

**Victors Or Victims? An Exploration of How Teachers Navigate Changes in Teaching
and Learning During the Covid-19 Pandemic**

By

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at

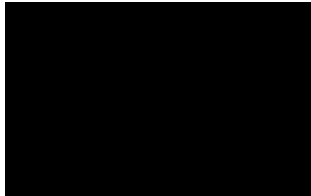
the **University of KwaZulu-Natal, Edgewood Campus**

Supervisor: Dr. V. Jairam

October 2022

DECLARATION

I, Mr. Lucas Pillay (student number 213505629), declare that this thesis is my own work, and has not previously been submitted by me, at any other university. It is my original work and I have acknowledged all the sources consulted and quoted, in the reference list.



Researcher: Mr. Lucas Pillay

Date: 11/10/2022

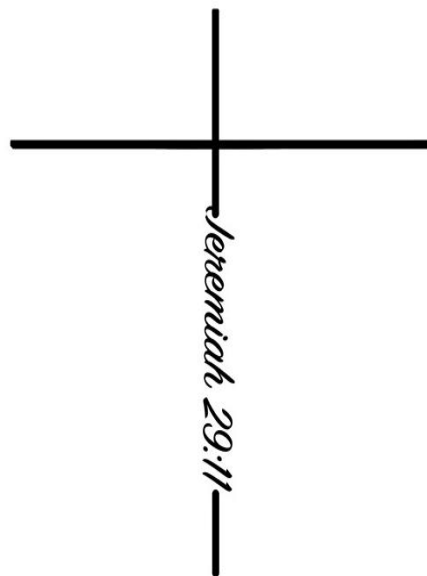
DEDICATION

I, yet again, whole-heartedly dedicate my thesis first, to the Glory of God – my Heavenly Father and my Lord and Savior Jesus Christ - who is my Creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the foundation of strength throughout this study and on His wings only, have I soared.

I also dedicate this thesis to the following people:

- ✚ Daniel and Nalini Pillay who, have supported and encouraged me throughout life. Deep gratitude to you both, for instilling good morals and values in me.
- ✚ My God chosen wife: Sonam L Pillay, who has stood by me through all my trials, my absences, my fits of pique and impatience. Your love and support is never underappreciated.

Commit to the LORD whatever you do, and HE will establish your plans – Proverbs 16:3



INJ JJ SDG

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- ✚ I also sincerely thank the participants of this study, who have so kindly agreed to participate and contribute to our archive of knowledge.

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LIST OF ACRONYMS

ANSSSF – Amended National Norms and Standards for Schooling Funding

ATPs – Annual teaching plans

B.Ed- Bachelor of Education

CAPS – Curriculum and Assessment Policy Statement

CDC – Centers for Disease Control and Prevention

Covid-19 – Coronavirus Disease 2019

DBE - Department of Basic Education

DoE - Department of Education

EUSA – Educators Union of South Africa

FET – Further Education and Training

GCSE – General Certificate of Secondary Education

GET – General Education and Training

Hons – Honours

LSEN – Learners with educational special needs

MERS-CoV – Middle East respiratory syndrome coronavirus

NAPTOSA – National Professional Teachers’ Organization of South Africa

NATU – National Teacher Union

NSC – National Senior Certificate

PE – Physical Education

PEU – Professional Educators’ Union

PPE – Personal Protective Equipment

RNA – Ribonucleic acid

SADTU – South African Democratic Teachers Union

SARS-CoV-2 – Severe acute respiratory syndrome coronavirus 2

UK – United Kingdom

UNESCO – United Nations Educational, Scientific and Cultural Organization

VOA – Voice of America

WHO – World Health Organization

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ABSTRACT

For many learners and teachers, 2020 and 2021 manifested many challenges, at home and school, as a result of the global pandemic, including facing severe illnesses, death of a loved one, experiencing abrupt school closures, disruption of the teaching and learning process, and the feeling fear, grief, and anxiety as Covid-19 spread. Education shifted from traditional methods of learning to remote and online learning. Teachers and learners found themselves teaching and learning in front of screens at home and in other settings. Even with efforts by teachers, staff, and school principals, many of whom swiftly established online lessons, remote-teaching plans, and concrete strategies for meeting learners' educational basic needs, the challenges were profound. This study explores how teachers navigated the changes in teaching and learning during the Covid-19 pandemic and provides guidance on creating an intervention programme.

The study was conducted in three primary and three secondary schools in KwaZulu-Natal. Eleven participants were purposely selected for this study. This study employed a qualitative approach and an interpretivist paradigm, as it is grounded in the world of lived experiences. Data was produced through collages, reflective journals, and interviews. Thereafter, a narrative was developed. Emerging from the data, an intervention programme guide and model was created to assist educational stakeholders in the creation of tailor-made intervention programmes based on their unique school context. Kurt Lewin's (1951) theory of change was the theoretical framework that underpinned this study, which provided insights on how changes in an institution can occur. Lewin's (1951) theory of change and the data generated from this study influenced the Navigating Change Theory which is presented in this thesis.

From the data produced from the participants, it is revealed that there are many changes and challenges in teaching and learning that need to be carefully navigated to achieve educational goals. This study extensively presents ways in which teachers, victoriously, navigated the changes in teaching and learning during the Covid-19 pandemic.

Keyword: Covid-19, changes, navigate, teaching and learning, intervention programme guide

CHAPTER ONE: BACKGROUND AND INTRODUCTION TO STUDY

1.1. Introduction

Since the first confirmed case in March 2020 surfaced in South Africa, the novel coronavirus (Covid-19) pandemic has overawed various systems within the country. As in many countries around the world, South Africa's attempts to control the virus resulted in a hard lockdown. This disrupted the normal teaching and learning processes as teachers and learners had to accustom themselves to online teaching and learning (Wenham, Smith & Morgan, 2020). According to Laguitao et al. (2021), the Covid-19 pandemic situation has posed unprecedented challenges requiring teachers to adapt to teaching online. Until March 2020, the typical teaching situation at school was characterised by learners who convened in classrooms according to their timetables and teachers who covered their subjects' standard content, frequently through formal teaching.

Learners were required to listen to their teachers, work individually or in groups, and predominantly reproduce knowledge in assessments (Hasan & Bao, 2020). However, from March 2020, teachers had to change to remote, non-contact and online teaching, requiring them to use various digital tools and resources to solve problems and implement new approaches to teaching and learning (Eickelmann & Gerick 2020). Beyond instructional goals, teachers were also required to maintain contact with their learners to account for the social integration of their learning groups. South Africa, being an underdeveloped country, was not able to successfully acclimatise to the notion of online teaching and learning (Allen et al. 2020)

As the rate of increase in the number of Covid-19-related hospital admissions and deaths in South Africa became steady, the lockdown gradually eased, with partial reopening of schools. The Minister of Basic Education implemented a phased approach which allowed Grade 12s and Grade 7s to return to school from early June 2020. Thereafter, other grades were gradually phased in. The phase in was influenced by research based on assumptions of lower transmission among primary school children and on findings from early population testing suggesting very low Covid-19 infection or asymptomatic carriage rates, particularly in children (Bi Q, Wu Y, Mei S, et al., 2020). Upon the reopening of schools, the Department of Education had to ensure that all Covid-19 regulations were in place. Whilst teachers prepared to return to school, they were faced with many psychological challenges pertaining to teaching amidst a pandemic. Hall et al. (2008) express, in times of a pandemic, people experience fear around getting infected with the virus, resulting in anxiety, stress, and depression, etc. For educators, the Covid-19

pandemic is a significant adaptive and transformative challenge, one for which there is no rulebook that can guide appropriate responses. Education leaders must continually design responses – with specific contexts in mind – as the pandemic runs its course. This study aims to explore how teachers navigate the changes in teaching and learning brought about by Covid-19.

1.2. Problem statement

The result of the Covid-19 pandemic has led to many changes in every country. These changes overawed every system in the country, including the education system. Like other countries, the South African education system was faced with frequent school closures, loss of school days, reductions in content in annual teaching plans, subject rationing, remote learning, and preventative measures for the spread of Covid-19 such as social distancing, wearing of mask and regular washing of hands and sanitizing. The DBE (2020) enforced *Guidelines for Development of the School Timetables reopening of schools COVID-19* which directed that schools comply with the social distancing requirement of 1.5m; schools must operate at 50% or less of their capacity; masks need to be worn by everyone at school; and regular hand washing/sanitizing protocols must be practiced. Hence, the researcher aimed to explore how teachers navigate these changes in teaching and learning during the Covid-19 pandemic and to assist teachers during this pandemic.

1.3. Location of study and description of the location

This study was conducted in KwaZulu-Natal in six different schools that consists of multiracial learners and teachers. Three of the schools are primary schools and the other three are secondary schools. The three primary schools and one secondary school are in Phoenix, one secondary school is in Tongaat, and the other secondary school is located in Newlands West. Each of these schools belong to different quintiles (as stipulated below). South Africa's Department of Education (DoE) has been determined to “redress, equity and quality” (DoE, 2006) in the education system since 1994 so the quintile funding system as stipulated in the 2000 National Norms and Standards for School Funding was an apparatus put in place to attain these goals. According to Van Dyk and White (2019, p.1), “the Amended National Norms and Standards for School Funding (ANNSSF) required the ranking of schools into one of five quintiles of which Quintile 1 represents the poorest schools and Quintile 5 the most affluent.” The result of this amendment allows for schools in impoverished communities to receive more funding.

1.3.1. Phoenix, Durban, KwaZulu-Natal

The following schools belong to the Pinetown District and are situated in a historically Indian urban context, where learners from the area and surrounding townships are admitted. Most of these learners belong to families with low incomes.

School name: (pseudonym)	Number of participants	Quintile	Learner attendance and functionality during Covid-19
1. Lakewood Primary	4	4	Lakewood Primary school has adopted a 10-day alternative cycle for learners to attend school. Learners are put into divisions (i.e., A class and B class) and attend school on every alternate day. Furthermore, each division is broken into two groups (i.e., A1 and A2, B1 and B2) to maintain social distancing.
2. Crestview Primary	1	5	Crestview Primary has adopted the colour coding model. The learners of the school have been divided into two groups. Group one is the yellow code, and the second group is the green code. Each learner has been issued a colour tagged to ensure that they attend school on the correct day.
3. Valleyview Primary	1	5	Valleyview Primary has implemented a model whereby learners belonging to a certain class were divided into two groups. Group one attends on one day and group two on the other. These groups attend schools on every alternate day.
4. Winterville Secondary	1	5	Winterville Secondary receive their learners daily according to their grades. All grade 12 learners are expected in school every day. Grades 10s and 11s attend school on Monday, Wednesday, and Friday. Grade 8s

			and 9s attend school on Tuesdays and Thursdays.
5. Evergreen Heights	3	4	Evergreen Heights has implemented a two-week cycle attendance model. In the first week, grades 8, 11 and 12 attend school. In the second week, grades 9, 10 and 12 attend school.

Figure A

1.3.2. Newlands West, Durban, KwaZulu-Natal

This school belongs to the Umlazi District where learners derive from poor socio-economic home environments, which include separation and abandonment. However, there are learners who belong to average and above average households.

School name: (pseudonym)	Number of participants	Quintile	Functionality during Covid-19
1. Riverdale Secondary	1	4	Riverdale Secondary has adopted the alternate day model for learners to attend school. Grade 12s are expected to be in school every day whilst grades 8 and 10 attend together on one day and grades 9 and 11 attend on another day.

Figure B

1.4. Context and purpose of study

For a period of ten weeks, from the 26th of March, up until the 8th of June 2020, children were not permitted to attend school. From the onset, profound inequalities in the schooling system were evident. While a small percentage of schools promptly switched to online learning, educational activity came to a complete halt for most learners. The rapid decision of a lockdown left little time for the schools to set the foundation for all teachers to teach remotely and learners to learn remotely. Thus, resulting in an extreme and steep learning curve. The rapid change from traditional face-to-face classroom teaching and learning to remote and online learning

highlight extreme inequality in the country. Learners living in deep rural areas were unable to effectively learn remotely. Findings from Petrila et al. (2022), express that remote and online learning in the context of Covid-19 reflected poor parental involvement in children's homework, poor quality and incomplete class-work submissions, insufficient personal equipment, poor network access, and lack of learning devices.

Steadily, from the 8th of June 2020, learners were required to return to a schooling system that was never seen before. The teaching and learning process changed drastically through the practice of social distancing, wearing of masks, regular sanitising, reduction in curriculum content, suspension or rationing of subjects, changes to assessment, altered learning approaches and different timetable models. This study explores how teachers navigated the changes in teaching and learning during the Covid-19 pandemic and provides guidance on creating an intervention programme. Lewin's (1951) theory of change and the data generated from this study influenced the Navigating Change Theory which is presented in this thesis (chapter seven). Exploring what teachers did and how they navigated changes in teaching and learning during the Covid-19 pandemic resulted in data that assisted in finding methods of how teachers can embrace the changes in teaching and learning during the Covid-19 pandemic.

1.5. Rationale

The researcher has encountered many teachers, including himself, complaining about the strain of Covid-19, specifically in the teaching and learning environment. There were many 'trial and error' adjustments endorsed by the Department of Education on the curriculum which contributed to greater stress, anxiety, and burnout. Above and beyond the curriculum needs, other factors, such as adherence to Covid-19 protocols, also contributed to increased stress. Whilst Covid-19 is often seen as having a negative impact on the education system, Mahaye (2020, p.18), expresses that this "pandemic illuminates the plethora of golden opportunity in the current education system, which is to be innovative, creative, radical and versatile in advancing with agility the decolonization of education." Through this study, the researcher wanted to contribute to the body of knowledge by exploring how teachers navigate the changes in teaching and learning brought about by Covid-19 and to provide guidance on creating an intervention programme.

1.6. Study significance

Since Covid-19 is novel, there is a dearth of knowledge concerning the experiences of educators during Covid-19; the literature that is available comprises mainly the mental health of those in the health sector. As mentioned before, Mahaye (2020), articulates that there is still need for research pertaining to the impact of the virus on the individual's mental health. This includes research on teachers' mental health as they are frontline workers, yet not recognised as such, who are highly exposed to the virus Mahaye (2020). Moreover, there has been very little support offered to teachers during this time. There is very little published research on the teaching and learning process during Covid-19 in the South African context. The data generated in this study made it possible for an intervention programme guide and model to be developed. The intervention programme guide and model will assist the Department of Education, schools, principals and teachers to tailor-make intervention programmes, within their capabilities, that will mitigate challenges in teaching and learning during the Covid-19 pandemic and future pandemics.

1.7. Objectives

1.7.1. Main objectives

To explore how South African teachers navigate the changes in teaching and learning during the Covid-19 pandemic

1.7.2. Secondary objectives

1. To explore the changes experienced by South African teachers in teaching and learning during the Covid-19 pandemic.
2. To explore how South African teachers navigate these changes in teaching and learning during the Covid-19 pandemic.
3. To examine the implications of these changes for teaching and learning.

1.8. Research questions

1.8.1. Main research question

How do teachers navigate the changes in teaching and learning during the Covid-19 pandemic?

1.8.2. Secondary research questions

1. What are the changes experienced by South African teachers in teaching and learning during the Covid-19 pandemic?
2. How do South African teachers navigate these changes in teaching and learning during the Covid-19 pandemic?
3. What are the implications of these changes for teaching and learning?

1.9. Theoretical framework

In exploring how teachers navigate changes in teaching and learning during the Covid-19 pandemic, The researcher utilised Kurt Lewin's (1951) theory of change, as my theoretical framework. This theoretical framework served as a lens to understand how teachers allow for change in teaching and learning. Drawing from Kurt Lewin's (1951) theory of change, and how change should be dealt with, he introduced the three-step change model. The Kurt Lewin's change theory model is based around a three-step process (unfreeze; change; refreeze) that offers a high-level approach to change.

Lewin explains these three steps as follows: (1) *Unfreezing* means getting people to gain perspective on their day-to-day activities, unlearning their old habits, and becoming open to new ways of reaching objectives. The goal during the unfreezing stage is to create an awareness of how the status quo is hindering the organisation in some way.

The second step involves *change*. Lewin (1951, p.50) "recognized that change is a process where the organization must transition or move into this new state of being." This changing step is also referred to as 'transitioning' or 'moving'. During this stage, people struggle with the new reality as it is a time marked with uncertainty and fear. During the change step, people begin to learn the new behaviour, processes and ways of thinking.

The third step involves *refreezing*. This step encompasses the act of reinforcing, stabilising, and solidifying the new state after the change. Efforts must be made to guarantee the change is cemented into the organisation's culture and maintained as the acceptable way of thinking or doing. Lewin's (1951) theory of change and the data generated from this study influenced the Navigating Change Theory which is presented in this study.

1.10. Methodology

With the focus of this study being how educators navigate changes in teaching and learning during the Covid-19 pandemic, it was appropriate for me to utilise narrative inquiry. Additionally, this study employed a qualitative approach, with the interpretive paradigm being used, as it is grounded in lived experiences. Moreover, to obtain rich data to support the study, collages, reflective journals, and semi-structured interviews were used as data generation methods. The eleven participants in this study were selected through the use of the non-probability sampling method.

1.11. Overview of research project

Chapter One

In this chapter, the researcher discussed the context and background of the study. Additionally, this chapter has presented the purpose, rationale, significance, objectives of this study. It also provided the research questions pertaining to this study.

Chapter Two

The focus of this chapter is to foreground the literature relevant to the research study. The literature review highlights “scholarly conversations” (Clandinin & Connelly, 2000, p. 136) which bring out key themes, debates and discussions relevant to the Covid-19 pandemic in the educational system.

Chapter Three

This chapter discusses a theoretical framework which guides the study. In exploring how teachers navigate changes in teaching and learning during the Covid-19 pandemic, the researcher utilised Kurt Lewin’s (1951) theory of change. This theoretical framework served as a lens to understand how teachers allow for change in teaching and learning.

Chapter Four

This chapter discusses the research design, methodology, research paradigm, research sample and methods used in the study. The multiple methods of data production are as follows: collage reflective journals and structured interviews. In addition, the data analysis and interpretation are discussed.

Chapter Five

This chapter presents the data generated for this study. The data is presented verbatim.

Chapter Six

In this chapter, the researcher analysed the data through thematic analysis and summarised the data generated by participants.

Chapter Seven

This chapter presents a theory (Navigating Change Theory), an intervention programme guide and model, which emerges from the data generated.

Chapter Eight

This chapter is the final chapter of the study, which contains a concluding discussion on the findings. These findings reflect the nature and purpose of the study.

1.12. Chapter conclusion

This chapter has discussed the context and background of the study. It focused on the goals of the study and presents the objectives and key questions to be achieved in the study. The following chapter explores the literature pertaining to the Covid-19 pandemic in relation to the educational system.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

The previous chapter discusses the context and background of the study. It also aims to contextualise this study and present the objectives and key questions to be achieved in it. This chapter comprises a literature review pertaining to the Covid-19 pandemic in relation to the educational system. Moreover, it presents insights on Covid-19 that include its etiology, epidemiology, responses, challenges in the educational system and implications for teaching and learning.

2.2. An emerging Coronavirus Disease: Covid-19

Coronaviruses are enveloped, positive single-stranded large RNA viruses that infect humans, but also a wide range of animals which results in a severe acute respiratory syndrome (Pal et al, 2020). Covid-19, the coronavirus responsible for the pandemic beginning in 2019 was titled by the World Health Organisation as Covid-19 in January 2020 (Liu et al., 2020); Covid-19 is the most contagious disease and one of the world's worst global pandemics. It emerged in Wuhan, China.

According to Cirrincione et al. (2020), Covid-19 can be transmitted both by air and via direct and indirect contact; however, the most frequent way it spreads is via droplets. Like the other viruses belonging to the same family of coronaviruses, it can cause mild flu-like symptoms, such as a sore throat, cough and fever, or more severe ones such as pneumonia and breathing difficulties, and it can lead to death.

Research shows that older people and those with underlying medical problems like cardiovascular diseases, diabetes, chronic respiratory disease, and cancer were more likely to develop serious illnesses from Covid-19 (W.H.O, 2020). At the time of this study, there are no reliable treatments for Covid-19 but many attempts to were made to find a clinical vaccine for the contagion. As a result, the AstraZeneca Covid-19 vaccine, Novavax Covid-19 vaccine and the Johnson and Johnson vaccine were found to be effective in protecting individuals against Covid-19.

The AstraZeneca vaccine, specifically in South Africa, was found to be less effective due to the new variant (Omicron) of the virus. On the 14th of December 2020, authorities from the

United Kingdom of Great Britain and Northern Ireland (United Kingdom) reported a new variant of SARS-CoV-2 to WHO. According to WHO (2020a), it was identified by viral genomic sequencing, and is referred to as SARS-CoV-2 Variant Under Investigation, year 2020, month 12, variant 01 (SARS-CoV-2 VUI 202012/01). This variant was also found in South Africa resulting in higher transmissibility.

According to Raja et al. (2020), the first Covid-19 vaccine was introduced in late 2020 for emergency use. According to Bozio et al. (2021), the endorsement of vaccines in less than a year is extraordinary in human history and is seen as a victory in medical research. However, there are many controversies surrounding the vaccines used to offer some protection to individuals.

As the virus progressed, various variants developed. According to Callaway (2020), the variant D614G became the first spike protein mutation of concern that spread worldwide within a few months. The D614G variant resulted in an increase of transmission, therefore, causing higher infections which affected the upper respiratory tract of Covid-19 patients. Callaway (2020) states that towards the end of June 2020, the D614G variant was detected in nearly all the SARS-Cov-2 samples worldwide. Wise (2020) expresses that this strain, which was detected in Brazil, South Africa (B.1.351 - Beta) and the United Kingdom (UK) (B.1.1.7 - Alpha), caused a massive sense of apprehension globally.

Collier et al. (2021) reported that the maximum rate of transmissibility and infection rates reported for the mutant strains of SARS-CoV-2 was the UK B.1.1.7 (Alpha) strain, this had already spread to over fifty countries. Mahase (2021b) states that the South African strain had spread to 20 countries and the Brazilian mutant strain had spread to Japan, Germany, and some other countries. As a result of the detections of the new variants of Covid-19, many countries had to close their borders, going into another lockdown, which included the closure of schools, and introduce new restrictions. As an outcome of these measures, these countries endured and are still enduring massive economic loss and further deaths.

2.3. Epidemiology of Covid-19

According to Su (2016, p. 495), “SARS-CoV, MERS-CoV, and SARS-CoV-2 are viruses that cannot be maintained well in humans, they are likely to spread mainly through other zoonotic

reservoir(s), with occasional outbreak in the susceptible human population, possibly via an intermediate host species.” Xu (2020) expresses that the human-to-human transmission rate of the novel coronavirus is significantly high, which results in a varied range of clinical manifestations in patients infected with virus.

Since the epidemic of Covid-19 in December 2019 in Wuhan, China, the contagion swiftly spread to other parts of the world. At the origin of Covid-19, more than fifty people in China, were diagnosed with acute pneumonia which is associated with Covid-19. This discovery was linked to a seafood market in the Wuhan province. Through observations, people who had been to the seafood market and consumed food that was prepared with infected animals were supposedly infected with SARS-CoV-2. Later, additional investigation and contact tracing of Covid-19 positive patients revealed that several individuals with no record of visiting the seafood market also tested positive for Covid-19, indicating that human-to-human transmission of the virus was possible. Chan et al. (2020, p.520), states that there is “possibility of human-to-human transmission of SARS-CoV-2; this was confirmed in an epidemiological study of patients in a family cluster, in which some of the members visited Wuhan, but one member of the family did not visit the place.” Guan et al. (2020, p.1710) reports the “possibility of community transmission and intra-family transmission as the main reasons of SARS-CoV-2 spreading in the city whereby human-to-human transmission of SARS-CoV-2 mostly happens in the presence of the close proximity of an infected individual due to the exposure to cough, sneeze, respiratory droplets, or aerosols.”

Like other respiratory contagions such as SARS-CoV and MERS-CoV, SARS-CoV-2 is spread through droplets of various sizes. “Droplets with a particle diameter of more than five to ten micrometers are considered as respiratory droplets, whereas droplets with diameter of less than five micrometers are referred to as nuclei” Wang et al (2020, p.473). WHO (2020a) further articulates that the spread of diseases by nuclei droplets comprising of the virus, which stays after the evaporation of large droplets, is referred to as airborne transmission. These airborne droplets stay in the air for a very long time and can be spread among individuals standing at large distance of more than a meter. SARS-CoV-2 is mostly spread through respiratory droplets and direct contact interaction.

The droplet spread of SARS-CoV-2 occurs when an individual is in close contact of less than one meter with an individual suffering from respiratory symptoms such as cough or sneezing.

In stating so, WHO (2020a) informs that an infected individual can possibly spread the virus through the infected droplets of his/her mucosae (mouth and nose) or conjunctiva (eyes). Yang et al. (2020) comment that transmission through mucosae is most common, and the transmission of the virus through conjunctiva is relatively less common.

Additionally, Ong et al. (2020) studied different fomites including surface samples of objects used on infected individuals, PPE samples, and swabs, etc., from the patients lodged in a well-protected isolation room. “The study has suggested environmental contamination by SARS-CoV-2-positive patients through respiratory droplets and fecal shedding to be potential threats for the transmission of disease” (Ong et al., 2020, p.1611). As mentioned before, the swift developments of Covid-19 resulted in public health officials and government authorities implementing unprecedented measures such as travel restrictions, imposing large-scale curfews, isolation, and quarantine of infected individuals, etc.

2.4. In what way did Covid-19 become a pandemic?

The origin of Covid-19 is supposed to be a seafood wholesale market in Wuhan which also sells different types of wild animals including snakes, birds, bats, rabbits, and frogs, etc. “The sequence analysis of various species of coronavirus revealed that SARS-CoV-2 is a recombinant virus between the bat coronavirus and a coronavirus of an unknown source, which is suspected to be the pangolin.” (Zheng, 2020, p.1678). Subsequent to the sanctioned announcement about the novel SARS-CoV-2 Covid-19 outbreak in Wuhan, China, governments and public health officials were in dread because this would become a pandemic. According to Wu (2020b, p.508), a “pandemic affects various aspects of healthcare systems and requires extensive planning regarding the arrangements of supplies, availability of human resources, and ensuring the sustainability of the health system through the peak and duration of the epidemic.” Furthermore, radical measures were required to contain the spread of this specific pandemic. Some of the radical measures include the implementation of strict social distancing and mobility restrictions, such as closures of schools, public offices, gardens, etc., and strict travel advisories/bans, which seriously disrupt social and economic stability.

2.5. Covid-19 in children

Bhuiyan, Stiboy, and Hassan et al. (2021) carried out a comprehensive systematic review and meta-analysis of literature which was based on children who tested positive for Covid-19. Their

review advises that the projection of Covid-19 in children aged less than five years supports current research, with greater than ninety percent of children displaying mild to moderate symptoms (Bhuiyan, Stiboy, & Hassan et al., 2021). Similarly, reviews by Castagnoli et al. (2020) and Hoang et al. (2020) revealed that all children younger than 18 years display mild to moderate symptoms of Covid-19 during the exiting variant.

Seven percent of cases reviewed by Bhuiyan et al. (2021) were severe cases, necessitating intensive care unit admissions, as compared to 53 percent of adults recorded with severe Covid-19 that required intensive care unit admissions. This finding shows that infants and young children aged less than five years are already at high risk of severe disease associated with other respiratory infections. According to Bhuiyan, Stiboy, and Hassan et al. (2021, p. 671) “it is likely that many Covid-19 infections in young children classified as moderate illness (requiring hospital admission), were in fact mild disease, as those reported to have a hospital admission due to isolation requirements only, not necessarily due to severity of clinical condition.”

Moreover, developing studies by Viner et al. (2020) and Metha et al. (2020) present that those children with confirmed and suspected Covid-19 contagion can manifest as the Kawasaki-like syndrome which has been named as multisystem inflammatory syndrome in children associated with SARS-CoV-2. Returning to the review conducted by Bhuiyan, Stiboy, and Hassan et al. (2021, p.675), “more than ninety five percent of the Covid-19 infections in children supposedly had a community source of infection, however, familial clusters were common in four case reports included in the review.” An and Zhang (2020) express that younger adults and children have a greater chance of contracting Covid-19 due to household exposure such as when a family member is Covid-19 positive. Nevertheless, An and Zhang (2020) conclude that there is inadequate evidence of secondary infection from children to others. This proposes that, in 2020, the way in which children can get infected with Covid-19 remains unclear.

Hassan et al. (2021) states that children that are infected with Covid-19 were treated with antivirals and antibiotics. However, Baraff (2000) and Farkas (2019) state that the use of antibiotic use as a treatment for the viral disease in children is a matter of concern, as given the incorrect use of antibiotics in under five children is a substantial contributor to the rise and spread of antimicrobial resistance around the world.

2.6. The complications of containing the virus

Munster et al. (2020) express that the quick transmission of Covid-19 infections has resulted in Covid-19 transforming from an epidemic to a global pandemic over a shortened time frame. There was an exponential increase in Covid-19 cases because of direct contact or through droplets (Chang et al., 2020). Guidelines to avoid contracting Covid-19 comprise avoiding close contact with individuals suffering from acute respiratory infections, regular handwashing, particularly after direct contact with unwell people or their environment and avoiding unprotected contact with farm or wild animals (Lai et al., 2020).

WHO (2020b) advises that individuals with symptoms of Covid-19 must follow the cough etiquette such as maintaining distance, covering of mouth with hand or disposable tissue or clothing while coughing or sneezing, regular washing of hands, etc. “While social distancing and good hand hygiene are the most important methods to prevent virus transmission, some countries have also issued new guidelines of mandatory mask wearing by healthy individuals in public settings, particularly in places where physical distancing is difficult” (Feng et al., 2020, p.345). There have been many difficulties experienced by government and regulatory authorities, in implementing these guidelines to contain Covid-19.

Moreover, there are many different approaches to the wearing of masks. Numerous studies have shown that the transmission of Covid-19 is also reported profusely by asymptomatic carriers (Bai et al., 2020). Hence, wearing a face mask possibly reduces the transmission of Covid-19 to healthy individuals by infected individuals who may not know that they have infection (asymptomatic carriers). Since the start of Covid-19, the use of face masks was practiced in China and other Asian countries. Feng et al. (2020, p.345) express that “large differences in opinions were observed on the use of masks by the general public and community settings, even though authorities across the globe agreed to recommend the use of masks for infected individuals and healthcare professional.”

Countries across the globe implemented different guidelines pertaining to the use of masks. The WHO recommended “use of mask by only those who are taking care of infected individuals but later advised the use even for healthy individuals in community settings” (Khan et al., 2020, p.25). In the United States of America, Centers for Disease Control and Prevention

did not recommend the usage of face masks. Yet, later, more than a few states including Washington, D.C. required the use of a face mask in public (Lyu et al., 2020).

The United Kingdom strictly recommended using a “face mask in hospitals but is not convinced about the widespread benefits of wearing a mask for the general public due to the lack of sufficient evidence” (Greenhalgh et al., 2020, p.369). Particularly, indications suggested that the spread of Covid-19 is probable even before the onset of symptoms; therefore, the “recommendation of face masks for everyone including infected individuals can be very helpful in reducing the potential community transmission” (Tindale et al., 2020; Wang et al., 2020, p. 475). Likewise, in South Africa, wearing of face mask became mandatory to every individual in the country. Commercial areas, transport and schools would not allow an individual to enter without a face mask properly covering the mouth and nose.

Furthermore, other measures to contain the virus or slow down transmission, self-isolation, quarantine and social distancing, are required. Predominantly, self-isolation and social distancing are operative measures to slow the transmission of Covid-19 worldwide. According to the CDC (2020) whilst these measures are imperative, there are many people who are refusing to put these measures into practice. Additionally, “even among the people who understand the importance of public health measures very well, such as washing hands, maintaining appropriate distance, avoiding touching face, etc., people fail to practice them efficiently.” (Geldsetzer, 2020, p.22).

2.7. The response of Covid-19 by the general population

The rapid spread of Covid-19 across the globe has undoubtedly caused immense psychological impacts on individuals. According to WHO, some of these impacts can be linked to elevated levels of stress or anxiety. In addition to the disease’s symptoms, human emotions such as fear (Asmundson & Taylor, 2020), worry, panic, anxiety, or depression-related distress (Bao et al., 2020) can occur. According to Ozamiz-Etxebarria et al. (2020) and Rodríguez-Rey et al. (2020) recent studies about the psychological impact of this pandemic disease on the general population, an increase in depression and stress levels between the first days and the third week of the lockdown has been found.

According to Rajkumar (2020), in many studies, anxiety has been related to impaired sleep. Moreover, social situations have changed due to the disease and the subsequent quarantine (Zhang et al., 2020), as well as due to attending to dependent or infected persons or those under other medical conditions at home or nearby. Also, it was due to the preventive measures applied by the government such as confinement or lockdown (Liu et al., 2020). In previous pandemics, individual differences seem to play an important role (Asmundson & Taylor, 2020). In any case, broader and more specific research of the impact on mental health is still needed (Mahase, 2021a).

2.8. Impact of Covid-19 on education: Nationally and internationally

In the height of the pandemic schools were closed to prevent transmission; learners, parents, and teachers around the world have suffered from the unexpected ripple effect of the Covid-19 pandemic. During this pandemic, education systems attempt to continue imparting quality education for all during these unprecedented times. In South Africa, the pandemic came on top of pre-existing inequalities in the education system (Chirinda, 2021).

Daniel (2020) states that the Covid-19 pandemic poses a threat to the normal teaching and learning process. Di Pietro et al. (2020) express that Covid-19 has a negative effect on cognitive and non-cognitive skills acquisition and may have crucial long-term consequences in addition to the short-term ones. Moreover, the Covid-19 pandemic has also negatively influenced educational systems worldwide through the closures of schools (Wikipedia, 2020b). The Covid-19 pandemic has resulted in temporary closure of schools in 192 countries all over the world with 91.4% of the total number of enrolled learners in these countries temporarily forced out of school (UNESCO, 2020c).

The closure of schools, as an attempt to contain the virus, stemmed interruptions in academic activities, as well as in career plans. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) monitoring, over 192 countries implemented nationwide closures, impacting over half of the world's student population (UNESCO, 2020a). Additionally, according to Mahaye (2020, p. 4) during the time of the first wave of Covid-19 "it is reported that over 1.6 billion learners across the world are currently compelled to stay out of schools as social distancing is being enforced locally and regionally around the world in order to contain the spread of Coronavirus disease." Report also shows that lockdown of

schools is more prominent in some continents such as Africa, South America and in some parts of Europe (UNESCO, 2020c).

According to UNESCO (2020b), some of the harmful effects of school closures for Covid-19 are as follows:

- **Interrupted learning:** schools have always provided essential and contact learning. However, when schools are closed, learners are deprived of opportunities for growth and development.
- **Nutrition:** many learners are dependent on free or discounted meals that are available at schools for food and healthy nutrition.
- **Unequal access to digital learning portals:** lack of access to technology or good internet connectivity for continued learning during school closures.
- **Social Isolation:** since educational institutions have always accommodated for social activity and human interactions, school closures can deny youth and children of some social communication and socialisation that is crucial to learning, development and creativity.

With the sudden shift away from the classroom in many parts of the globe, most educational institutes directed themselves to online learning. In a South African context however, online learning is very challenging. According to Dube (2020), online learning alternative in the context of Covid-19 excludes many rural learners from teaching and learning in South African primary schools because of the lack of resources to connect to the internet, the learning management system, and low-tech software. Furthermore, Ebrahim et al. (2020) argue that the state of lockdown halted learning in South African schools, and learners and educators in rural areas are helpless in approaching online learning during the Covid-19 lockdown. Ngogi (2020) concludes that blended learning practiced in South African schools is commendable but suggested that rural schools are disadvantaged because of several challenges. Studies have shown that rural schools lack internet connectivity, hence, learners in such environments have little or no access to the relevant tools required for online learning tools during the era of Covid-19 (Omodan, 2020; Dube, 2020). Through the review of literature, little research exists concerning the challenges of online learning in South African schools.

2.9. Understanding change

Change can be defined as a ‘shift’ or a ‘transition’. According to Fullan (1993), change is a journey and not a plan because it is an expedition from what is partially known to the unknown. The National Council for Curriculum and Assessment, a statutory advisory body to the Minister of Education, states that educational change comes in many forms, affecting the lives of students and teachers and the school as an organisation.

Bush (2006) expresses that schools are being changed by globalisation and technology, and that change is an ever-present factor in schools. In stating so, Covid-19 has caused rapid change in the teaching and learning process. Gardner (2006) express that educational change that is deep and lasting takes time and change is essential for growth. Fink (2003, p.10) states that “change can cause turbulence and unsuccessful change brings grief and there is the common belief that leaders like change and followers dislike change because change produces instability, anxiety, and resistance in the organization.”

2.10. Global response to teaching and learning during Covid-19

The Director-General of UNESCO (Andrey Azoulay) was quoted in the VOA News (2020) where he warns that “the global scale and speed of the educational disruption due to coronavirus is unparalleled and, if prolonged, could threaten the right to education”.

Major changes in the teaching and learning process brought about by schooling from home has affected teacher performance and the quality of education, globally. Distance learning or learning from home during the Covid-19 pandemic has altered the traditional way of teaching and learning. Almost all countries in Europe, Central Asia and African region have instructed their primary, secondary, and tertiary school systems to close completely or partially and adopt online, digital, internet and distance learning, to stop a possible virus spread among students and the general public (Mahaye, 2020).

Online learning systems using devices, television, and radios as well as offline learning material such as printed books or resources packs provided by schools were utilised. Murgatroid (2020) notes that the challenges found by other researchers include e-learning accessibility, affordability, flexibility, learning pedagogy, which impacts life-long learning,

and educational policy. Additionally, most countries are faced with challenges regarding internet connection and the access to proper digital devices (Ebrahim et al., 2020).

In Indonesia, there were changes in the instructional system during the lockdown, where learners had to learn from home, learning activities for teachers, students, and parents (Cheng, 2020). These included impacts on instructional strategies and techniques. In the context of Indonesia, these included changes in instructional strategies, technology readiness to teachers in implementing online learning, support, and the motivation of teachers, parents, schools, and government involvement. Thus, learning from home must be well established so that learning objectives can be achieved (Guo & Li, 2020; Kaup et al., 2020).

Findings from Mahaye's (2020) study shows that Africa and South America are the continents where educational systems have been most affected by the pandemic. Furthermore, the results indicate that at least 98% of teaching and learning could not be conducted due to country-wide lockdowns on these continents. The closure of schools in North America, Australia and Northern Europe is relatively lower when compared to other parts of the world and this can be attributed to the fact that these regions conducted a lockdown of schools only in localised areas where the spread of the disease was more prevalent.

In many developing countries, disadvantaged children living in informal settlements are unable to afford or access online learning devices. Moreover, the online education idea poses a risk to learners as this exposes them to more screen time. Evidently, it is recommended to engage in offline activities and self-exploratory learning (Mahaye 2020). Another challenge involves the lack of parental guidance, especially for learners in lower grades as parents may be at work.

In a lot of countries, learner assessments were conducted online, with a lot of trial and error, uncertainty and misunderstanding among the teachers, students and parents (Cristobal-Fransi et al., 2020). The method implemented to conduct online examination differs as per the convenience and expertise among the teachers and the learning abilities of the learners.

Sintema (2020b) states that the level of academic performance of learners may decline and may perform poorly in their assessments due to reduced contact hours and lack of consultation with teachers when facing difficulties in learning/understanding. The numerous lockdowns and

closure of school could cause learners to be unable to actively and productively engage; it could and poor academic performance (Rasmitadila, 2020).

2.11. Changes in teaching and learning in South Africa during Covid-19

At the time of this research, there is very little research published on the teaching and learning process during Covid-19 in the South African context. Results that were available have been included below.

2.11.1. Loss of school days

A study conducted by Hoadley (2020) extensively provides imperative data regarding the number of days lost since Covid-19. On the 23rd of March 2020, South Africa entered a lockdown that resulted in the closure of schools. Since then, learners remained at home and started to return to schools from June 2020. Hoadley (2020) states that schooling continued from June 2020 to the 15th of December 2020 without any other interruptions. Upon the resumption of schools, a staggered approach was implemented which allowed the different grades to return. This staggered approach was a result of the *Guidelines for Development of the School Timetables reopening of schools Covid-19* (DBE, 2020), which directed that schools operate at 50% or less of their capacity. Moreover, Hoadley (2020, p.3) discusses that due to the social distancing measures “schools had the choice of five timetable models: daily and weekly rotation (learners coming on alternate days or weeks); bi-weekly rotation (learners coming for two weeks at a time then remaining at home); platooning or shifts (half the school attending a morning shift and the other half an afternoon shift; traditional or daily (normal, daily attendance); or a hybrid of different models.”

Hoadley (2020) expresses that grade four, five, eight and nine suffered the greatest proportion of school days lost, whereas grades seven and twelve lost the least number of school days because their return was prioritised due to them being at exit levels. He further states that the foundation phase learners lost a full third of the school year in 2020.

The lockdown resulted in social instability which provoked unrests in citizens. Hoadley (2020) states that this stemmed widespread social delivery protests. Additionally, economic insecurity made way for prevalent hunger and psychological hardships in communities which may be seen as an impact on the functioning of schools. Furthermore, timetabling models during

Covid-19 can be seen as the weightiest reason for days lost in schools. The DBE (2020) had enforced *Guidelines for Development of the School Timetables reopening of schools COVID-19* ('*Timetabling Guidelines*', May 2020) DBE (2020) which directs that every school must comply with the social distancing requirement of 1.5m, schools must operate at 50% or less of their capacity, masks need to be worn by everyone at school and regular hand washing / sanitizing protocols must be practiced.

According to Gustafsson (2020), South Africa had endorsed very strict regulations regarding social distancing in schools to safeguard learner and teacher safety, while WHO recommended a 1-meter distance, the guidelines endorsed in South Africa was 1.5-meter distance; masks were mandatory and citizens will be fined if they are not using them; and operation is at 50% capacity of any room space, if not adhered to, organizations will be fined. However, Gustafsson (2020) argues that learners would lose a lot less contact time if just the 1.5m rule was shifted to 1m. Nevertheless, it can be noted that the regulations are passable for schools with facilities that are large enough to observe the social distancing protocols.

Moreover, Hoadley (2020, p.3) discusses that due to the social distancing measure "schools had the choice of five timetable models: daily and weekly rotation (learners coming on alternate days or weeks); bi-weekly rotation (learners coming for two weeks at a time then remaining at home); platooning or shifts (half the school attending a morning shift and the other half an afternoon shift; traditional or daily (normal, daily attendance); or a hybrid of different models."

2.11.2. Reduction in content in the annual teaching plans (CAPS)

After level 5 of the national lockdown, schools recommenced. The curriculum was trimmed to accommodate fewer days of teaching. According to Hoadley (2020, p.10) the adjustments "addressed issues of curriculum progression, coherence and sensitivity to the school context, the guiding principles articulated as:

- **Feasibility** – analyses and examines the content in the light of the time and resources available to the schools, considering the current socio-economic and political climate.
- **Coherence** – systematic curriculum mapping must have horizontal, vertical, subject area and interdisciplinary coherence."

With regards to the Grade 12 curriculum, Hoadley (2020) expresses that this curriculum could not be trimmed, however, there was a reduction in the assessments to cater for more teaching and learning time. Whilst the trimming of the curriculum was initiated as a temporary strategy for 2020, the revised annual teaching plans continued into 2021. According to researchers, the revision or changes in the curriculum involved a reorganisation and a reduction in assessments, especially the content from term two being integrated into the other terms (Sandan, 2020; Palte, 2020; Senekal, 2020; Burrige, 2020; Boyd, 2020; Phetlu, 2020, and Loizides, 2020). Maldonado and De Witte (2020) reviewed the revised annual plans for Foundation Phase subjects, Creative Arts Senior Phase, Life Sciences FET, Dramatic Arts FET, English Home Language FET and Mathematical Literacy FET and found that the revisions were sensible and line in with what is required. According to Sandan (2020); Palte (2020); Senekal (2020); Burrige (2020); Boyd (2020); Phetlu (2020) and Loizides (2020) the revision or changes in the curriculum involved a reorganization and a reduction in assessments, especially the content from term two being integrated into the other terms.

As schools recommenced, it became evident that there would be further loss of teaching time, especially because of the delayed and staggered reopening, the different rotational timetabling models and increased teacher and learner absenteeism than normal. As a result, Hoadley (2020) noted that there was a second round of curriculum content reduction which involved revisions to the minimum concepts, content and skills per grade and per subject. This revision was called the 'Fundamentals'. As stated by Hoadley (2020, p. 10) "the fundamentals include:

- Teacher Guidelines for Implementing the Revised Annual Teaching Plans (ATPs).
- The Minimum Core Content and Skills per subject and grade as addenda to the Revised Annual Teaching Plans (ATPs) (or 'Fundamentals').
- PowerPoint presentations to mediate the guidelines and core content for GET and FET."

Revisions to the curriculum allowed for more flexibility over curriculum coverage, with teachers having greater flexibility to make decisions on what to teach and when to teach it. The *Teacher Guidelines for Implementing the Revised Annual Teaching Plans (ATPs)* (DBE, 2020) states "in selecting what content to leave out and to reorganize, teachers will employ their own professional judgement on which content is crucial for their learners to do this year, and at what depth." The guidelines required teachers to design and use diagnostic assessments to inform curriculum selection; collaboratively plan on-going selections based on formative assessment;

balance face-to-face, remote and self-guided learning; and conduct continuous communication between teachers around coverage. The revised and reduced curriculum for each grade and subject were made available at the DBE site in the form of PowerPoint presentations. The driving force for reducing the curriculum demands was to recognise broad, priority topics without extensive explanations and to remove the timeframes prescribed for each topic. Hoadley (2020) notes that the presented revised or trimmed curriculum didn't include the topics that were removed which makes it problematic to navigate the changes.

2.11.3. Subject rationing in the Curriculum and Assessment Policy Statement (CAPS)

Due to the reduction of teaching and learning time there were concerns regarding the load of teaching many subjects in the curriculum, specifically in the senior to FET phase. The Guidelines for Development of the School Timetables reopening of schools Covid-19 ('Timetabling Guidelines', May 2020) advocated for schools to not ration the fundamental subjects, i.e., mathematics, home language and English first additional language (EFAL). The timetabling guidelines also proposed that subjects such as life skills and life orientation should be taught alternately. However, the revised annual teaching plans emphasised that all subjects are important, as they form part of the learning programmes in each phase.

