondary schools in the Rustenburg area North West Province																																						
Study Leader/Supervisor: Prof AMF Pelser - MBA																																						
Student: Mmekoa, OK (23469447)																																						
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<u>Status:</u> S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation																																						
Application Type:																																						
Commencement date: 02/06/2022					Risk: Low																																	
Expiry date: 02/06/2023																																						
Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.																																						

Special in process conditions of the research for approval (if applicable):

•

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- The study leader/supervisor (principle investigator)/researcher must report in the prescribed format to the EMS-REC:
 - annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and
 - without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.
- The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the EMS-REC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.
- Annually a number of studies may be randomly selected for an external audit.
- The date of approval indicates the first date that the study may be started.
- In the interest of ethical responsibility, the NWU-SCRE and EMS-REC reserves the right to:
 - request access to any information or data at any time during the course or after completion of the study;
 - 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 study are revealed or suspected;*
 - *it becomes apparent that any relevant information was withheld from the EMS-REC or that information has been false or misrepresented;*
 - *submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or*
 - *new institutional rules, national legislation or international conventions deem it necessary.*

The EMS-REC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the EMS-REC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely,

Mark Rathbone
Digitally signed by Mark Rathbone
DN: cn=Mark Rathbone, o=North-West University, ou=Business management, email=mark.rathbone@nwu.ac.za, c=ZA
Date: 2013.06.03 09:30:29 +0200

Prof M. Rathbone
Chairperson NWU Economic and Management Sciences Research Ethics Committee

ANNEXURE B – PERMISSION TO CONDUCT RESEARCH



education

Lefapha la Thuto la Bokone Bophirima
Noordwes Departement van Onderwys
North West Department of Education
NORTH WEST PROVINCE

Garona Building, Mmabatho
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OFFICE OF THE SUPERINTENDENT-GENERAL

Enq. : Dr T Phorabatho
Tel. : 018 388 3071/3433

To: Professor A M F Pelser
North West University (Mahikeng Campus)
Faculty of Economic and Management Sciences
Business School

From: Ms S M Semaswe
Superintendent-General

Date : 19 October 2021

PERMISSION TO CONDUCT RESEARCH: MISS OMPHEMETSE MMEKOA

Permission is hereby granted to you to conduct research in the department as requested, subject to the following conditions:

- You contact the relevant School Principals for your target schools about your request with this letter of permission;
- Considering that your research will involve both Educators and Learners, the general functionality of the school should not be compromised by the research process.
- The participation in your project will be voluntary.
- The principles of informed consent and confidentiality will be observed in strictest terms, and
- The findings of your research should be made available to the North West Department of Education upon request.

Best wishes

Mrs S M Semaswe
Superintendent-General



**BE SAFE
ACT RESPONSIBLY**

**WASH YOUR
HANDS OFTEN**

**WEAR A MASK WHEN
GOING OUTSIDE**

**MAINTAIN SOCIAL
DISTANCING**



ANNEXURE C – INFORMED CONSENT FORM

RESEARCH PROJECT: THE CHALLENGES OF TEACHERS DURING COVID-19, IN RURAL SECONDARY SCHOOLS IN THE RUSTENBURG AREA: NORTH WEST PROVINCE

Ethics clearance reference number: [NWU-01288-21-S4]

We would like to do a study on the challenges of teachers regarding the covid-19 situation, in rural secondary schools in the Rustenburg area: North West Province. You would be required to take part in an interview that will be recorded for purposes of information retention. The interview should also not be more than 10 minutes long.

Inclusion criteria for participation:

- You must be at least 18 years of age in order to complete this survey.
- You must be an educator at a registered secondary school in Rustenburg, in one of the rural areas.
- Your only responsibility as a *willing* participant will be answer the questions posed by the interviewer.