According to the Guidelines for Development of the School Timetables reopening of schools Covid-19 ('Timetabling Guidelines', May 2020) all schools should go strictly by the annual teaching plans for all subjects and ensure that there is no removal of any subjects or reduction in the teaching and learning time of those subjects. Nevertheless, Hoadley (2020), states that the reduction of subjects were only allowed in the Senior Phase with economic and management sciences, technology, social sciences or creative arts being the only options to ration whilst the languages, mathematics, natural science and life orientation were reserved as compulsory subjects.

2.11.4. Reductions and changes to assessments

The assessment facet in the curriculum faced the most changes. From May to October 2020, these changes were announced and delivered to teachers. According to Van der Berg and Spaull (2020) one of changes was the moving of the June 2020 Senior Certificate and the National Senior Certificate (NSC) examinations to November 2020. For the other grades (Grade 4-11), mid-term examinations (June examinations) were cancelled which allowed for the

prioritisation of formative school-based assessments. No formal assessment tasks were set for the Foundation Phase. School-based assessments were reduced for Grades 4 to 9. DBE (2020) allowed for school-based tests to carry a reduced weighting and time allocation as it is stipulated that not all topics and aspects of a subject are considered important for a learner to progress into the next grade.

2.11.5. Preventative mechanisms for the spread of Covid-19

The DBE (2020) enforced *Guidelines for Development of the School Timetables reopening of schools COVID-19* which directed that schools comply with the social distancing requirement of 1.5m; schools must operate at 50% or less of their capacity; masks need to be worn by everyone at school; and regular hand washing/sanitizing protocols must be practiced.

According to Gustafsson (2020), South Africa had endorsed very strict regulations regarding social distancing in schools to safeguard learner and teacher safety, while WHO recommended a 1-meter distance, the guidelines endorsed in South Africa included a 1.5-meter distance. Gustafsson (2020) argues that learners would lose a lot less contact time if just the 1.5m rule was shifted to 1m.

In addition, masks were mandatory and it was stated that citizens would be fined if they did not use them, and operations had to run at 50% capacity of any room space – if not adhered to, organisations could face a fine. Nevertheless, it can be noted that the regulations are passable for schools with facilities that are large enough to observe the social distancing protocols.

2.12. Remote learning

Due to lockdowns for places of education, a paradigm shift was needed in the way teachers deliver quality education. According to Pokhrel and Chhetri (2021, p. 134), “the online learning, distance and continuing education have become a panacea for this unprecedented global pandemic, despite the challenges posed to both educators and the learners, as transitioning from traditional face-to-face learning to online learning can be an entirely different experience for the learners and the educators, which they must adapt to with little or no other alternatives available.”

Subedi et al. (2020) express that the education system and the teachers in many countries across the globe have adopted 'Education in Emergency' approach through various online platforms and are obliged to implement a system that they are not accustomed to or ready for. They further express that e-learning tools have played a vital role during Covid-19, as it helps facilitate learning during the closure of universities and schools.

As the pandemic progressed, the teaching and learning process had to acclimatise to several changes. The use of effective and relevant methods for teaching remotely depends on the skills and access to information and communication technology for teachers and learners. Petrie (2020) states that for the purpose of learning online, integrated communication and collaborative platforms are needed, which include Microsoft Teams, Google Classroom, Canvas and Blackboard. Pokhrel and Chhetri (2021) add that some learners find it difficult to adapt and adjust to the new 'norms' of learning during this period.

Doucet et al. (2020) state that there exists no 'one size fits all' pedagogy for learning outside of the traditional classroom as there are several subjects which comprise of varying requirements. They further state that different subjects and age groups will require different approaches to learning during this time. Petrie (2020) argues that some learners who worked from home have undergone psychological and emotional distress and have been incapable of engaging constructively.

Learning remotely, raises social skills concerns as learners are now exposed to much on the internet when learning online. Additionally, learners who are not engaging in constructive work may be distracted and may incline to other harmful activities. According to Pokhrel and Chhetri (2021, p.135) "there are economic, social and psychological repercussions on the life of learners while they are away from the normal schedule of schools as many of these learners have now taken online classes, spending additional time on virtual platforms, which have left children vulnerable to online exploitation." Pokhrel and Chhetri (2021) further express that amplified and unstructured time spent on online learning has subjected learners to possibly harmful and violent content which also includes cyberbullying. As a result, the closure of schools for strict containment of the virus has led to families relying on technology and digital tools to keep children occupied, entertained, engaged in learning and connected to the current events, however, children lack the necessary knowledge and skills to safeguard themselves from the dangers of the internet.

On a more positive note, Basilaia and Kvavadze (2020, p. 3) state that online learning “allows physically challenged students with more freedom to participate in learning in the virtual environment, requiring limited movement.”

According to Green (2011), the Department of Basic Education recognises the importance of blended learning in South African schools. The notion of e-learning in South Africa started in 2004 when the Department of Education published the term in a White Paper (2006) and termed it “think-tank” which involves the implementation of e-learning in schools. Dube (2020) notes that there is a realisation of online learning that serves as a tool to address trajectories during predicaments, not only for survival (by communicating essential information on the fight against Covid-19) but also for teaching and learning by members of deprived communities, such as those of rural schools. Therefore, Du Plessis and Mestry (2019) recommended, strategies should be implemented to enhance teachers' working conditions and the teaching at rural schools to improve learner performance in all rural areas of South Africa.

Cristobal-Fransi et al. (2020, p.56) express that “it is essential to mention that South African rural areas mostly lack the social and economic viability needed to sustain technological improvement”. In stating so, South African government may find it difficult to supply quality education services in rural areas, especially during Covid-19. Du Plessis and Mestry (2019) express that there are several factors that hinder the provision of quality teaching and learning in South African rural areas.

Dube (2020) notes that there is a realization of online learning that serves as a tool to address trajectories during predicaments, not only for survival (by communicating essential information on the fight against Covid-19) but also for teaching and learning by members of deprived communities, such as those of rural schools. Therefore, Du Plessis and Mestry (2019) recommended, strategies should be implemented to enhance teachers' working conditions and the teaching at rural schools to improve learner performance in all rural areas of South Africa.

As revealed above, in South Africa, bulk of schools are in the rural areas and learners belonging to these schools are less privileged in regard to receiving quality education. (Du Plessis, 2017) Learners are often required to engage in helping parents in farm activities such as agriculture, tending to cattle and household chores. Most of these learners do not have smartphones or TV

at home. Those that do utilise technology are likely to experience issues with poor internet connectivity.

2.13. Impact of Covid-19 on teachers

The Covid-19 pandemic has placed significant demands on teachers. An interrupted academic year, unforeseen closure of schools, returning to school with social distancing, teaching with a mask and constant sanitizing were some of the strains placed upon teachers. Hall et al. (2008) express that when faced with life-threatening situations like a pandemic, people tend to experience fear of getting infected with the virus/disease resulting in anxiety, stress, and depression, etc. Selye (1956) articulates that stress can be explained as a feeling of emotional and physical tension which arises from any event that threatens our homeostasis. Holland (2018) states that the fear of the unknown is termed as anxiety, and that this is the body's natural response to stress.

There have been overarching concerns around psychological responses to the pandemic. Xiang et al. (2020, p.100) argue for a timely action on mental health during the Covid-19 pandemic; World Health Organization (WHO, 2020b) has issued public interest guidelines to address psychological issues that may arise; and researchers have noted increases in suicide figures (Goyal et al. 2020; Mamun & Griffiths 2020).

As a result of the psychological impact of Covid-19, teachers experience anxiety whilst teaching in classrooms. Factors that contribute to increased stress include: having large classes but teaching smaller groups which results in teaching one lesson multiple times; fear of not completing the curriculum timeously; and ensuring that their classrooms are always Covid-19 compliant and students and themselves are wearing appropriate personal protective equipment (PPE).

2.14. Extra-curricular activities during Covid-19

As part of the traditional curriculum in education, physical activity was promoted through physical education, however, Covid-19 has disrupted this (Huang, Li-Wei, Chang Hsieh & Lu. 2019). According to Super, Wentink, Verkooijen and Koelen (2017) physical activities and sports in schools are viewed as a beneficial facet in maintaining a healthy lifestyle in teachers and learners, however, this heightens the risks of infection in contact physical and sporting

activities. Mass gatherings significantly exacerbate the risks of the spread of the virus, therefore, the postponement of competitive sport at schools took place (Goldstein 2020a). As a result, “the suspension of school sports has inadvertently exposed huge complexities for current funding and endorsements enjoyed by teachers who teach these young sports stars” (Goldstein 2020a, p.865). Therefore, according to Goldstein (2020a), this situation implicates the private and public schools financially.

Sadly, sports events and activities in rural schools remain weaker during Covid-19 (Zimu, van Heerden & Grace 2020). Since rural schools are more vulnerable to Covid-19, because of poor healthcare provision, the suspension of physical activities is a concern for teachers (Shepherd et al., 2021).

Major concerns have arisen from the postponement of physical activities in schools. Nevertheless, the research available on extracurricular “offer very little information about how schools and caregivers might enforce social distancing as one of the pillars that might prevent teachers from contracting Covid-19 by participating in a sport during daily planned events and activities as part of normal teaching and learning” (Doucet et al., 2020, p. e5).

Thunstrom et al. (2020) argue that “As schools continue to strike a balance between saving the academic year and minimising the chances of contracting Covid-19, vulnerability to risks in taking part in school sport remains a serious challenge for teachers (Goldstein 2020a, p.358). Hall, Jones and Klenow (2020) recognize that several teachers are adjusting to the normal in the teaching and learning process, which includes social distancing, regular sanitising and wearing of masks, as it is considered vital in containing the transmission of the virus. Hall, Jones and Klenow (2020, p.36) further state that “there is an increased risk that arises from social isolation for teachers which impacts seriously on their mental health and physical wellbeing.”

According to the DBE (2020), the rise in new Covid-19 infections has placed an obligation on the Department of Basic Education to withdraw from executing a blanket phasing-in approach due to the greater risks of contracting Covid-19. However, there were many challenges associated with the resumption of extra and co-curricular activities. According to Zimu et al. (2020), teachers are requiring solutions from government to eradicate the challenges they are faced with during these unprecedented times. The rise in Covid-19 new infection amongst the

teachers has forced Unions (SADTU, NATU, PEU, NAPTOSA, EUSA) to contemplate the frequent and on time closures of schools (DBE 2020). The DBE has arranged some training for all staff members, including teachers who are all key role players responsible for fighting Covid-19 in schools (DBE 2020).

Zimu et al. (2020) present that teachers are battling with simple health and safety requirements such as physical distancing, hygiene, respiratory protocol, and mask-wearing. They further express that for this reason, most teachers have been instructed to display posters with the health protocols required to lessen the transmission of virus in areas that learners are in most. This is one of the significant interventions adopted by the DBE to raise awareness and minimise the risks of contracting Covid-19. The DBE guidelines approve the appointment of a health officer to ensure compliance with all these important protocols when sports resume (DBE 2020). The concerns of childhood obesity and inactive behaviour was seen as a catalyst to demand resumption of physical education (Goldstein 2020b).

2.15. Opportunities for Teaching and Learning

While there exist tremendous challenges for teachers, schools, institutes and the government during Covid-19, there are several opportunities that is beneficial to the educational system. According to Sintema (2020b), this pandemic has created stronger involvement between teachers and parents. Google Classroom, Zoom, virtual learning environments and social media and various group forums like Telegram, Messenger, WhatsApp and WeChat are being used and are beneficial for teaching and learning.

Pokhrel and Chhetri (2021) state that the use of these interactive online platforms can be further used even when contact teaching and learning returns as it will aid lessons. There are unparalleled opportunities for collaboration, original solutions and inclination to learn from others and try new tools as teachers, parents and learners share comparable experiences (Doucet et al., 2020). In stating so, it is evident that learning through online resources has offered the opportunity to teach and learn in pioneering ways, however, this requires extensive research to evaluate its future existence.

2.16. Gaps in literature

There are many gaps in the body of knowledge concerning the experiences of educators during Covid-19. As mentioned previously, Mahase (2021a), articulates that there is still need for research pertaining to the impact of the virus on the individual's mental health. Research into teacher's mental health is vital as they are frontline workers, yet not recognised as such (Pollock et al, 2020). There is very little published research carried out on the teaching and learning process during Covid-19 in the South African context. There is a richness of data regarding literature on Covid-19 and its relation to education, however, there appears to be a scarcity of research on how teachers navigate the changes in teaching and learning brought about by Covid-19.

2.17. Chapter conclusion

This chapter reviewed literature on Covid-19 as a pandemic, its relation to education, the etiology, epidemiology, responses, challenges in the educational system and implications for teaching and learning. The dearth of research around how teachers navigate the changes in teaching and learning brought about by Covid-19 emphasise the importance of this study. The next chapter presents the theoretical approach that underpins this study.

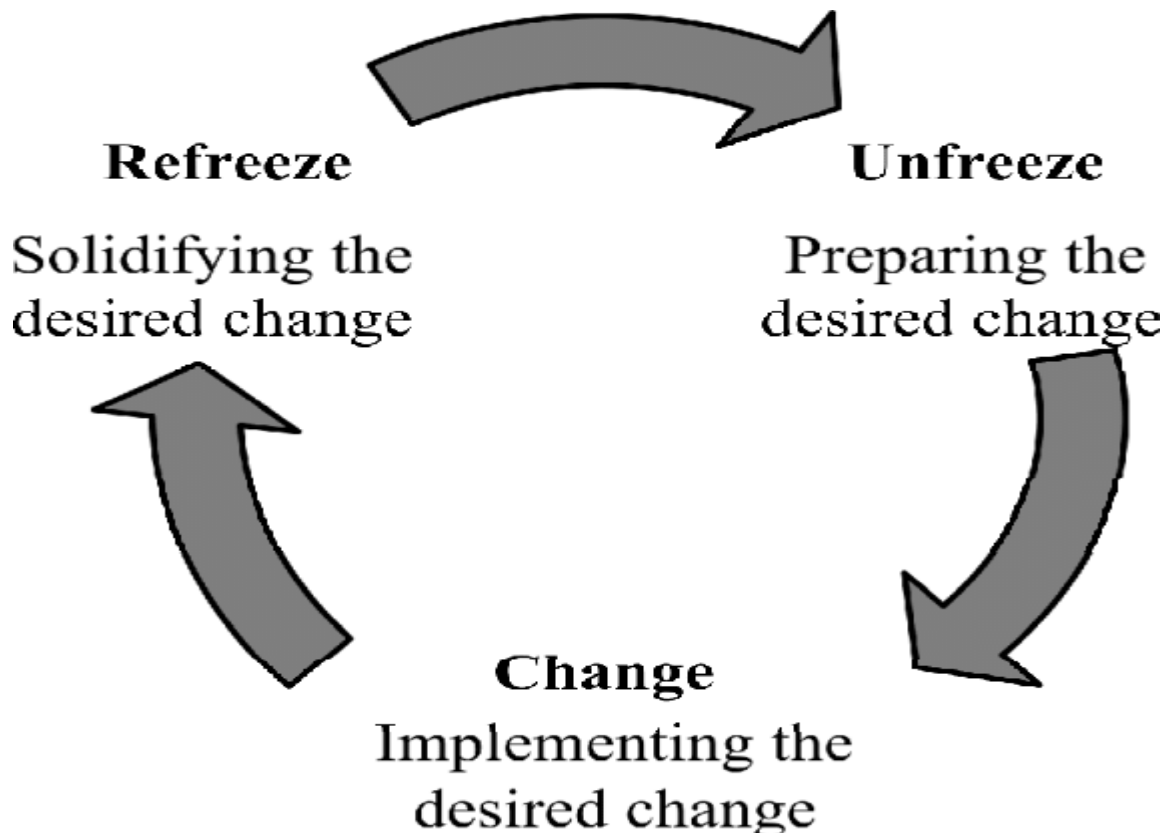
CHAPTER THREE: THEORETICAL FRAMEWORK

3.1. Introduction

The previous chapter reviews literature pertaining to the Covid-19 pandemic in relation to the educational system. It presents insights on Covid-19 that include its etiology, epidemiology, responses, challenges in the educational system and implications for teaching and learning. This chapter discusses and presents the theoretical framework of the study.

In exploring how teachers navigate changes in teaching and learning during the Covid-19 pandemic, the researcher utilised Kurt Lewin's (1951) theory of change as my theoretical framework. This theoretical framework served as a lens to understand how teachers can allow for change in teaching and learning during the Covid-19 pandemic. Kurt Lewin's (1951) theory of change introduced the three-step change model. The Kurt Lewin change theory model is based around a three-step process (unfreeze; change; refreeze) that offers a high-level approach to change.

3.2. Kurt Lewin's (1951) theory of change



Robbins and Judge, (2009), Sonenshein (2010) and Martinez-Devesa et al. (2007) express that Lewin's unfreeze-change-refreeze steps are considered as the fundamental approach or classic

paradigm for managing change. Lewin's model of change has labelled him as "the intellectual father of contemporary theories" (Schein, 1988). Jacobs (2001) argues that this theory has subjugated just about every western theory of change over the past fifty years. According to Hendry (1996), most researchers assert that theories of changes draw from Kurt Lewin's theory. Levasseur (2001) claims that his most powerful tool in adapting to change is the three-step change model by Kurt Lewin. Marrow (1969) portrays Kurt Lewin as a great experimentalist because the three-step change model provides a solid base for managing change.

When change occurs, it may be difficult, and it ought to take place with the aim of making the transition as seamless as possible. This model implements and encourages efforts to welcome the changes. This three-stage change model functions as an informative lens through which teachers make sense of the changes in the teaching and learning processes and to manage these changes to make the teaching and learning process successful or effective during the Covid-19 pandemic.

3.2.1. Step one: unfreezing

According to Lewin (1951) human behavior exists on a quasi-stationary equilibrium endorsed by many forces. Baulcomb (2003, p.280) states that "before old behavior can be discarded (unlearned) and new behavior successfully adopted, the equilibrium needs to be destabilized (unfrozen)." The initial stage, which is unfreezing, assumes that past observational understanding and social influences outline human behaviour (Wirth, 2004). Schein (2002) states that the way humans behave is founded on a "quasi-stationary equilibrium" underpinned by a force field of driving and restraining forces (which is explained later in this chapter). He further contends that for transformation to occur, changes would have to be made to this force field.

The unfreezing stage is broken up into three sub-processes that influence change (Schein, 2002; Wirth, 2004). The first process is 'disconfirmation'. Disconfirmation is where individuals are unhappy with their current condition. Schein (2002) states that this process is a requirement for change. Disconfirmation sparks the second process 'survival anxiety' or 'survival guilt'. This second sub-process requires the recognition and acceptance of the situation to change. Schein (2002) and Wirth (2004) state that survival anxiety or guilt should not be more than the third sub-process which is 'learning anxiety'. This sub-process is combined with the complexity of unlearning what has previously been learned and resilient to change. Kritsonis (2005, p.5)

suggested that “motivation, preparedness for change, and active participation in problem-solving situations will assist the unfreezing phase.”

Unfreezing means getting people to gain perspective on their day-to-day activities, unlearn their old habits, and open up to new ways of reaching objectives. The goal during the unfreezing stage is to create an awareness of how the status quo or current way of doing things is hindering the organisation in some way.

3.2.2. Step two: change

The second step identified by Lewin (1951), is that of change. Schein (2002), in agreement with Lewin (1951), states that a cognitive re-definition and unfreezing allows for a desire to change. Wirth (2004) defines this step as making alterations to whatever is required to change, which then allows for a transition into the change. Importantly, Wirth (2002), notes that there will be dissatisfaction with moving away from the current status quo and moving into change. For change to take place without many difficulties, a vision of the new way of doing things must be created, which will result in identification of the need for change and the desire to move into change. Hence, “role model imitation and problem solving on an individual level through trial-and-error learning are characteristics of the change activities in this process” (Wirth, 2004, p.25).

The notion of trial-and-error mentioned by Wirth (2004), indicates that there is a need for ‘scanning’. This comprises of searching through several methods of communication with people, reading, exposure to new material, all of which could provide solutions to the problems that are being experienced (Schein, 2002). Hence, this process allows for individuals to search for meanings and solutions through problem solving methods. Once these have been discovered, solutions can be developed. Schein (2002) describes the changes in step two as ‘cognitive restructuring’. The learning of new information in the change process, causes semantic redefinition (different meanings of words to previous assumption); cognitive broadening (a broader interpretation of previous assumptions); and new standards of judgement or evaluation (no fixed judgements) (Schein, 2002).

Lewin (1951, p.50) “recognized that change is a process where the organization must transition or move into this new state of being.” This changing step, also referred to as ‘transitioning’ or ‘moving’ is recognised as the implementation of the change. During this stage, change becomes concrete. It is also, consequently, the time that most people struggle with the new reality. It is a time marked with uncertainty and fear, making the hardest step to overcome. During the

change step people begin to learn the new behaviour, processes, and ways of thinking. As a result of Covid-19, there are many changes in teaching and learning. The changes in teaching and learning that became concrete include the trimming of the curriculum, reduced classroom capacity, because learners are required to attend school every alternate day or week. Moreover, learners work individually, without the sharing of resources.

3.2.3. Step three: refreezing

According to Lewin (1951), during this step, efforts are made to stabilise the new quasi-stationary equilibrium, to make certain that the new behaviors are comparatively safe from regression. He further implies that the new behaviour (after changes have been implemented) must be consistent with the rest of the behavior, personality and environment or it may result in a new round of disconfirmation. This stage involves applying the new changes and ways of doing things into the daily routine of the school (Wirth, 2004). Schein (2002), states that new behaviour must be aligned with an individual's personality and pre-existing behaviour, or this stage may fail, and 'unlearning' can take place which can contradict the second stage. Schein (2002) states that to benefit from this stage, scanning for solutions, as mentioned in stage two, must be encouraged for individuals to obtain solutions against a contradictory behaviour or personality. In other words, this step encompasses the act of reinforcing, stabilising, and solidifying the new state after the change. Efforts must be made to guarantee the change is not lost, rather it needs to be cemented into the organisation's culture and maintained as the acceptable way of thinking or doing. These changes were implemented to contain the spread of the virus, therefore, the changes need to be reinforced to ensure that teaching and learning can take place in a manner that lowers the risk of infections in the schooling environment.

3.3. Force field of driving and restraining forces

The concept of driving forces and restraining forces, for teachers, can be adopted in the changes in teaching and learning during the Covid-19 pandemic. On one hand, the driving force may benefit the changes as the changes in teaching and learning during Covid-19 is beneficial to teachers, and this can be seen as a desired direction. On the other hand, the restraining force may encumber the changes that have occurred or are occurring in teaching and learning during the Covid-19 pandemic, as teachers may be struggling to cope with the implemented changes in the teaching and learning process during the Covid-19 pandemic. Lewin's three-step model can help with making changes, diminishing the challenges faced by teachers, and making sure that the change is adopted successfully.

3.4. Significance of Kurt Lewin's (1951) theory of change to my study

Lewin's theory of change is beneficial for my study as it provides an understanding of processes that will assist teachers with changes in teaching and learning during the Covid-19 pandemic. Lewin's (1951) change theory can also assist the Department of Basic Education, policymakers and ministers to comprehend the need for teachers to 'unfreeze' their minds in relation to the traditional ways of teaching and learning. The change process consists of clear communication, promotion of action on the change, and active participation of every member of the organisation (Faraz, 2019). Therefore, every entity within the Department of Education must recognise the changes in teaching and learning during Covid-19 as the new normal. Finally, the freezing of the changes must be done so effectively to minimise the impact of Covid-19.

3.5. Chapter conclusion

This chapter presents an old, yet significant theoretical framework for understanding changes in the teaching and learning process. Kurt Lewin's (1951) theory of change serves as a lens to understand how teachers can allow for change in teaching and learning. Drawing from Kurt Lewin's (1951) theory of change provides a solid basis for teachers to effectively deal and manage the changes in the teaching and learning process during the Covid-19 pandemic. The next chapter will provide a complete account of the research methodology of this study which includes the method of data production, the selection of participants and the ethical principles followed; where necessary aspects of non-maleficence and beneficence and limitations of this study receive attention.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1. Introduction

The previous chapter presented a significant theoretical framework for this study. This chapter covers a complete account of the research methodology, which includes the method of data generation, the selection of participants and the ethical principles followed by the researcher. Aspects of non-maleficence, beneficence and limitations of this study, will be discussed within this chapter.

With the focus of the study being on how teachers navigate the changes in teaching and learning during Covid-19, it is suitable to utilise narrative inquiry as the methodological approach. One of the reasons for the utilisation of such an approach was the fact that it allowed an exploration of the changes in teaching and learning during Covid-19 in teachers' own words. This then enabled me to fathom what, how and why the changes in teaching and learning during Covid-19 came about.

The research design, instruments, and techniques used in the data analysis, as well as relevant methodological constraints and ethical considerations, will be discussed in the subsequent sections. Additionally, the researcher will outline my research methodology and present my data generation approaches.

4.2. Paradigm

This study was underpinned by the interpretivist paradigm. The researcher chose the interpretivist framework as it is grounded in the world of lived experiences. "Specifically, interpretivism supported scholars explore their world by interpreting the understanding of individuals" (Thanh & Thanh, 2015, p. 24). According to Ataro (2020), the interpretivist paradigm permits researchers to develop an understanding of human behaviour, attitudes, beliefs and perceptions, which are context dependent. Moreover, the interpretivist paradigm allows for the acknowledgement of numerous interpretations, which are informed using theory and a theoretical framework.

According to Lindof and Taylor (2019, p.19), "the interpretivist paradigm does not focus on numbers and statistics rather participant observation and interviewing"; they also add that "reality is prolific and emerges between humans through their symbolic activities of expression and interpretation." Hence, this was beneficial in my study as the researcher used personal

experiences and opinions to explore how teachers navigate changes in teaching and learning during the Covid-19 pandemic.

Additionally, Ataro (2020), further elaborates that interpretivism encourages naturalistic research, where research is conducted in a naturally occurring context with the researcher playing a non-intrusive role which discloses the experiences of the participants. Bergold (2012) argues that the premise of interpretivist researchers is that access to reality, whether given or socially created, is only through social construction such as language, consciousness, and shared meanings. Hence, it is through the interpretation of these experiences, which are informed by theory that leads to the development of authentic data.

Nieuwenhuis (2015) expresses that interpretivist research provides a lens through which the researcher can understand human life from within and this focuses on people's subjective experiences, or how people 'construct' the social world by sharing meanings, and how they relate to or interact with others. To address the research questions of this study the researcher interacted with teachers in order to gain a deeper understanding of their experiences relating to teaching during the Covid-19 pandemic.

By investigating the richness, depth and complexity of teachers' experiences of the changes in teaching and learning during the Covid-19 pandemic within the context of their schools and classrooms, the researcher built a sense of understanding of how teachers navigate these changes. The supporting belief is that by exploring participants' experiences in their social contexts or personal space, there is a greater opportunity to understand the perception they have of their subjective reality. Cohen, Manion and Morrison (2011) concur that the principal concern is an understanding of the way in which participants (educators) create, modify, and interpret the world in which they find themselves.

4.3. A qualitative approach

This study employed a qualitative approach. According to Jackson, Drummond and Camara (2007), qualitative research is primarily concerned with understanding human beings' experiences. Furthermore, a qualitative study is an investigative process whereby the researcher gradually makes sense of social phenomena through contrasting, comparing, replicating, cataloguing, and classifying the object under study (Creswell, 2008, p. 38).

Babbie and Mouton (2006, pp. 274-278) state that a qualitative approach is concerned with the examining and interpretation of observations. Qualitative research, from the interpretive

inquiry position seeks to understand the meaning of experiences, actions and events as interpreted through the participants and the researcher, paying attention to the intricacies of behaviour and meaning in the context of where it occurs (Lopes, 2008). The qualitative approach is used so that the researcher could explore through reflective journals and collages, how teachers are navigating the changes in teaching and learning during Covid-19 pandemic,

4.4. Research design

A case study was conducted for this study as it is the process of generating data and developing narratives that are transparent and clear to the reader, the participants, the examiner, and other interested parties. Neuman (2006), defines case study as “an in-depth study of one particular case in which the case may be a person, a school, a group of people, an organization, a community, an event, a movement, or geographical unit” (p. 40). Cohen et al. (2011) argue that case study is regularly used within qualitative research, with Rule and John (2011), adding that a case study is an orderly and comprehensive investigation of a particular example in its context in order to generate data.

Simons (2009) created the following definition of a case study founded on a critical review that pursued cohesions of numerous case study definitions: “[a] case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program or system in ‘real life’”. Furthermore, she emphasises that a case study should not be viewed as a method in and of itself. Rather, it is a design frame that may integrate several methods. Baxter and Jack (2008) express that a case study has the potential to deal with simple through complex situations as it enables the researcher to answer ‘how’ and ‘why’ type questions, while taking into consideration how a phenomenon is influenced by the context within which it is situated.

Cohen et al. (2011) claim that a case study studies an incident or example in detail and analyses intensively the diverse examples or phases that make up the life cycle of the unit being explored. Cohen et al. (2007) also point out that “case studies are conducted in a specific temporary, geographic and institutional context”, therefore public schools were chosen.

This research is a case study of teachers in public schools teaching during the Covid-19 pandemic. In affirming so, the use of a case study as the research design for this study allowed me to explore the phenomenon of the Covid-19 pandemic in the educational realm as teachers shared how they navigate the changes in teaching and learning during a pandemic.

4.5. Participants

To gain data for this research, **the researcher** used a non-probability sampling method. According to Cohen et al. (2011), there are two main types of sampling: probability or random sampling and non-probability sampling. The probability or random sampling technique derives from the wider population and all the individuals of this population have an equal chance of contributing to the study. The prospects of the wider population being selected or not selected for the study, is entirely dependent on chance. Since probability sampling randomly selects from the population, it gives the researcher the opportunity to generalise and produce results which are representative (Cohen et al., 2011).

The non-probability sampling technique is a sampling technique whereby participants or a group of participants are chosen by the researcher with the full knowledge that they are not representative of the entire population. In this case the members of the wider population do not have an equal chance of being selected. Some members will be selected or included while others will be excluded. The researcher consciously, deliberately, and purposely chooses a part of the population (Cohen et al., 2011).

This study uses non-probability, purposive sampling to select participants for the study. The study has eleven teachers as participants. These eleven educators returned to school during the Covid-19 pandemic, and were hand-picked by me based on my personal judgement of them (through prior interaction) and with the understanding that they possess in-depth knowledge or experiences about the phenomenon being explored.

Cohen et al. (2007, p. 101) suggest that “there is no clear-cut answer, for the correct sample size”. For this study, the researcher selected eleven participants based on my capacity in terms of time and resources, as well as availability of the participants.

4.6. Data generation methods

4.6.1. Collage (Visual Method)

This data generation method addressed the following:

First research question:	First objective of this study:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.

According to Glaw et al., (2017), visual methods encompass the use and interpretation of photography, film, video, painting, drawing, collage, sculpture, artwork, graffiti, advertising, and cartoons in research. They further express that while they are commonly used in qualitative research and are gaining more acceptance as research methods, the utilisation of methods date back to the 19th century as an ethnographic method. Becker (2002, p. 11) states that “what pictures can do that words or numbers cannot do as he calls them specified generalizations and explains that the images depicted are real, showing us real people or places, but what they represent is a general story of which they are instances”.

This research uses photo collages. “Photo collages are created by placing a number of photo images on a canvas area of limited size” (Bianco & Gianluigi, 2015, p.1). When using collages contemplatively, the researcher focuses on a predicament, in this case, Covid-19, and asks the participants to select pictures that symbolically reflect facets of their thinking or experiences. Wood and Mayaba (2015, p. 2) express that a collage is a piece of art created by sticking various materials such as pictures and words on paper or fabric to exhibit a message, story or understanding. The participants of this study used pictures and words from magazines, the internet, and newspapers to portray exactly what changes took place in teaching and learning during Covid-19. As Kisber (2010) asserts, a collage process breaks away from the linearity of written thoughts by working first from feelings to the ideas they evoke.

Participants were given three weeks to generate the necessary data to create their collage. Once the collage was completed, participants sent a photograph of their collage to the researcher via WhatsApp. Participants were required to discuss their collage by doing a write up. The write up will be presented in the next chapter.

4.6.2. Reflective journals

This data generation method addressed the following:

Second research question:	Second objective of this study:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning the Covid-19 pandemic.

Connelly and Clandinin (1990) note that reflective journals produced by research participants that are in the practical settings are beneficial for narrative research. According to Dymont and O'Connell (2011, p.60) "reflective journals comprise an important part of documenting the practice of different professions, such as nursing, and in fields such as musical education, business administration, psychology, and education." Moreover, the use of reflective journals in education offers an opportunity for improving the learning processes (Moon, 2006; O'Connell & Dymont, 2011). Through reflection, participants become aware of their thoughts, positions, and feelings in relation to learning and to the learning community (Farabaugh, 2007). Dymont and O'Connell (2011) add another advantage, in their opinion, that journals serve as a tool for the improvement of learning by creating a connection between theory and practice. Journals are a multidimensional instrument that can exist in a variety of forms (Boud, 2001).

Moreover, the use of reflective journals offers an opportunity for researchers to hear the voice of teachers as they express the thoughts and changes they experience as a part of their learning experience (Dunlap, 2006). The researcher provided a book to all participants to reflect on how they navigate these changes in teaching and learning during the Covid-19 pandemic; this served as a type of diary where the participants made regular entries during prescribed timeframes. In these entries were reflections that were aligned with the research aim and questions of my study. Participants were given three to four weeks to complete their reflections. Due to Covid-19, participants were required to photograph their reflections and send it to me via E-mail or WhatsApp.

4.6.3. Structured interviews

This data generation method addressed the following:

Third research question:	Third objective of this study:
What are the implications of these changes for teaching and learning?	To examine what the implications of these changes are for teaching and learning.

“Structured interview is sometimes referred to as in-depth interview due to the tendency of engaging with the units of analysis to the real generation of crucial information about the personal experiences and perspectives” (Bihu, 2020. p. 713). According to Bertram and Christianson, (2014) in a structured interview, the researcher may simply introduce the topic or main research question, then let the respondent answer in the way that he or she would like to. Hofsi et al. (2014) state that structured interviews are an enquiry process which involves individual face-to-face, group or telephonic interviews. Due to Covid-19, the researcher utilised the text-based method of instant messaging (WhatsApp) and recorded video-calling (Zoom) to obtain data. For the interviews, a Zoom meeting was scheduled to conduct the interview. Interviews were recorded and transcribed later.

4.7. Data analysis

To effectively analyse the data gained from this study, the researcher utilised thematic analysis. “Thematic analysis has been poorly branded, yet widely used in qualitative research” (Lorelli et al., 2017, p.2), and has been rarely appreciated in the same way as grounded theory, ethnography, or phenomenology. Braun and Clarke (2006) argue that thematic analysis should be a foundational method for qualitative analysis, as it provides core skills for conducting many other forms of qualitative analysis. “Thematic analysis provides a highly flexible approach that can be modified for the needs of many studies, providing a rich and detailed, yet complex account of data” (Braun & Clarke, 2006; King, 2004. p.20). Moreover, Thematic analysis means recognising and analysing patterns of meaning in the data (Gray, 2013). Categories were developed with meaningful words, phrases, and sentences. Thereafter, patterns, trends and links were developed, and finally conclusions were developed.

4.8. Validity and Reliability and Rigour

4.8.1. Trustworthiness

Cohen, Manion, Morrison (2011) emphasise that trustworthiness in qualitative research is fundamental, for without it, research findings can be deemed worthless. Aspects of emotional attachment to the participants may also encumber the trustworthiness and impact negatively on the research. “In interpretivist research, it is important that the research is credible: it must reflect participant reality” (Bertram & Christianson, 2014, p. 188).

The researcher aimed to be professional in my interactions with the participants and kept all non-related topics to a minimum. In terms of credibility of this research study, both data generation was done using an audio-recorder to record the discussion on the collages and then this was transcribed verbatim, consequently being more precise than scribing during the discussion.

4.9. Ethical considerations

It is imperative that an ethical researcher protects the identity of the participants. In this study, the researcher used pseudonyms for my participants, the name of the school, the area in which the school is situated and any organisations that were to be mentioned.

4.9.1. Autonomy

Ethics concerns itself with behaviour that is considered right or wrong. The researcher obtained ethical clearance from the higher degrees department at the University of KwaZulu-Natal. Moreover, the researcher obtained permission from the KwaZulu-Natal Department of Education to use teachers as participants. Additionally, participants were notified beforehand about what the study entails and what the intentions and purpose are (which were also contained in the consent form). They were informed that they could choose to leave the study at any time during the process without any consequences. Participants were issued with a written consent for which they signed. “Consent means that the participants agree to take part in the study” (Bertram & Christianson, 2014, p. 66). Through the signing of the forms, participants agreed to participate in this study.

4.9.2. Non-maleficence

Researchers are always aware of the importance of participant confidentiality as an ethical requirement of research (Coolican, 1990; Creswell, 2013; Roberts, 2015). This includes, but is not limited to, using pseudonyms or false names to preserve anonymity (Thomas & Hodges, 2010). According to Bertram and Christiansen (2014, p. 66), “non-maleficence means do no harm.” The participants in this research study were guaranteed of confidentiality of the information that they provided to this research and the identities of the participants are protected. The participants were also informed how the information that they provided would be made public.

4.9.3. Beneficence

According to Bertram and Christiansen (2014, p. 67) “Beneficence means should ‘be of benefit’ to the research participants or other researchers”. This research aimed to be beneficial to the participants and other researchers in the field of education and educational psychology. Participants have contributed to the existing knowledge of teaching and learning during the Covid-19 pandemic as well as provided approaches for principals and teachers to embrace the changes in teaching and learning during Covid-19.

4.10. Chapter conclusion

This chapter provided a complete account of the research methodology of this study which included the way in which data was generated and the selection of participants. Furthermore, the ethical principles followed were discussed. Aspects of non-maleficence and beneficence were discussed. The next chapter presents the research findings in the arrangement of themes identified by the researcher, during the analysis process.

CHAPTER FIVE: PRESENTATION OF DATA

5.1. Introduction

The previous chapter discusses the methodological framework for this research study. Collages, reflective journals, and interviews were used to generate data for this study; the responses from the participants will be presented in this chapter. The transcribed interviews are presented. Visual and textual data gained from collages and reflective journals are also presented in this chapter. Moreover, the pseudonyms and biographical data of participants are included.

5.2. Pseudonyms and biographical data of participants

Researchers are always aware of the importance of participant confidentiality as an ethical requirement of research (Coolican, 1990; Creswell, 2013; Roberts, 2015). This includes, but is not limited to, using pseudonyms or false names to preserve anonymity (Thomas & Hodges, 2010). The pseudonyms chosen for participants, along with their biographical data, are listed below.

Participant	Pseudonym	School	Qualification	Years of teaching experience
1	Sonu	Evergreen Heights	B.Ed	6
2	Mandisa	Crestview Primary	B.Ed	15
3	Danny	Riverdale Secondary	B.Ed, B.Ed Hons	5
4	Hazel	Winterville Secondary	B.Ed, B.Ed Hons	6
5	Songezile	Lakewood Primary	B.Ed	2
6	Kate	Lakewood Primary	B.Ed	10
7	Duduzane	Evergreen Heights	B.Ed, B.Ed Hons	5
8	Shaun	Lakewood Primary	B.Ed	18
9	Sipho	Valleyview Primary	B.Ed	23
10	Natasha	Lakewood Primary	B.Ed	25
11	Praise	Evergreen Heights	B.Ed	6

5.2.1. Themes

Presented below are three themes that emerged from the data production tools.

Themes	Questions/prompts from data production tools
Theme 1: The unfamiliar order.	<ul style="list-style-type: none">• In the form of a collage, participants were required to put together a series of images and words that signpost the changes in teaching and learning during Covid-19.• Explain, in detail, what your collage depicts. Try to refer to each image/word used in your collage.
Theme 2: Teachers' functioning within the unfamiliar order.	<ul style="list-style-type: none">• Reflect on your experiences of teaching during the pandemic by expressing your emotions or commenting on your mental health. How have you worked around this?• Based on the changes you have identified in the collage, reflect on how you navigate these changes. How have you embraced these changes in the teaching and learning process?• Reflect on the differences in the teaching and learning environment prior to Covid-19 and during Covid-19. How have you adjusted to this environment?• Reflect on the challenges in the teaching and learning environment and how have you embraced them.• Reflect on learner attendance during Covid-19. How did you manage the accommodation of learners in a classroom?• Reflect on learner performance during Covid-19. How did you cater for the various learning levels during Covid-19? <p>Reflect on the overall management of learners during Covid-19 in accordance with health protocols. (Teaching and learning outside of the classroom)</p>

Theme 3: The aftermath of the unfamiliar order.	Main probing question: <i>How do these changes implicate teaching and learning?</i> <ul style="list-style-type: none"> • What do you think are the implications of Covid-19 for teaching and learning? • What do you think can be done to overcome these implications? • Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.
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5.3. Presentation of data

The collage addresses the first objective of the study: exploring the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic. The reflective journal explores how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic. The structured interview examines the implications of these changes for teaching and learning. It is vital to note that data collection took place in 2021, when most of the changes were still in effective from the beginning of the pandemic.

All three data sets from each participant are included below.

5.3.1. Participant 1- Sonu

5.3.1.1. Collage

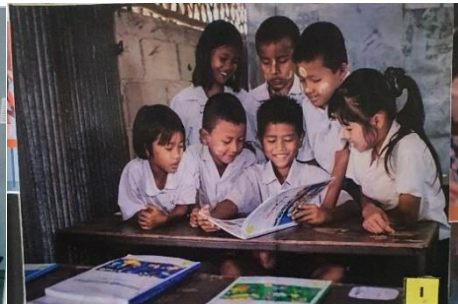
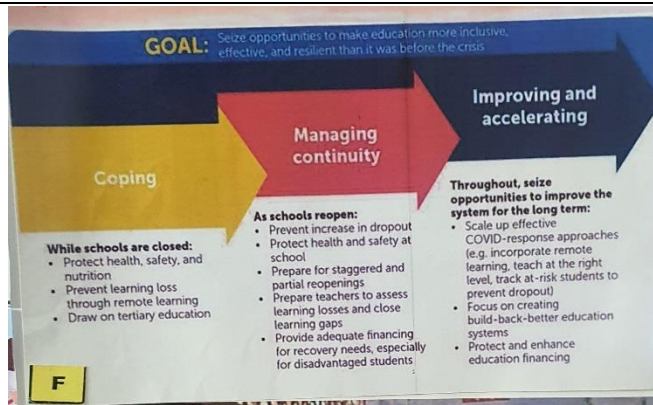
This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order



Figure 5.1. – Collage created by participant 1 – Sonu





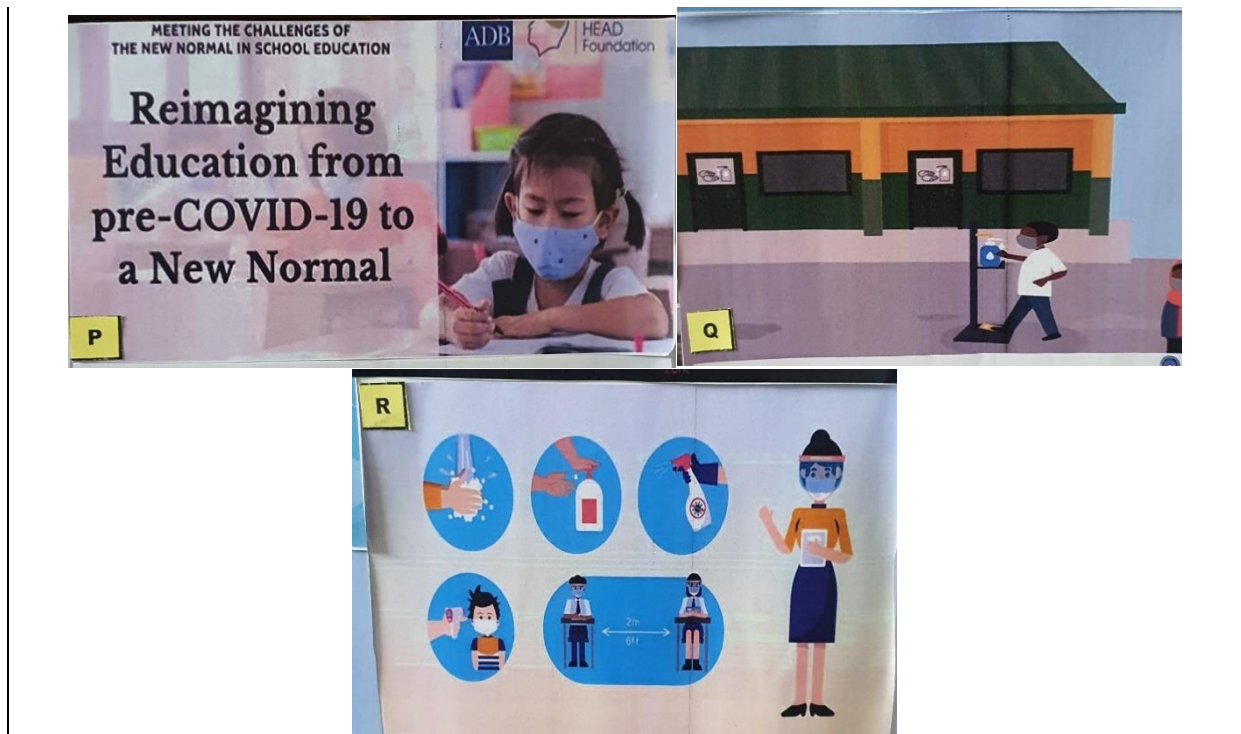


Figure 5.2. Specific pictures referred to by participant 1 - Sonu

Discussion on collage (write up):

Education has been hit hard by the Corona virus pandemic. My collage depicts in the education system before and after Covid-19. Some of the challenges that I have faced that my collage depicts:

Picture A outlines the “New Normal” that we have had to become accustomed to. It (Coronavirus) first seemed like a temporary emergency, but it has now become a new normal. A lot of schools were in a mix, one day we were all in school and the next day, the whole world was flipped upside down.

Picture B represents the halt this pandemic has had on attending school daily. This froze the entire education system as all educational lectures/classes were put on hold. Schools had to prepare, under pressure for the last minute “at home” learning. This transitioned overnight. Parents became the substitutes as “educators” and homes turned into classrooms.

Picture C shows one of the many changes made in the classroom. We now not only play the role of educators apart from the many others, but also health and safety officers. Having to ensure social distancing in and out of classrooms are one of the many protocols we now must manage daily.

Picture D portrays the soaring, turbulent and intense emotions that teachers have faced during this pandemic. This pandemic has not only affected the physical aspects of our lives but also the mental aspects of our lives. The pressure and expectations of teachers were already there pre Covid-19; this increased immensely post Covid-19.

Picture E outlines the already existing challenges in education. The Education department was already experiencing shortage of teachers. Currently, that challenge has surged to new heights. Due to Covid-19 many lives of teachers were lost, this increases the number of teacher shortages we have had. This means that there were already no teachers in many classrooms, now many more classrooms are left without teachers. This leaves a huge gap in the teaching and learning of students. The loads of other teachers' increase and therefore the pressure and expectations of us as educators do too.

Picture F describes the lack of timely government guidance. Unfortunately, no picture can clearly portray this. The Education system already had high demands in regard to curriculum/teaching and learning. Currently, due to the loss of teaching and learning time, a trimmed curriculum was provided, and we have had to ensure that education is more inclusive and effective now, than it was before the pandemic. The picture portrays how educators can support learners during this pandemic. Although this has happened, the demand expected of teachers continues and we, as educators fulfill all the roles that is expected from us.

Picture G unfolds the changes in education overnight. Learners have had to adjust to at home learning. Some schools were privileged enough to ensure that teaching and learning continued. Learners had to get accustomed to online learning/Zoom lessons. This disadvantaged the underprivileged learners as according to UNICEF "At least 1 in 3 schoolchildren had no access to remote learning during school closures". Whilst this may have benefited learners academically, this disadvantaged them socially. Learners' loss of interaction hinders on their development. They were isolated from their friends, peers/colleagues.

Picture H however, shows interaction, but a limited interaction. Now that we are back at school and adjusting to this lifestyle, learners still cannot be 'children' in the true sense of the word. They cannot play, hug, hold or touch their friends, near and dear ones. This also affects the development and mental health of learners. Learners cannot interact with each other.

Picture I shows life before Covid-19. Collaboration is now a thing of the past. This affects learners' developmental progress as working in groups or with partners plays a major role in social and academic development.

Picture J and O illustrates learner isolation. [A] learner's motivation to learn increases when working with partners, groups, or their friends. In this situation learners are de-motivated to learn or partake in activities. As I have stated in Picture I, this hinders the learner's academic and social development.

Picture K portrays the mental and physical exhaustion of teachers. Teachers now have many additional roles to their current burdened teaching load. Teachers have no break. We need to constantly be on our feet to ensure not only that learning continues but also ensure protocols are followed and supervision of learners. This results in strain on the delivery of lessons by educators.

Picture L indicates the halt that Covid-19 put on the world. The doors of every educational institute were shut. Traditional forms of education had to transition to something that became unfamiliar.

Picture M outlines the mental state of learners were being hindered. During this time, learners lost the most. Their academic needs were negatively implicated resulting in strain on the teaching and learning process. Covid-19 has also affected learners' mental ability such as anxiety which also hinders their learning process. Due to the fear and anxiety of being around people, learners are not fully concentrated in the class. They also go through separation anxiety from not interacting with their friends which is vital for social development.

Picture N represents the one-on-one teaching done by educators. This also makes teachers paranoid due to their already burdened load. Teaching learners individually results in time constraints to the teaching curriculum and leaves many learners behind as teachers focus strongly on an individual learner. Different learners have different learning abilities; in this case many learners are disadvantaged as their needs are not being effectively met.

Picture P outlines the adjustment in education due to Covid-19. It was a horrid adjustment as we were not prepared for this change. Currently, learners and teachers are still adjusting to this new normal.

Picture Q and R outlines the time taken out of instruction periods to reiterate Covid-19 protocols. This results in longer time for curriculum delivery.

Some of the other challenges that my collage outlines are:

Ensuring social distance, making sure learners wear masks, and are screened thoroughly before entering the classrooms, sanitizing constantly, assuring social distance, ensuring that all protocols are followed.

During this pandemic I have had to juggle teaching a full course-load to learners who come from all walks of life, facing different circumstances/situations, whilst also ensuring that the Covid-19 protocols were being followed. Whilst doing this, I have had to also consider that teaching certain aspects of the curriculum tend to take longer than usual due to the attendance structure.

As an educator, I have also lost personal interaction with my learners. As we go along, I will discuss the ways in which I have maneuvered through these changes and challenges. The pandemic has left some overwhelming consequences. My collage is a clear depiction of life pre Covid-19 and the changes that had to be made after.

5.3.1.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers' functioning within the unfamiliar order

The Corona Virus pandemic has had a major effect on our lives especially in Education. During the pandemic many of my challenges as an educator has been stressful, overwhelming, and emotional. Having to ensure social distancing and to keep away from our close ones not only made me feel isolated but also impacted towards stress and anxiety. Teaching during this pandemic emerged a lot of feelings in me such as fear, anxiety, worry, frustration and much more.

During the pandemic, my dedication and adaptability towards teaching, as with many other educators, have been tested in my efforts to provide a sense of normalcy along with maintaining and sustaining my learners' wellbeing whilst still striving for academic progress.

I have had to adapt to fit my new reality and shift my goal of teaching. I had to play many roles apart from being a teacher in the classroom. Teaching content to overwhelmed and scared, fearful learners is an ambitious endeavor. I've had to focus on what was controllable for my learners' future amidst a difficult teaching period. I have had to not only care for the physical well-being of my learners but also had to look after their mental well-being whilst also providing academic support for my learners. That act shows us that teaching goes well beyond the classroom.

A major issue during teaching through this pandemic is the shortage of teachers. Due to this, the load on us as teachers have increased and therefore the demands have too. This overwhelms me as I must meet the expectations of the Department of Education and the demands of the curriculum. The pressure that has been put on us as educators during this pandemic is unexplainable.

Furthermore, the hit that education has taken; leaves a huge gap in the lives of my learners. I have had to ensure that this doesn't leave my learners falling behind. Working under pressure to ensure that my learners reach their academic level of success is one of my ultimate goals during this pandemic.

Despite my best efforts I have still struggled to manage my classrooms and ensure learners learn. I've had my learners fall behind academically, worse than they were before the pandemic. I've had to constantly remind learners to follow protocols and ensure their safety knowing that these learners want to be around their friends to play, work etc. during this time I have had to ensure that curriculum was taught and followed whilst also making sure that learners are not left behind. This put immeasurable pressure on me as an educator.

Some of the ways in which I have managed to work around or overcome these challenges:

- *I have shared my experiences with other teachers/colleagues. This gave me the opportunity to share and learn about other teachers experiences as well.*
- *I give my learners who are falling behind the support that they need through learning recovery programmes (LSEN).*

- *I prepare myself for accommodating and protecting my learner's well-being whilst also ensuring that teaching and learning continues to take place in the classroom. I do this by making sure learners are sanitized and are using their masks before entering my classroom and making sure they are social distancing during instruction time I ensure discipline is maintained so that the teaching and learning process can continue.*
- *I provide more individualized approaches to learners who need it e.g. one-on-one. This has its advantages and disadvantages. Whilst I focus on the one learner in the class, my other learners are disadvantaged as they don't receive the individual attention they need. It is difficult for me to individually focus on my learners due to limited time and the class sizes.*
- *I create a safe and supportive interaction where my learners can express their emotions and experiences during this pandemic. This helps increase the concentration level in learners when they are reassured that they are in a safe environment.*
- *I include activities that will help my emotional, overwhelmed, and vulnerable learners. This is taking time out of me teaching the curriculum and focusing on my learners' well-being itself.*
- *I educate my learners on the seriousness of this pandemic. This motivates them to follow protocols, practice social distancing and proper hygiene.*

We are already a more than a full year into this pandemic, almost two years. The pandemic has really put teaching and learning to the test. When the Corona virus pandemic hit South Africa, it affected everyone regardless of their income, gender, nationality, religion, or level of education. It affected all the working environments and education was no exception. In my perception, education has been hit the hardest during this pandemic as it deals with the lives of our learners and the future generations.

Learners who are from privileged backgrounds and are supported by their parents could find their way past closed school doors using alternative learning opportunities such as zoom lessons. whereas in schools like mine, where learners come from disadvantaged backgrounds remained shut out when their schools shut down. This deprived the underprivileged learners as according to UNICEF "At least 1 in 3 schoolchildren had no access to remote learning during school closures".

The lockdown interrupted conventional schooling. Learners had to rely more on their own resources and learn through the internet or TV during this time. Some learners had no access to learning materials and therefore remained shut and disadvantaged completely. I have had to also adapt to the new teaching and learning situations for which many were not trained for example loss of instruction time. Some of the changes and ways that I have navigated through the changes as stated in my collage:

- *First and foremost, one of the major changes was adapting to the changes in the physical environment e.g. social distancing, sanitizing etc. We now not only play the role of educators apart from the many others, but also health and safety officers. Having to ensure social distancing in and out of classrooms is one of the many protocols we now have to manage daily. In order to adapt to the physical changes such as following protocols, class sizes are reduced to ensure social distancing is followed. This makes teaching smaller loads easier. Learners are sanitized at the beginning of every lesson. Learners' physical environment "the tradition classroom" changed and therefore altered their learning process.*
- *A change that hinders the learning process is the inability to utilize textbooks. This plays an important role in the learning process as learners rely mainly on information from textbooks. To make learning easier for learners during this time and for the protection (to prevent cross contamination) I went the extra mile and used a variety of resources to support my learners by making instructional packages, worksheets and term booklets. Unfortunately, as much as this is seen as a beneficial tool in containing the virus, it disadvantages learners who are unable to engage on their own with learning material. I was limited in providing support for these learners.*
- *Another transition to the school environment is collaboration in classrooms. Learners could not get into their groups or partner up with their friends to complete activities. This affects learners' social and academic developments. Human beings are social beings and therefore social interaction is required as a learning process. Unfortunately, due to Covid-19 this has become impossible. Learners are demotivated as they have to learn in isolation. A way that I have ensured that the learning continues in a safe and secure environment, I avoid tasks that requires (sic) large groups of learners and promote more full on class discussions where all learners contribute together and with each other while adhering to the protocols*

(this is the notion of the collaborative teaching methodology, just done in a way that embraces the protocols).

Pre Covid-19 classes were already filled to its capacity. This made ensuring the safety of our learners and protocols difficult. We could not accommodate for +40 learners in a class whilst ensuring social distancing. A way in which we have adjusted to this change is through different attendance strategies. Learners attend [in] shifts to reduce class sizes. In my school, we first started the alternate week model, recently shifting to the alternate day model.

- *Now that we are back at school and adjusting to the “New Normal”, Learners cannot interact with each other. Furthermore, in a classroom, learners now have to learn in isolation, making learning even more difficult than it already was. Each learner has a different learning ability and therefore are on different levels academically. I cannot sit individually with each learner ensuring he/she understands. Doing this means, loss of instruction time. I have to cater for the needs of my learners through my class lessons instead of individually. I ensure that all my learners have the opportunity to benefit from face-to-face teaching.*
- *The Education system already had high demands in regard to curriculum/ teaching and learning. Currently, due to the loss of teaching and learning time, a trimmed curriculum was provided, and we have had to ensure that education is more inclusive and effective now, than it was before the pandemic. Although this has happened, the demand expected of teachers continues and we, as educators fulfill all the roles that are expected from us. A way in which I have navigated through this is through cutting down of content, only important aspects were highlighted in the resources according to the trimmed curriculum. I have used various resources to check for sufficient content.*
- *The pandemic has also affected academic capabilities of learners. South Africa already had a high rate of learners who are disadvantaged and who were academically declined (sic). However, this pandemic has left lags in all learners in some way or the other. One of the developments I have ensured are catch up plans for the curriculum. Individual teaching outside of the instruction time (during breaks) and through intervention programmes (LSEN). Furthermore, I do not bombard and overwhelm my learners with the amount of content I am teaching. Rather, I work at their pace.*

- *My learners have expressed the difficulty and change in their learning environment. This is one of the most common complaints I have received. They had already been facing challenges for learning at home and now it has become an even more difficult task to do. The limitations on their learning environment hinders their learning process [for] example load shedding, noisy homes, distractions from learning, limited space to learn in. The rotational attendance model that schools have implemented (day in, day out) makes the situation even more grim as the learners complain that they forget their work by not attending school every day, and when at home, they do not get to study or complete tasks fully.*

To effectively support the development of my learners, I would have to have the knowledge of their cognitive functioning, including their emotional, social, and behavioural development. During this time, I used my knowledge of my learners' motivation and abilities to provide or create conditions in the classroom to promote self-motivation.

I decided on a general approach to teach my entire class that would cater for their learning needs and to support student learning in the most effective way I can. I give my learners more time allocated as per Department of Education to complete their tasks and assessments. As mentioned above, my priority during Covid-19 is not only to ensure that curriculum is taught and completed, but also so ensure the safety of my learners whilst also improving their academic capabilities (weaker learners). The pandemic is exacerbating pre-existing education disparities by reducing the opportunities for many children, the youth of our country as well as many adults, to continue learning.

Before the Covid-19 pandemic, South Africa had already been facing formidable challenges in fulfilling the promise of education as a basic human right. Pre Covid-19 an extra ordinary number of learners lacked basic reading skills. Currently, that number has drastically increased. The challenges were already daunting before the Corona virus pandemic.

The pandemic has created the largest disruption of education systems experienced. It has brought far reaching changes in all aspects of our lives with education being hit the hardest. Social distancing and restraining movement strategies have significantly disturbed traditional educational practices. Reopening education institutes (schools) after the relaxation of restrictions is another challenge with many operating procedures in place.

Pre Covid-19 the teaching and learning environment was that of a stable, secure, and safe environment for us teachers and learners. Learners were able to move about freely, work with their partners during activities and communicate freely and expressively through movement. Currently, living with Covid-19 the teaching and learning environment has been limited. Learners with a fixed mindset find it difficult to adapt and adjust to this environment of social distancing, sanitizing and mask wearing. Learners with a growth mindset adapt quickly to this new environment.

There is a variety of subjects with varying needs. Different subjects and age groups will require different approaches and strategies to learning. During Covid-19, these approaches and strategies have been limited. Where the conditions for learning at home were already limited, Covid-19 added more strain to these conditions.

Before Covid-19, schools provided a stimulating and enriching environment, learning opportunities, social interaction, and adequate nutrition and now these are compromised. This situation compromises their longer-term health development more specifically the learners who come from poor and disadvantaged families.

The pandemic has affected learners differently. Some learners may have made learning gains during this pandemic whilst others may have not as compared to being in the classroom. In certain cases, academic abilities were the same pre Covid-19 and during Covid-19. Pre Covid-19, South Africa was not delivering the quality education that was needed to ensure all learners have the skills necessary to thrive. Now, due to the pandemic South Africa has gone into a learning crisis.

The pandemic has introduced uncertainty for schools' [for] example the effects in learners. The pandemic has also left unequal opportunities for learning depending on whether the learners were able to get access to technology and parental support during the school closures.

Whilst more learners are back at school now and we adjust to our new normal, the collective shock the education system has experienced is ongoing. This unprecedented acceleration of education inequality requires new responses(actions). We are hoping that a more equal education system can emerge out of this pandemic. Covid-19 has disrupted the education system in South Africa. When the pandemic first hit South Africa, schools were required to shut down.

During this time a lot of schools went online. This posed as a challenge to the more disadvantaged schools like mine who could not ensure that learning continued during this time. Furthermore, many educators did not know what was involved in e-learning. Another encounter I faced during this time was having my learners adjust to a new learning environment. Whilst ensuring that my learners are being taught, I have had to also ensure that my learners were motivated enough to concentrate on learning/what was being taught.

Since the onset of this pandemic, educational leaders (teachers, principals, SMT, SEM) have tried to manage this situation we were in, but human infrastructure was not ready. I have faced many challenges in the teaching and learning environment during this pandemic. We have been slowed dramatically by restrictive laws and the establishment of social distancing, protocols etc.

I, as an educator, have had to maintain quality education for my learners at all levels amidst this pandemic. Being in the classroom does not reduce mine or my learners' risk of infection. If anything, it has increased as we all are enclosed in a room with little or no space to move around. While countries are at different stages or parts of their Covid-19 infection rates, South Africa's state of disaster seems to be worsening.

The effect Covid-19 has in schools varies among age groups and learner development. Whilst some learners may progress academically, some still have difficulties. As I have already stated in my previous responses, there are many more challenges in the teaching and learning environment and many ways I have dealt with them too. I have used a range of collaboration tools and engagement methods to promote teaching and learning in the classroom.

During the pandemic, teaching and learning approaches were reinforced. Learners cannot just sit passively and listen, it serves no one well. Furthermore, the protection and safety of our learners is harder to safeguard in the classrooms. The prolonged closure of education institutes/ schools due to Covid-19 transformed schools learning content. We have established specific priorities and emphasizes some subjects more than others in school curriculum example English CAPS amended. Different approaches were taken to ensure educational continuity.

Some of the challenges I have faced during Covid-19 and how I have embraced these changes:

- ✓ *Time limitations/constraints have had major impact on education during the pandemic. Pre Covid-19, as teachers, we already were trying to live up to the*

expectations of the Department and curriculum hopes. During Covid-19, although the curriculum has been adjusted, the pressure and expectations to complete syllabus still exists. I have embraced this challenge by using easier methods to teach, simplifying my activities, and using worksheets for learners. This makes it easier as I spend much less time writing on the board and more time teaching content.

- ✓ *Teaching and learning with masks present a new set of challenges not only for me, but also for my learners. when teaching with a mask, I am straining my voiced (sic) all the time. It also impacts on my ability to pace my lesson. Pre Covid-19, I could depict my learners understanding of content through facial expression, now I cannot tell if they are understanding or enjoying my lesson because their faces are masked. A creative solution to this challenge is to wear a visor. Also, to question learners to gather their understanding of the topic.*
- ✓ *Large class sizes have always been the most common problem in schools. However, during Covid-19, this has become an even greater issue. Pre Covid-19, I had already been teaching in classes of 40+ learners. [D]ue to Covid-19, this has caused classes to relocate or downsize. This reduces risk of infection but challenges me in a way where my lessons must be repeated. Learners who are taught days after may not be advantaged as they are lagging. A way in which I've overcome this challenge is that I have made work booklets which makes is easier for me to keep learners up to pace at the same time. It saves me time from constantly writing on the board.*
- ✓ *Social distance in classrooms. Although this has become a part of our so called "new normal", it still poses as a challenge. We have been instructed to ensure social distancing in our classrooms. This works only for periods of time, and it is difficult to enforce. A way in which I have conquered this challenge is through constantly reminding that learners must socially distance, leaving my classroom windows and doors open to ensure ventilation and explaining to learners the consequences of not following protocols.*
- ✓ *Teaching and learning levels. Covid-19 has deeply impacted the academic aspect of learners. [T]his makes it difficult for me to directly teach as learners are on different levels academically. It leaves the slower learners disadvantaged as they may not understand concepts in class. To accommodate for all of my learners I have used pairing of weaker learners with the more academically inclined learners and*

have also offered individual support during and after class time (non-teaching periods).

Teaching is restricted to the classroom. The time allocated in classrooms to teach is not enough as not only do we have to teach in the classroom but also accommodate for learners who are not present in class (online learning/work packs). This itself proves that a teacher's job goes way above and beyond the allocated teaching time. I have ensured that all my learners are not behind and that they all have the work required for them to practice activities/tasks.

- ✓ *As I have already stated in my collage, the Education department was already experiencing shortage of teachers. Currently, that challenge has surged to new heights. Due to Covid-19 many lives of teachers were lost, this increases the number of teacher shortages we have had. This means that there were already no teachers in many classrooms, now many more classrooms are left without teachers. This leaves a huge gap in the teaching and learning of students. The loads of other teachers' (sic) increase and therefore the pressure and expectations of us as educators do too. Unfortunately, this is a challenge that cannot be solved due to the circumstances in South Africa.*
- ✓ *The Education system already had high demands regarding curriculum/teaching and learning. Presently, due to the loss of teaching and learning time, a trimmed curriculum was provided, and we have had to ensure that education is more inclusive and effective now, than it was previously to the pandemic. Although this has happened, the demand expected of teachers continues and we, as educators fulfill all the roles that is expected from us.*
- ✓ *As I have specified in my previous responses, collaboration in classrooms is now a thing of the past. Learners cannot get into their groups or partner up with their friends to complete activities. This disturbs learners' social and academic progresses. Human beings are social beings and therefore social interaction is required as a learning process. Unfortunately, due to Covid-19 this has become impossible. Learners are de-motivated as they have to learn in isolation. A way that I have ensured that the learning continues in a safe and secure environment, I avoid tasks that requires (sic) large groups of learners and promote more full on class discussions where all learners contribute together and with each other while adhering to the protocols (this is the notion of the collaborative teaching methodology, just done in a way that embraces the protocols).*

- ✓ *A challenge that my learners have expressed is the difficulty and change in their learning environment. This is one of the most common complaints I have received. They had already been facing challenges for learning at home and now it has become an even more difficult task to do. The limitations on their learning environment hinders their learning process [for] example load shedding, noisy homes, distractions from learning, limited space to learn in. The rotational attendance model that schools have implemented (day in, day out) makes the situation even more grim as the learners complain that they forget their work by not attending school every day, and when at home, they do not get to study or complete tasks fully. I have ensured that my learners have a study plan and ample time to complete tasks in class. They have notes to go over on their day off school so that they remember what was being taught.*
- ✓ *Learner concentration levels in certain cases were very poor. Due to Covid-19, learners are now spending more time at home. This results in reduced physical activity, poor diets as some learners living conditions does not allow them to get the proper nutrition that they need, increased levels of anxiety and in special cases, exposure to domestic violence. In such situations, schools normally provide a safe haven for learners living in those circumstances. Now learners are without that protection hence they come to school disturbed and therefore cannot give off their full attention. The school NSNP helps in providing proper nutritional meals for learners which eradicates that challenge only when learners are in school. Additional support for learners is provided by me. I ensure that my learners know that they are on safe grounds and get the counsel that they need to overcome the situation that they're in. This allows my learners to be able to concentrate better in the class where I can grasp their full attention.*
- ✓ *Increase in teenage pregnancies during Covid-19. Although this has been an issue of the past, there has been a spike in teenage pregnancies during Covid-19. Learners are kept at home on most days and therefore, this occurs. This results in learners either dropping out of school or being absent on most days. Although this may not seem like a challenge, it leaves the pregnant learner lagging as she misses out on instruction time. Lessons cannot be repeated if a learner is absent. This also increases the dropout rate in schools. A way that I have yielded this challenge is on education my learners more on teenage pregnancies, ensuring that they are*

academically occupied when they are at home. This will reduce the high pregnancy rate.

During this pandemic I had to juggle teaching a full course-load to learners who come from all walks of life, facing different circumstances/situations, whilst also ensuring that the Covid-19 protocols were being followed by myself and my learners making school a safe and secure environment for us all. Whilst doing this, I have had to also consider that teaching certain aspects of the curriculum tend to take longer than usual due to the attendance structure. I have had to adapt myself according to time and content being taught and safeguarding protocols are followed.

As a teacher, I have also lost personal communication with my learners. As we go along, I will discuss the ways in which I have maneuvered through these changes and trials. The pandemic has left some overwhelming consequences in educational institutions.

Rotational attendance, sporadic school closures and days off for specific grades has resulted in the loss of learning time.

Returning to schools means producing inclusive classrooms and shielding my learners. Just like any social environment, schools are also rife with challenges such as discrimination, harassment, misconduct, and abuse. These challenges heightened as teachers have had to deal with the stressful challenge of returning to school amidst the pandemic.

After the lockdown and school closures ended, many learners have not returned to the classrooms. The return to school did not only introduce anxiety to teachers but also to learners and parents. Parents are worried and concerned that their children may become infected with the Corona Virus whilst they are at school, and educators fear for their own health.

To accommodate for learners, the school I am at has taken the rotational day model (day-in, day-out). Class sizes have also been reduced to ensure that social distancing is made possible.

Taking the daily attendance and monitoring learner absenteeism is absolutely essential during this pandemic. When my learners do not show up at school it is an indicating factor that the positive learning conditions are not in place for learners. At the onset of this pandemic, when schools first opened again, the attendance rate was absolutely poor. Many learners did not return to school. This left many learners lagging. Thereafter as the adjustment to living through and with this pandemic became a part of the new normal, many learners returned to school.

Covid-19 has impacted and affected learners differently. Some learners may have gained academically, some learners may have lost or deteriorated academically whilst some learners may have stayed on the same academic level that they were on, before Covid-19. When the pandemic hit South Africa, online teaching became a new phenomenon. This posed as (sic) a challenge for both learners and teachers. During this time, the academic performance of weaker learners, in cases where they had no parental support, weakened/decreased drastically.

There are many factors that are linked to learner performance such as: learner-teacher interaction; learner-learner interaction; education quality; self-efficacy and the learners learning process. During the Covid-19 pandemic many learners experienced their first attempt towards online teaching therefore their understanding and performance can be significantly measured.

As I have stated previously, the pandemic has affected learners differently. Some learners may have performed better whilst others may have performed worse or stayed the same. Regrettably, the pandemic has affected greatly almost all educational levels in different contexts. There has been significant impact on academic performance during the Corona virus outbreak. At the start of Covid-19, the academic performance of learners decreased drastically. Currently, as we have adjusted to this new way of living, the academic performance of learners seems to be stabilizing and getting better in most cases.

In certain cases, learner performance has lowered or stayed the same. Learners who were struggling pre Covid-19, may still be struggling as the same support that was given to them, cannot be given now due to Covid-19.

In order to meet and cater for the needs of all of my learners, I have adjusted my lessons and use strategies in my classroom where no protocol can be broken. I ensure that all my learners understand the content of the lesson whilst also ensuring that protocols are followed. In cases where my learners are still struggling (weakest learners), I provide individual support to that learner or those learners in my non-teaching periods. During the pandemic, class sizes are smaller, which makes it easier to manage learners academically and also with following the safety protocols. However, outside of the classroom, this becomes more difficult to manage. As schools reopened it was important to ensure that teaching and learning goes on but also to make sure that precautions are taken both inside and outside of the classroom.

As a teacher, I have had to ensure that my learners will be able to continue their education in a safe and healthy environment. In my point of view, no two learners or even families have been affected by Covid-19 in the same way, but all still need the support of their teachers. Many learners respond to the pandemic experience by showing different changes. Some may have changed in good ways whilst others may show abrupt changes [for] example sleep routines, weight, behavior, participation, and performance. I have observed regression (deterioration) in a learner's behavior. Learners may be withdrawn, aggressive, quiet, clingy, [show] delinquent behavior, [and] they may experience problems concentrating or becoming agitated easily.

The ways in which I have navigated through these emotions or behavior is:

I have continued to support my learners through:

- *Showing care and concern by noticing these changes*
- *I do not push for information or ask pointed questions*
- *I have done check-ins with my learners' parents or guardians where there was a concern*
- *I do not ignore concerns or minimize what has happened*
- *I lend an ear to my learners. I let them know that they can talk to me*
- *I reassure my learners and let them know that they are safe in my care*
- *I encourage my learners*
- *I do more listening than talking when need be*
- *I provide opportunities for my learners to express themselves*
- *I keep to routine as much as possible*
- *I do not recount traumatizing details of events in special situations*
- *I refer my learners if I feel further help is needed example referring them to a social worker*

Another way in which I navigated through these changes, was the employment of Education Assistants, General School assistants and the reading champion. These opportunities assisted educators in making the load lighter, ensuring protocols were adhered to and offered assistance in the classroom such as working individually with a weaker learner, passing of materials etc. A screener was also employed to check temperatures, sanitize and ensure social distance. In my school, we have a health and safety officer to ensure that social distance is adhered to and learners' masks are on during breaks. Additionally, educator assistants played

different roles, such as a psychologist assistant [who] offered assistance with learners who were struggling mentally or psychologically.

During this pandemic, each method of conducting classes brought about its own challenges, especially for us teachers. Teachers who do remote teaching will have had to build class culture and routines with learners whilst teachers in school buildings needed to figure out how to adapt their instruction time, shaped and constrained by their physical environment. During this time, challenging my learners with cognitively demanding work, and providing them with support when and where it was needed, has been more important than ever.

5.3.1.3 Structured interview

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

○ Sonu:

“There are many implications of Covid-19 such as:

- *Trimmed curriculum*
- *Learners are behind*
- *Loss of teaching and learning time*
- *Learning gaps in the future*
- *Change in the teaching and learning environment*
- *Learning lags*
- *Learner learning outcomes*

- *Higher dropout rates*
- *Lower grades*
- *Assessments were cancelled which shows learners' progress. This delays the recognition of high potential and learning difficulties and therefore has long-term negative effects on the learner.*
- *I also believe that the foundation phase learners (Grades R-3) have been most disadvantaged as they were phased in towards the end of the staggered phase in approach as they lost a lot of teaching and learning time since the start of the pandemic. Although learners were expected to return to school, the main focus was not on curriculum as they had to adjust to the new environment. From my experience, I noticed that these learners required a lot of time and practice just to get used to the new norm in teaching and learning during Covid-19. This resulted in a shift of focus from teaching and learning to learning how to function during a pandemic in a school environment. Therefore, this loss of teaching and learning time will inhibit their developmental growth and performance in higher grades."*

2. Research: What do you think can be done to overcome these implications?

Sonu:

- *"Extra classes for learners who are behind*
- *One on one teaching*
- *Teach only content that is beneficial to learners*
- *Try to create an atmosphere conducive to education/learning*
- *Have frequent communication between learners and parents to discuss progress*
- *Give learners the opportunity for synchronous or asynchronous discussion in the classroom*
- *Figure out where gaps may prevent learners from understanding content taught*
- *Use formative assessments to figure out where learners may need the extra support*
- *Give feedback in the context of lessons, only if learners need a quick reminder or the concepts refreshed*

- *Work with learners who need additional support*
- *Establish a routine with learners that can be followed through different educational programmes [for] example television*
- *Encourage learners to ask questions*
- *Start shorter learning lessons and make them progressively longer.”*

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Sonu: *“Lower pass rates lead to poor results so learners exiting secondary education may not be accepted to meet the requirements of tertiary entrance education as they do not achieve the required results. Also, [a] shortage of teachers leads to classes being disadvantaged that are not taught. These increases learning lags. Learners without teachers will miss out on curriculum being taught.”*

5.3.2. Participant 2- Mandisa

5.3.2.1. Collage

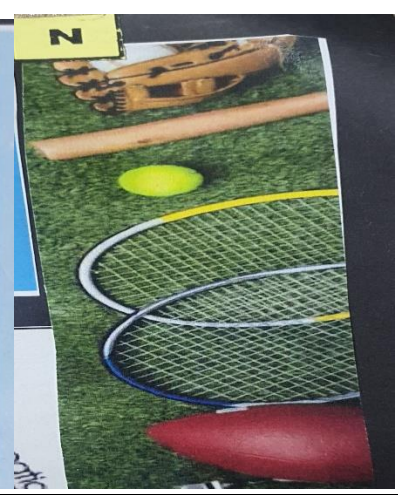
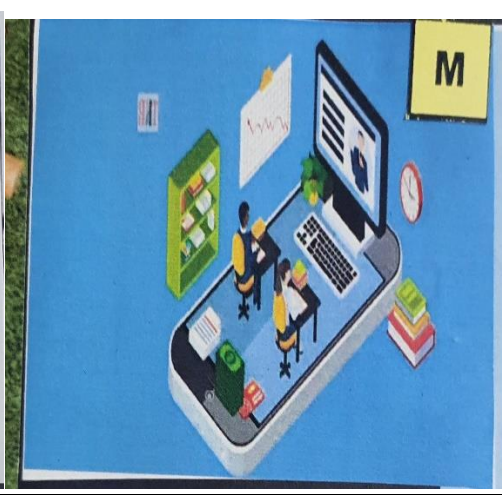
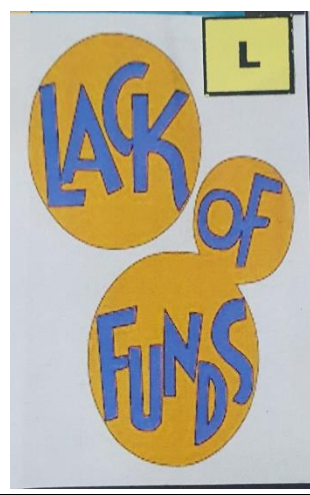
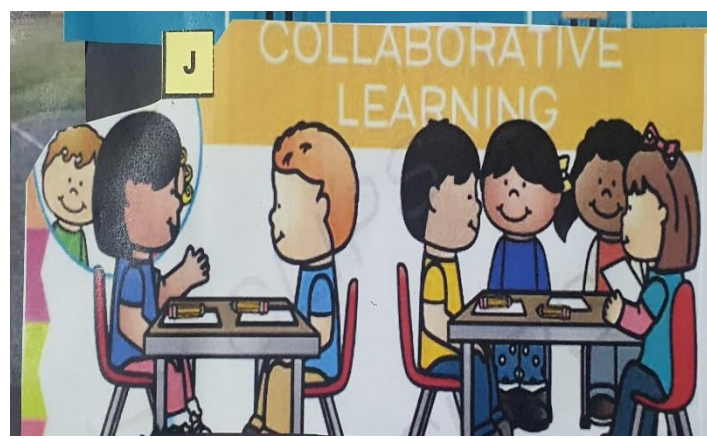
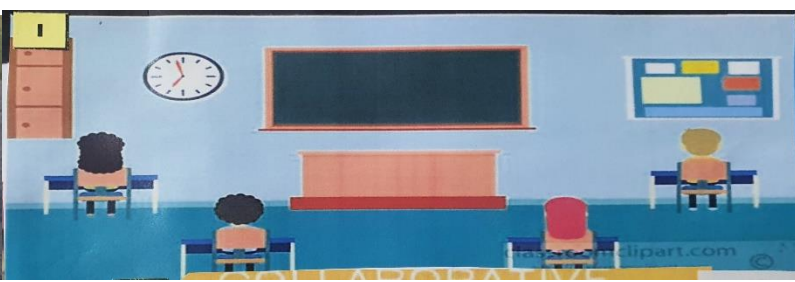
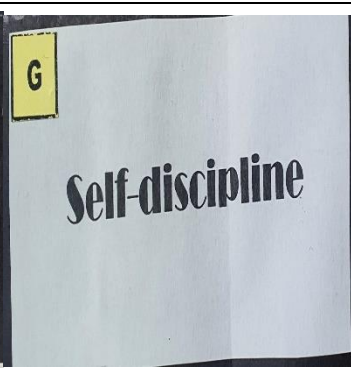
This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order



Figure 5.3. Collage created by participant 2 - Mandisa





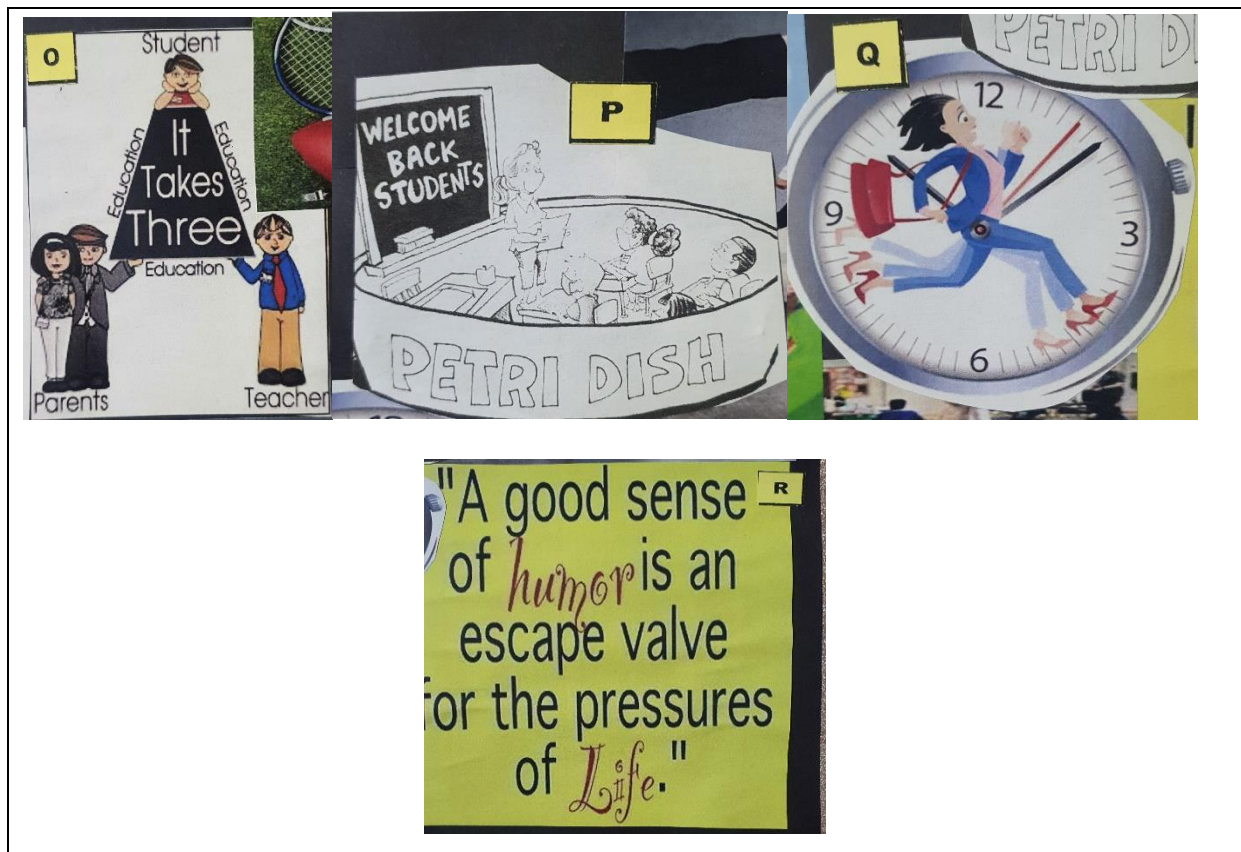


Figure 5.4. Specific pictures referred to by participant 2 – Mandisa

Discussion on collage (write up):

Picture A: “The word “resilience” is here at the top and centralised because it describes a teacher’s job at any given time. We are always faced with difficulties which we have to overcome. As per **picture B** I’ve used the quote “All are teachers, all are learners” to show that teaching is a dynamic process, and, as a teacher, you never stop learning. We’ve had to find new ways to deal with the changes schools face.

I’ve included examples of pre and post Covid-19 greetings in **picture C**. Mornings would usually be filled with smiles, hugs, high-5s and special handshakes but these have been replaced with socially distanced greetings. As per **picture D** The morning routine of screening also contributes to a more sombre atmosphere as opposed to the relative freedom learners had upon entering school.

I’ve included pictures (**picture E**) about Covid-19 protocols because school rules have to now include wearing of masks, social distancing and regular washing of hands. I used the words “what are the rules?” (**picture F**) since sharing used to be a fundamental act of kindness that

we encouraged. Now we are asking learners not to share, which could be quite confusing to younger children.

The word “self-discipline” (picture G) is included because learners are showing more awareness to COVID-19 protocols and are adhering to the rules. They are taking responsibility for themselves. Discipline itself has improved in that there has been a drastic reduction in fights & scuffles between learners. This could be attributed to the low numbers of learners & social distancing.

The words (picture H) “school’s closed” were included since these words have been used so often for the past 2 years as the infections in schools rise. Along the same lines, a picture of an abandoned school was included. Learners are grouped and each group attends school on alternate days so the number of learners on any given day is lower than pre-Covid-19. Learner attendance is very poor, so schools look abandoned.

Picture I portrays overcrowded classrooms were a problem pre-Covid-19. Now learners are grouped and spaced out. This provides for more individualised attention, but the banter and exchange of ideas isn’t as lively as before. With majority of learners having learning barriers, collaborative learning was a popular method of teaching. Now learners aren’t able to participate in group work or be involved in peer teaching (picture J)

Picture K describes the lunch breaks. Lunch breaks were an eventful time, with endless stories laughing, running, and playing. You would see learners enjoying time with friends and even making up games. Now learners are seated and quieter. It doesn’t look like they are having as much fun as before. However, there are less disciplinary issues than before.

Picture L: The words “lack of funds” is included to show that Covid-19 has exacerbated the already existing problem. School fees were only paid by a minority of parents. Monies were raised through fund raising initiatives. Now parents have either lost jobs or have developed the attitude of not paying since their children are hardly in school due to shutdowns or lockdown, so schools are losing income. Schools are also reluctant to fundraise in an attempt to avoid a Covid-19 outbreak. With the little income, schools are battling to pay SGB employees and general maintenance. There aren’t enough funds to buy needed resources. Learners used to share textbooks and now are unable to. Worksheets need to be made but it is costly to buy ink, stencils and paper. Schools and many learners themselves do not have access to computers or tablets to make digital learning a viable option.

*The picture (**picture M**) showing various digital equipment indicates our reliance is now more on digital means of teaching. This has changed from traditional methods of teaching. But as stated above, this poses a difficulty since not all schools and learners have access to these resources. The picture (**picture N**) of the sports equipment shows the lack of sporting activities. Normally learners would share the limited equipment & participate in team sports, but we are unable to share equipment. This is sad since learners looked forward to outdoor activities and it was a chance for learners who aren't academically inclined to shine.*

***Picture O** shows the important role parents play in their child's education. Pre-Covid-19, it was difficult to get parents to assist their children with work or even attend parent meetings. Now due to learners staying at home more, with work being sent via booklets or digitally, the role of parents (of lack thereof) in their child's education is drastically highlighted.*

*This picture (**picture P**) that says "petri dish" was used because before most people went back to work after the first lockdown, children were asked to go back to school. The virus was fairly new and not a lot of data available so it felt like an experiment was being conducted to see what would happen and how school opening would influence the infection rates.*

***Picture P** is related to the picture on the right which is showing a leader pointing employees in a certain direction which they enthusiastically follow but only to their demise (indicating failure in context). It feels like teachers are being told what to do but leaders do not seem to understand the obstacles we fail which cause us to hit dead ends. We were given a trimmed ATP which is still too long considering that there are many assessments, a learning gap that is growing larger and poor attendance. Circulars are being sent at the last minute after a considerable amount of preparation has begun to fulfil the original directive given. (Home study alternatives/cancellation of testing programme). Furthermore, the announcement that all learners were to return to school as the 3rd wave was in effect was a difficult decision to heed considering many schools do not have enough manpower or space to accommodate social distancing rules.*

*The clock (**picture Q**) symbolises time constraints teachers are faced with. It was difficult to complete the syllabus and assessments timeously in a normal school year. More so now with poor learner attendance and schools being shut due to Covid-19 outbreaks. Lastly, humour (**picture R**) helps me personally to deal with difficult situations and it's something I bring to my classroom. Having a sense of humour certainly assists to ease the anxiety the learners (and I) may have. I used black cardboard to symbolise that even though we have to carry on with*

our daily tasks, the daunting reality of Covid-19 always looms in the background. I used glitter tape around to show that there is always a silver lining to every cloud. As I mentioned at the beginning, teachers are resilient, and we find ways to overcome challenges we are faced with. It's in our nature to look for solutions.”

5.3.2.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers' functioning within the unfamiliar order

“When schools were first faced with the pandemic, there were a lot of uncertainty as to when schools would reopen. It was also frustrating that PPEs were delayed, which further added to the uncertainty of schools reopening. It was disheartening and worrying when schools were closed because valuable teaching time was lost. Also, many learners rely on the nutrition club for their meals. When learners returned, I had to be more understanding of the fears and anxieties they may have (some learners may have lost close family members, or their parents may have lost jobs) while at the same time dealing with my own uncertainty and trying to separate the facts of the pandemic from fiction. I tried to allow learners time to express their thoughts and feeling; and reaffirming that following the Covid-19 protocols assists in keeping everyone safe.

With so much teaching time lost, lessons have to be watered down and rushed through, so it feels like there isn't justice being done on a lesson. Screening and sanitizing is a time consuming task and the time constraints constantly puts one under pressure. It is difficult to learners with certain barriers because you need to work closely with them in order to teach. This hurdle has urged me to constantly try new methods of teaching that would be beneficial

while still adhering to Covid-19 protocols. I have had to come to a point of understanding [of] what is in my control and what is not.

I navigate the changes (as expressed in my collage) through the following ways:

The new greetings and classroom rules (pictures C, E and F): *I reinforced these daily either verbally or by using charts and role play activities or games*

Learners are seated quietly and in isolation during lunch breaks (picture K): *I encouraged learners to exchange ideas of fun, creative and interesting things to do. They can get to know each other's likes and dislikes- which they can turn into a quiz or game. This was done in small groups that adhered to the Covid-19 protocols.*

Smaller number of learners in classrooms (picture I): *This was beneficial to a certain extent as this allows me to dedicate more attention to learners individually and to try a differentiated curriculum with learners that have barriers.*

Lack of funds (picture L): *Reminders are often sent to parents during this time. More non-contact means of fundraising are attempted. For example: Civvies days.*

Lack of sporting activities (picture N): *I try to incorporate non-contact activities like aerobics and yoga.*

More parent involvement (picture O): *I try to engage with parents to explain their role and give them tools to help them to assist their child whilst being at home.*

Time constraints (picture Q): *I try to at least complete the necessary core aspects that will enable learners to grasp the topic and build on it later, if time allows.*

There are a few differences between pre-Covid-19 and during Covid-19 in the teaching and learning process. These include:

Pre-Covid-19:

- *Classes were overcrowded.*
- *Learners were able to share textbooks or other resources.*
- *Group work and peer tutoring to assist learners who struggle to grasp concepts.*
- *Many disciplinary issues had to be resolved during class time (bullying, theft, etc.)*

Post Covid-19:

- *There are fewer learners in class. This has allowed me to dedicate individual attention.*

- *This has certainly helped learners who normally struggle to complete work on their own.*
- *Unable to share textbooks and resources. I had to make more worksheets.*
- *Individual attention has helped. I am also constantly trying to find new ways to teach during this time.*
- *Less discipline issues which allow for more time to teach.*

Some of the challenges faced during this time are that we are unable to use textbooks, so more worksheets have to be made. This is costly and time consuming. I am unable to do group work. Other forms of teachings are used and sought. Fewer learners so the responses are not always lively. It is difficult to build on ideas in a lesson if nobody is responding. Especially since learners are using masks. It is difficult to decipher when they speak.

Since the beginning of the pandemic, learner attendance had fluctuated constantly. Currently (in the midst of the third wave) learner attendance is very poor. The learners that do attend are still taught and work is set via WhatsApp to those learners that are at home.

Some learners have also had to move away due to parents losing their jobs.