Important notices, terms, and conditions:

- The study is part of a post-graduate qualification-Masters in Business Administration and is conducted by a North-West University student.
- Any personal identifying information such as demographics will remain confidential.
- This survey is voluntary, and you are under no obligation to participate in it.
- There will be no negative consequences to you if you do not complete the interview.
- Results will only be used and presented in an anonymised format from the total sample. Therefore, your individual results will not be presented or released at any time.
- By completing this interview, you agree that the information you provide can be used for research purposes. Specifically, for potential academic publications and conferences.
- There are no correct or incorrect answers to any of the questions in this interview.
- This study has been approved by the Economic and Management Sciences Research Ethics Committee (EMS-REC) which reserves the right to audit this study to ensure compliance.
- The recordings and data will be securely stored at the University when collected.

If you have **ANY** questions or concerns, you are welcome to contact the researchers:

	Researcher: Miss Omphemetse Mmekoa <i>Master's candidate:</i> <i>Business Administration</i> kommekoa@gmail.com	Research supervisor: Prof. Anna-Marie Pelser <i>Professor:</i> <i>Talent Management</i> ampelser@hotmail.com
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CONSENT TO PARTICIPATE IN RESEARCH PROJECT

Title of the study: The challenges of teachers regarding the covid-19 situation, in rural secondary schools in the Rustenburg area: North West Province

I, the undersigned full name(s): _____ hereby confirm that I have agreed to participate in the above-mentioned study conducted by Miss OK Mmekoa. I confirm that I have read and understand the above notices, terms, and conditions.

Signature

Date

ANNEXURE D- INTERVIEW GUIDE

INTERVIEW GUIDE: RESEARCH PROJECT- THE CHALLENGES OF TEACHERS DURING COVID-19, IN RURAL SECONDARY SCHOOLS IN THE RUSTENBURG AREA: NORTH WEST PROVINCE

Interview Dates: To be determined once proposal has been approved

Number of Participants: 12

Demographics

1. Which district does your school fall under?
2. How many years of experience do you have as an educator?
3. What is your designation within your school? Are you an educator, head of department, deputy principal or principal?

Interview Questions

1. Teaching and Learning

- 1.1 Would you say that the new way of teaching since the onset of the pandemic has had a significant impact on teaching and learning activities?
- 1.2 Kindly provide the ways in which you have had to adjust your teaching and learning methods?
- 1.3 Briefly describe your experience of online learning.
- 1.4 Do you believe you have always been well equipped to facilitate classes by means of online learning? Refer to aspects regarding the provision of technological resources, as well as knowledge of how to make use of those resources.
- 1.5 What challenges that you have encountered while having to adapt to the new method of delivery?
- 1.6 How have you responded to those challenges?
- 1.7 What do you think the Department of Basic Education authorities, as well as school management could do to help make your teaching experience much easier? Please give practical examples.
- 1.8 Do you think that the Department of Basic Education should maintain and continue to improve on the current mode of delivery, or would you rather go back to the traditional classroom method?
- 1.9 Which mode of delivery do you think the learners respond better to? Online learning, rotational attendance in groups or the traditional day-to-day classroom method and why?

ANNEXURE E – TURNITIN REPORT/ SUMMARY

Omphemetse Mmekoa 27 Nov

ORIGINALITY REPORT

27%
SIMILARITY INDEX

23%
INTERNET SOURCES

8%
PUBLICATIONS

15%
STUDENT PAPERS

ANNEXURE F – LANGUAGE EDITING CERTIFICATE

To whom it may concern

This letter confirms that I, Bongani Thela, edited the dissertation **THE CHALLENGES OF TEACHERS DURING COVID-19, IN RURAL SECONDARY SCHOOLS IN THE RUSTENBURG AREA, NORTH WEST PROVINCE.**

Among other aspects, the editing offered corrections and suggestions to Ms. Omphemetse Mmekoa in a form of bringing questionable writing conventions to her attention: the editing/proofreading focused on –

- grammar usage, spelling, punctuation, and other mechanics of style; checking for consistency; clarifying meaning, polishing language, and
- citation – referencing.

Lastly, I have neither changed nor added any information in the study. I have only made the necessary suggestions pertaining to language as per the agreement between Ms Mmekoa and myself.

Yours sincerely,

Mr. BC Thela

MA in English

Cell: 066 229 5711

Email: thelas.bc@hotmail.com

Signature:



Date: 20 November 2023