Learner performance has fell notably. I have had to lower the standards of lesson and even testes (sic). Levels of questioning are limited to mostly level one and two questions. Learners had missed half of the year of the previous grade and are still not being taught at full capacity, so the learning gap is big and getting bigger. Apathy and laziness that sets in from having no routine at home shows in the performance during class activities and tests.

With regards to the management of learners during Covid-19 in accordance with the health protocols... keeping in mind that I am reflecting on fifty percent of the school capacity. Most learners have shown an increased awareness of themselves and their surroundings. Besides being time consuming, screening and sanitizing are done effortlessly since learners follow the process on their own without constant reminders. In places where there aren't indicators, learners find it hard to keep the appropriate distance. Masks are generally well worn albeit with minor issues (loose elastic or elastic cuts)."

5.3.2.3. Structured interview

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Mandisa: *“I believe that Covid-19 is a disease that we have to contend with just like the other existing viruses. We have to follow the protocols laid out and continue with the tasks assigned to us. Schools need to accommodate all learners by providing more teachers so that class numbers can remain small and there is enough manpower to assist with the screening and sanitizing. Schools need to move toward digital learning. More non-contact methods of teaching and learning need to be applied.”*

2. Researcher: What do you think can be done to overcome these implications?

Mandisa: *“The Department of Education can provide financial assistance to schools. Also, parents should pay school fees. The income can be used to purchase necessary resources. It will be really helpful for the Department of Education to employ more educators.”*

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Mandisa: *“I think the learners are being disadvantaged and there will be serious learning lags in the future.”*

5.3.3. Participant 3 – Danny

5.3.3.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school	To explore the changes experienced by public-school	The unfamiliar order

teachers in teaching and learning during the Covid-19 pandemic?	teachers in teaching and learning during the Covid-19 pandemic.	
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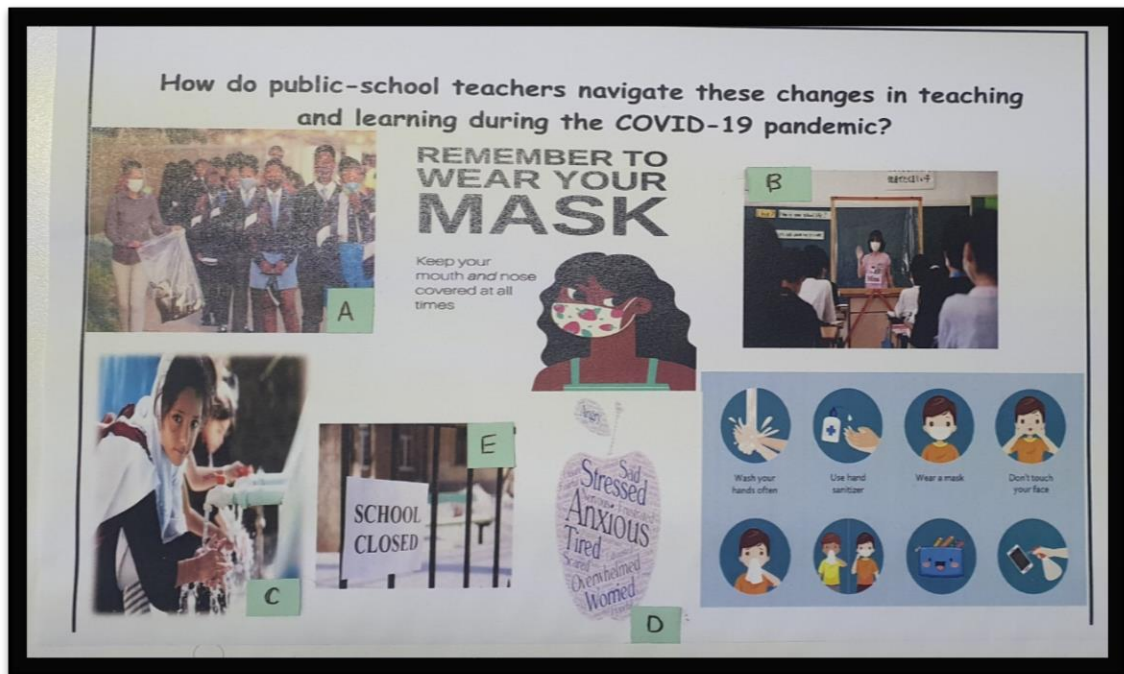
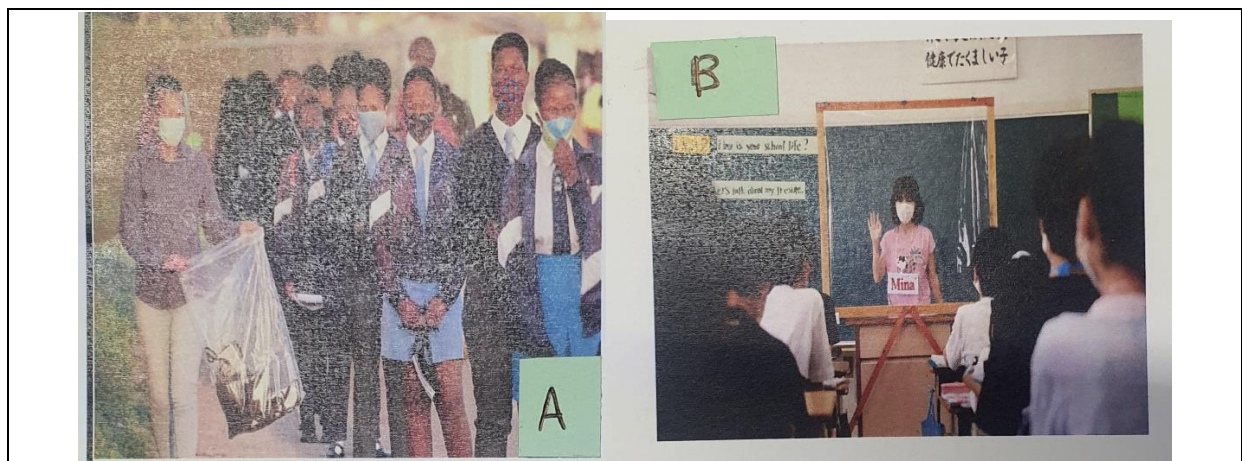


Figure 5.5 Collage created by Participant 3 Danny.



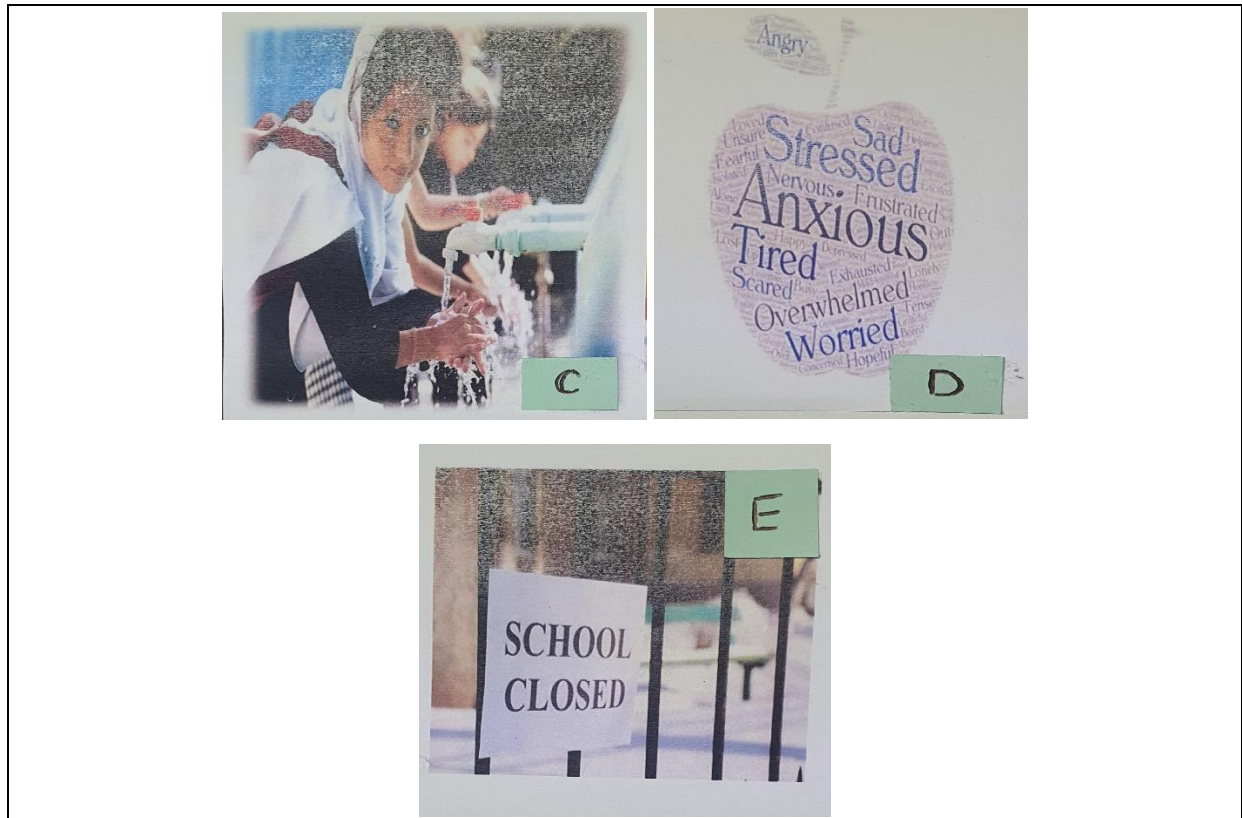


Figure 5.6 Specific pictures referred to by Participant 3 Danny

Discussion on collage (write up):

“During these times of uncertainty, teaching and learning as we know it traditionally to be, has changed. Learners and teachers now must wear mask for their own and others protection whilst learning and teaching. In the first image (picture A), we see a line of learners and an educator/assistant handing out mask[s], this image shows what occurs every school day morning as learners line up to have their temperature checked. Further to this, this impacts on teaching and learning at my specific school has (sic) learners are always pitching up late, therefore this process minimizes teaching and learning in the first period.

The second image (picture B), which is the educator standing at the front has a deeper meaning. As an educator teaching during a pandemic, I have a personal fear of getting too close to my learners, traditionally this would occur when assisting with work, giving instructions, etc. This fear steams from contracting the virus or passing it on to my learners. Now, as we are over a year into the pandemic, I stand at the front of the class, minimizing my movement, and I feel this has a negative effect on teaching and learning, especially to my weaker inclined learners that may need my personal assistance.

*The image (**picture C**) of the girl washing her hands, speaks about time made and encourage[ment] during teaching and learning to continuously washing (sic) of hands. Although this is something that is important and a must, it does cut into teaching and learning time as learners are continuously leaving the classroom, and when they return, there is a disturbance as they are asking around what they have missed whilst outside.*

*The apple shaped image (**picture D**) with the phrases on them are common emotions for learners and teachers during this pandemic. We arrive at school in fear, for our lives and the lives of our learners. We constantly have a worry of whether today will be the day we contract the virus or hear news of one of our learners that have it. We are also angry as educators when protocols laid out by the DOE forgets that we are humans and have no compassion for us such as disinfecting schools timeously when cases are identified. We as educators are tired and overwhelmed by the increased workload that comes with the pandemic. There is more administration work added to our increased teaching loads. The phrases used on the collage, are common phrases, or remainders (sic), for learners and all teaching staff that the virus is still around, and we should always have our guard up to protect ourselves and those around us.*

*The closure of schools (**picture E**) during the first wave of Covid-19 (March 2020) has had negative impact on teaching and learning which we are still feeling the consequences of the lockdown. During this time, learners were home, as the school I teach at is under resourced and we serviced a semi-rural community, we had no means of holding online classes with learners. The application of WhatsApp was our only means of contact with our learners. Although this was some means of communication, it still leaves huge gaps in the curriculum coverage, especially with senior learners, grade 10 and 11.”*

5.3.3.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers' functioning within the unfamiliar order

“Teaching during a pandemic is very emotionally, physically and mentally taxing. Every day is an educator, I live with fear of contracting the virus. I would be so anxious to step into a classroom, always aware of what I am touching and how close I am to a learner or fellow colleague. Each time a teacher had tested positive, alarm bells would go off in my head questioning, when is my turn?”

As a school we worked on a rotation basis for learners, this had an impacted our teaching periods per week. There are days we do not have a free period, plus the added break duty. I do not have time to sit, gather my thoughts for what I am supposed to teach and what I still need to get done with regards to preparing myself for my lessons. Learners are also form[-]based therefore, we are walking class to class. It is physically exhausting as I have to carry so much of resources around such as textbooks, etc. It takes away the comfort of having all teaching and learning resources in my classroom which was easier to have access to when needed to enhance lessons.

The idea of extra lessons after school instantly freaked me out, as I had to be in a place that I had this growing fear of contradicting the virus. I feel all these facts have drained me as an educator. Truth be told, I am not as motivated as I was pre-covid. I feel I have lost that edge of eagerness to give off my best due to the fear instilled in me.

To navigate through of all I mentioned above, I had to do a lot of self-reflection and ask myself the burning questions, to be the best for myself and my learners. I had to learn to be strong, mentally, to overcome all these challenges given to me as an educator. When learners looked

to me for emotional support during these difficult times, I would have to calm the situation and help put their fears at rest rather than add fuel to the fire. I have also learnt to accept we are going through a pandemic, and it is okay not overwhelm myself with all [the] task[s] in a day and learn to priorities (sic) what I need to do in a list of most important to least. I have also learnt to accept help from fellow colleagues when I need to and not solely rely on myself to get everything done.

Teaching and learning during a pandemic have really forced me out of my comfort zone as an educator. I had to learn fast how to embrace the new normal. Learners would complain about not been able to hear me, as humans, we have grown to look at the movement of the mouth to process information. To this challenge, I would have to instantly become louder, and give instructions, teach content slower with the aid of writing down the main points on the chalkboard, as this would help my learners have a clearer understanding of what I was saying.

Covid 19 has really robbed teachers and learners of individual teaching and learning, especially to learners that take a bit longer to process new content. As I have a fear of getting too close to my learners. I have made an effort to teach the entire class and those that do not understand or are lost during the process of learning, I stand in their direction and focus my attention and eye coordination (sic) to them to help them create a better understanding of the content I am teaching.

As an educator I had to learn quickly on ways to embrace the new era of teaching and learning as we are no longer form based but are walking around the school, which limits the use of resources as we would have in our form class. As it is tiring to carry a whole lot of textbooks, I write the notes on the chalkboard and use my cellphone to take a picture of the notes. This helps in the process of limiting the carrying of textbooks and limits the amount of touch of textbooks by learners. Once I have the notes, when I walk into the next classroom, I just simply write it out on the board.

As a school we have implemented the rotational basis, because of the limitation of time, I have created WhatsApp groups for my learners from various grades and subjects. I post important information into those groups to assist learners on the days they are not at school. It is also used as a tool to form healthy relationships with parents to get and receive updates about learners.

Prior to covid 19, each classroom would have a minimum of 50 learners, which was a lot and did not able myself as a teacher to give weaker learners individual attention, as I had to

maintain discipline in the class as a whole. One of the positives of covid 19 is the reduction of class size, as there are now a maximum of 25 learners in a class. The adjustment has been pleasant as I have more room in the class and are (sic) more able to give weaker learners individual attention, whilst still maintaining a distance.

As a school we do not have enough textbook for every learner and the touching of textbooks have been limited, I have improvised by making learners photocopied booklets for them. This is also a positive effect as learners now do not need to hand in the textbook at the end of the lesson but have their own booklet to revise on days they are not at school.

Prior to covid 19, teachers were form based and I was lucky to have a class that has a white screen, so I was able to make use of my personal projector to enhance my lesson by playing YouTube videos to help learners create a better understanding of content. During covid 19, we are no longer form based, as I am unable to use this teaching strategy. Given the current times, I have adapted the teaching strategy by playing videos off my cellphone and through the sound bar, however this does not give learners a clear visual presentation as my cellphone is small, but it still does expose them to YouTube videos based on the content.

Prior to covid 19, I would not allow the usage of cellphones in the classroom as I felt it distracts learners from the lessons, especially Grade 10 – 12. However, during covid 19, I find myself encouraging the use of cellphones in the classroom, as there are so many useful applications for learners to use to enhance their learning. I now find it acceptable to use the cellphone to research topics in the class as we are fighting a battle of time, so using the cellphone in class, gives me a faster turnaround time to collect research assessments.

The main challenge I find in learning and teaching is the language barrier. As I am an English medium speaker, 90% of learners in my classroom, English is their second language. Also, they fairly understand what I am saying, I feel they are not able to comprehend fully what I am saying and also fail to express what they don't understand. I have encouraged group work amongst learners prior to covid 19, however during covid its unsafe for learners to work in groups. I have rearranged their places by placing a higher achieving learner amongst weaker learners, so they feel the safety net of having someone close by who can understand them, I have really seen this build confidence amongst learners.

As the administration burden has increased due to our school been classified as underperforming and to top it off with covid 19, there has been a large increase in administration work. This eats into my teaching time, as I have to record everything that is

done in the classroom. To make it easier for myself, I have created a file on my cell phone where I just enter the details of my day, as opposed to walking around the school with a lot of files.

Another challenge is the lack of planning from my side, as things are so uncertain with school calendars. During the past year and a half, we teach for the day, as we don't know what tomorrow holds. The DOE makes decisions so suddenly and as a teacher I am left not covering curriculum or even assessments for the term as schools suddenly close. This is scary for teachers and learners too as we are trying to teach and learn during uncertain times. The one thing I have learnt to do is teach a section, test and then move on. Because even though changes are made suddenly by DOE, they still expect marks to be put on SASAMS. Because I cannot host online classes, I have opted to testing after a section is done so I have marks ready when asked for it. This levitates (sic) pressure from myself and learners.

As a school we are already experiencing time constraints due to conforming to the covid protocols by applying the alternative day attendance of learners. As a school we had many cases of covid amongst learners and teachers. Learner attendance has been poor, during normal teaching periods and even during testing times. Parents and learners alike are fearful of their lives at school, thinking they may contract the virus.

As a school we are not given the privilege of online teaching and learning. Learners would receive the work when they were at school. As they are much older, high school learners, I would make arrangements with learners to catch up with work on the days they are at school. One way would be, to ask their friends to sit and explain content to them. As a teacher, it's very difficult to find time in the day to reteach content.

If assessments or test[s] were not written, I would ask them to rewrite and complete ask during the course of the day. As the return of learners return to school is uncertain, I would have to get the work from them the day they are at school. As a learner and as a teacher it is really a tiring task to play catch up when time is against you.

My school is currently an underperforming school with a pass rate of below 65%. Covid has not helped the situation. Learners at my school do not have a culture of learning outside the class or at home, because firstly the[y] do not even have proper homes. It has been really difficult to help improve the pass rate as learners are hardly attending and learning much less at school.

To try and imitate the challenges of covid, we have set up many interventions plans to try to recover time, such as morning, afternoon and Saturday classes. Learners who were already struggling academically, and now that struggle has deepened, I have encouraged learners who are much faster to grasp content to assist. I have also rearranged my classroom by bringing the really weak learners to the front so I can assist them personally during my lessons. When marking if I find learners are still doing bad during formal task, I personally or with the assistance of learners tutor the task to the learner and reassess. I have also personally invited parents/guardian of learners to explain to them how they can assist their child. Also, additionally work is given to learners on the days they are not at school.

With regards to educators' task[s], covid protocols are never compromised in our school. We ensure learners adhere to the rules such as mask wearing, sanitizing and maintaining a safe distance from each other. We encourage them to constantly wash their hands and remind them that covid is still here. We lead by example.

When learners experience any covid symptom[s], they are immediately removed from the classroom and are placed into the isolation room until their parent or guardian has come to take them away from school.

However, as human beings, we are social creatures. There are many of times I have witnessed and had to reprimand learners about talking to their friends without mask, sharing of lunch, hugging and behaving as if it[']s pre-covid. I often hear from learners that they believe covid does not exist. As I drive to school, along the way I myself witness members of the community that the school is in, they do not have mask on.

During break, I personally feel, for learners covid does not exist, they are interacting with their friends closely and constantly sharing food. At any given time, there are plus minus 600 learners in the school. Although there are educators of duty, saying the same thing over and over again, mask up, keep a distance, it is wrong to say every learner is watched every minute. That is when the ball is dropped."

5.3.3.3. Structured interview

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Danny: *“The first implication of Covid-19 for teaching and learning is the loss of time. Due to the closure of schools, learners could not attend daily and teaching and learning time was lost. As the school I teach at services an underperforming area without internet connection and home and a scarcity of smart phones and little to no laptops, learners could not have the comfort of having online learning from their homes. This really exposes the unequal education system we have in the country.*

Due to time loss, when learners returned to school, we had to find ways of recovering time, morning, afternoon, Saturday and evening Sunday classes. As matriculants, the curriculum coverage they are expected to know, was not trimmed. Learners and teachers alike were coming to school 7 days a week. Mentally, physically and emotionally we were drained. There were times I personally saw learners sleeping in class, and I just felt their pain and could not do anything to assist them.

We as educators have also noticed, despite all intervention programs in place, learner performance has greatly been affected. There has been a decrease in learner performance, as they are expected to know the entire curriculum even though we are all going through a pandemic with so many external factors influencing our emotions and thoughts. There has been no consideration for our Matriculants of 2021 from the DOE.

Learners are also cooped up in their classrooms. Due policies been sent and then retrieved, causing confusion, learners are not outside their class getting physical education. They often express their feelings of been ‘suffocated’. Yet the DOE expects marks for physical education.”

2. Researcher: What do you think can be done to overcome these implications?

Danny: *“I personally feel the DOE is responsible for filling the gaps we are facing as teachers and learners, on the ground. Policies are drafted and just sent out, without proper consideration of what is really going on. Learners are expected to know the entire content curriculum coverage, yet schools are closed.*

In the era that are living in now, being so technologically advanced, it is the duty of the DOE to set up and enable online teaching and learning. We are using the same resources 10 years ago and that’s not good enough. Every year the education sector is given a budget, but we have not seen any upgrades or improvement within the sector.

To overcome the challenges, the DOE needs to start putting the wheels in motion to enable online classes. They need to help and assist schools that are under resourced by empowering learners with resources to make themselves better. Policies are drafted from a top-down approach, the men and women on the ground, their inputs need to be included. Idealistic policies cannot work in uncertain environments.”

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Danny: *“Each and every grade has been affected by Covid. For example, the Grade 10 and 11s of 2021 have also experienced loss of learning time. Their curriculum has been trimmed yet when they get to Grade 12, they are expected to know the entire curriculum. This in itself will have a negative effect with the pass rate in the future. There are many gaps that Covid has caused, and we might never find time to fill them up.*

There is a positive effect to this, teachers teaching during a pandemic are really resilient. They have been backed to the corner from the onset of Covid, some given little to no resources, but still make a way to get material to their learners. Selfless sacrifices have been made, weekends, early mornings, and afternoons to ensure they can learners are taught. They have been emotionally and mentally moulded to tackle any challenges that may come in their way currently or in the future.”

5.3.4. Participant 4 - Hazel

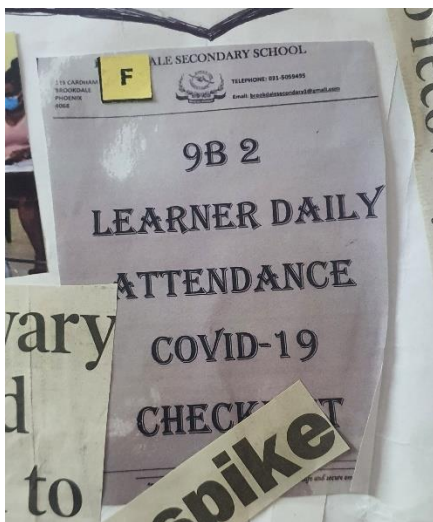
5.3.4.1. Collage

- This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order



Figure 5.7. Collage created by participant 4 - Hazel



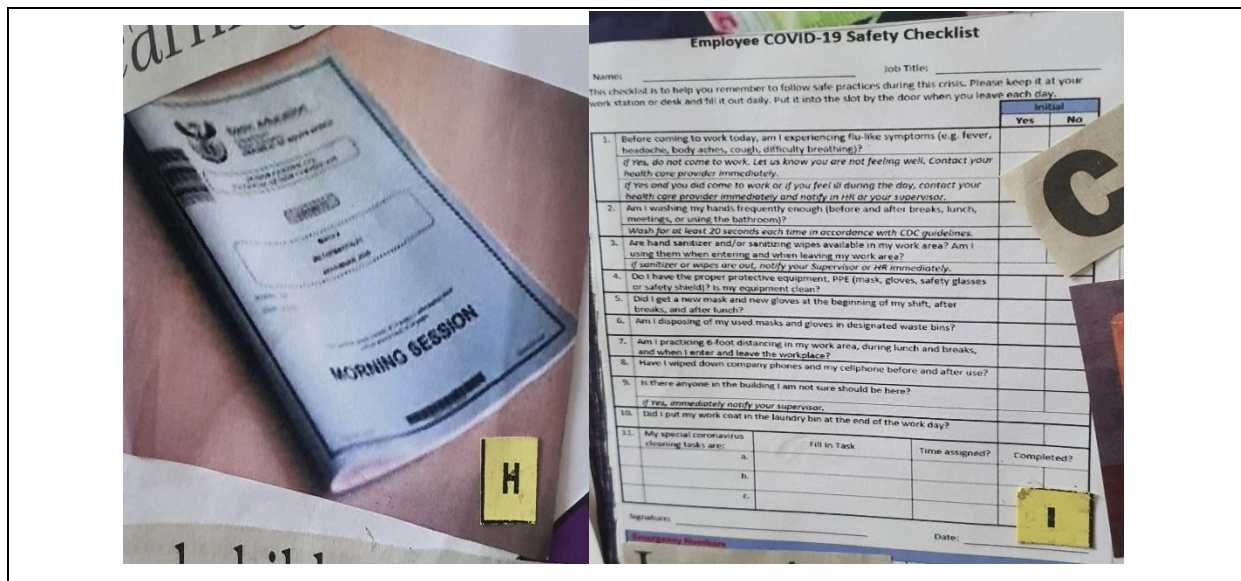


Figure 5.8. Specific pictures referred to by participant 4 - Hazel

Discussion on collage (write up):

“My collage has an outline of a book which is vital facet in the school environment for both teachers and learners. The pictures placed inside and outside the book outline, depicts the infestation of Covid-19 on (sic) the education system.

Pictures A, B, C and D: *These reflect the additional classroom rules that learners have to adhere to such as sanitizing, washing of hands and wearing of masks.*

Picture E: *Masks and screening forms have become essential items which allows individuals onto the school premises.*

Picture F: *The roles of teachers have multiplied as seen in my school’s Covid-19 action plan. This means that teachers have additional duties such as screening, checking of temperatures, soap, sanitizing, masks and ensuring social distancing.*

Picture G: *This refers to how often [the] school is getting closed due to a teacher or learner testing positive for Covid-19. Therefore, the process of disinfecting and deep cleaning has become a norm.*

Image H: *The 3-day norm of marking [a] learner’s scripts and assessments have become null and void as teachers are requested to let the scripts rest for at least 3 days before marking. This is done as a safety precaution.*

Image I: *Lessons in class have incorporated Covid-19 in various subjects. This results in less time when it comes to the delivery of lessons.*

The headlines and phrases on my collage emphasises how severe Covid-19 is and its impact on the education system.”

5.3.4.2. Reflective Journal

– Participant 4 – Hazel - This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers’ functioning within the unfamiliar order

“As an educator and parent, I get nervous, anxious, stressed and scared every time the Minister of Education, Angie Motshekga, announces the reopening of schools. I sometimes feel like a soldier going into war and the school is my battlefield. Awakening for school does not feel like a passion anymore, it is merely a job to pay bills with the uncertainty of the future. The stress of the unknown prevails, not knowing when and if you have made contact with a Covid-19 positive teacher or learner. This is very daunting. The learners in my school use the alternative approach whereby grade 12 attends every day, the FET phase attends on Monday, Wednesday and Friday and the GET phase attends on Tuesday and Thursday.

The curriculum is only revised at 80% except for grade 12. These contact sessions are not enough to complete syllabus and assessments timeously. In addition to the break in schooling due to frequent closure of schools. Hence, teaching has now become a race in order to complete syllabus which results in burnout and stress for both teachers and learners. We become overloaded with marking and completing tasks in a short period of time. The attitude of learners is very playful as they seem like they are permanently on holiday mode. It becomes challenging to follow up on tasks given as homework as learners return to school with incomplete work. I have worked around this by completing most assessments during class time which affects the time stipulated for content.

I have embraced these changes as more hygiene is brought into the workplace whereby frequent sanitizing this done. This eases the stress and anxiety when touching surfaces. The reduced class sizes assist with classroom management and individual attention is given to learners who are struggling. This also assists with learners having access to a textbook without having to share.

The Covid-19 action plan, implemented by my school has really assisted us in managing the changes. It keeps teachers well informed about their duties on a daily basis. Lessons now include Covid-19 which reiterates the severity of the virus and the need to always follow protocols. For example, for my comprehension passage for English, I try my best to get something pertaining to Covid-19. Stressful events like fund raising and extra-curricular activities, which can be seen as a super spreader, has (sic) been cancelled. The reduction in the curriculum has assisted us to accommodate for lost time and for learners to gain from all subjects.

Prior to Covid-19, teaching and learning took place in classroom's (sic) that accommodated 45 to 50 learners. This was challenging as disciplining learners was time consuming, to be precise, it took 15 minutes off a 55-minute lesson to settle the learners down. Learners tend to lose focus easily due to the size of classrooms and noise. Posters and charts were displayed on classroom walls to inform learners about certain topics. The attendance of learners was constant as they attended school on a daily basis, covering the usual 100% curriculum. The purpose of marking class registers were to check learner attendance. Teachers were stationed in their form rooms and learners had to be mobile and move to their subject rooms.

However, teaching and learning has completely changed ever since Covid-19. Classroom sizes had to decrease in order to fit [a] maximum 50% of its capacity which is about 25 learners. This is required as adherence to the Covid-19 protocols. This had numerous advantages as learners received individual attention, classroom management was less time consuming, and learners were able to focus longer. The curriculum was revised for grade 8 to 11. The curriculum for grade 12 remained unchanged. Charts were removed from the walls to accommodate for the signage of the Covid-19 protocols. This made learners less informed on subject knowledge and more informed on health protocols. Learners are now based in their classrooms and teachers are required to walk to the different classes for each period. As a secondary school educator, this change made a huge impact on teachers as it became a rush,

consumes time and is strenuous. Record keeping became a mammoth task as we now have to record temperatures and screen learners.

Time management is a challenge as lesson time is used to sanitize learners and to reiterate the Covid-19 protocol. Teachers are expected to constantly remind learners [t]o wear their masks correctly and to maintain social distancing. Especially during the peak of the virus when schools remained opened. This is challenging as learners feel that it is a form of punishment, resulting in a strained relationship between teachers and learners. The alternate day model does not do justice as there is not enough teaching time to complete syllabus. This makes it difficult to follow up on tasks given. Assessments are being withheld and are returned in drips (sic) and drabs which affects the injecting (sic) of marks onto SASAMS and handing in of statistics on time.

Learners attitude towards learning is poor as they get lazy and their absentee rate is high, this affects teaching as trying to get learners to focus is challenging. Teachers carry marking of assessments and tests over the holiday to complete at home as the three-day marking norm is not applicable due to Covid-19. This is challenging as work takes up family time and teachers become overloaded a[n]d burnt out with work from school and at home. Furthermore, the closure of schools due to positive cases negatively affects teaching and learning which is a gap in the completion of the curriculum.

Learner attendance was inconsistent as learners did not attend school on a daily basis. My school used the alternate day model whereby the grade 12's attending school every day, the FET phase attended Monday, Wednesday and Friday and the GET phase attended on Tuesdays and Thursdays. The accommodation of learners was managed by splitting classes into two, for example, 10C1 and 10C2. There are 20 learners based in each classroom in order to keep with the social distancing and other Covid-19 protocols.

Learner performance has dropped due to less contact time, high absentee rate and a poor attitude towards learning. I catered for various learning levels by ensuring that all learners receive resources packs for each subject every term. Assessments are given during class time and learners are required to complete it in class in order to ensure that all learners hand it in timeously. Due to smaller class sizes, learners who struggle are given individual attention. The marking of books is done once a week rather than everyday which gives learners time to catch up on their work.

The management of learners during Covid-19 is effective at my school. We have a Covid-19 action plan whereby the duties of teachers are stipulated. In the morning, at the entrance of the school, teachers are queue marshals which ensures social distancing and wearing of masks. Learners follow a line for their temperature to be checked by a screener. During registration, learners undergo the screening process whereby teachers will record their temperatures and check for learners that have symptoms. Learners that are unwell or have two or more symptoms are referred to the Covid-19 committee in order to assess the situation and to be seated in the isolation room. Sanitizer bottles are placed in each classroom to ensure frequent sanitizing.

5.3.4.3 Structured interview

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Hazel: *“The implications of Covid-19 for teaching and learning may include the poor performance of learners in future as learners lost time during the lockdown. Additionally, the curriculum and learning may be a year behind. The dropout rate of learners will increase as many learners opt for home schooling. Learners stay away from school and engage in wrong doings such as substance abuse, teenage pregnancy and crime related activities which may hinder their education. Concerns regarding post Covid-19 may include the difficult task of bringing learners back to how school used to be or basically going back to the traditional way of learning.”*

2. Research: What do you think can be done to overcome these implications?

Hazel: *“Learners can be given resource packs of certain subjects in order to work with them at home. Ensure parent involvement in order to keep track of work being done. Programmes*

should be implemented to encourage learners to not drop out from school. These programmes should reiterate the important of education. Include lessons on substance abuse and sex education to create awareness.

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Hazel: *“I think that the impact of Covid-19 on education has not only brought about drastic change, but it also offers some opportunities. With regards to digital and online learning, since the world is ever changing is constantly advancing technologically, it will be advantageous to bring the public schools into the similar notion. However, many recourses (sic) be required as South Africa is not so developed.*

5.3.5. Participant 5 - Songezile

5.3.5.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order

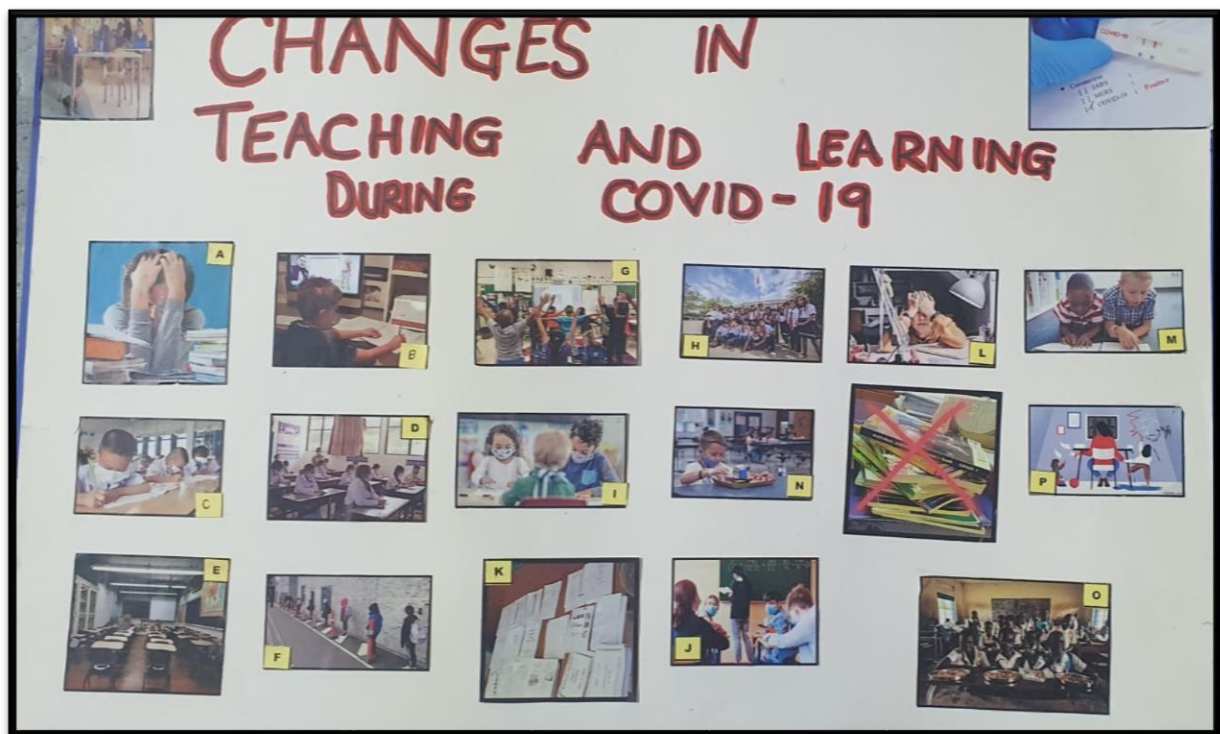


Figure 5.9. Collage created by participant 5 – Songezile





Figure 5.10. Specific pictures referred to by Participant 5 - Songezile.

Discussion on collage (write up):

***“Picture A:** The job of an educator is always undermined. The hard work, pressure, stress and other feelings of emotions goes unnoticed as people view our jobs as easy. The job of an educator, as mentioned above has doubled ever since the pandemic. Therefore, picture A depicts exactly how educators feel during the Covid-19 pandemic.*

***Picture B:** The image portrays one of the biggest challenges faced during the pandemic. Speaking as an educator at a public school, remote teaching and learning was the hardest to work through. This is practically impossible to conduct with resources.*

***Picture C:** The use of masks made learners very uneasy and uncomfortable.*

***Picture D:** Learners have difficulty adjusting to the Covid-19 protocols.*

***Picture E:** Classrooms were empty due to fear and anxiety.*

***Picture F:** Social distancing is difficult to control in a school environment.*

Picture G: This image depicts happier times in the classroom, which learners loved.

Picture H: Learners were able to form and build relationships with others. However, the Covid-19 restrictions now limits this.

Picture I and J: Learners were once able to work together and express themselves. There was more flexibility among learners and parents.

Picture K: Resource packs are made and distributed to learners to aid in their learning.

Picture L: Learners have also dealt with stress and pressure from Covid-19.

Picture M and N: Learners are so affected; they don't realize it. Learners have been deprived for (sic) a proper school year. They are unable to experience school to their best. Distance is created amongst learners.

Picture O: Shows the lack of resources and teaching aids.

Picture P: Parents are also taken aback by the issues caused due to Covid-19.

Picture Q: Learners have been affected directly and indirectly due to factors such as job loss in their homes. Learners are dependent on food given by the school.”

5.3.5.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning the Covid-19 pandemic	Teachers' functioning within the unfamiliar order

“With the sudden arrival of the pandemic, like many other people, I found myself overwhelmed. Apart from the adverse impact on the everyday lifestyle of South Africans, the pandemic specifically and adversely affected the teaching and learning process. As an educator, whose

priority is to develop her learners, endless thoughts of how to assist learners to cope and keep up amidst a pandemic, while ensuring their safety, were daunting to say the least.

The simple reason being that learners already encountered pre-existing challenges prior to the pandemic. Therefore, the arrival of the pandemic caused these challenges to become greater than ever before. The major challenge for me as an educator was to ensure that these learners maintain the status quo. Despite now, having to employ an alternate day model. The only way around this, from my experience, was to manage teaching time better. This is done by reading with learners and focusing specifically on concepts that they have problems grasping. Another method that worked was one on one with learners due to smaller class sizes.

Two of the greatest changes brought by the pandemic was a concept that is foreign to the public schooling environment, namely remote teaching and learning as well as the observation and enforcement of what is termed the Covid-19 protocols. As far as remote teaching and learning is concerned, this was due to the school's incapacity to accommodate more than a certain number of learners per class. This required the use of technology and social media platforms to communicate with the learners and parents, to ensure that teaching and learning continues. I personally have a WhatsApp group comprising of parents which allows me to communicate with them and dispatch the necessary work to be done by learners.

The next challenge is faced in the classroom. The use of masks made it practically difficult for learners to interact. The only way to embrace this and make learners accept and understand the reasoning behind social distancing and the wearing of masks, was to educate them about the dangers of the virus.

To imagine a time before Covid-19 seems so farfetched. It seems as if we have been this way forever. Prior to the pandemic the school environment was a happy, carefree, productive, partnership type of environment. Learners and educators had no reason to be fearful for their lives during the teaching and learning process. Educators and learners, we able to work together with and around people or other learners. I have adjusted to this by doing less group activities. The alternate day model has pressurized us with a time limit to cover content and assess learners. This is an inconvenience as learners are attending school on every alternate day. This complicates things especially for weaker learners. I work through this by trying to cover all content but also always ensuring learners understand what is being taught, if not, I teach the concept again. The positive difference in the environment is the number of learners per class. This enables and allows us to concentrate more on the weaker learners.

A major challenge in the teaching and learning environment would be the use of an alternate day model. For learners, the reason for this being that lessons taught will remain the same for two days, all four classes whilst also battling and taking into consideration time constraints and the amount of content needed to cover or complete. I embrace this by doing my level best to complete the content coverage whilst ensuring learners understand the content. This is also a disadvantage to learners who are weaker. I try to assist these learners as much as possible on the days they do attend. Time is allocated to do reading during my lessons. It is more difficult to implement learning recovery programs.

Educators are overloaded and exhausted. We are working under increased demands and with limited recourses. I maintain a positive attitude and do my best to ensure my learners have access to things they require in the classroom. When Covid-19 began, learner attendance was poor. There were very few learners attending school resulting in smaller classes. As the lockdown restrictions were eased, learner attendance improved. Grades were divided into four groups and the alternate day model was put in place. A and B groups consists of learners not more than 25. These groups attend school on alternate days.

There was a decline in learner performance after the pandemic. The most common reason for this decline, is the lack of concentration during class, the usage of masks, loss of teaching and learning time. I have ascertained that learner's find it difficult to concentrate due to their circumstances at home. Financial situation and social circumstance is concerned (sic). I have catered for this by encouraging reading and allocating specific times for reading. I am also communicating directly with family members to assist learners. Fortunately, these methods seem to be working, as I have noted a gradual improvement in learner performance.

A sad situation is trying to make learners understand why they cannot play with their friends, share a juice, share a sandwich, or sit close to their peers. Another equally challenging aspect is to convince the learners not to remove their masks. The only way around this was to reinforce the risks of their actions and the severity of the virus.”

5.3.5.3. Structured interviews

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Songezile: *“Learners are now isolated; a distance has been created. Learners are more to themselves, takes away their experience of socialization. Learners are unable to work one on one with learners, we have to assist from a distance which make it difficult. A gap has been created in learning abilities. Lack of focus due to the change in lifestyle habits because of the lockdown and alternate day model. Learner’s minds were blank, and they were out of routine when they returned to school.”*

2. Research: What do you think can be done to overcome these implications?

Songezile: *“A programme be put in place to help learners bridge the gap created due to Covid-19. Amendments be made to relevant documents to recover lost teaching and teaching time. Although there is difficulty in learning and teaching, educators should allow some time to enjoy being at school for example. Take them for lessons outside the classroom, do exercise, have a talk session, etc. We need to keep in mind that learners’ mental health has also been affected and it has taken a toll on them as well.”*

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Songezile: *“We play a major role in shaping this new norm in the school environment. We, as educators are required to do our best to eliminate the effects of Covid-19 in the educational realm.”*

5.3.6. Participant 6 – Kate

5.3.6.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order

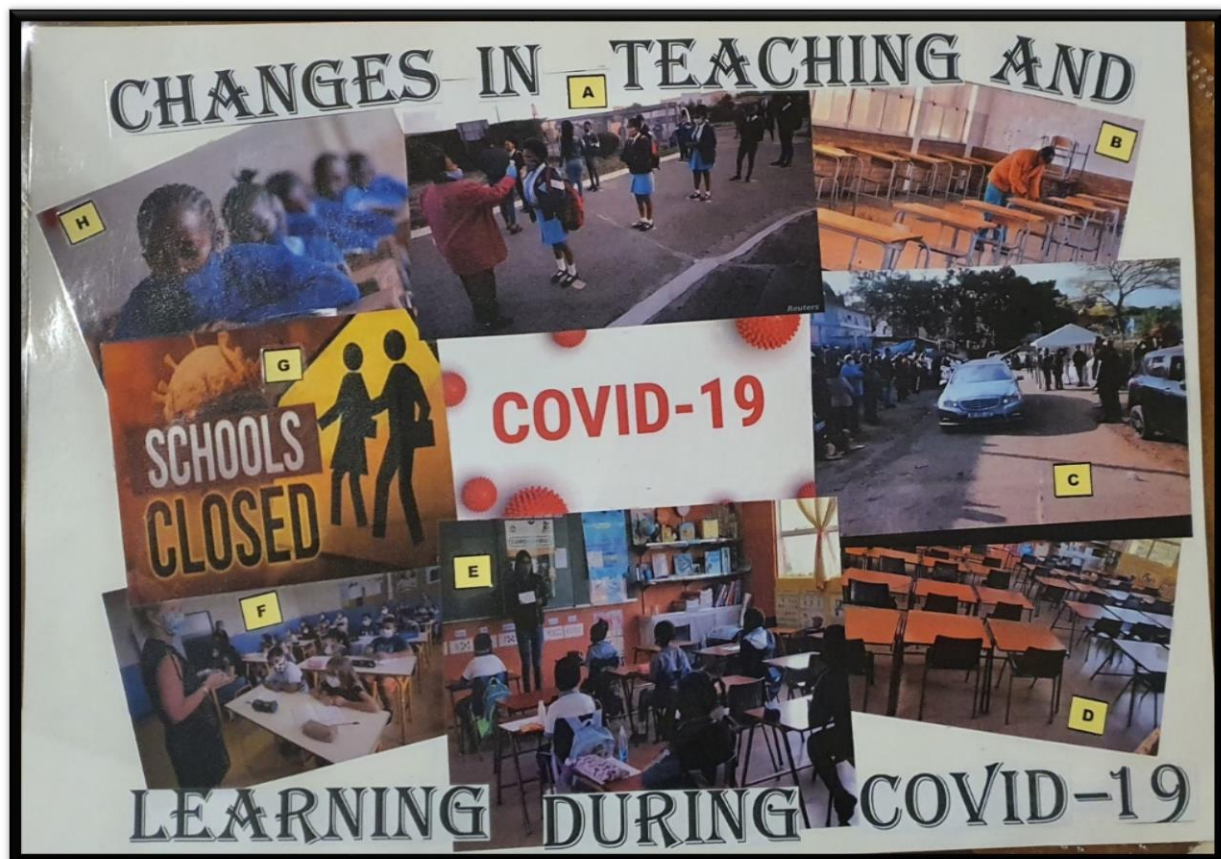
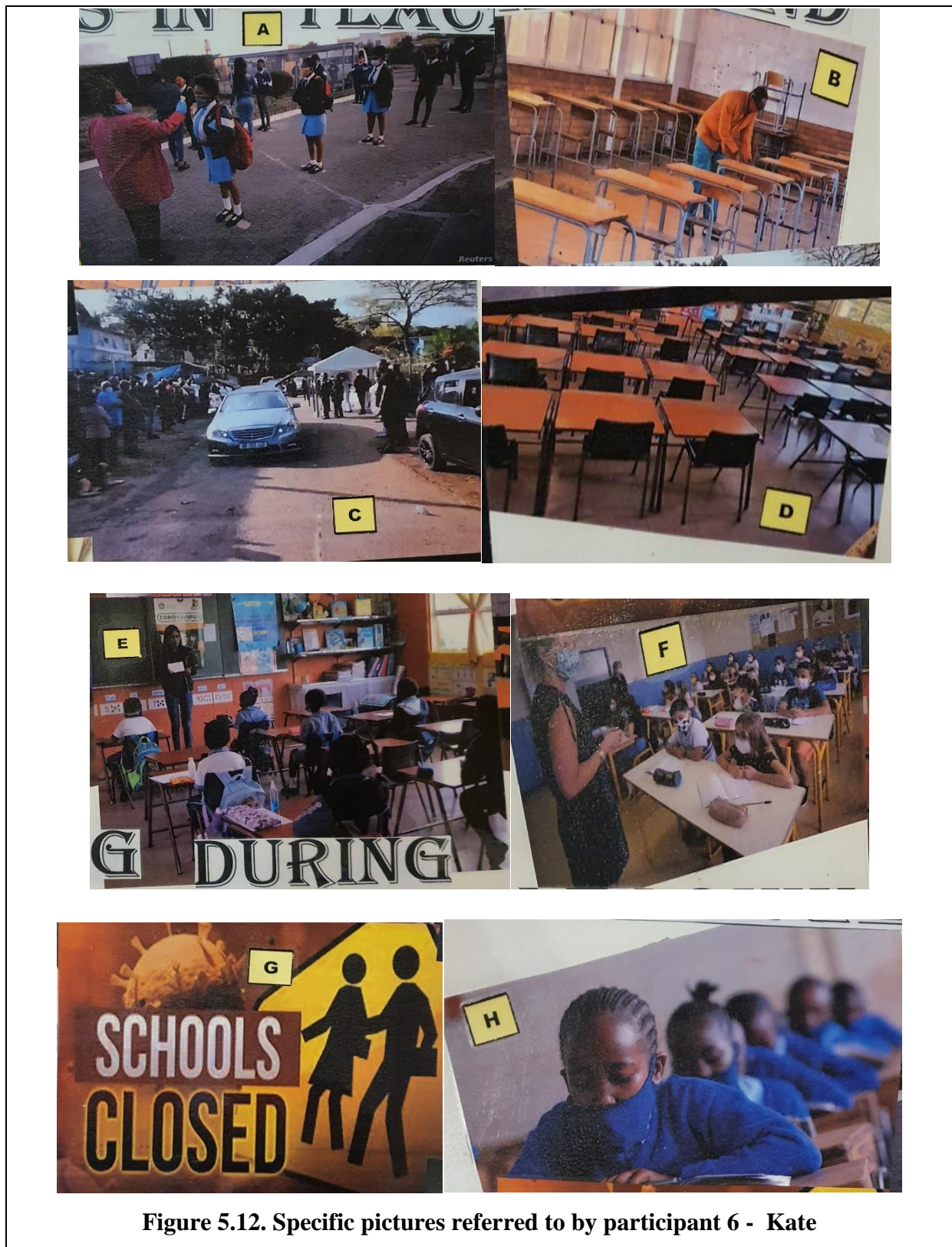


Figure 5.11. Picture of collage created by participant: 6 - Kate



Discussion on collage (write up):

*“My collage depicts the effects of Covid-19 upon our lives and in the schooling environment. The changes we had to embrace as the new normal. As per **picture A**, I would like to caption*

it the “new normal”. Upon entry into school we as educators have taken on an additional role to screen our learners and to identify unwell learners who pose a risk being at school. The picture shows learners standing a meter apart from each other following social distance protocol. Previously learners were able to embrace their friends and have chats within close proximity of each other. Educators and learners are now requested to arrive earlier at school in order to fast track screening of learners so that the day can begin.

Picture B portrays the task of maintenance staff has also increased and become perilous with each of them required to sanitize immediately after the usage of classrooms, staffrooms, Office area etc. Cleaning and disinfection of restrooms has now increased to various times in the day. Daily Data sheets are used to identify areas that were sanitized or not.

The use of **picture C** illustrates the human remains of a person who has died from Coronavirus [and] are considered contagious. The picture shows the Funeral procession of a Learner who succumbed to the Virus. It is heartsore that Covid 19 denies families the right to bid a proper final farewell to their loved ones with all the protocols that needs to be adhered to. The body is wrapped into clingwrap and driven to their residence for the last time for a short duration not even allowing the family to see the dearly departed. Such height of emotions we have to endure and still go on living in these unprecedented times.

As per **picture D**, the picture shows a classroom layout prior to Covid 19. Learners sat within close proximity of each other, collaborating during group discussions and active involvement during instruction time. Undoubtedly the classroom may seem congested in layout as compared to picture B, but learners were comfortable in that environment, less fear of isolation and active learner and Teacher interaction with no risks.

Pictures E and F shows one of the protocols that must be followed in the classroom which is social distance. Also, it is mandatory for Teachers and Learners to wear masks during teaching and learning. Wearing masks have now become an essential (sic) as per safety regulations, however covering the lower half of the face reduces the ability to communicate, interpret and mimic the expression of those with whom we interact. Positive emotions become less recognizable and negative emotions are amplified. Emotionality in general is reduced and the bonding between Teacher and learners, group cohesion and learning of which emotions are a major driver. Masks stifle speech and sounds. Masks fundamentally restrict teaching and learning. The inability to hear becomes a problem in larger classrooms.

*I used **picture G** because it portrays the disruption to education. School closures due to Covid[-]19 have brought significant disruptions to education. Teachers were and are, until current times additionally tasked to provide extra support material for learners during the absence of learners as well as during school closures. The abruptness of the situation, Teachers and administration were unprepared for this transition and were forced to build emergency remote learning systems almost immediately.*

***Picture H** was used because another requirement whilst teaching and learning takes place is for learners and teachers to use masks. Face masks can prevent the spread of the virus; however, it reduces the ability to interpret the speaker. Face masks impair verbal and non-verbal communication. Learners in picture H, are seen wearing masks which is taking a long time to get used to. They too understand the importance of wearing masks, but the daunting effects remain leaving them to fear their safety and how limited schooling life has become. Covid 19 has indeed left us with much despair and the effects are tormenting and irreparable.”*

5.3.6.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers’ functioning within the unfamiliar order

“Since [the] Covid 19 Pandemic, the field of Education has experienced drastic changes including the adoption of remote learning. Teachers have had to continue their jobs amid a series of circumstances and stressors that may have had a toll on [their] mental health state. The emotional well-being and coping strategies used by Teachers pertained to social support by colleagues and [the] Senior Management Team.

Personally, Covid 19 has brought on a series of stressors, including the fear of infection and death, the loss of loved ones, confinement and mobility restrictions from increased core

responsibilities at home and school. As a result of the pandemic and the series of prevention and control measures taken, there has been an increase in the number of symptoms and signs of stress, anxiety and depression among all Teachers as well as medical staff and mental health professionals.

March 2020 will forever be known as the month when all Teachers were faced with a task which far exceeded our mental abilities and literally to respond overnight to t[e]ach in new modalities. As Teachers, we were required to shift 'gears' immediately to respond to learners and families['] need[s]. Apart from all the new measures undertaken we were and are still required to begin a New Norm of teaching despite all the concerns of contracting the virus and fatal implications attached to the situation. The wearing of masks became mandatory. There is no question that Teachers of all grade levels, in all sectors of education are indeed capable of incredible undertakings and accommodating challenges of any nature.

As an Educator, my day begins earlier, is busier than previous[ly]. I am required to adhere to expectations, to be on duty 24/7 with limited break time. Breaks are shared with learners in order [to] incorporate Covid 19 Protocols to prevent any spread of the virus. Despite all these challenges to work in unprecedented times, we find the capacity to embrace all challenges and provide still, the best opportunities for success for all learners in their struggle during these apprehensive times. The mental stress Teachers are handling daily is commendable in the sense that we now have to equip ourselves for the inevitable.

As Teachers, we face an entirely new set of challenges caused by the Coronavirus pandemic. As each day begins, care needs to come before content. We must not get fixated to complete aspects per day when we have not fully understood the predicaments of each child and the situation each one arises from is vastly different.

My day as an Educator now begins at 6.45am, noting down temperature recordings of each learner in my class. My role as a teacher now encompasses being more vigilant towards learners who could be ill and pose a risk for myself and others. Thus, the wearing of masks have (sic) become mandatory to prevent contracting and spreading of the virus. It guards an individual from infection even in an environment where others may not be masked. As Teachers we need to inculcate the practice and importance of wearing our masks despite its discomfort. We need to be examples of this practice before enforcing it to our learners.

Social distancing and sanitizing are an essential to prevent infection. Cleaning, disinfection and hand hygiene are now a new toolkit for Teachers. It is intended to aid Teachers in

protecting the health, safety and well-being of all learners and others around them. Cleaning with products containing soap or detergent reduces germs on surfaces and objects used by learners to remove contaminants in order to decrease the risk of infection.

At one stage we as Teachers, stood in front of the class to discuss a lesson. Learners were able to hear us and see facial expression and grasp correct pronunciation of the language spoken. Covid 19 has not only instilled fear and uncertainty but become the main reason for us to now wear masks at all times, fundamentally restricting teaching and learning. Face masks were limited to operating rooms and construction sites, but today face masks have become part of everyone's everyday outfits. Teaching with a mask not only stifles speech sounds but exhausts the Teacher further when he/she has to exert her speech to be heard audibly by all learners. Masks have reduced our ability to interpret expressions and to see and identify our learners. But as individuals that were drawn to the profession, we aim to dedicate ourselves to ensuring that all learners receive the best possible education to be successful and motivated individuals for future endeavors.

Covid 19 has largely impacted on social and physical development. Social and physical distancing measures have become commonplace to curtail the spread of the virus. Lunchbreaks used to encompass fun, running and high-spirited attitudes, these days that has become a thing of the past with constant instruction given for social distancing eradicating anticipated times to socialize and destress from the stress of wearing masks and learning in a claustrophobic environment.

Prior to Covid 19: Teaching was more inter-active (sic). Five years into Sustainable Development Goals, the world is nowhere near to ensuring a quality education for all. The Covid-19 crisis is exacerbating this learning crisis. Lessons were based on groupwork, interactions, experiments, skills, outdoor activities, eradication of social distance, and most importantly there was a sense of safety. Days were normal, no fear, no social distancing. Learners could assist their peers.

As a Teacher, I could show affection to my learners with no fear of the unknown. My daily functioning involved assisting my learners on a one[on]-one basis. I could physically hold their hands and guide them towards improving their writing skills. Standing closely by them to assist their learning process with a sense of safety and security. That type of teaching and learning built bonds of communication, trust, sharing and friendship as well as confidence. Resources that are an integral part of lessons were used without restrictions.

During Covid-19: The implementation of restrictions and protocols during Covid-19 has thrust us into a world of fear and despair. School closures due to Covid-19 have brought significant disruptions to education across the globe. Given the abruptness of the situation, Teachers and Administrators were unprepared for this transition and were forced to build emergency teaching and learning systems almost immediately to deal with the crisis.

Covid-19 has disabled teaching and learning structures that existed. Capacity in classrooms have dropped. Social distancing becoming mandatory, has brought on much anxiety and reason to question the unknown as the new norms creates a sense of isolation. No interactions, no teaching aids or resources can be shared with learners. Even the fear of marking learners['] books have become fearful (sic). Marking of learner's work is an integral part of teaching in order to provide feedback to the learners about their strengths and weaknesses. My days of Teaching have turned into days of worry and concern for my safety as well as all those around me. Nevertheless, we are in this profession for a purpose and reason and that is to facilitate good teaching to enhance better learning skills.

Despite the fear and anxiety, Teachers today are navigating methods to eradicate the effects of Covid to ensure optimum learner achievements. Covid-19 is in existence and causing much changes within the education field, we as Teachers must not allow these changes to overwhelm us and forget our primal function is to lead our children by example, shaping, teaching and ensuring a good breed of future generations to come. If anything, Covid-19 has enhanced the use of technology. It is imperative that we not only recover from the pandemic but, that we use this experience to become better prepared for future crisis.

As an Educator, I believe knowledge is wealth. It far exceeds materialistic values. My passion and drive had, always been to become an Educator, not for selfish, personal reasons but to work with children in ensuring I do my level best to assist and support them. Therefore, when I completed my studies, I aimed to achieve teaching and learning success. The classroom has become my place of worth, but alas Covid-19 has changed my clear and rational approach. We were not prepared to go through such drastic changes and worse of all to teach with reservations and fear.

I had to teach my learners a new way of existing at school. Masks were a challenge to teach or learn with, gradually I reinforced the importance of using masks and learners watched as I began coping with it, they too sensed its importance. Teaching in the Foundation phase allows you to work with learners who embrace love and attention, Covid-19 has robbed learners and

Teachers the ability to touch each other without restraint. Learners could not get easily acquainted with social distancing and working on their own. Many learners were absent often due to parent concerns regarding the increase in positive cases.

Teachers provided additional support to learners via the WhatsApp forum of communication. I provided and am still providing daily breakdown[s] of work aspects for all subject areas in order to ensure a proper facilitation of teaching and learning. I allocate sufficient homework to learners so that they do not lose sight of our previous liquid learning situation in comparison to our alternate day system. In this way my learners are totally occupied even if they do not attend school daily. I work with my parents and learners as a team to ensure efficient learning and understanding of all subject matter. I will not allow covid-19 to change my perceptions as a teacher who has vowed to still project the best possible guide to teaching and to imbibe motivation and ambition in all my learners.

Covid-19 protocols as well as the fear and anxiety the pandemic has cast upon us all, had disrupted our norms of working together. With the re-opening of schools and the introduction of alternate day attendance of learners, Parents, Teachers, and learners were left with much trepidation regarding their safety and mental state upon return to a very volatile situation.

Absenteeism has long been a vexing and frustrating issue for Teachers. During Covid-19, the phenomenon has only grown more pressing, with the presence of the deadly virus. Parents are sceptical to send learners to school due to fear with the increase in infection rates. We accommodated learners from Grade RR – 7 via the alternate day attendance numbers pertaining to a capacity of 20-25 learners per class unit depending on availability of space. Furniture in every classroom has been placed to accommodate social distancing per each learner as well as adherence to all necessary protocols. Despite the daunting task of teaching with a mask on, we have to constantly be mindful that social distance of furniture and between each learner prevails. We, as Teachers play various roles in ensuring teaching and learning continues. We have gone the extra mile to telephonically contact parents to send learners to school or alternatively contact relevant teachers for further teaching aids and resources. Providing a holistic approach to education, that addresses learners learning, social and emotional needs, is crucial, especially in times of crisis.

We all have a way in which we best learn. Every learner has a different preferred learning style and adapts accordingly. However, by trying to incorporate various methods into our teaching, we may be able to reach the majority of learners. Some are visual learners, who have

a preference for seen or observed things, including pictures, displays, handouts, flip-charts etc. Auditory learners have a preference for the transfer of information through listening to the spoken word, of self or others. Kinesthetic or Tactile learning style have a preference for physical experience (sic) – touching, feeling, holding, doing, practical hands-on experiences. Thus, having to decipher between all levels during covid assists teachers to provide competence related aspects in order to guide learners towards fully understanding the concepts taught. Learners need additional support systems, parents need to play active roles in ensuring homework is completed, by guiding the learner in order to enhance their understanding of the aspects given.

Unfortunately, parents tend to complain about additional support provided to their learner (sic), this adversely creates a negative impact on the learner. Motivation, guidance and support assists learners to achieve learning success. Covid-19 has instilled much fear and changes for all learners. As the Teacher, my focus is to ensure that I assist all learners with short-comings that they may encounter in achieving success. Breaking down weekly aspects has largely benefitted learners in completing tasks timeously and provided them with confidence to better their reading skills which plays a pivotal role in achieving academic success. It is important that precautions are taken both inside and outside the classroom in order to prevent the spread of Covid-19. Learners are screened prior to their entry to school. Temperatures are noted for referral in the event the need arises.

Physical distancing at schools: establishment of classroom ground rules in accordance with the procedures established by School's administration as well as protocols by respective health bodies. Maintaining a distance between each learner as well as increasing desk spacing has been implemented in every class.

Breaks are staggered and nutrition time takes place within the classroom at their individual desk space to ensure everyone's safety.

Learners remain in one class for the entire day, in other instances Teachers move between classrooms. Number of learners in each class amounts to 20-25 learners, considering the availability of space. Daily my learners and I discuss a do and don't list pertaining to social distance, sanitizing, behavior during break and always keeping masks on. I am constantly reminding my learners that handwashing is an effective way of combating the spread of germs and keeping themselves clean and healthy. Physically demonstrating how to wash your hands and apply sanitizer can assist the learner in following by example and doing the same. Masks

are mandatory and it should not interfere with learning. Daily cleaning and disinfecting of surfaces and objects are essential to accommodate another group of learners for the next day and to ultimately eradicate spread of infection. All learners are timeously reminded not to attend school in the event they have flu like symptoms or other symptoms in order not to pose a risk to others. As a teacher becoming complacent and not following rules and regulations can negatively pose a threat to my family and others around me. Practicing safety measures will reinforce learners to create a culture for hygiene and thus preventing the spread of the virus to others. Covid-19 is a serious disease, everyone must do their bit to eradicate this disease from our lives.

I have been working closely with Parents, to ensure that work given to learners is completed by the child with their assistance. Any aspects not adequately understood by Parent or learner is taught via WhatsApp communication and again in the classroom. I send parents messages pertaining to breakdown of weekly aspects to be completed by the learner. Every day is a challenge...between teaching, administrative duties and constant supervision of learners, but as the role player in my classroom I have to rise above all challenges and ensure that at the end of the day, lessons were understood, questions were answered, and tasks were completed.

Academic learning losses in reading has become a growing concern especially for children living in low resourced communities, I strongly believe the root cause of poor performance has everything to do with reading ability. It's a ripple effect, if the child can't read simple sentences, how is he supposed to analyze mathematical equations. I have devised a strategy to motivate my learners to read...read and read. This will inadvertently assist them. "Reading is the Gateway skill that makes all other learning possible" Barack Obama!

5.3.6.3 Structured interviews

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Kate: *“The unprecedented nature of the Covid-19 pandemic took us all by surprise and it had interrupted the normal rigidly structured operations of many schools. The world of education as we knew it became a distant memory as we all scrambled to modify our systems of operation and adapt them to the new normal. School closures due to Covid-19 have brought significant disruptions to education. Teachers and administrative personnel were unprepared for this transition and were forced to build emergency remote learning systems almost immediately. One of the limitations of emergency remote learning is the lack of personal interaction between the learner and teacher. Teachers have now adapted to many additional roles they have to undertake in order to ensure their safety as well as learners. They have to conduct themselves in many key functions that did not exist prior to Covid-19. The pandemic has almost rewritten teachers’ job descriptions. Many of them are doing more than they ever were before and those are implications that are adversely going to affect our mental health. Teachers are more stressed. They begin their day working and end their night in front of their laptops, planning and trying to complete other tasks that require their attention. Covid-19 is and will be a persisting problem long after positive cases decline, it is leaving behind a trail of despair that will take a lot of grit, persistence and determination in order to execute effective solutions.”*

2. Research: What do you think can be done to overcome these implications?

Kate: *“Educators need a support system, whereby the learning losses can be reduced and reverse the long-term negative effect by implementing learning recovery programs and to also prepare for future shocks of this nature by ‘building back better’. All too often teachers are seen as a tool to project, explain, rationalize, provide and ensure 0% failure rate. Are they teachers of instruments or teachers as instruments? From transfer to transformative*

approaches to one-to-one pedagogy, teachers too are essential tools in the building of the nation.

School closures have a very real impact on all learners, more especially to the most vulnerable ones. Children and youth from low income [households] suffer by being deprived of physical learning opportunities, social and emotional support available in schools and extra services such as school meals. Initiatives needs to be designed to address the different needs of vulnerable learners during Covid-19 pandemic.

An almost universal response to school closures has been the creation of online learning platforms to support teachers, learners, and their families. While the most vulnerable learners might not have access to digital learning resources, television broadcasts lessons to assist learners. As teachers we can identify the challenges we face daily in the classroom, we need to devise assessment tasks to determine [the] level of understanding per learner and work in conjunction with parents to eradicate the shortcomings encountered by learners.”

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Kate: *“Covid-19 pandemic has changed education forever, with the distinctive rise of digital platforms. Online learning has been shown to increase retention of information and takes less time, indicating the changes that coronavirus has caused might be here to stay. I believe that the integration of information technology in education will be further accelerated, and that online education will eventually become an integral component of school education. Children are staying away from school or have dropped out of school during the pandemic. Learners cannot read for meaning in any language. Without the foundational skills to grasp the curriculum, many learners get overwhelmed and have often repeated a grade or drop out of the system. Covid-19 has affected the way children experience education and, for many, education has just not been an option throughout the pandemic.*

Many parents have become unemployed and the issue of affordability of costs that go towards sending a child to school, including fees, transport and school supplies far exceeds the meager budget they have to barely provide meals and shelter for their families. Their primary concern is to ensure the safety and well-being of their family even if that eradicates the importance of attending school or hope of one day achieving success and attaining good revenue from a job. Poverty leaves permanent scars... Malnutrition, susceptibility to disease and missed schooling. Covid-19 will accentuate the long-term concentration of poverty in schools resulting in

learners lack of concentration as well as poor attendance. While social protection programs are needed to help support struggling families, in the end, greater economic growth is the fastest way to bring people out of poverty. Poverty negatively impacts their academic performance. Education is one of the key areas to empower education. We cannot go back and change the beginning, but we can start where we are to change the ending!”

5.3.7. Participant 7 – Duduzane

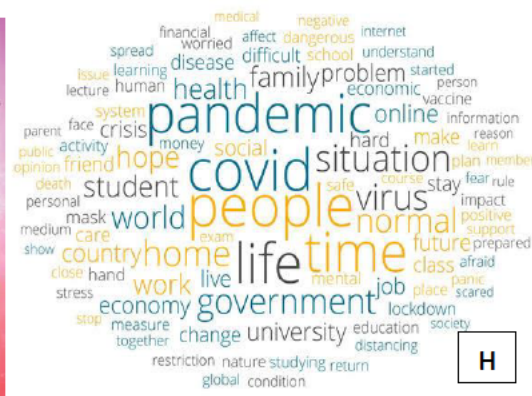
5.3.7.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order



Figure: 5.13 Collage created by participant 7 - Duduzane



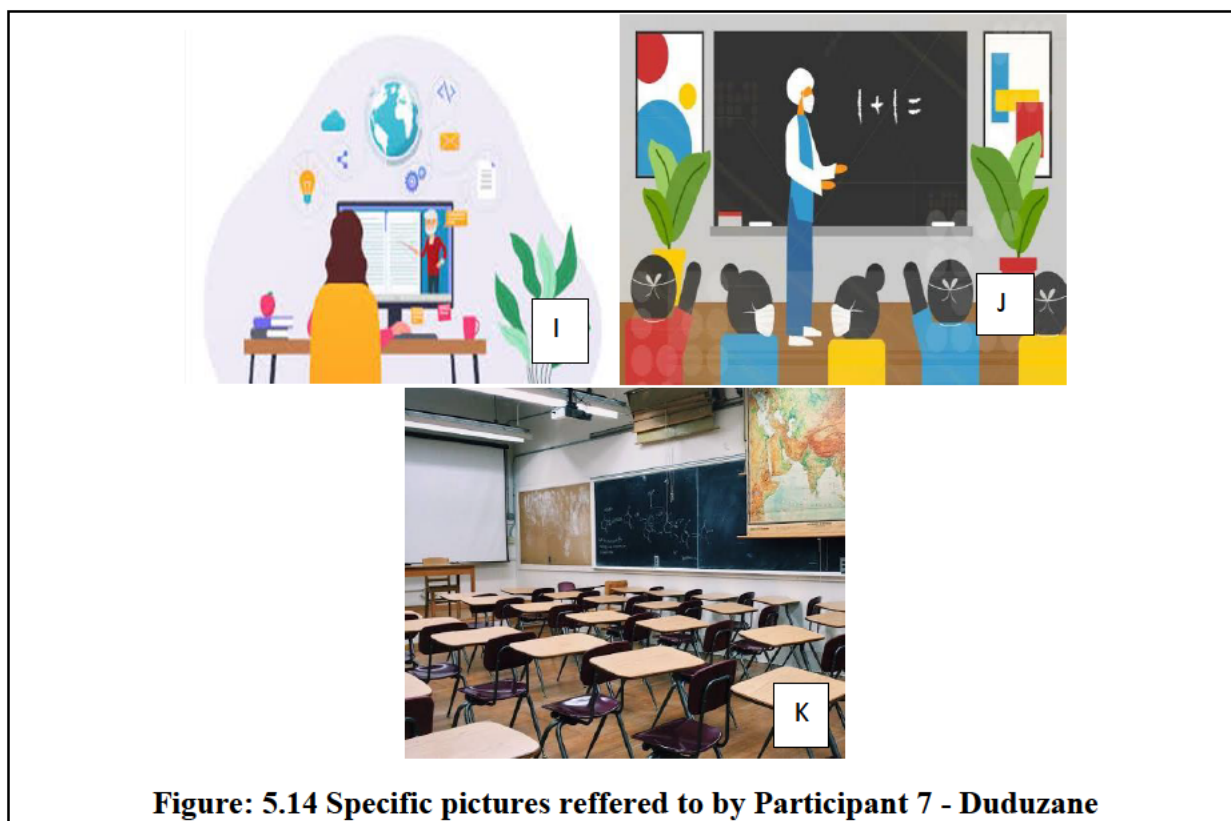


Figure: 5.14 Specific pictures referred to by Participant 7 - Duduzane

Discussion on collage (write up):

“The collage depicts the changes that occurred during COVID-19 during my teaching and learning. The images indicate that traditional teaching became very online based (E-Learning) whereby due to schools during March 2020 closing, the only means of contact with learners was through virtual instruction. The methods used such as WhatsApp chat groups, voice notes, zoom lessons and Microsoft teams in which work was uploaded. The teaching at the beginning solely relied on these forms with students. Learners also had to adjust to a new form of learning via virtual learning or popularly known as E-Learning and there were some cases of poor learners not having access to such devices and forms of learning which became a challenge to teachers. As the return of teachers and learners to school began, learners came in groups with small numbers so that social distancing was practiced at schools and safety protocols were done however, absenteeism was a problem with classes having a very small number of learners. Booklets were created so those who were not returning to school were asked to pick up and study and learn remotely. Learners had to practice their social distancing, wear their masks and teachers also had to maintain their distances when teaching in their classes. Newer method[s] of teaching had to be created by teachers so that both learners at schools and at home were being taught the same pieces of work and there was equality overall.”

5.3.7.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers' functioning within the unfamiliar order

“During March 2020, the teaching and learning changed drastically not just for learners but for teachers as well. In my case, at the school I currently teach which is a Secondary public school teachers were immediately asked to shift gears from the traditional method of teaching to a more virtual instruction and teachers were expected to now teach learners in new modalities. When it came to my mental health and with these very new methods being used for the very first time, I felt extremely stressed, overworked, anxious, exhausted due to the amount of content to be taught, questions arose such as “how do I communicate with all of my learners?”, “what type of methods do I used that can allow for all m[y] learners to be a part of the E-Learning to take place?”, “what alternate platforms are there to use due to some learners being underprivileged?”. These were the questions that stressed me out mentally because at this point I had no answers to it.

With guidance offered by my senior staff, liaising with other school teachers helped in getting work across on various platforms, some learners were able to retrieve information from neighbors whose children also attended the school and were in the same class, referrals were made in textbooks which learners had access to. The feeling of distress, panic and anxiousness was at the beginning when no form of communication to all learners was received. But as a teacher I managed to work around these challenges with my senior grades, pushed for syllabus coverage and also ensured that hard copies were provided to my learners when teachers and learners returned to school for pick up. The new adjustment to teaching during the pandemic was exhausting because of the way in which learners were brought back, but as time went on, it was something which now became a norm.

These changes have allowed me as a teacher to be more open to different methods and technology is now the way forward in many schools. My school now encourages teachers to make use of whatever devices we have in class, ensure learners have access to those platforms the school uses so no one falls short of the newer methods to be used now and in the future. I still do make use of WhatsApp voice notes and send to my learners as a way of getting used to this type of electronic method. Learners have become more comfortable with using masks and social distancing in school and classes are practiced well. Learners are also using the Microsoft Teams service along with teachers as a way to get assessments done. The learners also seem to enjoy the technologically advanced methods of learning and welcome this idea.

The teaching and learning prior to Covid-19 entailed our large classes of 45 learners and solely the traditional methods of teaching and learning which was being 100% reliant on textbooks and collaborative learning between the children. However, during the COVID-19, teachers and learners adapted to a newer and different style of teaching and learning which was virtual learning which involved more of E-Learning that many learners were not used to. During this time when learners returned to school, the absenteeism was extremely high, learners had to now adjust to the social distancing protocols and also a newer method of learning in which they had more assessments done at school rather than take home projects due to safety precautions. Learners had to also adjust to a new time-tabling system. There was much more work introduced after the Covid-19 and both teachers and learners had to adjust to these new demands.

The amount of work which was required by teachers was overflowing. Teachers needed to now adapt to a new methodology of teaching. WhatsApp groups had to be created within classes which was a challenge faced by most teachers in which learners did not have access to cellphones or data and in some cases even both along with zoom lessons and this became a great challenge. However, it was comforting to know that learners assisted those who did not have access to social media by conveying those pieces of work to those who lived near to them. WhatsApp groups were now created which sent out valuable work, teaching videos and voice notes and this now was a chat to parents of those learners who did not have access to social media which was very helpful especially with the juniors (8-9). Teachers at my school had to now adjust and embrace the changes which came with Covid-19 by finding new ways to ensure learners have access to retrieving their work send out, coming up with innovative methods of teaching. When teachers returned to school amidst the Covid-19, I felt like I had so much more

work to get done and it was difficult to manage however, booklets were slowly created to all learners who then used this as preparation for the new academic year.

A new time table (sic) system was created, lessons were followed according to days and on those very days we had group 1 and group 2 arriving on their given days. The numbers in classes were small with no more than 25 each group, lessons were spread over two days in which it catered for groups 1 and 2. The classes were small and accommodated to the needs of each child.

The performance of learners decreased rapidly during COVID-19 due to learners mainly staying home which resulted in very high absenteeism and poor performance. Gradually learners began to attend school. Many assessments were done at school ensuring learners were getting that completed. Many learners were able to self-study when they were absent. Those that required the attention was (sic) given during class time. The very poor levels of learning learners attended school and also extra worksheets were run out and class activities were done with further explanations to these learners. Progressively there was a change in performance which helped with assessments done at school rather than take home projects because this gave learners an opportunity to ask questions and understand concepts better. These little challenges were slowly changing and teachers were becoming accustomed to the changes and found these ways to deal with it.

The management of learners at the beginning was difficult because many learners were not used to wearing a mask and also keeping a distance from their friends. Each form teacher held workshops for their learners (form classes) to make them understand, provide useful and important information and realize the severity of the Covid-19 pandemic faced. Classrooms were regularly sanitized, learners were restricted movement during change of lessons due to any contact and therefore teachers moved class to class. Classrooms flowed the 1.5 distancing of learner's (sic) desks from each other, the learners were regularly sanitized. Outside the classroom, boys and girls were in different parts of the school and breaks differed with matrices and the 8-11 learners. Teachers were always out on duty to ensure masks were worn by learners, no sharing was taking place and each learner followed the social distancing protocols.”

5.3.7.3 Structured interviews

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Duduzane: *“From my personal experience it was that many learners do not have full access to technological devices [and] data to be a part of virtual lessons. Overall, when it came to the online teaching, many learners were not fully equipped and due to that there is a lack of interest in joining the lessons if they have missed out on so many due to lack of resources. These learners would rather get help from other students rather than making the effort to ask the teacher and this leads to not understanding the core topic and focal point of the lesson. Teachers also had to adjust to a new way of teaching which many were unprepared for and with the changes brought in, many still are adjusting to teaching in Covid[-19] circumstances; in my case the amount of work we teach and still need to prepare for those learners who are absent frequently or have chosen the home-schooling option. The workload for students also for many subjects and there is such limited time for completion during school hours and it becomes a challenge because not all learners are at school in full units (repeated days on the timetable are also a major problem).”*

2. Researcher: What do you think can be done to overcome these implications?

Duduzane: *“Firstly, it starts with the education system ensuring that proper curriculum planning is done so all topics that should be covered are done within the given time frame or certain topics can be trimmed from the curriculum. Secondly, teachers and learners need to be proactive in embracing the new changes to teaching and learning and need to now adjust and make the efforts of embracing such changes and as mentioned the ways in which chat groups are created for various grades and subjects. Teachers and learners also need to be prepared for changes that have come about and are yet to come by and integrate creative methods to teach so that learners are able to be engaged in the newer methods of teaching and learning.”*

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Duduzane: *“When Covid-19 came about many teachers were not prepared along with learners therefore for the future, opportunities should be taken to start improving the quality of learning material that is used in the teaching and learning process. Also, teachers should ensure that the learning is spread across to all learners and use creative methods to teach during such uncertain times.”*

5.3.8. Participant 8 - Shaun

5.3.8.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order

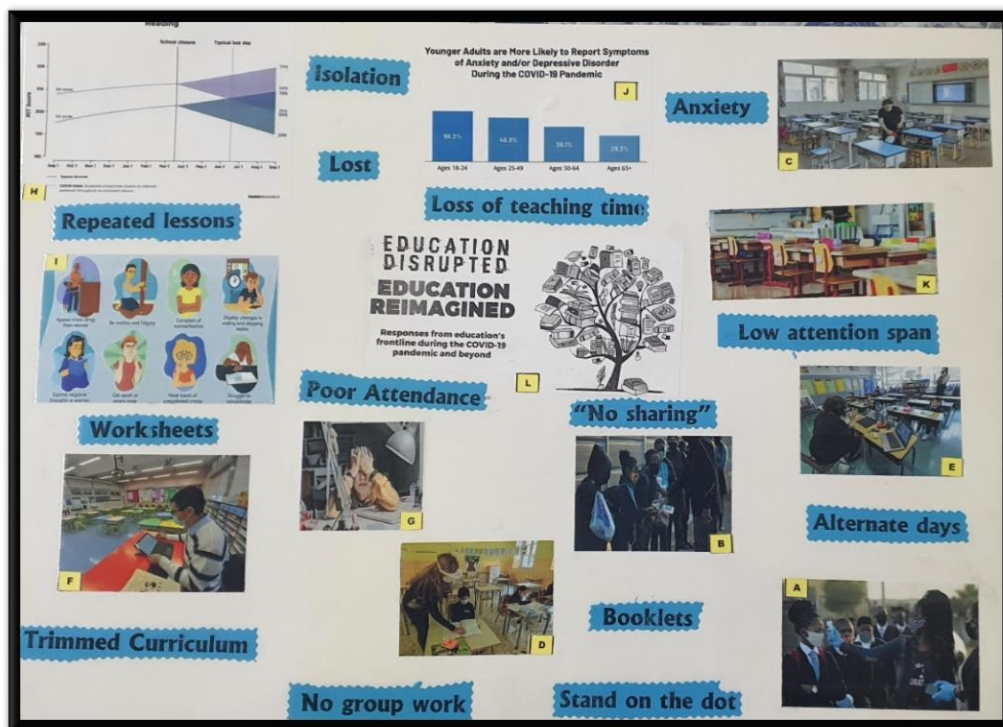


Figure 5.15 Collage created by Participant 8 – Shaun



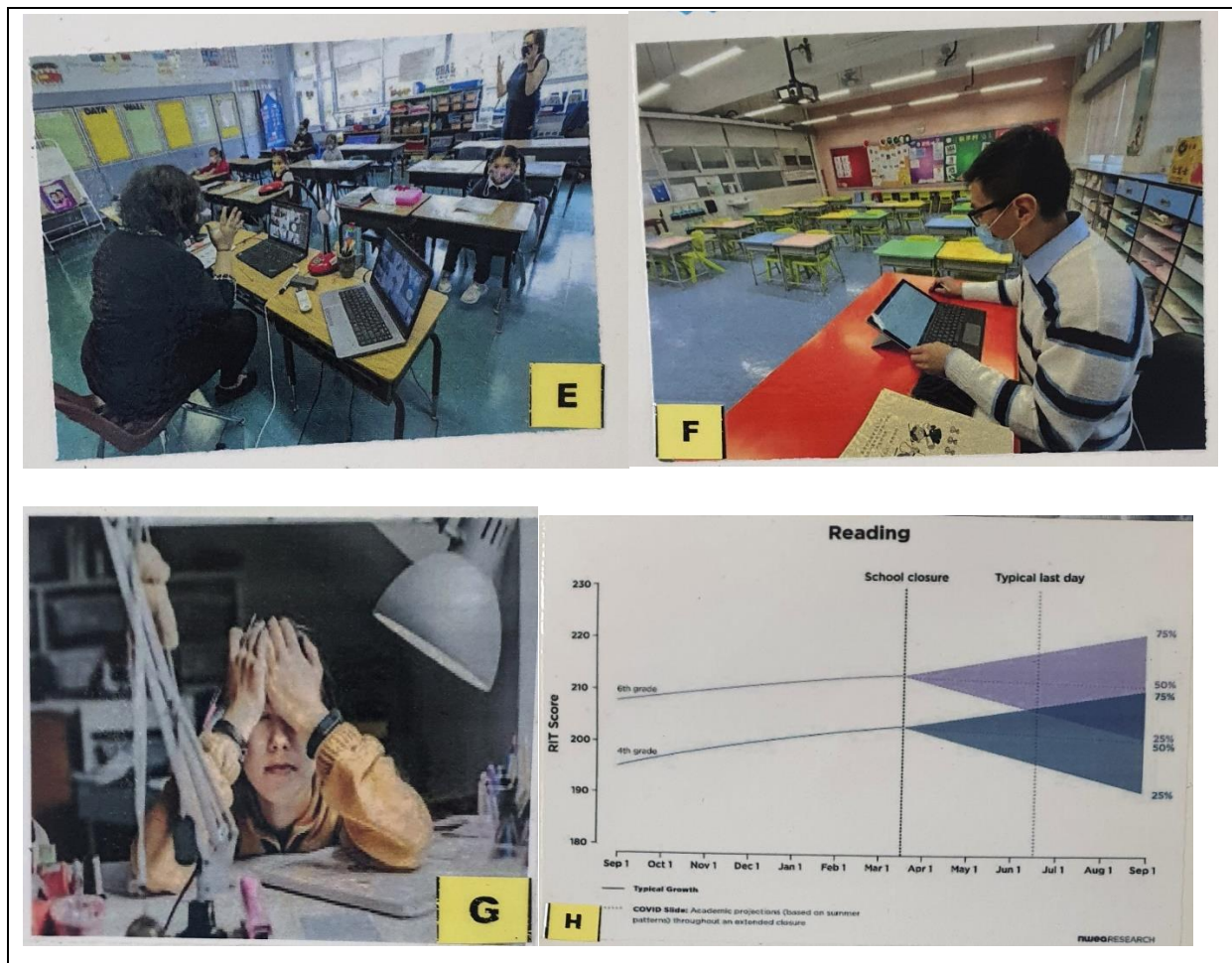


Figure 5.16 Specific pictures referred to by Participant 8 - Shaun

Discussion on collage (write up):

***Picture A** – depicts the necessary Covid-19 protocols (scanning and recording of temperature) which is done every morning on a daily basis. Learners attend school on alternate days in order to ensure that social distancing is maintained.*

***Picture B** – Learners are to stand on dots marked on the floor while their hands are being sanitized as part of the Covid-19 protocols.*

***Picture C** – The role of the educator – sanitizing the classrooms so that [the] learner's and teacher's safety is further enhanced.*

***Picture D** – No group work is allowed, to ensure that social distancing is being followed and safety is a priority. Children are given booklets which encompasses the tasks and other work that needs to be done.*

***Picture E** – Alternate day attendance to minimize the number of learners per class.*

Picture F – *The curriculum has been trimmed to accommodate for the challenges brought about by Covid-19.*

Picture G- *Disrupted education due to poor learner attendance.*

Picture H – *Extended closure of schools has resulted in lost teaching and learning time.”*

5.3.8.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers’ functioning within the unfamiliar order

“The mental and emotional problems encountered during the Covid-19 pandemic is directly related to the changes brought about in the working environment and the risk of infection. The high stress levels caused by the possibility of infection has triggered symptoms of anxiety and a high level of paranoia. These psychological problems have been further exacerbated due to the mental exhaustion and fatigue experienced as a result of wearing face masks all the time and being extremely cautious of ensuring that all Covid-19 protocols are being followed.

Significant social changes in relation to social interaction with work colleagues have created feelings of isolation resulting in further anxiety. Staff outings and team building exercises have been put on hold further increasing the feelings of isolation. The changed classroom environment coupled with the alternate day attendance has resulted in workloads being increased, lessons being repeated and learners’ academic performance decreasing drastically. These factors have also added to the psychological stress that is encountered. Stress has created a sense of low self confidence in my ability to do my work and also made it more difficult to manage learners’ behaviour in the classroom.

Prior to the Covid-19 pandemic I had implemented a variety of teaching methods and strategies in order to optimize the teaching and learning process in the classroom. Some of the methods I have used are the teacher centered method based on presenting information to the learners. This method allows for collaboration. The learner centered method (co-operative learning) in which learners work in teams to complete tasks and projects. This method involves group work. The buddy system (pair learners in class who can support one another with specific tasks or skills). The teacher-learner centered method allows and encourages reciprocation between teacher and learners in a lesson.

During the Covid-19 pandemic many of the teaching strategies had to be revised to adapt to the changes in the classroom environment. Loss of instruction time due to the sanitizing process has resulted in many classroom tasks being given as homework. Greater emphasis has now been put on learners' task[s] being individually centered. The trimmed curriculum has resulted in a lack of continuity from understanding one concept leading to another. Learners are encouraged to read [up] on aspects that have been omitted in the form of worksheets.

Prior to Covid-19 the pandemic, lessons were highly interactive and the reciprocation between learners and the teacher was encouraged. Lessons and tasks allowed for group work, peer assistance and individual work. Activities in the English Home Language like plays, group research and presentations were encouraged. At times, lessons were also conducted outside the classrooms as these activities involved a lot of movement and working in groups. The pace at which lessons were conducted was also taken into consideration to enable learners to understand concepts and content.

During the Covid-19 pandemic, a number of adjustments had to be made in the teaching and learning process. The teacher and learner centered method is now the core of the lesson. Learners listen to the lesson conducted by the teacher and then work alone in (sic) the given tasks and activities. However, oral questions and answers are encouraged during the lesson while ensuring that all Covid-19 protocols are followed. Learners are allowed to work with textbooks, but group work and peer tutoring is discouraged as it involves close interaction.

The main challenges encountered is the loss of instruction time due to the alternate day attendance. The loss of instruction time in the class due to sanitizing in the mornings has also posed a problem. The trimmed curriculum has also created a sense of discontinuity as a times the concepts are not interlinked and makes it difficult for learners to understand. The wearing of face masks has caused learners concentration to become distracted as they are complaining

that these masks irritate their faces and also creates difficulty in breathing. Group work and the buddy system has also been abandoned in keeping with the Covid-19 protocols.

The work that cannot be completed in class due to the alternate day attendance is done as homework which is checked by the teacher when learners return. The interlinking concepts that have been trimmed out is given to the learners in the form of worksheets to read in order to have a better understanding of the content. Group work is not permitted but the buddy system (peer tutoring) is allowed to a certain extent while all Covid-19 protocols are followed. Lessons are given to learners in the form of booklets which they can refer to if they don't understand the topics.

Learners were accommodated in classrooms with social distance and other Covid-19 protocols adhered to because of the alternate day attendance. The number of learners attending per day allowed for social distancing. On days of examination, learners were seated in the school hall and other bigger venues to ensure social distancing. The examination timetable was planned to only allow certain grades to write on a particular day. Thus, keeping attendance to a manageable number. On days when learner attendance is high, in my classroom, I must add more tables and chairs. This too, with adherence to social distancing.

During Covid-19 the academic performance of learners was hindered drastically due to poor performance and the change teaching and learning approach. Many weak learners struggle with the basic skills of literacy and numeracy. In order to compensate for the high absenteeism, booklets were made for learners to do the tasks and activities at home. Greater emphasis was placed on revision so that learners will be thoroughly prepared for tests and examinations. Parents are notified via WhatsApp to check on learner's (sic) tasks and activities that should be completed at particular dates.

The greatest care was taken to ensure that all learning activities outside the classroom was (sic) done with strict adherence to Covid-19 protocols. Learners were to stand on demarcated dots on the floor in order to maintain social distancing. Signs were up around the school to remind learners of the Covid-19 protocols. Preparation for a play required group interaction, however the groups did not have more than three learners in a group. The learners were constantly supervised to ensure that Covid-19 protocols are being followed. There was no exchanging of play scripts and other resources.

The use of textbooks during lessons was closely supervised so that each learner has his/her own book. Due to the increased workload as a result of the alternate day attendance,

incomplete tasks and activities were given as homework. [A] Learner's parents or guardians were encouraged to motivate and supervise the learner's homework. Much emphasis was placed on remedial work so that learners understand work thoroughly before moving on with the new content. Special attention was given to weak learners who were normally part of the buddy system (peer tutoring). Reading of comprehension passages and questions in order to help the children."

5.3.8.3. Structured interviews

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Shaun: *"Children received very little education due to the extended school closure and alternate day attendance. Very little instruction, feedback or interaction between the teacher and the learner. Learners often complain that the tasks and activities given in the booklets are difficult to do because there is no teacher guidance like in a normal classroom. This also hampers the learner ability to comprehend and understand the requirements for a particular task. Learners frequently studied fewer topics or less content due to the trimmed curriculum and the limited time. Extended school closure and working from home have created feelings of stress, anxiety, isolation and depression in many learners. Important social skills that are acquired when working with peers was significantly reduced. Academic performance has also dropped significantly due to high absenteeism and the sense of isolation that has developed in the class environment. The quality of lesson presentation has also dropped significantly due to educator anxiety and the tedious task of doing the same work at least four times to compensate for the alternate day attendance. Group work and peer tutoring have also been stopped or tapered down resulting in weaker learners struggling to complete tasks."*

2. Research: What do you think can be done to overcome these implications?

Shaun: *“In order to make the teaching and learning process more effective during the Covid-19 pandemic the following measures I think we should encourage and initiate interactive lessons in the classroom including peer tutoring and group work under very strict Covid-19 protocol supervision. Make resources easily available (pictures, worksheets, textbooks) which can enhance learners’ understanding of work especially if they are working alone. Booklets should contain tasks and activities that are enjoyable, easy to understand and at the same time encourage learners to work alone. Encourage activities outside the classroom (play sports activities) while ensuring that all protocols are followed. Ensure open channel[s] of communication between the teacher and parent to empower them to help learners at home.”*

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Shaun: *“As a result of the Covid-19 pandemic, extended school closures and high absenteeism has resulted in the rise of e-learning whereby teaching is undertaken remotely and on digital platforms. However, gaps are created between the privileged and the disadvantaged learners who do not have access to reliable internet. However, remote learning and teaching bears little resemblance to actual classroom learning which caters for learners at different levels of cognitive functioning. Learners who display difficulty grasping basic numeracy and literacy skills will be further disadvantaged as the trimmed curriculum and limited time makes no provision for them. Another challenge is providing comparable assessments and examination conditions to the pre Covid-19 face to face provision.”*

5.3.9. Participant 9 - Sipho

5.3.9.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order

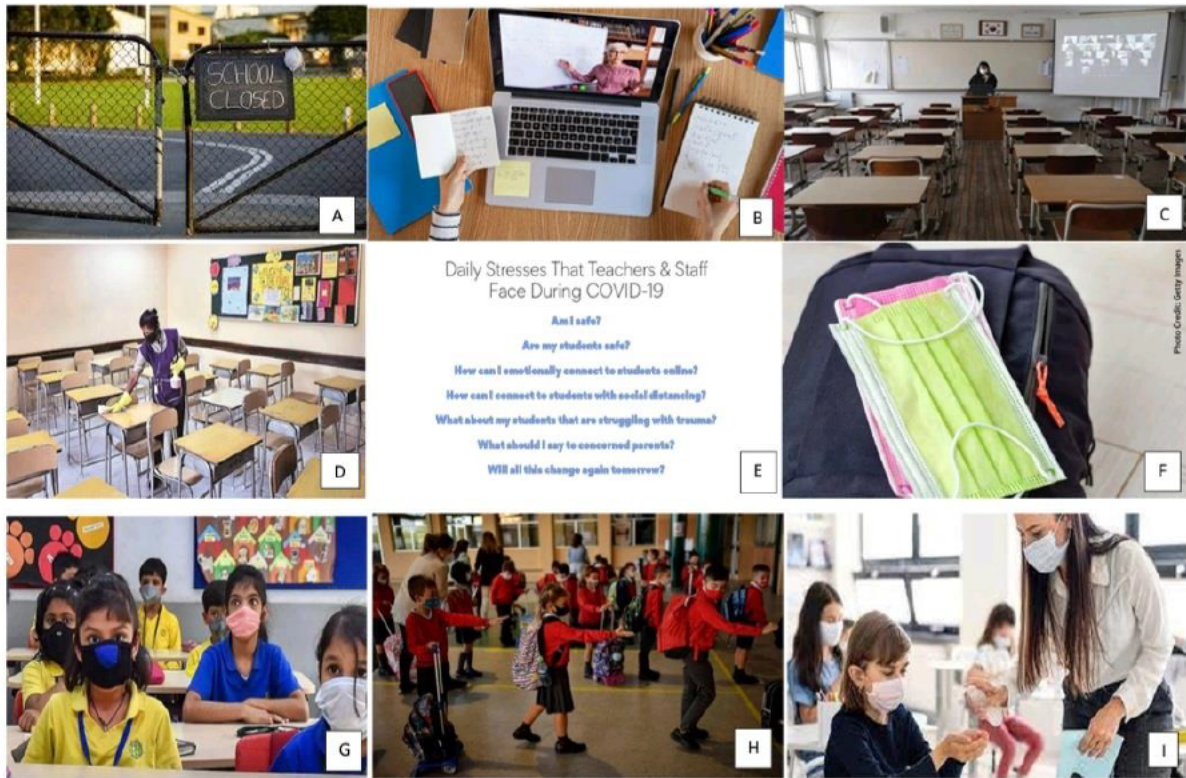


Figure: 5.17 Collage created by Participant 9 - Sipho

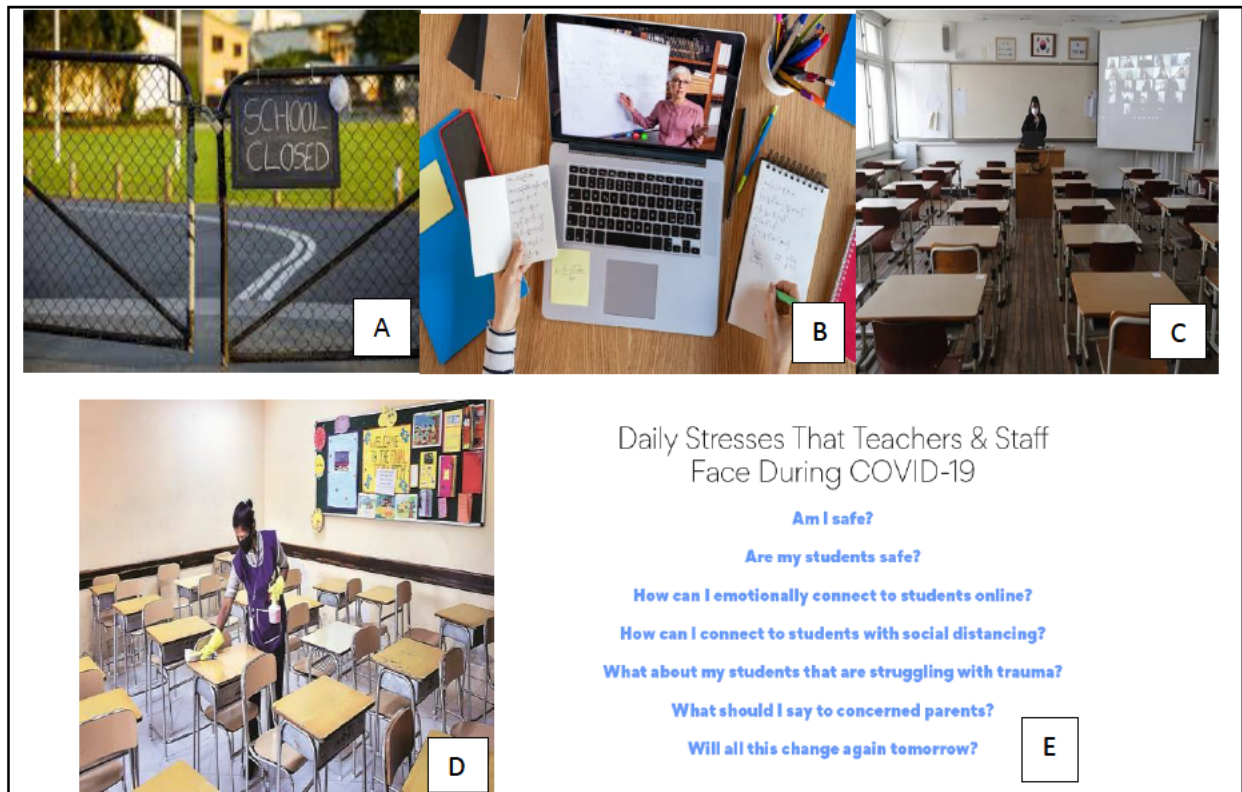




Figure: 5.18 Specific pictures referred to by Participant 9 - Sipho

Discussion on collage (write up):

“My collage depicts the changes in teaching and learning during Covid-19.

Picture A- *this picture represents the closure of schools. Since the pandemic surfaced in South Africa, schools have been irregularly closing and opening. This resulted in a disruption in the teaching and learning process as well as the loss of teaching and learning time.*

Picture B- *this picture depicts the major shift from traditional in classroom learning to home learning. Learners and teachers are totally dependent on technology during this time.*

Picture C- *this picture clearly shows the new classroom set up when learners returned to school after the lockdown level 5. No learner could sit in close proximity of another learner. A distance of at least one meter was created between learners. This results in no collaborative methodologies in the teaching and learning process.*

Picture D- *Frequent sanitizing takes place during teaching time as it is important. However, this results in less teaching and learning time.*

Picture E- *Anxiety, stress and worry became part and parcel of the changes in teaching and learning process during the Covid-19 pandemic. Frequent questions were asked: Am I safe? are my learners safe? How can I emotionally connect with students online? How do I connect with students and maintain social distance? What about the trauma that my students are faced*

with? What should I say to a concerned parent? Will all this change tomorrow? How much longer must be (sic) operate as such?

Picture F/G/I- *This picture contains face masks. This has become most important but most irritating as well. Learners have to be constantly reminded to use their mask[s]. Teachers are expected to teach with a mask. Learners cannot decipher much when the teacher speak[s] as some learners take in well through lip reading. The issue of masks breaking or hurting learners faces (sic).*

Picture H- *this picture illustrates the long lines outside the school gate and the classroom. Learners are expected to wait to be screened and sanitized. Much of teaching and learning time is used up.”*

5.3.9.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers’ functioning within the unfamiliar order

“The beginning of the pandemic created an initial feeling of high-level stress and being in uncharted territory. This stress has often been accompanied by symptoms of anxiety, depression, and sleep disturbance, as a consequence of increased workload. A feeling of exhaustion overcame me due to the uncertainty of workload because of the change in the way teaching has to take place. I became less confident in my ability to deliver the curriculum at the standard that it was supposed to be delivered, due to the constant changes in the outcomes and annual teaching plans, and the manner in which the curriculum was required to be delivered viz: online, booklets and correspondence.

Working under constant changes created feelings of tension, anxiety, exhaustion and decreased job satisfaction. However, I had to adapt to a new way of working because these were the only tools that were available to us educators.

The sudden unprecedented and rapid change of education within moments notice (sic) where teachers were asked to leave their classrooms indefinitely and recreate a learning environment that was almost hundred percent virtual was a challenging landscape during the pandemic.

The shift to remote learning did not change my practice, only the delivery. I think it is important to be flexible and prepared for anything. The positive change is how fast I found myself learning and embracing the format of technology that I did not choose in the past. When I created activities and directions, I ensured that they are as clear as possible so that learners can be successful working on their own.

During the school shut down my colleagues and I had to make available many resource materials to learners on a newly created private school-parent WhatsApp chat. This is the first time I have created a way to ensure access of learning materials in one place, to a whole package of resources for students outside of school. This whole experience has reaffirmed and increased my confidence in my own teaching philosophy.

The teaching and learning process prior to Covid-19 is one w[h]ere going to school presented the best public policy tools available to raise social skills and social awareness. The primary point of view of being in school is that it increases a child's ability, even a relatively short time at school does this. I believe that the absence of learners during Covid-19 will have consequences of skill growth in certain cohorts of learning. The closure of schools during the pandemic has affected the structure of learning and schooling. It has affected the teaching and assessment methodologies.

In an effort to prevent the spread of Covid-19 conventional learning that gathers many students in one room needed to be reviewed where the situation had to be adjusted to minimize physical contact between students and other students and between students and teachers. One alternative to traditional learning prior to Covid-19, was online learning and the other was having a rotational system of learning having only half of the learners attending school at any given time due to infrastructure available.

Initially when we were faced with remote learning, I found myself constantly asking the question – “what is the most important thing students need to do or know?” when I came across

each new assessment task. From this experience I have learnt that the important things are still possible with distance learning, that is reading, writing, decision making and creativity.

At the start of Covid-19, I had to adjust to the thought of moving away from a physical class where I am to teach and answer questions immediately and where I could read body language and facial experience (sic) of my students. I also found myself changing my methods of teaching. The shift required me to use innovative and creativity for the most critical assessments. As colleagues we also became closer as we were expected to collaborate with each other more than ever. We had to rely on one another and work together so that all of our learners are able to succeed.

Covid-19 has led to an increase in the number of students who were absent on a typical school day. With regards to social distancing, a rotation system was devised to have half of the class in groups at school at any given time. Every effort was made to ensure that each learner handed in assessments, so that no learner was left behind despite poor attendance. Calls were made to parents whose children did not return to school to make them aware of assessments due for promotion purposes. In nearly all cases, parents responded positively to our requests. The policy at our school is “We need to do everything we can to support learners during this time as there is much at stake”.

The effects on learning were significantly leaving learners behind in important learning areas such as Mathematics, Languages and Science. The crisis did not impact just academics but also the broader health and wellbeing of students. Since students were not given the opportunity to complete a full year of learning, it is difficult to gauge exactly how prepared they are for the next grade. However, it was found that students from wealthier backgrounds with access to technology and information performed better than those who had little or no access to these facilities.

We were given specific ATP's in all learning areas for the period of the pandemic viz 2021-2023 by the DOE. These ATP's influenced what is taught and what is left out of the curriculum. Part of the catch-up programmes included the use of digital platform and handing out of resource material to all learners so that no learner is left behind.

As schools re-opened it is important to note that precautions had to be taken in and out of the classroom. Some of the health protocols include the following measures:

- ✓ *Maintaining a social distance of at least one meter between desks. Staggered breaks and dismissal time.*
- ✓ *Limit the mixing of classes for school activities.*
- ✓ *Using signs, ground markings, tape barriers to maintain one meter distance in queues and around the entrances.*
- ✓ *Encourage students not to gather and social[ise] in big groups.*
- ✓ *Encourage students to get into the habit or practice of regularly washing their hands and using hand sanitizers at key moments such as entering and leaving the classroom, touching surfaces, learning material, etc.*
- ✓ *Always ensuring that learners wear their masks correctly*

5.3.9.3 Structured interviews

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Sipho: *“The implications may include:*

- *Learners are left behind with unfinished learning. This leaves learners with huge learning gaps which in certain cases become difficult to catch up on.*
- *There is a vast shortage of teachers leaving us with an increased number of teaching time, more hours and more classes. This leaves teachers mentally exhausted and burnt out and therefore they cannot give of their best in every classroom.*
- *Shortened curriculum*

- *Lower performance outcomes in learners*
- *Higher pregnancy rate among learners*
- *Less teaching time”*

2. Researcher: What do you think can be done to overcome these implications?

Sipho:

- *“Create programs that targets (sic) learners who are in dire need of support.*
- *Extra classes to explain concepts to learners who don’t understand and to catch up weaker learners*
- *Filling vacancies at school to decrease the shortage of teachers*
- *Teaching only what is necessary for learners to know*
- *Communicate with parents of the weaker learners also giving them parental support”*

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

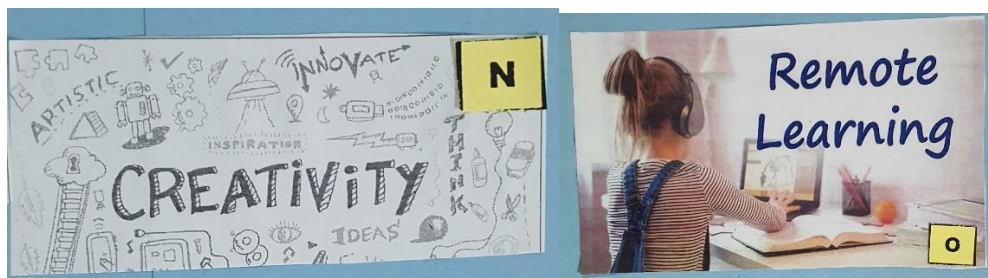
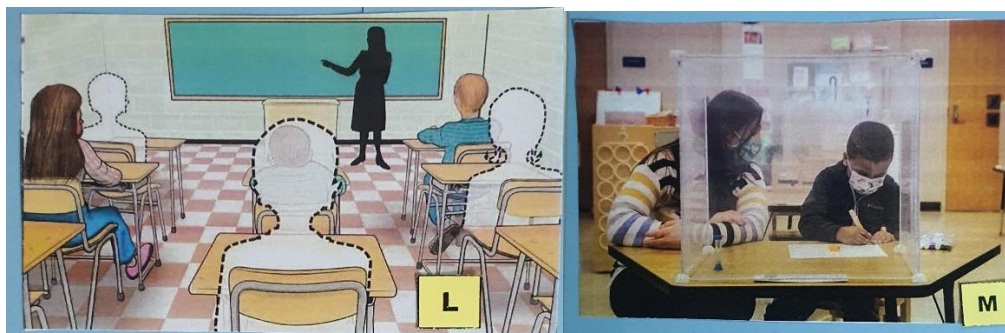
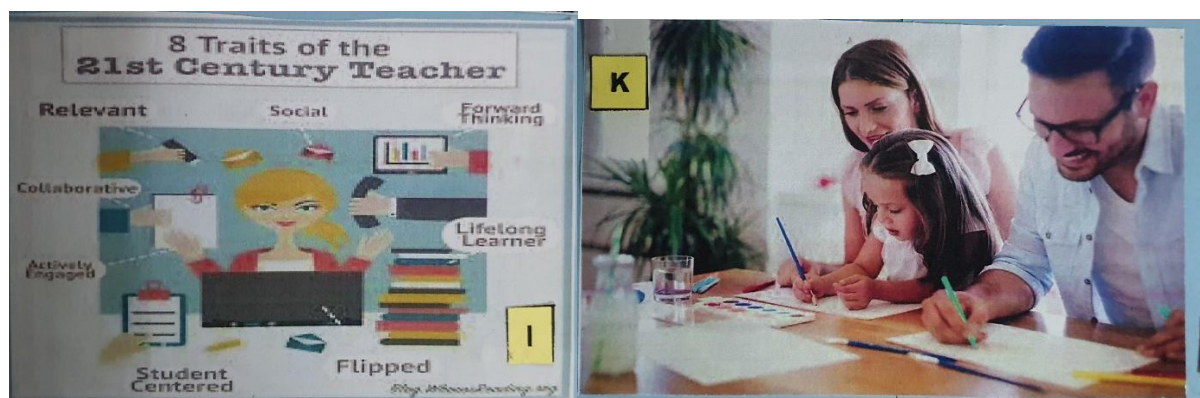
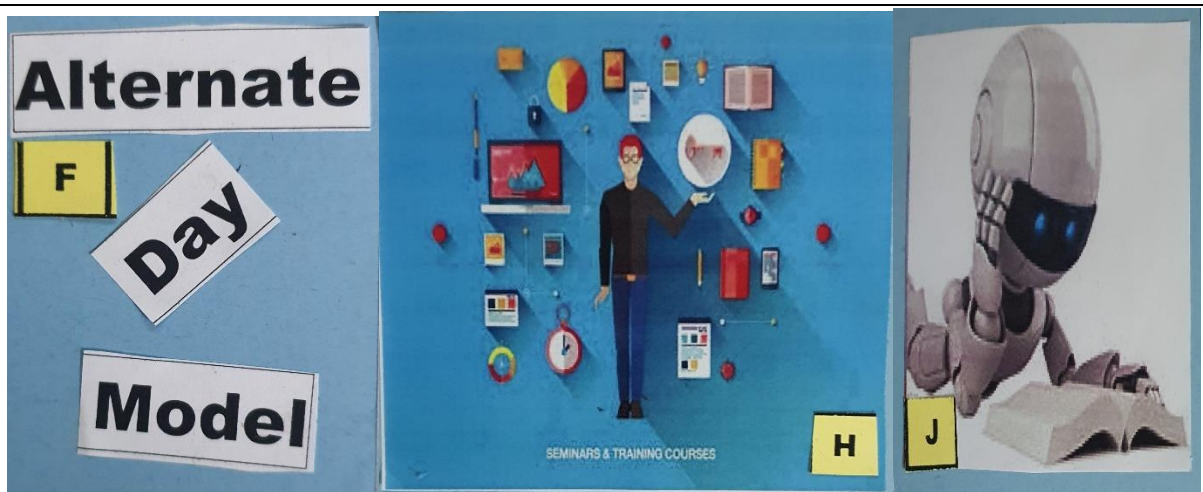
Sipho: *“A significant increase in dropout rates. Learners cannot cope with the increased expectations of education or catch up with their learning lags and therefore become demotivated to attend school.”*

5.3.10. Participant 10 - Natasha

5.3.10.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order



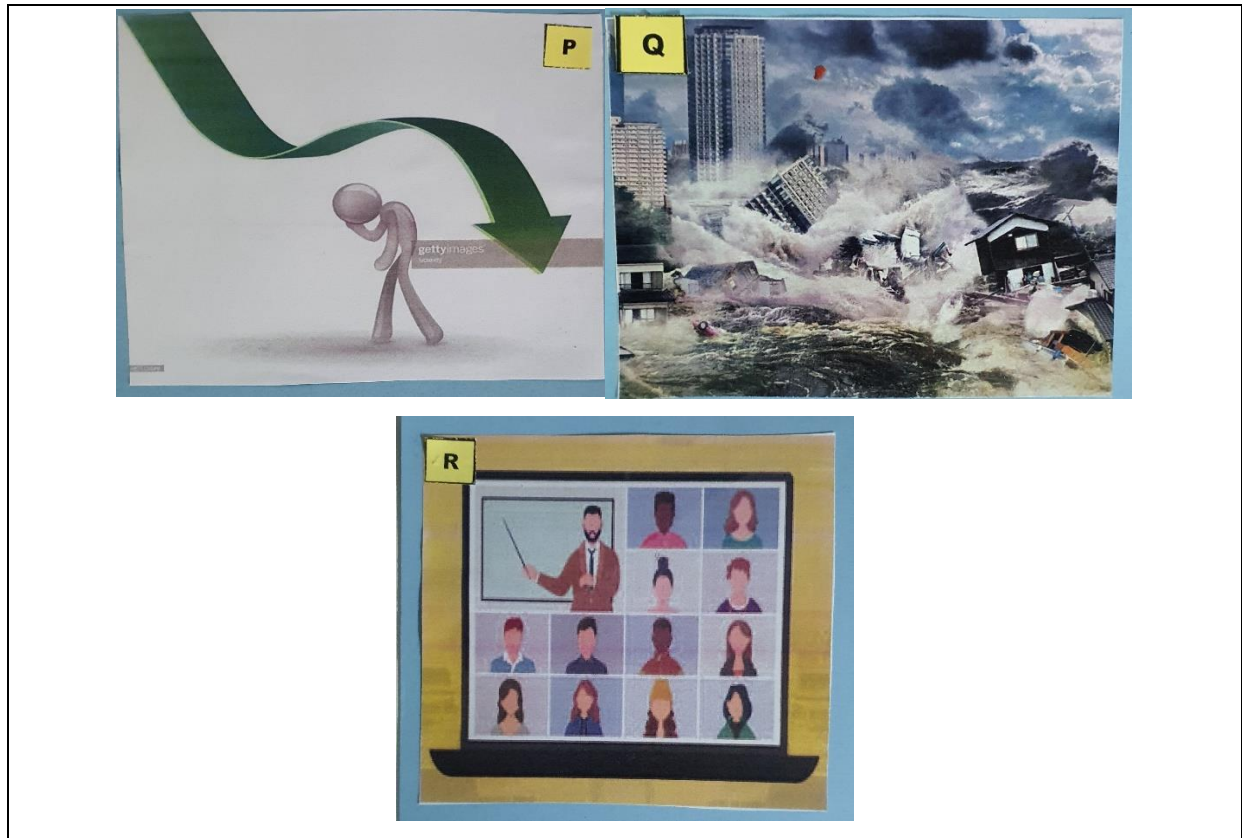


Figure 5.20 Specific pictures referred to by participant 10 - Natasha

Discussion on collage (write up):

*“Covid-19 has altered the aspects of teaching and learning in many ways. For me, significantly, was adjusting to classroom sizes (**picture A**). I originally used to teach a class of 51. I adjusted my teaching strategies to suit this number. It was an abnormal acceptance (sic) for me for many years. I know that learners that attend a public school also are aware of this challenge but are accepting of the fact that all of them cannot be taught on a one-on-one basis daily. They are given the same attention yet very mindfully proportional. Rotating and stretching out my concepts (**picture B**) for teaching is done to make certain that every concept has the same attention to detail. Learner attention span has also been very much a challenge (**picture C**). Prior to Covid-19, I knew exactly on a given day what my given mode of teaching is going to be. Now in 2021, I have been exhausting my thinking skills on methods of delivering the same concept every second day. It is not only been challenging to the mind but also it has taken a toll on my thinking ability in that I am so afraid of not doing “justice” to my art of delivering a lesson in my classroom. My learners are no longer awake in class (**picture C**). I feel that the delivery of lessons is of paramount importance, but this has become difficult during Covid-19 as there as so many contextual factors that hinder this.”*

5.3.10.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers' functioning within the unfamiliar order

*"Mental health as an educator prior to Covid-19 was a challenge given the quality of intellectual learners that we have but Covid-19 has come only to cement those challenges. It has been extremely difficult yet rewarding at the same time. I have never been an educator to hide behind a desk (**picture D**) and for me this has been the most hard-hitting platform I have ever faced. For me, interaction comes naturally – it used to - given the fact that now I must keep my social distance from my learners makes it extremely impossible to feel (**picture E**) my learners understanding what I am teaching. When you, yourself must be cautious of where you are solely for the reason that you maybe (sic) risking your life, it is virtually impossible to say that you are 100% mentally equipped to handle your position.*

*Learner attendance daily before Covid-19 used to be around 50 to 55 but during Covid-19 it is supposed to be 50% of the capacity of a venue which then permits 25 learners into my classroom. Learners have been grouped according to A days and B days. Due to the peaking of the different variants of Covid-19, now I only have an attendance of maximum 14 learners on any given day. This hinders the learning process for learners who aren't at school. The majority of our learners fall under the poor or vulnerable socio-economic levels. This results in them have (sic) minimum access to resources so their learning of the curriculum cannot be continued at home. However, as an educator I have utilized whatever resources I have available to be delivered in the safest and best possible manner to each and every one of my learners in and out of attendance. Overall, the performance levels declined (**picture P**). Covid-19 has also affected and altered the mannerism of learners. As I said before, many of them stopped to function in a classroom environment. I would also not be doing justice if I failed to*

mention there are a handful of learners who have excelled during the pandemic. I would love to think that the classroom adjustment size has been working in their favor. They have filtered in all concepts and only to[o] proudly show off their intellectual abilities.

*With regards to the changes, I expressed in my collage during Covid-19, I have now been able to make use of more than a few resources to teach in my class. Having had to get used to the small classes I feel it has made me to realize that there are always many routes to a destination. Prior to Covid-19, I would never have tackled so many resources (**picture H**). Keeping up to date on information used to be a challenge before Covid-19. During this pandemic I fell (sic) I have been utilizing all my routes as a result I have become even more equipped as and (sic) educator in the 21st century (**picture I**). I have learnt to accept this new normal. I understand it is never going away and that I NEED TO CHANGE to keep up with the mindset of learners and keep them in the present. The fact that I have seen the perfect intellectual changes in some learners only makes me want to outshine myself. Management of learners by myself has been excellent.*

I implement all of the new changes in our lifestyle every minute of my teaching day. It is difficult, it used to set me back but not (sic) I think it has also been a strategic method of the way I deliver my lessons. My learners are aware of my demands as an educator in the classroom during this time and they have met me halfway. Due to Covid-19, we never used to go out as a class but because it is managed so well in the class, we have accustomed ourselves to carry ourselves out in the same manner out of the classroom. This is no longer a challenge.

My teaching methods have not been galvanized (sic) during this pandemic. It changes constantly. I can reflect on my teaching methods prior to Covid-19. It was constant and not demanding. I have learnt to evolve around the adjustments of my learners. I have had to learn to deliver my lessons in a way so that my learners can be awake in class. I have learnt to be extremely creative as in becoming more of an artist whose daily goal is to achieve an Oscar Award. In many ways, I have been thankful of the pandemic because I have been commanded into this position by higher powers. I have also learnt to be more gracious of my situation. Hence, my delivery in the classroom is always an Oscar performance. I think that if I did not relate gratitude with my situation, I would never been able to adjust. Gratitude in that it takes an awful lot to have a child in the present, leave alone (sic) being in a class, during this time.

My mental attitude as well attitude has a 360-degree rotation. It is extremely difficult being positively charged on a daily basis, but I think when you realize that you do not have an

alternative, you just forge ahead. Most accepted was social distancing out of the class and delivering an upbeat lesson, learners were more focused out of the class behind a mask than change of scenery and not be confined positively alters and enhances the mind.

*Learners are coming to school in a semi-conscious movement. Their behaviour in class is that of a robot (**picture J**). Their movement is so limited and lifeless. Unfortunately, this behaviour I choose not to embrace because I have noticed that my learners are ready to go back to sleep at 8:00am. With regards to listening and communication, I have at least three learners that provide answers to the relevant questions whilst the other learners just sit and look into open space and daze (as can be seen in **picture A**). being assertive is the way forward. I feel that learners need to step up to their roles as parents (**picture K**) (sic) and make certain that their child or children are coming to school to learn and not pass valuable time or coming to school for nothing during a pandemic.*

*Attendance in a Covid-19 class is poor, but work has been going on well. Even if the attendance is poor, the curriculum is still being taught. Having fewer learners in the class was difficult at first (as illustrated in **picture L**). But I adjusted because this is the new norm. We are able to comfortably house half of the learners in class and maintain social distancing. What makes me upset are those learners that do attend school, they are in school without stationery and learning material that has been provided. The only way forward was to ask them to write in crayons as sharing isn't allowed during Covid-19. The learners that attend school are regulars and the others have become lackadaisical. The learners that are absent are required to catch up on their own because we are far too advanced in class to retreat and start again for those that missed out. The learners are managed and accommodated extremely well because only 40 to 50 % of the learners are attending.*

*The learners that were weak continued being weak whilst some of them excelled at their pace. The weak learners were trying to understand and make sense after our discussions, and they would be somewhat on the right track. Overall, learner performance has dwindled quiet badly. Learners are lost. The only thing that I am able to do is give extra sets of worksheets on aspects so that the concept will be better understood. If this is done, then I feel that we have made some progress. I am also now very able to work on a one on one with most of learners (as per **picture M**). Classroom size is a huge bonus in this aspect as it gives us the distance that we need to keep but also the time limit is maxed as there are fewer learners to work with. Due to the attendance of small numbers of learners on any given day, I am now able to transition my*

*learning more cognitively. Being creative (as represented in **picture N**) is beneficial as learners are more engaged and interested in the creative methods of learning. Therefore, a relook at teaching techniques or methods is essential during this time of Covid-19.*

*Managing learners has been a breeze for me because learners are well taught day in and day out on the importance of attending school during the pandemic. It is extremely difficult to teach behind a mask (as in **picture E**). Sadly, it is here to stay, and I can say we need be a little way conservative (sic) with this aspect. If this is here for the long run, then it can imply that we are going to produce robots with robotic like movements with our kids. I am certain that not much emphasis is being put on keeping a sick learner at home. Parents will not answer their phones if we have to call and report that their child is sick. Transportation in this regard is also an issue. I am not very happy with the notion of home schooling (as represented in **picture K**). Parents have taken the responsibility to teach their child, keeping in mind that they are not qualified to teach, and they may have not done the same curriculum as us educators who are teaching now.*

I believe that only if a learner is capable with learning on their own with little help from the teacher, then only can this learn embrace the notion of home learning (sic). However, my learners are not capable of this. I agree that it is extremely important for teaching and learning to take place whether it is in or out of the classroom. But it needs to be done correctly. In the past parents have never been so involved in their children's academic aspect. However, now they hound teachers for work, without acknowledging that each section to teach has a specific time limit. These parents come across as parents who pushes the work on the kids to finish up as quickly as possible. They are doing an injustice to their child's learning process.

*The pandemic has a tsunami like impact on our lives (as per **picture Q**). It will take many years to rebuild all that we have lost. The ability to make learners thrive outside of the classroom requires effort from all stakeholders. Although we are uncertain of this virus, life goes on, we are required, as educators, to use our skills to work around the situation that we are faced with. Having learners test positive in my class really set me back. I have become a paranoid teacher. Something that I do not like but that is my shield of safety.”*

5.3.10.3 Structured interviews

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Natasha: *“The impact that Covid-19 has left on teaching and learning has been significant. One of the many implications is that many students now have learning lags in many different learning areas [for] example mathematics and English. Learners have unfinished learning due to limited time constraints and curriculum adaptation. Furthermore, many learners have become more likely to drop out of school. Due to the lockdown and being confined at home for a long period of time, learners begin to lose the knowledge and skills that they once acquired. Learner’s who are passed on to the next grade unprepared are missing key building blocks of knowledge that are necessary for success, while students who repeat a year are much less likely to complete high school and move on to college.”*

2. Researcher: What do you think can be done to overcome these implications?

Natasha: *“Some of the ways we can overcome the implications of Covid-19 can be:*

- *Implement programs that target those in most need.*
- *Education mediations during a predicament can support prevention and recovery of public health while alleviating the impact on students and learning.*
- *Offering extra tuition for learners who are struggling.*
- *Encouraging learners to attend school*
- *Simplifying curriculum- teaching only what is necessary”*

3. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Natasha: *“Due to many learners being at home, they do not have the motivation to do any type of learning. So, when going back to school, this has left a huge adjustment/ transition for learners. There will also be a significant increase in the pregnancy rate in schools. Learners are at home most days of the week and therefore many are left unattended to.”*

5.3.11. Participant 11 - Praise

5.3.11.1. Collage

This data production method addressed the following:

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order

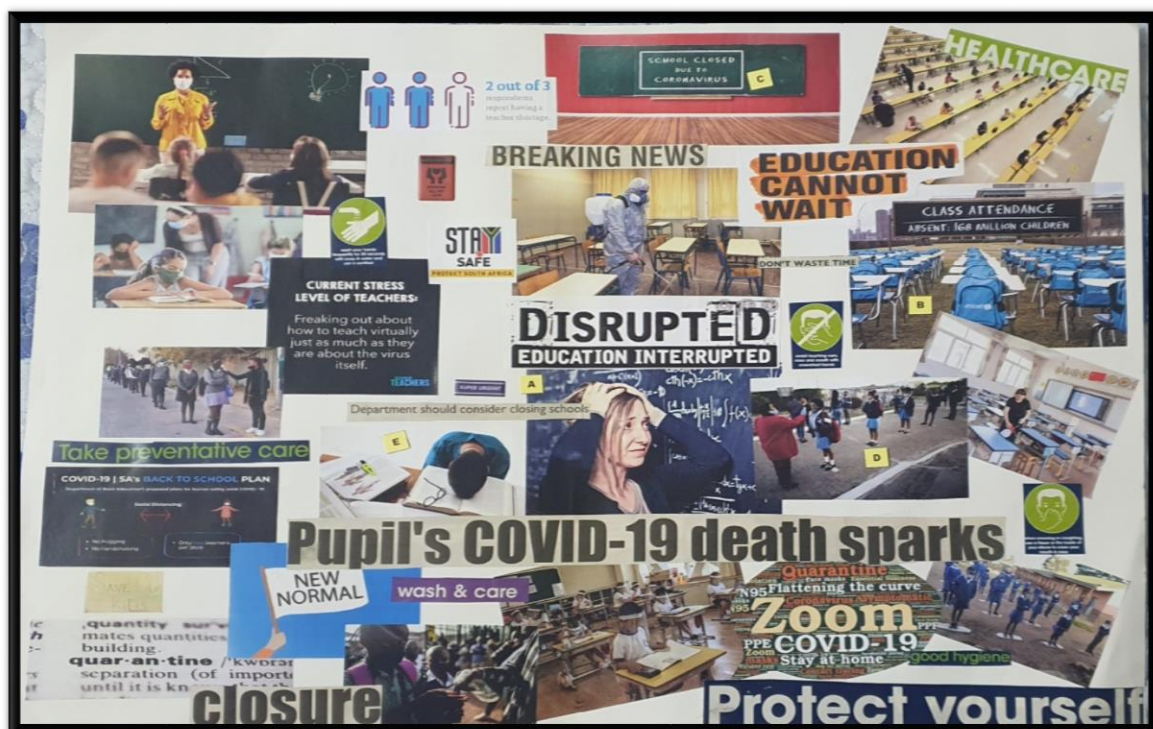


Figure 5.21 Collage created by Participant 11 - Praise



Figure 5.22 Specific pictures referred to by Participant 11 - Praise

Discussion on collage (write up):

“Picture A- Teachers have accumulated a high level of stress since the beginning of the pandemic. One of the major stressors is having to adapt to the new normal which places greater demands on teachers in the classroom. This is accompanied by anxiety, depression, and sleep disturbance.

Picture B- The Covid-19 pandemic has resulted in major increase in learner absenteeism. This has negatively impacted on learner’s academic performance as well as their mental health and functioning.

Picture C- *The ongoing closing and opening of schools due to positive Covid-19 cases and the adherence to Covid-19 protocols has affected teaching and learning as time was being lost. This causes major delays in the delivery of the curriculum.*

Picture D- *The new normal has now allowed for new protocols to be followed every day at school. Temperature checks and sanitizing are done religiously which is time consuming.*

Picture E- *Learners are becoming overwhelmed and their stress and anxiety levels are increased which has a negative effect on their learning.”*

5.3.11.2. Reflective Journal

This data production method addressed the following:

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers’ functioning within the unfamiliar order

“At the start of this pandemic, I had many mixed emotions. However, stress and anxiety were my two major mental health issues. Due to the demands of [being] a teacher during this pandemic, my mental and physical health has been affected. Depression also had played a major role due to me not being able to manage the pressure. Nevertheless, I try my best to protect my mental health by being positive, remaining calm and finding inclusive teaching strategies so that I am able to deliver to my learners without disadvantaging them.

As expressed in my collage, there are many changes in the teaching and learning environment. It has come to realization (sic) that this is the new way of life, and we are required to adapt to it. Therefore, I am able to navigate these changes by ensuring that the protocols are reiterated in the classroom. I have provided worksheets and additional learning material. Created WhatsApp groups to ensure that learners are well informed. Encouraged learners to attend

school and complete their assessments. For grade 12s the holiday classes continued, so I had time in school to compile resources for my other grades and subjects.

Prior to Covid-19, teaching and learning was functioning a developing level (sic). Teachers had the time to work with learners without hinderances. The concept of time being lost was not thought off. However, during Covid-19, the opposite has taken place. Now, there is very little time to work with learners and there is a high number of learners who are absent or have not yet returned to school. Learners are found to have shifted their focus from schooling and have redirected to things not concerning academics. Hence, as an educator, it has now been almost two years dealing with this pandemic at school level. I am still slowly adjusting. Every day we have new situations which we must deal with effectively. Our learners are our main priority. Therefore, we do whatever is possible to assist them in achieving their academic goals.

As mentioned before, learner attendance has decreased tremendously. However, with learners that are present, we ensure that they are following social distance with proper air ventilation, and we ensure that classrooms are not overcrowded. Learner performance during the Covid-19 has also decreased. Learners are not as focused as prior to Covid-19 due to the many disruptions. I now use more visuals in my lessons. This helps learners to have a better understanding of what is being taught. Due to Covid-19, there were no activities that were done outside of the classroom. I was afraid to take learners out because of learners not following the Covid-19 protocol as the environment isn't so confined."

5.3.11.3 Structured interviews

This data production method addressed the following:

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

1. Researcher: What do you think are the implications of Covid-19 for teaching and learning?

Praise: *“There are many implications of Covid-19 for teaching and learning. The major impact of school closure has led to an increase in the dropout rate. The rise in absenteeism has also led to learners missing out on teaching and learning time. The Covid-19 protocols are time consuming and therefore interrupts the teaching and learning process.”*

Research: What do you think can be done to overcome these implications?

Praise: *“Encouraging all learners and teachers to take the necessary preventative measures to contain the spread of the virus. Reiterating to parents and learners about the important of education. Internet resources should be made available to learners.”*

2. Researcher: Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

Praise: *“If Covid-19 remains for some time, the effects of it will result in serious learning lags which will affect the future of learners and our country.”*

5.4. Chapter conclusion

Collages, reflective journals, and interviews were used to generate data for this study and the responses from the participants were presented in this chapter. The audio recordings were transcribed verbatim. Visual and textual data gained from collages and reflective journals were also presented in this chapter. Moreover, the pseudonyms and biographical data of participants were included in this chapter. The next chapter will entail an analysis of the data according to the themes, a discussion of the findings as well as the significance of the theoretical framework. Moreover, it will include a narrative that will be developed from the findings.

CHAPTER SIX: DATA ANALYSIS AND DISCUSSION OF FINDINGS

6.1. Introduction

The previous chapter presented data gained from participants through the use of collages, reflective journals and structured interviews. Themes will be discussed in detail in this chapter. In addition, an analysis of each participant's response as well as an overall response in a tabulated form will be presented. Furthermore, the challenges and implications of Covid-19 for teaching and learning will be presented along with ways in which we can overcome some of the challenges.

6.2. Data analysis: Themes

Presented below are three themes that emerged from the data production tools.

Themes	Questions/prompts from data production tools
Theme 1: The unfamiliar order.	<ul style="list-style-type: none">• In the form of a collage, participants were required to put together a series of images and words that signposts the changes in teaching and learning during Covid-19.• Explain, in detail, what your collage depicts. Try to refer to each image/ word used in your collage.
Theme 2: Teachers' functioning within the unfamiliar order.	<ul style="list-style-type: none">• Reflect on your experiences of teaching during the pandemic by expressing your emotions or commenting on your mental health. How have you worked around this?• Based on the changes you have identified in the collage, reflect on how you navigate these changes. How have you embraced these changes in the teaching and learning process?• Reflect on the differences in the teaching and learning environment prior to Covid-19 and during Covid-19. How have you adjusted to this environment?• Reflect on the challenges in the teaching and learning environment and how have you embraced them.

	<ul style="list-style-type: none"> • Reflect on learner attendance during Covid-19. How did you manage the accommodation of learners in a classroom? • Reflect on learner performance during Covid-19. How did you cater for the various learning levels during Covid-19? • Reflect on the overall management of learners during Covid-19 in accordance with health protocols. (Teaching and learning outside of the classroom)
Theme 3: The aftermath of the unfamiliar order.	Main probing question: <i>How do these changes implicate teaching and learning?</i> <ul style="list-style-type: none"> • What do you think are the implications of Covid-19 for teaching and learning? • What do you think can be done to overcome these implications? • Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

6.2.1. Discussion on themes

Thematic analysis was used for identifying, analysing, and interpreting patterns of meaning within qualitative data. It provides accessible and systematic actions for generating codes and themes from qualitative data. Braun and Clarke (2006) and King (2004) argue that thematic analysis is a valuable approach for exploring the ideas of different research participants, underlining similarities and differences, and generating unforeseen insights.

Thematic analysis is also beneficial for summarising key features of a large data set, as it gives leverage to the researcher to take a well-organised approach to handling data, assisting in producing a clear and arranged final report (King, 2004). The themes, as presented above and discussed below, emerged from the data produced by participants.

6.2.1.1. Data production tools in accordance with the themes

6.2.1.1.1. Collage

This data production method addressed the following.

First research question:	First objective of this study:	Theme one:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.	The unfamiliar order

This data production tool aimed to explore the changes in teaching and learning during the Covid-19 pandemic. There are many advantages of using collages to obtain data. Butler-Kisber and Poldma (2010, p. 4) articulate “Collaging can also be helpful in conceptualizing a phenomenon by fleshing out different facets in order to get a nuanced understanding of it”.

Participants were required to put together a series of images that signpost the changes in teaching and learning during Covid-19. Once the collages were completed, they were required to do a write up which explained their collages.

Theme one: The unfamiliar order

The Covid-19 pandemic presented the education system with its greatest test. The changes in teaching and learning during this unprecedented time were neither expected nor planned. As a result, in the educational realm, teachers and learners were caught off guard. The situation that teachers and learners found themselves in was not something that they were accustomed to. The participants express that Covid-19 catalysed a transition from a traditional classroom to an unfamiliar classroom.

The traditional classroom offered stability, unison, and freedom to teachers and learners, whilst the unfamiliar classroom opposes this. Therefore, the first theme emerged from these impressions. As per the theoretical framework of the study, Lewin (1951, p.50) describes this as step two (change), stating that “change is a process where the organization must transition or move into this new state of being.”

6.2.1.1.2. Reflective Journal

This data production method addressed the following.

Second research question:	Second objective of this study:	Theme two:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic	Teachers' functioning within the unfamiliar order

This data production tool explored the ways in which teachers navigate the changes, expressed in the collage, in teaching and learning during the Covid-19 pandemic. A journal (notebook) was presented to participants to reflect on how they are navigating the changes in teaching and learning as expressed in their collage. It served as a type of diary where participants made regular entries during prescribed timeframes. Participants were given prompts to reflect on (see appendix f)

Theme two: Teachers' functioning within the unfamiliar order

Since the unfamiliar order surfaced, an exploration was done to explore how teachers navigated and embraced these changes. Therefore, the second theme emerged from teachers' reflections on their navigation within the unfamiliar order. As per the theoretical framework of the study, Lewin (1951), notes this as stage one (unfreezing) of his change model.

Unfreezing means getting people to gain perspective on their day-to-day activities, unlearn their old habits, and be open to new ways of reaching objectives. The goal during the unfreezing stage is to create an awareness of how the status quo or current level of acceptability is hindering the organisation in some way.

6.2.1.1.3. Structured interviews:

This data production method addressed the following.

Third research question:	Third objective of this study:	Theme three:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.	The aftermath of the unfamiliar order

Interviews were set with participants to explore the implications of the changes during Covid-19 for teaching and learning. Some of these interviews were done via Zoom and others were done in person, with Covid-19 protocols adhered to. The interviews were transcribed.

Theme three: The aftermath of the unfamiliar order

Research was done to find possible short-term and long-term implications of Covid-19 on teaching and learning. Whilst discovering short-term and long-term implications of Covid-19 on teaching and learning, many of the participants provided suggestions for the aftermath of this pandemic. Therefore, the third theme emerged from these suggestions.

As per the theoretical framework of the study, theme three aligns itself with step three (refreezing). During this step, efforts are made to stabilise the new quasi-stationary equilibrium, to make certain that the new behaviours are comparatively safe from regression. Lewin further implies that the new behaviour (after changes have been implemented) must be consistent with the rest of the behaviour, personality and environment or it may result in a new round of disconfirmation. In this context, the stage involves applying the new changes and ways of doing things into the daily routine of the school (Wirth, 2004).

6.3. Discussion on participants' responses

6.3.1. Participant 1 – Sonu

The responses received from participant 1, Sonu, were received without vagueness. In her collage she portrays that this pandemic has resulted in a major disruption in the education system, specifically within the teaching and learning process. The major disruption that she mentions concerns itself with the changes in teaching and learning during the pandemic. The changes that she experiences includes conforming to the new normal (wearing masks, sanitizing and social distancing) which is a result of the pandemic, halting the education system

through means of putting a hold on the traditional classroom and moving towards a more pressurised system of unexpectedly preparing for home learning. Furthermore, she mentions that the role of educators increased as they are now expected to reinforce the Covid-19 health protocols which consumes teaching and learning time. She states that this reinforcement results in *“shorter time for curriculum delivery.”*

Another change during the pandemic, as mentioned by Sonu, is the change of emotions in the classroom. She implies that the classroom was a free, calm and fearless atmosphere which swiftly changed into a *“soaring, turbulent and intense”* atmosphere. Sonu states that this pandemic also resulted in a surge in a shortage of teachers which leaves a huge gap in the teaching and learning process. One of the expectations of teachers were to take on more subjects to teach which means more pressure was placed on teachers.

Additionally, *“lack of timely government guidance”* was another change mentioned by Sonu. She further expresses that the education system was already experiencing challenges as the demands in the curriculum were higher and were not easily attainable. The pandemic fostered this as a trimmed curriculum was introduced and teachers are expected to accustom themselves to teaching a trimmed curriculum in a different classroom functionality. *“Learners have had to adjust to at home learning and online learning / zoom lessons, limited interaction amongst learners, collaboration now being a thing of the past, learner isolation resulting is demotivation to learn, mental and physical exhaustion of teachers, mental state of learners i.e anxiety and stress, and one on one teaching done by teachers”* as stated by Sonu, were more of the changes in teaching and learning during the Covid-19 pandemic. Due to social distancing, Sonu experienced the loss of personal interaction with her learners.

The new attendance model was a change that hindered the smooth delivery of the curriculum, Sonu states that *“during this pandemic I have had to juggle teaching a full course-load to learners who come from all walks of life, facing different circumstances/ situations, whilst also ensuring that the Covid-19 protocols were being followed. Whilst doing this, I have had to also consider that teaching certain aspects of the curriculum tend to take longer than usual due to the attendance structure.”*

Sonu discussed, in detail in her reflective journal, the ways she navigated the changes that she was faced with during the Covid-19 pandemic. However, she expresses that the navigation during the pandemic *“emerged a lot of feelings in me such as fear, anxiety, worry, frustration and much more.”* During the pandemic, Sonu had to constantly remind learners to follow

protocols and ensure their safety knowing that these learners want to be around their friends to play, work etc. She further expresses that she had to ensure that curriculum was taught and followed whilst also making sure that learners are not left behind. Sonu states *“I went the extra mile and used a variety of resources to support my learners by making instructional packages, worksheets and term booklets.”*

She further mentions that she *“due to the loss of teaching and learning time, a trimmed curriculum was provided, and we have had to ensure that education is more inclusive and effective now, than it was before the pandemic. Although this has happened, the demand expected of teachers continues and we, as educators fulfill all the roles that are expected from us. A way in which I have navigated through this is through cutting down of content, only important aspects were highlighted in the resources according to the trimmed curriculum. I have used various resources to check for sufficient content.”*

Sonu navigated the changes by networking with other teachers. She mentions *“I have shared my experiences with other teachers/ colleagues. This gave me the opportunity to share and learn about other teachers['] experiences as well.”* With regards to learners falling behind during this pandemic, Sonu ensured that she provided support through learning recovery programmes. Additionally, in this regard, she mentions *“I provide more individualized approaches to learners who need it e.g., one-on-one. This has its advantages and disadvantages. Whilst I focus on the one learner in the class, my other learners are disadvantaged as they don't receive the individual attention they need. It is difficult for me to individually focus on my learners due to limited time and the class sizes.”*

The collage created by Sonu portrays anxiety, stress and fear during the pandemic which affects both educators and learners, she mentions that she navigates this change by *“I create a safe and supportive interaction where my learners can express their emotions and experiences during this pandemic. This helps increase the concentration level in learners when they are reassured that they are in a safe environment. I include activities that will help my emotional, overwhelmed, and vulnerable learners. This is taking time out of me teaching the curriculum and focusing on my learners' well-being itself.”*

As expressed by Sonu, the reiteration and adherence of the Covid-19 protocols was essential in the teaching and learning process. This change was navigated by ensuring that class sizes were reduced. *“A way in which we have adjusted to this change is through different attendance*

strategies. Learners attend shifts to reduce class sizes. In my school, we first started the alternate week model, recently shifting to the alternate day model."

Another change in the teaching and learning process, as expressed by Sonu, is the exclusion of the collaborative teaching and learning practices. Sonu articulates that *"This affects learners' social and academic developments."* She states how she navigated this change saying *"I avoid tasks that requires (sic) large groups of learners and promote more full-on class discussions where all learners contribute together and with each other while adhering to the protocols (this is the notion of the collaborative teaching methodology, just done in a way that embraces the protocols)."* Additionally, the large class sizes of 40+ learners had to be reduced to smaller classes as per the Covid-19 health protocols. This was navigated by Sonu through the adaptation of the alternate day model which allowed for small class sizes. Moreover, she expresses, *"A way in which I've navigated this change is that I have made work booklets which makes is easier for me to keep learners up to pace at the same time. It saves me time from constantly writing on the board."* With regards to social distancing, Sonu has to constantly remind learners of the Covid-19 health protocols.

Sonu expresses that the Department of Education had implemented a recovery plan for the loss of teaching and learning time. This resulted in a trimmed curriculum. *"Now, we have to ensure that the curriculum is more inclusive and effective, than it was before the pandemic"* as mentioned by Sonu. She navigated through this by *"cutting down of content, only important aspects were highlighted in the resources according to the trimmed curriculum. I have used various resources to check for sufficient content."* Furthermore, Sonu states that huge learning gaps have been created due to the change in the teaching and learning process during Covid-19. She mentions that she had to navigate this through ensuring that there is a catch-up plan as part of her role in the teaching and learning process. In stating so, she ensured *"individual teaching outside of the instruction time (during breaks) and through intervention programmes (LSEN). Furthermore, I do not bombard and overwhelm my learners with the amount of content I am teaching. Rather, I work at their pace."* Moreover, she states *"to accommodate for all of my learners I have used pairing of weaker learners with the more academically inclined learners and have also offered individual support during and after class time (non-teaching periods)."*

Regarding the limitations and constraints with curriculum delivery during the pandemic, Sonu embraced this challenge by *"using easier methods to teach, simplifying my activities, and using*

worksheets for learners. This makes it easier as I spend much less time writing on the board and more time teaching content.” Moreover, Sonu states, “to meet and cater for the needs of all of my learners, I have adjusted my lessons and use strategies in my classroom where no protocol can be broken. I ensure that all my learners understand the content of the lesson whilst also ensuring that protocols are followed. In cases where my learners are still struggling (weakest learners), I provide individual support to that learner or those learners in my non-teaching periods.”

Sonu states that she went beyond the call of duty and ensured that she would support her learners. She notes that *“to effectively support the development of my learners, I would have to have the knowledge of their cognitive functioning, including their emotional, social, and behavioural development. During this time, I used my knowledge of my learners’ motivation and abilities to provide or create conditions in the classroom to promote self-motivation. I decided on a general approach to teach my entire class that would cater for their learning needs and to support student learning in the most effective way I can. I give my learners more time allocated as per Department of Education to complete their tasks and assessments. As mentioned above, my priority during Covid-19 is not only to ensure that curriculum is taught and completed, but also so ensure the safety of my learners whilst also improving their academic capabilities (weaker learners). The pandemic is exacerbating pre-existing education disparities by reducing the opportunities for many children, the youth of our country as well as many adults, to continue learning.”*

The notion of moving to online teaching was another change in the teaching and learning process during Covid-19 as expressed by Sonu. She expresses that *“disadvantaged schools like mine ... could not ensure that learning continued during this time. Furthermore, many educators did not know what was involved in e-learning. Another encounter I faced during this time was having my learners adjust to a new learning environment. Whilst ensuring that my learners are being taught, I have had to also ensure that my learners were motivated enough to concentrate on learning/what was being taught.”*

The necessity of wearing masks became a change in the teaching and learning environment as mentioned by Sonu. Sonu states that *“Teaching and learning with masks present a new set of challenges not only for me, but also for my learners. When teaching with a mask, I am straining my voiced (sic) all the time. It also impacts on my ability to pace my lesson. Pre Covid-19, I could depict my learners understanding of content through facial expression, now I cannot tell*

if they are understanding or enjoying my lesson because their faces are masked. A creative solution to this challenge is to wear a visor. Also, to question learners to gather their understanding of the topic.”

Sonu mentions that her learners have a very low concentration span as they have become accustomed to staying at home during the various lockdowns. She states, *“this results in reduced physical activity, poor diets as some learners living conditions does not allow them to get the proper nutrition that they need, increased levels of anxiety and in special cases, exposure to domestic violence. In such situations, schools normally provide a safe haven for learners living in those circumstances. Now learners are without that protection hence they come to school disturbed and therefore cannot give off their full attention. The school NSNP [National School Nutrition Programme] helps in providing proper nutritional meals for learners which eradicates that challenge only when learners are in school. Additional support for learners is provided by me. I ensure that my learners know that they are on safe grounds and get the counsel that they need to overcome the situation that they’re in. This allows my learners to be able to concentrate better in the class where I can grasp their full attention.”*

As Sonu ended her reflective journal, she summed up the ways she navigates the changes in the teaching and learning process during the Covid-19 pandemic. She states, *I have continued to support my learners through: Showing care and concern by noticing these changes, I do not push for information or ask pointed questions, I have done check-ins with my learners’ parents or guardians where there was a concern, I do not ignore concerns or minimize what has happened, I lend an ear to my learners. I let them know that they can talk to me, I reassure my learners and let them know that they are safe in my care, I encourage my learners, I do more listening than talking when need be, I provide opportunities for my learners to express themselves, I keep to routine as much as possible, I do not recount traumatizing details of events in special situations, I refer my learners if I feel further help is needed [for] example referring them to a social worker.*

The structured interview was conducted to discover the implications of the changes during Covid-19 for teaching and learning. Sonu articulates that the trimmed curriculum, loss of teaching time (staggered return of learners), and the changes in teaching and learning can result in learners being left behind, lower grades, learning gaps in the future as well as learning lags. In secondary schools this may result in higher dropout rates. Furthermore, she states that *“assessments were cancelled which shows learners’ progress. This delays the recognition of*

high potential and learning difficulties and therefore has long-term negative effects on the learner.”

Sonu suggests the following for the above implications; *“Extra classes for learners who are behind, one on one teaching, Teach (sic) only content that is beneficial to learners, Try to create an atmosphere conducive to education/learning, Have frequent communication between learners and parents to discuss progress, Give learners the opportunity for synchronous or asynchronous discussion in the classroom, Figure out where gaps may prevent learners from understanding content taught, Use formative assessments to figure out where learners may need the extra support, Give feedback in the context of lessons, only if learners need a quick reminder or the concepts refreshed, Work with learners who need additional support, Establish a routine with learners that can be followed through different educational programmes [for] example television, Encourage learners to ask questions, Start shorter learning lessons and make them progressively longer.”*

Moreover, Sonu expresses that *“another way in which I navigated through these changes, was the employment of Education Assistants, General School assistants and the reading champion. These opportunities assisted educators in making the load lighter, ensuring protocols were adhered to and offered assistance in the classroom such as working individually with a weaker learner, passing of materials etc. A screener was also employed to check temperatures, sanitize and ensure social distance. In my school, we have a health and safety officer to ensure that social distance is adhered to and learners’ masks are on during breaks. Additionally, educator assistants played different roles, such as a psychologist assistant [who] offered assistance with learners who were struggling mentally or psychologically.”*

6.3.2. Participant 2 – Mandisa

The responses received from participant 2, Mandisa, comprised data that expresses the effects on Covid-19 on a teacher, the teaching and learning process as well as the school environment (matters outside the classroom). Mandisa portrayed, in his collage, that teachers are required to become resilient during this pandemic as teachers are faced with many challenges and difficulties during this time. Some of the changes to the teaching and learning process, as expressed by Mandisa, include wearing of masks and social distancing in and out of the classroom. These have been adapted as classroom rules. Moreover, the pandemic now requires frequent washing of hands which infringes on teaching and learning time. Mandisa expresses this saying *“Mornings would usually be filled with smiles, hugs, high-5s and special*

handshakes but these have been replaced with socially distanced greetings.” Due the social distancing, Mandisa portrays *“since sharing used to be a fundamental act of kindness that we encouraged. Now we are asking learners not to share, which could be quite confusing to younger children.”*

Other changes portrayed by Mandisa were the regular closure of schools, grouping learners to attend school in smaller groups to maintain social distance, the exclusion of the collaborative teaching methodology and the prohibition of social interaction. Furthermore, Mandisa expresses that due to Covid-19, fundraising initiatives also had to cease. To add, he also mentions that many parents had lost their jobs, therefore, are unable to pay school fees. This places a greater strain on the school governing body to ensure that staff members are getting paid.

On the positive side, Mandisa portrayed in his collage that the discipline has improved. He clearly states *“discipline itself has improved in that there has been a drastic reduction in fights & scuffles between learners. This could be attributed to the low numbers of learners & social distancing.”* Moreover, he mentions that learners have now become responsible. Additionally, he mentions that learners are able to receive individual attention because of the smaller groups attending school.

Mandisa notes that the greatest change in the teaching and learning process during Covid-19 was moving from a traditional form of teaching and learning to a more digital or technological form of teaching. He states that more reliance on digital means of teaching was encouraged. Mandisa also expresses *“this poses a difficulty since not all schools and learners have access to these digital resources.”* He also states *“now due to learners staying at home more, with work being sent via booklets or digitally, the role of parents (of lack thereof) in their child’s education is drastically highlighted.”*

Due to the Covid-19 protocols, sporting activities in school came to a halt. In this regard, Mandisa states *“normally learners would share the limited equipment & participate in team sports, but we are unable to share equipment. This is sad since learners looked forward to outdoor activities and it was a chance for learners who aren’t academically inclined to shine.”* The other changes expressed by Mandisa was the revised curriculum (ATPs); he mentions that the workload and expectation of teachers during this time is still too demanding and there are still too many assessments. As a result, Mandisa, voiced that the learning gap is growing larger. Mandisa further states that the teachers are faced with time constraints during the pandemic

due to the many closures of schools for the various waves, or if a teacher or learner tested positive then the school had to be closed for deep cleaning and sanitation.

Mandisa's reflective journal clearly provides his attempts of navigating the changes in the teaching and learning process during Covid-19. With regards to the changes in the delivery of lessons during this pandemic, Mandisa states that he had *"to constantly try new methods of teaching that would be beneficial while still adhering to Covid-19 protocols. I have had to come to a point of understanding [of] what is in my control and what is not."*

Mandisa reinforced the 'new normal' which is the wearing of masks, social distancing, regular sanitizing, new classroom rules and the new ways of greeting by using charts and role play activities or game. Moreover, he verbally reiterated it to his learners. With regards to learners being in isolation, Mandisa encouraged learners to exchange *"ideas of fun, creative and interesting things to do. They can get to know each other's likes and dislikes- which they can turn into a quiz or game. This was done in small groups that adhered to the Covid-19 protocols."* Mandisa enjoyed having smaller numbers of learners in his class, he found it beneficial to dedicate more attention to learners individually and to try differentiated curriculum with learners that have learning barriers.

Mandisa tried to incorporate non-contact activities like aerobics and yoga since sporting activity was excluded. Additionally, he tried to engage with parents to explain their role and give them tools to help them to assist their child whilst being at home. With regard to time constraints, Mandisa ensured that necessary and core concepts that enables learners to become meaningful were taught first.

Since the sharing of textbooks were discouraged, Mandisa ensured that he made worksheets and booklets for learners to use individually. He mentions that learner performance declined drastically. Therefore, he had to lower the standards of his lessons and assessments. Mandisa states *"levels of questioning are limited to mostly level one and two questions."* The challenge of poor learner attendance was navigated by Mandisa by ensuring that work is sent home through the means of WhatsApp. Moreover, the management of classes was determined by an alternate day model which reduced the number of learners attending to adhere to Covid-19 health protocol.

Mandisa was very confident in his interview. He believes that this virus is a disease that we must contend with, just like the other existing viruses. He feels that schools need to

accommodate learners, and provide more manpower to assist with the screening and sanitizing process. He implied that if schools do not move toward digital learning, then learners may suffer its consequence. Moreover, he suggests that more non-contact methods of teaching and learning must be applied. He also articulates that the Department of Education needs to provide financial support during this pandemic. Additionally, he mentions that there will be serious learning lags in the future if teaching and learning is not effectively conducted now.

6.3.3. Participant 3 – Danny

During the data generation process, Danny tested positive for Covid-19, so his collage was done whilst he was in isolation. He created his collage as a Microsoft Word document. He portrays in his collage that one of the changes in the teaching and learning environment during the pandemic was the wearing of masks by both educators and teachers. Moreover, unfamiliar from pre-Covid-19, learners are required to line up outside the school gates maintaining social distance and getting their temperatures checked. Importantly, he states that *“these impacts on teaching and learning at my specific school has learners are always pitching up late, therefore this process minimizes teaching and learning in the first period.”* Danny notes the adherence of teachers to the Covid-19 health protocols by constantly encouraging learners to wash their hands, sanitise, use their masks and to keep a safe distance was adopted by teachers. Danny, very profoundly, mentions that they do not compromise and that educators lead by example.

Danny’s collage portrays an image of an educator standing at the front of the class, far away from learners and with a mask on. He states that he had to change his manner of teaching, standing at the front of the class, minimising movement. He expresses that *“I feel this has a negative effect on teaching and learning, especially to my weaker inclined learners that may need my personal assistance.”* Moreover, his collage presents phrases that expresses emotions during the pandemic. This is the major change as teachers teach and learners learn in fear. He expresses that the Department of Education is not rigorous in their protocol of disinfecting schools when a learner or teacher is found to be Covid-19 positive.

Danny mentions that adhering to Covid-19 protocols limits teaching and learning time. In terms of the testing of temperatures and other protocols in the morning *“these impacts (sic) on teaching and learning at my specific school has (sic) learners are always pitching up late, therefore this process minimizes teaching and learning in the first period.”* The idea of regular hand washing results in learners continuously leaving the classroom. Danny mentions that

“when they return, there is a disturbance as they are asking around what they have missed whilst outside.”

Danny also notes that educators are tired and overwhelmed with the increased demand of administration such as recording of learners’ temperature etc. Moreover, at his school, their teaching allocations have increased. The frequent closure of schools negatively affected the teaching and learning process as learners had to stay at home with limited to no learning resources as they belong to a semi-rural community. Danny expresses that they had no means of holding online classes with their learners. In some cases, little communication was done through WhatsApp. According to Danny, this left a huge gap in the curriculum coverage. Moreover, the result of frequent school closures hinders the assessment process. Danny mentions that because of this uncertainty *“The one thing I have learnt to do is teach a section, test and then move on. Because even though changes are made suddenly by DOE, they still expect marks to be put on SASAMS. Because I cannot host online classes, I have opted to testing after a section is done so I have marks ready when asked for it. This levitates (sic) pressure from myself and learners.”* Furthermore, since his school was unable to move to online learning, when learners were unable to attend, due to testing positive for Covid-19 or school being closed, Danny made arrangements with learners to catch up with work on the days they are at school, or he would ask their friends to sit and explain content to them. He also allowed learners to complete their assessments during the course of the day so that the handing in of assessments wouldn’t be further hindered.

His school worked on a rotational model to accommodate the learners. He said he navigated this by *“creating WhatsApp groups for my learners from various grades and subjects. I post important information into those groups to assist learners on the days they are not at school. It is also used as a tool to form healthy relationships with parents to get and receive updates about learners”*.

In Danny’s reflective journal, he mentions ways in which he navigated the changes he experienced during the pandemic. He experienced much fear of the virus and the daily question of whether he would be next. Danny had to do some self-reflection in order to navigate the changes during in the teaching and learning process. Danny expresses that the changes during Covid-19 have affected his mental state which inhibits his ability to effectively deliver the curriculum in his classes.

Apart from his mental state, the changes were also physically demanding because of learners being form based and educators having to move between classrooms. This hindered his access to learning resources. He navigated this stating *“I write the notes on the chalkboard and use my cellphone to take a picture of the notes. This helps in the process of limiting the carrying of textbooks and limits the amount of touch of textbooks by learners. Once I have the notes, when I walk into the next classroom, I just simply write it out on the board.”*

He navigated the above changes by self-reflecting, learning to become mentally strong, claiming the situation by assisting learners in easing their fears during this time. Danny expresses that he had to do a lot of accepting. Because educators are required to teach with mask, *“I would have to instantly become louder, and give instructions, teach content slower with the aid of writing down the main points on the chalkboard, as this would help my learners have a clearer understanding of what I was saying”*. As one-on-one and individual learning halted, Danny expresses that he has to teach the entire class as a whole. He says *“I stand in their direction and focus my attention and eye coordination to them (sic) to help them create a better understanding of the content I am teaching.”*

Sharing of textbooks was not allowed. Danny expresses that he had to improvise by photocopying booklets for his learners. He also finds joy in this as he expresses *“This is also a positive effect as learners now do not need to hand in the textbook at the end of the lesson but have their own booklet to revise on days they are not at school.”*

Prior to Covid-19, Danny states that he utilised a white screen and projector to aid his lessons. However, due to learners being form-based during Covid-19, this became impossible. So, he stated he had to *“adapt the teaching strategy by playing videos off my cellphone and through the sound bar, however this does not give learners a clear visual presentation as my cellphone is small, but it still does expose them to YouTube videos based on the content.”* Moreover, he now encourages his learners (grade 10 to 12) to use their phones to research topics and use educational apps to aid their learning.

With regards to the recess in using the collaborative method, Danny *“rearranged their places by placing a higher achieving learner amongst weaker learners, so they feel the safety net of having someone close by who can understand them, I have really seen this build confidence amongst learners.”* Additionally, since Danny’s school was identified as underperforming, the administrative duties escalated. Therefore, amidst dealing with the pandemic, educators were required to take on extra administrative tasks. He navigated this stating that this involved

“recording everything that is done in the classroom. To make it easier for myself, I have created a file on my cell phone where I just enter the details of my day, as opposed to walking around the school with a lot of files.”

Underperformance was a major concern prior to Covid-19. Danny expresses that the pandemic does not assist this as his learners do not have the culture of learning outside of the classroom or at home. The attempts to improve performance has always been difficult. Consequently, it is believed that learners who were struggling academically, will face greater challenges in that regard. To respond to this, Danny expresses *“we have set up many interventions plans to try to recover time, such as morning, afternoon and Saturday classes. Learners who were already struggling academically, and now that struggle has deepened, I have encouraged learners who are much faster to grasp content to assist. I have also rearranged my classroom by bringing the really weak learners to the front so I can assist them personally during my lessons. When marking if I find learners are still doing bad during formal task, I personally or with the assistance of learners tutor the task to the learner and reassess. I have also personally invited parents/guardian of learners to explain to them how they can assist their child. Also, additionally work is given to learners on the days they are not at school.”*

Danny was very informative in his interview. He strongly feels that the loss of teaching and learning time impacts learner performance. Because he teaches in an area that is very under resourced, he emphasises that his learners are faced with an unequal educational system. He notes that some learners were able to learn during the lockdown through the means of online platforms and some were not. Other implications presented by Danny include ensuring enough time to bridge the gap that increased since March 2020. Moreover, the effect on matriculants during these years will result in their future being affected.

Danny suggests that the Department of Education should be responsible for addressing the gaps caused during the pandemic. He suggests that the Department of Education ought to provide for schools to transition to a more technological state. He articulates, *“We are using the same resources 10 years ago and that’s not good enough. To overcome the challenges, the DOE needs to start putting the wheels in motion to enable online classes. They need to help and assist schools that are under resourced by empowering learners with resources to make themselves better. Policies are drafted from a top-down approach, the men and women on the ground, their inputs need to be included. Idealistic policies cannot work in uncertain environments.”* Danny also expresses that whilst there are many negative effects during Covid-

19, there are some positive effects as well. This includes teachers becoming resilient and a change in the way lessons can be delivered.

6.3.4. Participant 4 – Hazel

The collage presented by Hazel was an outline of a book. This creativity was motivated by her belief that books are vital facets in the school environment for both teachers and learners. The pictures placed in the book and out of the book depict the impact of Covid-19 on the education system.

Her collage depicts additional classroom rules that learners have to adhere to which includes sanitizing, washing of hands, wearing of masks and social distancing. Learners are required to undergo a screening process and answer a lot of questions upon entrance to the school. At Hazel's school, the management created an action plan during the pandemic. This action plan places educators on duty for screening, temperature checking, distribution of soap, sanitizing and to ensure that learners have their masks on and are social distancing.

Her collage also depicts the regular closure of school due to a teacher or learner testing positive for Covid-19. Another change, as depicted, is the turnaround time for the marking of assessments and examination or test papers. Teachers are now required to let the scripts rest for three days before marking them which creates a back log for teachers. Moreover, Hazel, portrays that Covid-19 must be incorporated in every lesson so that the severity of the pandemic is understood.

She discusses the trimmed curriculum in her reflective journal, noting that the curriculum was revised at 80% for all grades except grade 12. Given the attendance procedure, time for curriculum delivery remains insufficient. She notes that the completion of the curriculum became a race and therefore resulted in burnout and stress for educators and learners. Along the same lines, she notes that the attitude and demeanor of learners became disinterested and indolent which results in it being a challenge to follow up on tasks and homes. Furthermore, learners' absentee rates are high which affect assessments and creates a gap in the teaching and learning process. The ways in which Hazel navigate the changes is by completing the assessments during class time so that she does not have to wait around for learners to hand in their tasks. Additionally, the headlines presented in the collage place emphasis on the severity of Covid-19 and its impact on the education system.

In Hazel's reflective journal, she expresses her emotions such as being nervous, anxious, and stressed whenever schools had to close and reopen. She notes that she feels like school has become a battlefield with lots of uncertainty. As an attempt to contain the virus and for teaching and learning to resume, Hazel's school has also used the alternate day model whereby Grade 12s attend daily, Grades 10s and 11s attend on Monday, Wednesday, and Friday, and the grades 8s and 9s attend on Tuesday and Thursday.

With regards to the Covid-19 health protocols, Hazel encourages learners to follow them. She constantly reinforces the protocols which eases the stress as she is required to touch surfaces. The reduced classes are seen as beneficial. Hazel notes that she can provide individual attention to learners, and they do not require to share textbooks as they have their own.

One of the most successful ways of navigating the changes in teaching and learning during Covid-19 at Hazel's school was the action plan. She states that the action plan *"has really assisted us in managing the changes. It keeps teachers well informed about their duties daily."* In regard to incorporating Covid-19 in lessons, Hazel now has lots of comprehension passages pertaining to Covid-19 in her English lessons. Here, she can teach the comprehension skills as well as educate learners about the virus.

Due to Covid-19 and its protocols, Hazel found some of the changes positive. She expresses that reduced class sizes were very beneficial as *"learners received individual attention, classroom management was less time consuming, and learners were able to focus longer."* Furthermore, she shared that *"The curriculum was revised for grade 8 to 11. The curriculum for grade 12 remained unchanged. Charts were removed from the walls to accommodate for the signage of the Covid-19 protocols. This made learners less informed on subject knowledge and more informed on health protocols. Learners are now based in their classrooms and teachers are required to walk to the different classes for each period. As a secondary school educator, this change made a huge impact on teachers as it became a rush, consumes time and is strenuous."*

The reiteration of the Covid-19 health protocols remains a challenge and is time consuming. This adds to time loss in lessons; therefore, learners are encouraged to carry their own sanitisers. Hazel mentions that the constant reiteration of the health protocols results in learners feeling that it is some sort of punishment. She further states that there is a strain in[the] relationship between teachers and learner[s] causing assessments are being withheld (sic) and

are returned in drips (sic) and drabs which affects the injecting (sic) of marks onto SASAMS and handing in of statistics on time.

The way in which Hazel navigates poor learner performance is by *“catering for various learning levels by ensuring that all learners receive resources packs for each subject every term. Assessments are given during class time and learners are required to complete it in class in order to ensure that all learners hand it in timeously. Due to smaller class sizes, learners who struggle are given individual attention. The marking of books is done once a week rather than everyday which gives learners time to catch up on their work.”*

Predominantly, Hazel states that the action plan created by her school is used to navigate the changes in teaching and learning during Covid-19. She states the content of the action plan; *“In the morning, at the entrance of the school, teachers are que[ue] marshals which ensures social distancing and wearing of masks. Learners follow a line for their temperature to be checked by a screener. During registration, learners undergo the screening process whereby teachers will record their temperatures and check for learners that have symptoms. Learners that are unwell or have two or more symptoms are referred to the Covid-19 committee in order to assess the situation and to be seated in the isolation room. Sanitizer bottles are placed in each classroom to ensure frequent sanitizing.”*

6.3.5. Participant 5 - Songezile

In Songezile's collage, he depicts many changes in the teaching and learning environment. He shows that teachers undergo major emotional trauma during this time. Songezile portrayed that the biggest change in teaching and learning during Covid-19 is the move to remote teaching. Moreover, he states that the using of masks, adjusting and adhering to Covid-19 protocols, decline in attendance, unhappy classroom atmosphere filled with fear and anxiety, halt in social interaction, take home resource packs, loss of teaching and learning time, lack of sufficient resources and teaching aid and external factors such as parents losing their employment, were the changes that he was faced with during the Covid-19 pandemic.

The reflective journal presented by Songezile comprised of some of the ways he navigates the changes in teaching and learning during the Covid-19 pandemic. To adhere to the Covid-19 health protocols, an alternate day model was created. This model hinders teaching and learning time. Therefore, Songezile's mentions *“the only way around this, from my experience, was to manage teaching time better. This is done by reading with learners and focusing specifically on concepts that they have problems grasping. Another method that worked was one on one*

with learners due to smaller class sizes". Furthermore, he states "this is an inconvenience as learners are attending school on every alternate day. This complicates things especially for weaker learners. I work through this by trying to cover all content but also always ensuring learners understand what is being taught, if not, I teach the concept again. The positive difference in the environment is the number of learners per class. This enables and allows us to concentrate more on the weaker learners." Whilst the model is in place, learners often got confused and would not attend school correctly. This creates a lag in their learning. Therefore, Songezile states that he tries his best to assist learners when they return to school, allowing them to catch up on what they missed.

Remote teaching was a challenge for Songezile due to the contextual factors that he is faced with. He navigated this by using what was available to learners and parents. He states that *"remote learning required the use of technology and social media platforms to communicate with the learners and parents, to ensure that teaching and learning continues. I personally have a WhatsApp group comprising of parents which allows me to communicate with them and dispatch the necessary work to be done by learners."*

The use of masks, social distancing and frequent sanitizing in the teaching and learning environment became a norm. Songezile states that he embraced this, along with his learners, by educating learners of the dangers of not using the mask, not social distancing and not sanitizing. Furthermore, due to social distancing, Songezile encouraged individual or whole class tasks rather than collaborative tasks which go beyond the rules of social distancing.

Due to the changes in the teaching and learning environment during Covid-19, Songezile has noticed a dramatic decline in learner performance. Some of the reasons includes *"the lack of concentration during class, the usage of masks, loss of teaching and learning time."* Moreover, external factors, such as issues at home, hinders a child's performance at school. Songezile navigates this change by *"catering for this by encouraging reading and allocating specific times for reading. I am also communicating directly with family members to assist learners."* He notes that there have been some gradual improvements since implementing these efforts.

As educators are functioning during the pandemic, they are overloaded and exhausted. Songezile mentions that there are increased demands placed upon educators during this pandemic. He navigates this by maintaining a positive attitude. With regards to the lack of resources, Songezile tries to access as many resources as possible to aid in the teaching and learning process.

In Songezile's interview, he articulates many implications that Covid-19 has on teaching and learning. He mentions that since learners are required to learn in isolation and from a distance, their socialisation skills are hindered which can negatively impact their future in education and work life. He notes that a gap has been created in learning abilities which is influenced by a change of lifestyle habits due to the several lockdowns. Learners get out of their routine, and this negatively impacts their learning processes. He further suggests that a programme should be put into place to address the above-mentioned issues. Further amendments should be made to school policies to effectively make up for lost teaching and learning time. Songezile also encouraged workshops for educators to attend so that they can network creative ways to teach during the pandemic.

6.3.6. Participant 6 - Kate

In Kate's collage, she refers, among many others, to the changes in teaching learning during the Covid-19 pandemic as the 'new normal'. She portrays that educators are now expected to take on additional roles during the pandemic as they are required to ensure that the screening process is conducted. This also includes coming to school earlier than usual. Additionally, she displays the Covid-19 health protocols which needs to be always adhered to. Kate also states that the learning environment such as the classroom is now properly cleaned.

Kate included a picture of a learner's Covid-19 funeral. This occurrence has sparked increased levels of fear and anxiety in the teaching and learning environment. She also portrays that learners are learning in an uncomfortable atmosphere whereby they learn in isolation, without meaningful and necessary social interaction. Kate describes the impact of wearing masks saying *"covering the lower half of the face reduces the ability to communicate, interpret and mimic the expression of those with whom we interact. Positive emotions become less recognizable and negative emotions are amplified. Emotionality in general is reduced and the bonding between Teacher and learners, group cohesion and learning of which emotions are a major driver. Masks stifle speech and sounds. Masks fundamentally restrict teaching and learning. The inability to hear becomes a problem in larger classrooms."* She finds this change challenging as educators are required to constantly reiterate the Covid-19 health protocols.

Frequent closure of schools has inhibited the teaching and learning environment. She states that *"teachers were and are, until current times additionally tasked to provide extra support material for learners during the absence of learners as well as during school closures. The*

abruptness of the situation, Teachers and administration were unprepared for this transition and were forced to build emergency remote learning systems almost immediately.”

In Kate’s reflective journal, she mentions that she navigates the changes during the Covid-19 pandemic by the notion of remote learning. She expresses *“March 2020 will forever be known as the month when all Teachers were faced with a task which far exceeded our mental abilities and literally to respond overnight to tach in new modalities.”*

Her methods of navigating the changes include arriving at school early, being on guard at all times to ensure that learners are following the Covid-19 health protocols and ensuring that learners are able to hear her though a mask, *“I had to teach my learners a new way of existing at school. Masks were a challenge to teach or learn with, gradually I reinforced the importance of using masks and learners watched as I began coping with it, they too sensed its importance”.*

Kate describes her adaptation strategy saying: *“I provided and am still providing [a] daily breakdown of work aspects for all subject areas in order to ensure a proper facilitation of teaching and learning. I allocate sufficient homework to learners so that they do not lose sight of our previous liquid learning situation in comparison to our alternate day system. In this way my learners are totally occupied even if they do not attend school daily. I work with my parents and learners as a team to ensure efficient learning and understanding of all subject matter. I will not allow covid-19 to change my perceptions as a teacher who has vowed to still project the best possible guide to teaching and to imbibe motivation and ambition in all my learners.”* Moreover, she works very closely with parents, ensuring that all aspects are understood by learners and parents. This is beneficial for parents who are interested in teaching their children during the lockdown periods.

Furthermore, Kate states that her teaching methodology had to change. She incorporated various teaching methods, for example the use of visual aids such as *“pictures, displays, handouts, flip-charts etc.”* She also mentions auditory teaching methods such as *“transfer of information through listening to the spoken word, of self or others. Kinesthetic or Tactile learning style have a preference for (sic) physical experience – touching, feeling, holding, doing, practical hands-on experiences.”*

Moreover, she navigates the changes in the teaching and learning environment by breaking down weekly aspects which has largely benefitted learners in completing tasks timeously and provided them with confidence to better their reading skills which plays a pivotal role in

achieving academic success. Additionally, Kate navigates the Covid-19 protocol stating: *“daily my learners and I discuss a do and don’t list pertaining to social distance, sanitizing, behaviour during break and always keeping masks on. I am constantly reminding my learners that handwashing is an effective way of combating the spread of germs and keeping themselves clean and healthy. Physically demonstrating how to wash your hands and apply sanitizer can assist the learner in following by example and doing the same”*.

Kate’s interview comprises a lengthy discussion on the implications of Covid-19 for teaching and learning. She articulates that pandemic has disrupted the entire education system. Educators were not ready for this rapid change from traditional learning to remote learning. Therefore, this creates a huge learning lag for the time lost during the Covid-19 pandemic. Kate also believes that the pandemic has affected educators’ mental health which will affect the way they operate in the classroom. Most significantly, Kate mentions that the closure of schools has affected the most vulnerable learners who depend on the *“physical learning opportunities, social and emotional support available in schools and extra services such as school meals”*.

Moreover, she notes that learner absenteeism and dropout rates have increased, which can negatively impact the future of our country. She further declares learners already had a language barrier. Covid-19 aggravates this issue as the teaching and learning environment has been affected. Sadly, she expresses that *“without the foundational skills to grasp the curriculum, many learners get overwhelmed and have often repeated a grade or drop out of the system. Covid-19 has affected the way children experience education, and, for many, education has just not been an option throughout the pandemic.”*

She also discusses that apart from facing difficulties in the learning environment, learners also faced issues at home whereby their parents lost their jobs causing huge financial strain. Kate further voices that *“the issue of affordability of costs that go towards sending a child to school, including fees, transport and school supplies far exceeds the meager budget they have to barely provide meals and shelter for their families. Their primary concern is to ensure the safety and well-being of their family even if that eradicates the importance of attending school or hope of one day achieving success and attaining good revenue from a job. Poverty leaves permanent scars.... Malnutrition, susceptibility to disease and missed schooling. Covid-19 will accentuate the long- term concentration of poverty in schools resulting in learners lack of concentration as well as poor attendance.”*

Kate discusses ways in which we can overcome the implications of the Covid-19 pandemic. These include educator support programmes or a recovery programme for educators, initiatives for learners who are vulnerable and belong to low-income families to receive the services that they were receiving whilst being at school and provide technological support for learners who are not able to access remote learning. These can be well supported and implemented by the Department of Education. She further states *“I believe that the integration of information technology in education will be further accelerated, and that online education will eventually become an integral component of school education.”* Significantly she voices that *“social protection programs are needed to help support struggling families, in the end, greater economic growth is the fastest way to bring people out of poverty.”*

6.3.7. Participant 7 - Duduzane

The collage created by Duduzane clearly depicts the changes in the teaching and learning environment during the Covid-19 pandemic. He portrays that traditional learning has been replaced by online learning on various platforms such as WhatsApp chat groups, voice notes, Zoom lessons and Microsoft Teams were used to facilitate teaching and learning during the pandemic. Both educators and learners were required to adjust to a new form of learning via virtual or E-learning.

Duduzane, in his collage write up, describes that the reopening of school after the hard lockdown required learners to attend school in smaller groups due to Covid-19 health protocols. Moreover, all other Covid-19 health protocols must be adhered to, including the using of masks and frequent sanitizing and washing of hands. During this time, high absentee rates were noted. Additionally, a change in the teaching and learning environment during the pandemic, as expressed by Duduzane, is the creation of booklets for remote learning. He further describes that newer methods of teaching had to be conducted so that learners who were brave enough to attend school and learners who were fearful and stayed at home would receive the same work. Duduzane pointed out that during the Covid-19 pandemic, learner performance rapidly decreased. Learners were unable to hand in their assessments of effective self-study.

In his reflective journal, he discusses that the immediate shift from the traditional methods of teaching to virtual and online teaching that resulted in stress, anxiety, and exhaustion as it goes beyond the norms of a teaching and learning environment. He mentions that his mental health was affected during this time. He navigated the changes by seeking guidance from his senior staff members, networking with other schools, sharing learning materials, and ensuring that

work was sent to neighborhoods and allowing for it to be shared by learners who couldn't access the work via online means.

When learners were not able to communicate with him when remote learning was the only option, he would panic, stress, and get anxious. He navigated this by ensuring that booklets were given to learners which contained all the necessary sections from the curriculum. He made available soft copies and hard copies of learning material for all his learners. Duduzane states *"it was comforting to know that learners assisted those who did not have access to social media by conveying those pieces of work to those who lived near to them. WhatsApp groups were now created which sent out valuable work, teaching videos and voice notes and this now was a chat to parents of those learners who did not have access to social media which was very helpful especially with the juniors (8-9)."*

As part of navigating the changes, Duduzane expresses that he had to become more open to the use of different teaching methods. His school had encouraged the teachers to make use of all online platforms to reach out to learners. As mentioned above, the use of WhatsApp chat groups, voice notes, Zoom lessons and Microsoft Teams was crucial. He specifically mentions that learners used Microsoft Teams to get their assessments done. Duduzane also expresses that the use of those online platforms assists with learners who have been absent for a long time.

The time-tabling system helped to navigate the social distance and reduced class sizes. He conveyed *"a new timetable system was created; lessons were followed according to days and on those very days we had group 1 and group 2 arriving on their given days. The numbers in classes were small with no more than 25 each group, lessons were spread over two days in which it catered for groups 1 and 2. The classes were small and accommodated to the needs of each child."*

Since the performance of learners rapidly decreased, Duduzane provided extra worksheets and activities for learners. If some things were not understood, he would take extra time to further explain the concept to learners. He notes *"progressively there was a change in performance which helped with assessments done at school rather than take home projects because this gave learners an opportunity to ask questions and understand concepts better. These little challenges were slowly changing, and teachers were becoming accustomed to the changes and found these ways to deal with it."*

The management of learners during Covid-19 was noted to be very difficult. Duduzane conveyed that *“each form teacher held workshops for their learners (form classes) to make them understand, provide useful and important information and realize the severity of the COVID-19 pandemic faced. Classrooms were regularly sanitized; learners were restricted movement (sic) during change of lessons due to any contact and therefore teachers moved class to class. Classrooms flowed (sic) the 1.5[m] distancing of learner’s desks from each other, the learners were regularly sanitized. Outside the classroom, boys and girls were in different parts of the school and breaks differed with matrices and the 8-11 learners. Teachers were always out on duty to ensure masks were worn by learners, no sharing was taking place and each learner followed the social distancing protocols.”*

In Duduzane’s interview, he articulates the negative implications for Covid-19 for teaching and learning and how we can overcome these. He voices that if learners continue to be disadvantaged in regard to having access to online learning devices, then they may not be fully equipped to move into the next grade. He also mentions that learners may use this as an excuse to lose interest in learning, therefore, resulting in poor performance in the future. The alternate day timetable model results in time loss in teaching and learning, which affects the effective delivery of the curriculum.

Overcoming these implications, as expressed by Duduzane, *“starts with the education system ensuring that proper curriculum planning is done so all topics that should be covered are done within the given time frame or certain topics can be trimmed from the curriculum. Secondly, teachers and learners need to be proactive in embracing the new changes to teaching and learning and need to now adjust and make the efforts of embracing such changes and as mentioned the ways in which chat groups are created for various grades and subjects. Teachers and learners also need to be prepared for changes that have come about and are yet to come by and integrate creative methods to teach so that learners are able to be engaged in the newer methods of teaching and learning.”* As we live in uncertain times, Duduzane expresses that we should create opportunities for teachers and learners to embrace changes so that it does not negatively impact them when change occurs.

6.3.8. Participant 8 - Shaun

Shaun’s collage points out the changes that he experienced in the teaching and learning process during the Covid-19 pandemic, such as adhering to the Covid-19 protocols, learners standing on dots, the role of educators increasing, the stopping of collaborative teaching strategies such

as group work, a new way of attending school (alternate day model), trimmed curriculum and the loss of teaching and learning time. Additionally, in Shaun's reflective journal, he includes some of the changes. He states that the academic performance has drastically dropped, and many learners are struggling in literacy and numeracy.

He navigates these changes by changing his teaching strategies. Due to the current situation, the direct teacher method was utilised by Shaun whereby the learner listens to the teacher and completes tasks and activities alone. Nevertheless, he encourages learners to actively engage orally in the lesson. Group or paired work was halted and Shaun navigates this by issuing textbooks for learners to use individually. However, he mentions that *"the use of textbooks during lessons was closely supervised so that each learner has his/her own book."*

Shaun expresses that currently, there is a whole lot of time lost in the teaching and learning environment due to the changes brought about by the Covid-19 pandemic. He further states that the trimmed curriculum, which was supposed to assist with time loss, *"creates a sense of discontinuity as a[t] times the concepts are not interlinked and makes it difficult for learners to understand."* Added to this, the learners lack concentration due to masks. This causes irritation for learners' comfortability and breathing.

Regarding time loss, Shaun states that work that cannot be completed in class is sent home as homework. He states that *"the interlinking concepts that have been trimmed out is given to the learners in the form of worksheets to read to have a better understanding of the content. Lessons are given to learners in the form of booklets which they can refer to if they don't understand the topics."*

He further mentions *"preparation for a play required group interaction, however the groups did not have more than three learners in a group. The learners were constantly supervised to ensure that Covid-19 protocols are being followed. There was no exchanging of play scripts and other resources."* Furthermore, he navigates the above changes by *"encouraging parents to motivate and supervise the learner's homework. Much emphasis was placed on remedial work so that learners understand work thoroughly before moving on with the new content. Special attention was given to weak learners who were normally part of the buddy system (peer tutoring). Reading of comprehension passages and questions in order to help the children."*

Shaun's interview regarding the implications of Covid-19 for teaching and learning was very informative. He articulates that learners received very little education due to the extended school closures and alternate day model. He also mentions that there was very little

communication regarding the academics. In saying so, he further explained that *“learners often complain that the tasks and activities given in the booklets are difficult to do because there is no teacher guidance like in a normal classroom. This also hampers the learner ability to comprehend and understand the requirements for a particular task. Learners frequently studied fewer topics or less content due to the trimmed curriculum and the limited time. Extended school closure and working from home have created feelings of stress, anxiety, isolation, and depression in many learners.”*

Shaun articulates that important socialising skills were neglected, which will, in some way, affect learners in the long run. Moreover, he mentions that the lesson presentations have dropped as per teachers’ anxieties and the tedious task of teaching one lesson four times. The result of halting and discouraging collaborative work affects weaker learners who can gain much out of this methodology. Since the pandemic, there has been a rise in e-learning which creates a gap between the privileged and the disadvantaged learners who do not have access to reliable internet. Most importantly, Shaun states *“remote learning and teaching bears little resemblance to actual classroom learning which caters for learners at different levels of cognitive functioning. Learners who display difficulty grasping basic numeracy and literacy skills will be further disadvantaged as the trimmed curriculum and limited time makes no provision for them.”*

Overcoming these implications, as articulated by Shaun, can be possible if some collaborative methods be done with strict supervision and adherence to the Covid-19 health protocols. Moreover, he mentions that the resources should be made easily available for learners to aid their learning. Shaun also states *“Booklets should contain tasks and activities that are enjoyable, easy to understand and at the same time encourage learners to work alone. Encourage activities outside the classroom (play sports activities) while ensuring that all protocols are followed.”*

6.3.9. Participant 9 - Sipho

Sipho’s collage included all the changes in the teaching and learning process that he experiences during the Covid-19 pandemic. The closure of schools and the irregular opening of schools, the traditional classroom transitioning to home learning or e-learning, a new classroom set up upon the opening of school amidst a pandemic, the break in collaborative methodologies, high absentee rates amongst learners, teaching and learning time consumed by

the Covid-19 health protocols, and the emotional and mental affects such as anxiety, stress, and worry, were all changes that Sipho experienced.

The reflective journal compiled by Sipho contains information pertaining to how he navigates the changes as expressed in his collage. He expresses that the pandemic as resulted in mental health damage as he was faced with high levels of stress, anxiety, depression, and sleep disturbances due to adjusting to the new normal. Sipho expresses that he became less confident, due to the way teachers were expected to deliver the curriculum during the pandemic, especially with the number of changes in outcomes of the curriculum and the annual teaching plans. He navigated this by becoming resilient and adapting to the new way of teaching.

Significantly, Sipho realised that it is very important for teachers to be flexible and prepared for anything. He states *“the positive change is how fast I found myself learning and embracing the format of technology that I did not choose in the past. When I created activities and directions, I ensured that they are as clear as possible so that learners can be successful working on their own.”*

With regards to irregular opening and closing of school during the pandemic, Sipho navigated this by accessing the available resource materials and sending it to learners via a private school-parent WhatsApp group. He writes that *“this is the first time I have created a way to ensure access of learning materials in one place, to a whole package of resources for students outside of school.”* Sipho states *“this whole experience has reaffirmed and increased my confidence in my own teaching philosophy.”* To navigate the change regarding the Covid-19 protocols, Sipho states conventional learning had to be reviewed. He mentions that there had to be *“minimized physical contact between students and other students and between students and teachers.”* Efforts to contain the virus were encouraged and Sipho states that they implemented staggered breaks and dismissal times. They used *signs, ground markings, tape barriers to maintain one meter distance in queues and around the entrances, encouraged students not to gather and social in big groups, encouraged students to get into the habit or practice of regularly washing their hands and using hand sanitizers at key moments such as entering and leaving the classroom, touching surfaces, learning material, etc. and always ensured that learners wear their masks correctly.”* Furthermore, online learning and an alternate day timetabling model had to be implemented.

Remote learning, and being new in a public school, found Sipho doing a lot of introspection whereby he asked questions such as *“what is the most important thing students need to do or*

know?” when I came across each new assessment task. From this experience I have learnt that the important things are still possible with distance learning, that is reading, writing, decision making and creativity.”

Sipho maneuvered a new classroom atmosphere by very closely looking at learners’ body language and facial expressions to decipher responses. He found himself constantly changing his teaching methods. The change also allowed him to become innovative and creative. He states that it also built a closer bond with other teachers as they had to work together to provide learning material for learners during this difficult time.

Even though the alternate day timetabling model was in effect, many learners were absent. Sipho mentions that this was navigated by making sure that learners received learning material and assessments so that they would be able to pass. This was done by *“calling parents whose children did not return to school to make them aware of assessments due for promotion purposes. In nearly all cases, parents responded positively to our requests.”* Sipho mentions that his school developed a new policy during the pandemic which states, *“we need to do everything we can to support learners during this time as there is much at stake”*. The alternate day timetabling model resulted in a trimmed curriculum.

Sipho articulates significant implications of Covid-19 for teaching and learning. He mentions that the teaching and learning environment prior to Covid-19 allowed for social skills and awareness, however Covid-19 opposes this as it hinders skill growth in certain cohorts of learning. Huge gaps are created in core subjects such as mathematics, languages and sciences. Moreover, he states that Covid-19 does not only affect the academics but the broader health and wellbeing of learners. Sipho further voices *“since students were not given the opportunity to complete a full year of learning, it is difficult to gauge exactly how prepared they are for the next grade. However, it was found that students from wealthier backgrounds with access to technology and information performed better than those who had little or no access to these facilities.”*

Sipho also voiced that *“there is a vast shortage of teachers leaving us with an increased number of teaching time, more hours, and more classes. This leaves teachers mentally exhausted and burnt out and therefore they cannot give of their best in every classroom.”* Additionally, lower performance outcomes and high teenage pregnancy rates was noted by Sipho as an implication for teaching and learning. In addition, he states that learners may

become demotivated and drop out of school due to the strain on education during the Covid-19 pandemic.

He states the following actions that will assist in overcoming the implications. These include *“creating programs that targets learners who are in dire need of support, extra classes to explain concepts to learners who don’t understand and to catch up weaker learners, filling vacancies at school to decrease the shortage of teachers, teaching only what is necessary for learners to know and communicating with parents of the weaker learners also giving them parental support”*

6.3.10. Participant 10 - Natasha

Adjustments to smaller class sizes, adjustments to new teaching strategies, rotating and stretching out topics, poor learner attention, teaching behind a desk with a mask, social distancing, poor learner attendance, lowered performance levels and no interaction between teacher and learner, were the changes in teaching and learning during the Covid-19 pandemic as presented in Natasha’s collage.

The ways in which Natasha navigated the changes in teaching and learning during the Covid-19 pandemic was discussed in her reflective journal. She notes that the alternate day model has helped with accommodating learners in a classroom, which adheres to the Covid-19 protocols. Natasha further discusses that *“due to the attendance of small numbers of learners on any given day, I am now able to transition my learning more cognitively. Being creative is beneficial as learners are more engaged and interested in the creative methods of learning. Therefore, a relook at teaching techniques or methods is essential during this time of Covid-19.”*

As a result of high Covid-19 infections at the time interview, Natasha states that learner attendance has dropped. Natasha states that this hinders the learning process of those who *“fall under the poor or vulnerable socio-economic levels. This results in them have minimum access to resources so their learning of the curriculum cannot be continued at home. However, as an educator I have utilized whatever resources I have available to be delivered in the safest and best possible manner to every one of my learners in and out of attendance.”*

She further states that the only way to navigate the changes is to constantly change the teaching strategies to evaluate which one works best during this difficult time. Natasha further states *“I have had to learn to deliver my lessons in a way so that my learners can be awake in class. I have learnt to be extremely creative as in becoming more of an artist whose daily goal is to*

achieve an Oscar Award. In many ways, I have been thankful of the pandemic because I have been commanded into this position by higher powers. I have also learnt to be more gracious of my situation. Hence, my delivery in the classroom is always an Oscar performance."

She also utilises more resources to aid her lessons. This is a positive effect as she expresses that *"prior to Covid-19, I would never have tackled so many resources."* She further expresses that she has now become more equipped to be teaching in the 21st century. To effectively navigate the changes, Natasha mentions that she had to do a lot of acceptance. Moreover, she states that *"I implement all the new changes in our lifestyle every minute of my teaching day. It is difficult, it used to set me back but no[w] I think it has also been a strategic method of the way I deliver my lessons. My learners are aware of my demands as an educator in the classroom during this time and they have met me halfway."*

Natasha's reflective journal and interview session contained the implications for teaching and learning during the Covid-19 pandemic. She feels that as home school took precedence during this time, it is very worrisome that parents aren't entirely capable of teaching their children effectively due to being unqualified. Additionally, she clearly states that *"the pandemic has a tsunami like impact on our lives. It will take many years to rebuild all that we have lost. The ability to make learners thrive outside of the classroom requires effort from all stakeholders. Although we are uncertain of this virus, life goes on, we are required, as educators, to use our skills to work around the situation that we are faced with."*

Natasha also mentions other implications such as learning lags, unfinished learning of certain topics especially in core subjects such as languages and mathematics, learners not fully prepared for the next grade, demotivation in learning and lack of interest in academics. Natasha states that the *"implementation of programs that target those in most need, education mediations during a predicament can support prevention and recovery of public health while alleviating the impact on students and learning, offering extra tuition for learners who are struggling, encouraging learners to attend school and by simplifying curriculum- Teaching only what is necessary"* are some ways in which we can overcome the implications for teaching and learning.

6.3.11. Participant 11 - Praise

The collage created by Praise included an increase in learner absenteeism, irregular closure and opening of schools due to peaks and positive cases, decreased performance levels, Covid-19

health protocols and increased emotions of stress and anxiety, as changes in the teaching and learning environment during the Covid-19 pandemic.

Praise states in her reflective journal that she navigated the changes in emotions in the classroom during the Covid-19 by remaining calm and positive. She also states that she found inclusive teaching strategies without having to disadvantage her learners. Moreover, she mentions that a big part of navigating the changes is to come to a realisation and acceptance of the new way of living due to Covid-19. Praise clearly states that *“I am able to navigate these changes by ensuring that the protocols are reiterated in the classroom. I have provided worksheets and additional learning material. Created WhatsApp groups to ensure that learners are well informed. Encouraged learners to attend school and complete their assessments. For grade 12s the holiday classes continued, so I had time in school to compile resources for my other grades and subjects.”* Significantly, she notes that *“our learners are our main priority. Therefore, we do whatever is possible to assist them in achieving their academic goals.”*

In the classroom, Praise records that she ensures social distancing with proper air ventilation. She also ensures that her classroom is not overcrowded. As the performance levels of learners dropped, Praise adjusted by using more visual aids and other effective resources to assist learners in understanding what is being taught.

Praise also notes increased dropout rates, saying *“the rise in absenteeism has also led to learners missing out on teaching and learning time. The Covid-19 protocols are time consuming and therefore interrupts the teaching and learning process.”* Praise further suggests encouraging all learners and teachers to take the necessary preventative measures to contain the spread of the virus and reiterating to parents and learners about the important of education. Internet resources should be made available to learners, so as to overcome the implications of Covid-19 on the teaching and learning process.

6.4. Comment on findings

Through the use of collages, reflective journals and structured interviews, it is evident that all participants experience similar changes in the teaching and learning environment during Covid-19. Moreover, some of the ways they navigated these changes were unique and some were similar. The implications of Covid-19 for teaching and learning were clearly articulated by the participants. In the next sub-section, the researcher aims to summarise the changes in the teaching and learning process during Covid-19, the ways in which teachers navigated the

changes, and the implications of Covid-19 for teaching and learning; this is presented in a tabulated form that will explicitly aid the research objectives and questions of this study.

6.4. Tabulated arrangement of findings: Changes and navigation.

Victors Or Victims? An Exploration of How Teachers Navigate Changes in Teaching and Learning During the Covid-19 Pandemic	
Theme 1: <i>The unfamiliar order</i>	Theme 2: <i>Teachers' functioning within the unfamiliar order.</i>
Listed in this column are the changes in teaching and learning during the Covid-19 pandemic	Discussed in this column are how teachers navigate the changes in teaching and learning during the Covid-19 pandemic.
Significance of the theoretical framework in accordance with theme 1: Lewin (1951) describes this as step two (change) saying “change is a process where the organization must transition or move into this new state of being” (1951, p.50). This changing step, also referred to as ‘transitioning’ or ‘moving’ is recognized as the implementation of the change.	Significance of the theoretical framework in accordance with theme 2: Lewin (1951), notes that stage one (unfreezing), means getting people to gain perspective on their day-to-day activities, unlearn their old habits, and open up to new ways of reaching objectives. The goal during the unfreezing stage is to create an awareness of how the status quo or current level of acceptability is hindering the organisation in some way.
Covid-19 health protocols: <ul style="list-style-type: none"> ▪ Wearing of masks. ▪ Social distancing at a 1.5-meter distance. ▪ Frequent sanitizing and washing of hands. ▪ Screening. 	The DBE (2020) enforced <i>Guidelines for Development of the School Timetables reopening of schools COVID-19 ('Timetabling Guidelines', May 2020)</i> . DBE (2020) directs that every school must comply with the social distancing requirement of 1.5m, schools must operate at 50% or less of their capacity, masks need to be worn by everyone at school and regular hand washing/sanitizing protocols must be practiced. As a result, participants navigate these changes by constantly reiterating the adherence to the protocols. They reinforce the Covid-19 health protocols with students through the usage of charts, role play activities, games and try to incorporate these in every lesson. Similarly, Zimu et al. (2020) present that teachers are battling with simple health and safety requirements such as physical distancing, hygiene, respiratory protocol, and mask-wearing. They further express that for this reason, most teachers

have been instructed to display posters with the health protocols required to lessen the transmission of virus in areas that learners are in most.

Participants also indicated that they create awareness, verbally, of the severity of the virus. Moreover, they also noted that as teachers, they must lead by example. Their roles in school increased during the pandemic. The new action plan that was introduced included duties for teachers such as screening, temperature checks and sanitizing of learners. An alternate day model for learners to attend school was adopted. This model ensured that there was adherence to the protocols as only 50% of a classroom could be used and social distancing of 1.5 meters were adhered to. Hoadley (2020, p.3) discusses that due to the social distancing measure “schools had the choice of five timetable models: daily and weekly rotation (learners coming on alternate days or weeks); bi-weekly rotation (learners coming for two weeks at a time then remaining at home); platooning or shifts (half the school attending a morning shift and the other half an afternoon shift; traditional or daily (normal, daily attendance); or a hybrid of different models.”

Classrooms are regularly sanitised (before school, during breaks and after school), and restrictions on movements are put in place to avoid cross contamination. According to Gustafsson (2020), South Africa had endorsed very strict regulations regarding social distancing in schools to safeguard learner and teacher safety; while WHO recommended a 1-meter distance, the guidelines endorsed in South Africa stated there should be a 1.5-meter distance. In addition, masks were mandatory and citizens were informed that they would be fined if they did not use them, and organisations had to operate at 50% capacity of any room space.

Since every individual was required to use a mask, participants said that they had to speak more loudly to ensure that their learners could hear them. Additionally, as they speak, they used the chalkboard to jot

	<p>down the main ideas so that learners are not left behind. Participants state that they encouraged individual and whole class discussions rather than smaller group work. Furthermore, staggered breaks, reduced class sizes, markings on the ground to ensure social distancing, minimised movement, distribution of soap and sanitisers were other ways in which teachers navigate this change in the teaching and learning process during the Covid-19 pandemic. Participants constantly ensured that there is proper air ventilation and that classrooms are not overcrowded.</p> <p>Moreover, education assistance, general assistance and reading champions were employed by the Department of Basic Education to assist schools during the Covid-19 pandemic. This opportunity was created from December 2020. They assisted with screening and ensuring that the Covid-19 health protocols were adhered to in and outside of the classroom. Moreover, the general assistants ensured that the classrooms were sanitised regularly.</p>
Mental health issues faced by teachers and learners - anxiety, fear, stress, depression, and tension.	<p>According to WHO, some of the psychological impact of Covid-19 can be associated with elevated levels of stress or anxiety. The virus itself creates personal situations in which, in addition to the disease's symptoms, human emotions such as fear (Asmundson & Taylor, 2020), worry, panic, anxiety, or depression-related distress (Bao et al., 2020) can appear more commonly among people. According to Ozamiz-Etxebarria et al. (2020) and Rodríguez-Rey et al. (2020) "recent studies about the psychological impact of this pandemic disease on the general population, an increase in depression and stress levels between the first days and the third week of the lockdown has been found."</p> <p>Moreover, Hall et al. (2008) express that whenever there is an existence of life-threatening situations, like a pandemic, people tend to experience fear of getting infected with the virus/disease resulting in anxiety, stress, and depression, etc. Participants state that they shared their experiences with other</p>

	<p>colleagues and networked new ideas to work around teaching during the pandemic. They sought guidance from senior members of staff and shared useful information.</p> <p>Participants said that they often encourage learners to remain calm and reiterate that the Covid-19 health protocols must be adhered to. Additionally, participants express that they create a safe and supportive interaction system so that learners don't have to feel alone or isolated. They allow learners to express themselves. Participants have made available information regarding where to find help with mental health issues. Moreover, the Department of Basic Education allocated a post designated for one educational assistance to serve the role of a counselor or psychologist to assist learners with mental health problems.</p>
Frequent closures and irregular reopening of schools.	<p>A study conducted by Hoadley (2020) extensively provides imperative data regarding the number of days lost since Covid-19. Therefore, this resulted in the education system moving towards online and remote learning platforms. Some participants used online platforms to conduct lessons whilst learners were at home during the lockdown period. They mainly communicated with learners regarding schoolwork via WhatsApp. Participants sent online material, voice notes, and instructional activity via this online platform. Upon the reopening of schools during the peaks of the virus, participants compiled work booklets and resource packs for learners to be actively engaged at home as parents were fearful to send their children to school. Moreover, the participants provided a breakdown of work for learners to complete daily.</p>
Loss of teaching and learning time.	<p>Participants navigated this change by engaging with the trimmed curriculum (Annual Teaching Recovery Plan 2021-2023). According to Sandan (2020); Palte (2020); Senekal (2020); Burrridge (2020); Boyd (2020); Phetlu (2020) and Loizides (2020) the revision or changes in the trimmed curriculum involved a reorganisation and a reduction in assessments, and especially the content from term two being</p>

integrated into the other terms. Keeping in mind that learners attended school on alternate days, the trimmed curriculum assisted teachers to cover all the necessary topics/sections for the term. In conjunction, teachers used different resources to highlight the main ideas and explanations for the necessary topics/sections. Since the sharing of textbooks were prohibited, participants compiled instructional packages and resources. These included worksheets with remedial exercises and activities.

Certain schools allowed for a learning recovery programme to be implemented to assist with topics that could not be covered. Teachers had to ensure feedback was given to learners timeously, and this was done by doing corrections of tasks straight after learners had completed the task. Moreover, within the use of different teaching strategies, teachers encouraged learners to verbally answer questions during lessons. Participants also state that they had to use new and different methods of teaching on a trial-and-error basis. This gave them insight into which one works best given the current situation. Some participants express that with regards to assessments, they could not wait for the end of the term to assess them due to the frequent closing of schools. Hence, they would test or assess a section once the teaching and learning of that section has been completed.

In addition, some participants note that learners who struggle academically were paired with a buddy. This was done following all Covid-19 health protocols. Participants also expressed that they had to focus a lot on concepts that learners were finding most difficult. This was done by ensuring that consolidation was done through homework activities and by also making accessible, efficient and accurate learning material for all subjects. Participants ensure that these difficult topics were broken down into smaller aspects for purposes of understanding. Furthermore, participants encouraged learners to use Google as a source of information if they were unclear about something in the absence of a teacher.

<p>Online and remote learning.</p>	<p>Participants had to rapidly move towards online platforms. According to Pokhrel and Chhetri (2021, p. 134), “the online learning, distance and continuing education have become a panacea for this unprecedented global pandemic, despite the challenges posed to both educators and the learners, as transitioning from traditional face-to-face learning to online learning can be an entirely different experience for the learners and the educators, which they must adapt to with little or no other alternatives available.” The online platforms that the participants used were Zoom, Microsoft Teams, WhatsApp, and Google Classroom. Subedi et al. (2020) expresses that the education system and the teachers, in many countries across the globe, have adopted “Education in Emergency” through these various online platforms and are obliged to implement a system that they are not accustomed to or ready for.</p> <p>Unfortunately, not all learners have access to such resources, therefore, WhatsApp, being the commonly used online platform, assisted teachers and learners. WhatsApp chat groups were created and learning material with guidance was posted in these groups. Electronic copies of the resource packs, worksheets, booklets, and other learning material were posted on these groups. Pokhrel and Chhetri (2021) state the use of these interactive online platforms can be further used even when contact teaching and learning returns as it will aid lessons. There are unparalleled opportunities for collaboration, original solutions and inclination to learn from others and try new tools as teachers, parents and learners share comparable experiences (Doucet et al., 2020).</p>
<p>New attendance model with reduced class sizes.</p>	<p>This change aided the adherence to the Covid-19 health protocols as reduced size classes accommodated for social distancing of at least 1.5 meters. Participants navigated this change by encouraging learners to attend school in their groups and by ensuring that all learners received the same work. Teachers also navigated this change by giving extra work to learners so that they can work with it on the days that they were not attending school. Some participants regarded this change as positive whereby learners were</p>

	able to give individual attention to learners. Due to the alternate day attendance, participants ensured that assessments were completed in class.
Halt in collaborative teaching and learning practice.	<p>Participants dreaded this change in the teaching and learning as this teaching methodology was the core of practice in any classroom. Participants had to ensure that the tasks and activities that were given to the learners didn't require any group work. They had to promote more classroom discussion as a large group. Since classes were reduced to smaller sizes, class discussions worked well. Learners were encouraged and prompted to actively engage orally in the lesson. Additional learning material was provided to extend and expand the understanding of a specific concept.</p> <p>Participants express that due to the Covid-19 pandemic, their teaching styles had to revert to the direct teacher method, or the teacher-centered method. Learners were required to complete tasks individually. Participants ensured that there was no physical contact between learners and teachers. The chalkboard played a major role as most of the ideas were jotted down on the board which became visualised for learners' understanding.</p>
Decreased learner performance and huge learning gaps.	Due to the pandemic's effects on the education system, learner performance decreased drastically which required remediation. Participants note that the trimmed curriculum helped them to navigate this change as the demands of the curriculum lowered. Participants, in some schools, implemented a catch-up plan for lower performing learners. The catch-up plan focused on literacy and mathematics, and it allowed for extra teaching and learning outside the prescribed instruction time. These lessons mainly focused on learners in the LSEN (Learners with Special Educational Needs) class, and those who showed some struggle in the core aspects.

	<p>Participants ensured that they did not overwhelm the learners with too much of work. This would demotivate them from learning. In certain subjects, participants used the buddy system whereby the weaker learners were paired with the more academically inclined learners. Participants note that this made some improvement in learners' performances.</p> <p>Moreover, participants express that they used their non-teaching periods to assist learners who were struggling. Much emphasis was placed on aspects that learners could not manage on their own. They also note that their teaching styles had to constantly vary to suit the needs of all learners in the class – this included ensuring more time to have class discussions and encouraging learners to read. Furthermore, they had to simplify and break down aspects so that learners would gain from the teaching and learning process. Participants stated they had to lower the standards of their assessments and tests, and the levels of questioning in class.</p> <p>Secondary school participants were able to implement after school and weekend classes to catch up and improve on learner performance. Participants also involved parents and asked them to guide their child or children in the learning process whilst schools were closed. According to Sintema (2020b), this pandemic has created stronger parent involvement between teachers and parents. Moreover, the Department of Basic Education allocated another post designated for reading. This post was called the reading champion which focused solely on learners' reading abilities and ensuring increased performances.</p>
Discipline.	<p>Participants note that the Covid-19 health protocols assisted in better discipline. Learners were required to stand on dots and away from other learners. This reduced the occurrences of fights and scuffles.</p>

<p>Halt in sporting activities.</p>	<p>As part of the traditional curriculum in education, physical activity was promoted through physical education, however, Covid-19 has disrupted physical activity at schools. According to Shepherds et al. (2020, p.25) “There is little doubt that PE teachers love sports and sports practice, not least for athletes, but they have had to change, pause or even cease their activities as a result of the pandemic.” Participants note that this change resulted in some demotivation amongst learners as this was used to encourage learners in their teaching processes. Participants incorporated non-contact activities like aerobics, yoga, stretches and breathing exercises in the lesson – since learners were socially distanced, this was possible in a classroom. Because teachers and learners had to always keep their guards up against Covid-19, teachers encouraged learners to play sport and to be physically fit at home in a safe area.</p>
<p>New classroom requirements.</p>	<p>Participants navigated this by ensuring that the Covid-19 health protocols were always adhered to. They safeguarded themselves and learners by minimising movement. The reiteration of the rules ensured that teaching and learning would take place without fear, anxiety, and stress. Moreover, participants had to view learners’ body language and facial expressions to decipher their responses.</p>

6.5. Challenges and implications of Covid-19 for teaching and learning

Participants shared the changes they experienced during the Covid-19 pandemic, particularly the challenges and implications of Covid-19 for teaching and learning. These challenges and implications will be discussed below. This section covers theme 3 *The aftermath of the unfamiliar order*. It speaks of the challenges that arises from the implementation of change in teaching and learning during the Covid-19 pandemic.

As per the theoretical framework of the study, theme three aligns itself with step three (refreezing). During this step, efforts are made to stabilise the new quasi-stationary equilibrium, to make certain that the new behaviours are comparatively safe from regression. Lewin (1951) further implies that the new behaviour (after changes have been implemented) must be consistent with the rest of the behaviour, personality and environment or it may result in a new round of disconfirmation. This stage in relation to the Covid-19 pandemic involves applying the new changes and ways of doing things into the daily routine of the school (Wirth, 2004).

6.5.1. Unprepared for change

Schools had to prepare, under pressure, for the last minute at home learning. Teachers and learners were not accustomed to the online platforms This pandemic has not only affected the physical aspects of our lives but also the mental aspects of our lives. School closures due to Covid-19 have brought significant disruptions to education across the globe. Given the abruptness of the situation, teachers and administrators were unprepared for this transition and were forced to build emergency teaching and learning systems almost immediately to deal with the crisis.

6.5.2. Shortage of teachers

Due to Covid-19, many lives of teachers were lost; this increases the number of teacher shortages in schools. This means that there were already no teachers in many classrooms, now many more classrooms are left without teachers. As a result, this leaves a huge gap in the teaching and learning of students. Moreover, the workloads of other teachers increased and therefore the pressure and expectations of teachers also increased.

6.5.3. Learner isolation

Learners' loss of interaction hinders their development. They were isolated from their friends and peers. UNSECO (2020b) states that social isolation is a challenge as educational institutions have always accommodated social activity and human interactions; school closures can deny youth and children of some communications and socialisations that are crucial to learning, development and creativity.

Learners cannot be 'children' in the true sense of the word. They cannot play, hug, hold or touch their friends and family. This also affects the development and mental health of learners. Furthermore, learners' motivation to learn increases when working with partners, groups, or their friends. In this situation, learners are demotivated to learn or partake in activities because they are learning in isolation.

6.5.4. Strain on existing teachers

Teachers now have many additional roles added to their current burdened teaching load. Teachers have no break. They need to constantly be on their feet to ensure not only that learning continues but also ensure protocols are followed and adequate supervision of learners is happening. Moreover, the task of ensuring social distance, making sure learners wear masks, and are screened thoroughly before entering the classrooms, sanitizing constantly, ensuring that all protocols are followed, is a challenge on its own. This results in strain on the delivery of lessons by educators. Although the curriculum has been adjusted, the pressure and expectations to complete the syllabus still exists.

Teachers are tired and overwhelmed by the increased workload that comes with the pandemic. There is more administrative work added to increased teaching loads. Since learners remain form based, one participant states that it is physically exhausting to carry so many resources around. The curriculum is only revised at 80% (except for grade 12), and these shortened contact sessions are not enough to complete the syllabus and assessments timeously.

Teachers state that they became overloaded with marking and completing tasks in a short period of time. Scripts needed to rest for up to 72 hours before teachers could mark them. Participants state that it was difficult to keep students' minds on work when they were spending so much time at home. They added that it is challenging to follow up on tasks given as homework as learners return to school with incomplete work.

6.5.5. Decline in learner performance

The most common reason for this decline in learner performance, is the lack of concentration during class, and the loss of teaching and learning time. In relation, the result of numerous lockdowns, which brings the closure of school, causes learners not to be actively and productively engaged, it could lead to idleness which might result in youth involvement in crimes, loss of interest in learning, and poor academic performance (Rasmitadila, 2020). Masks also likely contribute to this, with Sintema (2020b) stating that the level of academic performance of learners may decline and may perform poorly in their assessments due to reduced contact hours and lack of consultation with teachers when facing difficulties in learning/understanding. Furthermore, the dropout rate of learners will increase as many learners opt for home schooling. S

Participants note that there has been an increase in teenage pregnancies during Covid-19. This results in learners either dropping out of school or being absent often. As a result, learner performances are negatively impacted.

While the foundation phase learners (Grades R-3) have been most disadvantaged in terms of time at school, as they were phased in towards the end of the staggered phase and lost the most teaching and learning time since the start of the pandemic. In contrast, lower pass rates mean that learners exiting secondary education may not meet the requirements of tertiary institutions which has a significant impact on their opportunities.

6.5.6. Online learning opportunities

Learners who are from privileged backgrounds and are supported by their parents can use alternative learning opportunities such as Zoom lessons. Learners from disadvantaged backgrounds remained shut when the school went into lockdown.

According to Dube (2020), the online learning alternative in the context of Covid-19 excludes many rural learners from teaching and learning in South African primary schools because of the lack of resources to connect to the internet, the learning management system, and low-tech software. Murgatroid (2020) notes that the factors found by other researchers include e-learning accessibility, affordability, flexibility, learning pedagogy, and educational policy. Additionally, most countries are faced with challenges regarding internet connection and the access to proper digital devices (Ebrahim et al., 2020).

Furthermore, Ebrahim et al. (2020) argue that the state of lockdown halted learning in South African schools, and learners and educators in rural areas are helpless in approaching online learning during the Covid-19 lockdown. Learners do not have full access to technological devices and data to be a part of virtual lessons; this sentiment is supported by the participants who state that learners living in disadvantaged areas are not able to participate in remote or online learning as they often don't have access to devices that facilitate this.

Overall, when it came to online teaching, many learners were not fully equipped to engage in this. As a result, there the participants say there is a lack of student interest in joining the lessons if they have missed out on so many due to lack of resources. Academic learning losses in reading has become a growing concern especially for children living in low resourced communities. According to UNESCO (2020b), unequal access to digital learning portals affects education as there is a lack of access to technology or good internet connectivity for continued learning during school closures.

6.5.7. Non-conducive learning environments

A change that hinders the learning process is the inability to utilise textbooks, at school or home. This plays an important role in the learning process as learners rely mainly on information from textbooks. In stating so, participants note that learners expressed their difficulty with the change in their learning environment – this is one of the most common complaints received. Students had already been facing challenges for learning at home and attempting to learn more at home places more of a strain on them. Challenges experienced at home include load shedding, noisy homes, distractions from learning by family members, and limited space in which to learn.

6.5.8. Attendance model

The rotational attendance model that schools have implemented (day in, day out) makes the situation even more grim as the learners complain that they forget their work by not attending school every day, and when at home, they do not get to study or complete tasks fully. This attendance model was noted as a major challenge for teachers, as one lesson is taught over two days and to four classes. Participants express that this system became tedious and difficult.

6.5.9. Teaching with a mask

Teaching and learning with masks present a new set of challenges for both teachers and learners. When teaching with a mask, teachers strain their voices, and it also negatively impacts

teachers' ability to deliver their lessons. The use of masks made it practically difficult for learners to interact. Covering the lower half of the face reduces the ability to communicate, interpret and mimic the expression of those with whom we interact.

Emotionality in general is reduced and the bonding between teacher and learners, group cohesion and learning are impacted. Additionally, masks stifle speech and sounds. As a result, participants note that masks fundamentally restrict teaching and learning. The inability to hear becomes a problem in larger classrooms. Moreover, the issue of masks breaking or hurting learners' faces is a challenge.

6.5.10. Lack of funds

Lack of funds became a greater challenge during the Covid-19 pandemic. Participants state that school fees were only paid by a minority of parents. They add that parents have either lost jobs or have developed an attitude of not paying since their children are hardly in school due to shutdowns or lockdown, so schools are losing income. Schools are also reluctant to fundraise in an attempt to avoid a Covid-19 outbreak. With the reduced income, schools are battling to pay school governing body (SGB) employees and do general maintenance. As a result, there aren't enough funds to buy needed resources. Learners used to share textbooks and now are unable to. Worksheets need to be made but it is costly to buy ink, stencils and paper. Sadly, some schools and many learners themselves do not have access to computers or tablets to make digital learning a viable option.

6.5.11. Trimmed curriculum

Teachers were given a trimmed Annual Teaching Plan. Participants state that this is still too long, considering that there are many assessments, a learning gap that is growing larger and poor attendance. Notices from the Department of Education are being sent at the last minute after a considerable amount of preparation has begun to fulfil the original directive given. (Home study alternatives/cancellation of testing programme). Moreover, the trimmed curriculum has also created a sense of discontinuity as at times the concepts are not interlinked, and this makes it difficult for learners to understand. Moreover, participants state that with so much teaching time lost, lessons must be watered down and rushed through, so it feels like there isn't justice being done to a topic. The effects on learning were significant, with participants stating this was particularly negative with regards to important learning areas such as mathematics, languages and science. While it was difficult to complete the syllabus and assessments timeously in a normal school year, this was still the case during this period with

poor learner attendance and schools being shut due to Covid-19 outbreaks, even with the trimmed curriculum.

6.5.12. Frequent closures and reopening of schools

When schools were first faced with the pandemic, there was a lot of uncertainty as to when schools would reopen. Participants said that it was also frustrating that personal protective equipment deliveries were delayed, which further added to the uncertainty of schools reopening. It was disheartening and worrying when schools were closed, because valuable teaching time was lost. Participants note that many learners rely on the nutrition club for their meals. Furthermore, the high absentee rate of learners during Covid-19 will have consequences of skill growth in certain cohorts of learning. The closure of schools during the pandemic has affected the structure of learning and schooling. Due to the lockdown and being confined at home for a long period of time, learners begin to lose the knowledge and skills that they once acquired.

6.5.13. Loss of teaching and learning time

Screening and sanitizing are a time-consuming task, and the time constraints constantly puts one under pressure. The Covid-19 health protocols cut into teaching and learning time as learners are continuously leaving the classroom, and when they return, there is a disturbance as they are asking around what they have missed whilst outside. A gap has been created in learning abilities. Learners' minds were blank, and they were out of routine when they returned to school. Time limit to complete syllabus and help learners catch up basically bridging the gap. Moreover, there is very little instruction, feedback or interaction between the teacher and the learner. Learners often complain that the tasks and activities given in the booklets are difficult to do because there is no teacher guidance like in a normal classroom.

6.6. Ways in overcoming the challenges and implications of Covid-19 for teaching and learning

Participants suggested some ways in which the challenges can be overcome. These suggestions include: extra classes for learners who are behind; one-on-one teaching, teaching only content that is beneficial to learners; having frequent communication between learners and parents to discuss progress; giving learners the opportunity for synchronous or asynchronous discussion in the classroom; figuring out where gaps may prevent learners from understanding content taught; using formative assessments to figure out where learners may need the extra support;

giving feedback in the context of lessons, only if learners need a quick reminder or the concepts refreshed; working with learners who need additional support, establishing a routine with learners that can be followed through different educational programmes, for example television; and encouraging learners to ask questions.

According to Zimu et al. (2020), teachers require solutions from government to minimise the challenges they face during these unprecedented times. In stating so, participants mention that the Department of Education should provide enough funds to assist schools as fundraising initiatives have come to a halt and parents are unable to pay schools fees due to the loss of jobs during the pandemic. Participants also express that the Department of Education should be responsible for filling in the gaps that were created during this pandemic by being more hands on and realistic in terms of their demands. They are required to ensure that proper curriculum planning is done so all topics that should be covered are done within the given timeframe or certain topics can be trimmed from the curriculum.

The policies and changes in the curriculum need to be well thought out and teachers ought to attend workshops. As mentioned by participants, many of the technological challenges can be overcome by taking some initiative in providing schools and learners with basic technological tools during this time. In doing so, the integration of information technology in education will be further accelerated. Furthermore, the Department of Education should fill vacancies at school to decrease the shortage of teachers.

Participants indicated that schools should create awareness around issues such as learner drop out, substance abuse and teenage pregnancy. Suitable programmes should be implemented and include coping strategies, safe sex practices and relevant information to eradicate the above challenges that have become prevalent during the Covid-19 pandemic.

It has also been noted by participants that teachers ought to further reflect on their teaching practices to ensure that learners are not falling short during this time. They can do this by networking and presenting workshops to build capacity. Teachers and learners need to be proactive in embracing the new changes to teaching and learning and need to now adjust and embrace such changes.

Teachers and learners also need to integrate creative methods of teaching so that learners are able to be engaged in the newer methods of teaching and learning. Schools and teachers need to ensure that resources are easily available (pictures, worksheets, textbooks) which can enhance learners' understanding of work, especially if they are working alone. Booklets should

contain tasks and activities that are enjoyable, easy to understand and at the same time encourage learners to work alone. Teachers should also encourage activities outside the classroom (being physically active) while ensuring that all protocols are followed. Ensuring open channels of communication between the teacher and parent can empower parents to help learners at home.

Although there is difficulty in learning and teaching, teachers should allow students some time to enjoy being at school, for example, taking lessons outside the classroom, doing exercise, having a talk session, etc. Teachers need a support system, whereby the learning losses can be reduced in order to reverse the long-term negative effect by implementing learning recovery programs and to also prepare for future shocks of this nature.

6.7. Narrative developed from the analysis of data

According to Moen (2006, p. 56), narrative research allows the voices of teachers to be heard “through stories of experience as it offers an opportunity to present the complexity of teaching to readers and to stakeholders.” McAllister (2001, p. 350), states that “A narrative can contribute to an understanding of a phenomenon as it provides the opportunity to engage a listener/reader in that experience from a safe distance”. The following narrative was written by the researcher of this study, which is built from the responses gained through the data production process.

This narrative comprehensively expresses how teachers navigate the changes in teaching and learning during Covid-19; it also gives an account of Covid-19, being a new virus, and the implications of the virus for teaching and learning.

Hard pressed but not crushed: The Victors of Unprecedented Times.

Before exploring the impact that the Covid-19 pandemic has on the teaching and learning infrastructures, one must first understand the severity of this new virus, that has plagued humanity. Throughout history, as humans have spread across the globe, infectious diseases have followed us every step of the way. Even with advances in medicine and technology, infectious diseases continue to evolve and threaten our existence.

Presently, we identify the latest threat, the SARS-CoV-19 pandemic. In early December 2019, atypical pneumonia was reported in a cluster of patients in Wuhan (China) and were shown to be caused by a new coronavirus, called SARS-CoV-2, with the disease being referred to as

Covid-19. The animal reservoirs are bats. It was proposed that pangolins could be the animal hosts that transmit the virus to humans.

Symptoms of Covid-19 are variable, but often include fever, cough, headache, fatigue, breathing difficulties, loss of smell, and loss of taste. Symptoms may begin one to fourteen days after exposure to the virus. At least a third of people who are infected do not develop noticeable symptoms. Older people are at a higher risk of developing severe symptoms. Some people continue to experience a range of effects (long Covid) for months after recovery, and experience damage to organs. Covid-19 transmits when people breathe in air contaminated by droplets and small airborne particles containing the virus. The risk of breathing these in is highest when people are in close proximity, but they can be inhaled over longer distances, particularly indoors. Transmission can also occur if splashed or sprayed with contaminated fluids in the eyes, nose, or mouth and rarely, via contaminated surfaces. People remain contagious for up to 20 days and can spread the virus even if they do not develop symptoms. The Covid-19 pandemic has impacted almost every aspect of our lives. In most instances, in a negative and destructive way. As expected, the health care system is strained, companies sink into bankruptcy, jobs are lost, stock markets crash, and countries spend billions on medical aid.

As a result of the above, drastic measures had to follow, especially in the world of teaching and learning. The Covid-19 pandemic, is a major cause for concern and triggers stress, uncertainty and fear, in both teachers and learners and to entire communities. The closure of public schools, has disturbed the psyche of all parties concerned. This has led to severe symptoms of anxiety and even depression.

How do teachers navigate through the changes in teaching and learning, during the upheavals of the Covid-19 pandemic? One needs to explore the tenacity of the brave and versatile teaching fraternity, worldwide. Teachers were put under immense pressure, especially in public schools, where the school population is huge. There is a teacher-pupil ratio averaging 1:45 across the board. This meant that classes had to be split into two or three units, depending on the total school/grade. The class units had to share the days of the school week, in order to adhere to Covid-19 protocols. This led to lessons being repeated several times, thus consuming more teaching time.

Textbooks couldn't be shared like before, to avoid cross contamination, so teachers had to make amends, which added to the administration work. Teachers' workload in general, tripled, whereas learner attendance and punctuality, considerably dropped. The attendance of teachers,

was also negatively affected, due to fear, stress, anxiety, etc. To add insult to injury, two thirds of schools across the provinces reported a shortage of teachers. These are just a few of the contributing factors, that had led to the sudden and drastic changes in teaching and learning. Teachers and learners were plunged into murky waters – into an unfamiliar order of expectations and into dangerous circumstances. It has to be noted, that the teaching faculty was and still is, adversely affected.

The entire education system has been turned upside down by this pandemic. Teachers were and still are, swamped with daunting challenges and demanding requisitions. Learners seem to be lost without the usual physical contact from their teachers and especially, their friends. The atmosphere was, indeed, very bleak.

At the outset, the Covid-19 pandemic seemed like a temporary emergency, but had speedily escalated into a worldwide pandemic, resulting in a majority of the world, declaring a "state of disaster!" All schools had to adjust policies and the curriculum in order to adhere to government and health department protocols. This caused unforeseen changes to the ethos and culture of public schools, thus initiating the 'new normal'.

Teaching and learning strategies were severely affected. These emergent laws froze the teaching programme, as all classes were put on hold for an indefinite period. One day, we were all at school, then suddenly the whole world was turned upside down. Schools had to frantically prepare for home schooling, via online classes, which placed underprivileged learners at a huge disadvantage. Parents became helpers in 'at home' learning, substituting as teachers. This led to homes turning into classrooms.

Online teaching imposed upon teachers' personal time and put undue pressure on parents who also had to work in their normal professions. It must be stated that the greater burden lay on the teachers, as they maneuvered through these demanding times. Using every ounce of their professional training, teachers went the extra mile and beyond, to ensure that all learners were sufficiently catered to. The closure of schools meant that teachers had to do limited group and one-on-one tuitions, whenever and wherever possible. Many resorted to private tuitions, especially where matric learners were concerned.

It was a dark phase in the history of the education system, in the 21st century. As all necessary precautions and protocols were put in place, schools started to open and learners attended at intervals. Many changes were made in the functioning of the school terms. Apart from teaching,

teachers had to play many other roles. They had to substitute as nurses, health care workers and safety officers. Teaching staff, together with management and general workers, had to ensure social distancing amongst all learners, in and out of the classroom. Frequent sanitizing and continual wearing of face masks had to be inculcated and implemented. These overwhelming duties had to be managed on a daily basis. This put a tremendous strain on the teaching staff, as there were numerous other duties to attend to, as well.

All these factors contribute to the physical, mental and emotional stress, endured by teachers in general. The vulnerability of mental health cannot be ignored, in these trying times. Pressures and expectations of teachers have increased tremendously, due to the Covid-19 pandemic and all that it entails. It must be strongly considered that the lack of timeous government assistance and guidance during this unsettling change added to the mammoth task that teachers face.

Teaching patterns were negatively affected. There was no chance of group activities, with close interactions amongst learners and teachers. This alienated pupils from their peers and from their teachers and vice versa, resulting in poor outcomes in the learners' academic and social development. Teachers worldwide had to quickly learn how to cope, in the 'new normal'. Even presently, teachers are strategically navigating through uncharted territory and troubled waters.

Teachers have had to overcome many trials and obstacles to achieve their goals. Teachers have to continue to explore new, safe and innovative ways to accomplish excellence, in implementing the education curriculum. Sharper skills in the classroom and on the internet, had to be acquired, to meet the requirements of the teaching profession.

These are some of the methods used, to effectively manage teaching and learning in public schools:

- *Extra classes for learners who have learning barriers, including one-on-one tuition.
- *Teaching only specific content that is beneficial.
- *Creating a safe environment and a positive atmosphere in the classroom.
- *Ensuring regular communication with learners and parents, to discuss progress and particular needs.

*Giving learners the opportunity for synchronous or asynchronous discussions in the classroom.

*Identifying the areas where learners find difficulty in understanding the lesson content.

*Using formative assessments to figure out where learners may need extra support.

*Giving feedback on the lesson context and refreshing concepts for easier understanding.

*Having extra lessons for learners who need individual attention and extensive revision.

*Establishing educational routines with learners and encouraging them to use the internet and educational television programmes for further research and understanding of the lessons.

*Encouraging them to ask questions and take part in healthy discussions.

*Always reminding learners of the importance of education and the necessity of keeping safe and cautious.

It has indeed been a dark period in the world of teaching and learning, but through the mindful and consistent efforts of the teaching fraternity, we have been able to overcome most of the obstacles facing the teaching profession. Teachers, across the world, have learnt to function in this unfamiliar order. We have, as a staff, implemented new and better skills to achieve our goals. Vital communication, via personal and group meetings with learners and the community and the use of current technology, has enabled teaching and learning to progressively continue.

Let us think about post-Covid-19. The researchers, curriculum designers, education officers, and educational institutions work together to transform the education system during and after the closures. Educational institutions should design curriculums, prepare learning strategies and techniques for post-Covid-19, and transform the education system itself.

During closures, curriculum design, collaborations, skill development, and educational institutions should focus on advancing the education system. After Covid-19, the school's design strategies and methods must enable recovery of lost learning, ensure children return to school and prepare learners, parents, and teachers, to scale distance learning accessibility. School teachers, in collaboration with education officers, need to give awareness for parents and learners, to make sure that children are safe at home during school closures and encourage learners to revise work done and read books, as much as possible.

There is inequality among urban and rural learners, therefore, the education system should design and implement some evidence-based actions that aim to facilitate the recovery of the lost portion of lessons, to every learner, regardless of economic status. Because of the lack of required support during the school closures, it could take a very long time for children from illiterate and low-income parents, to recover their missed portion, when they return to school.

Due to the suffering economy and poverty issues, some learners from low-income parents, may decide to work as daily laborers to support their families financially and may never return to school. The schools should trace those learners who do not return to school. Even if the countries recover from Covid-19, parents may fear to send their children back to school. Departments of education need to design strategies to encourage parents to send their children back to school. The education system needs strategies on how to prepare teachers and learners to respond effectively and efficiently during and after Covid-19.

The closure of schools, combined with the lockdown and economic crisis, will have a negative impact on the current and future development of children, and may further widen the gaps that existed before the pandemic. While governments have made efforts to sustain student learning and ensure their well-being, strategies have not reached learners equally, in part, due to pre-existing inequities in accessing resources, such as internet connection, device availability and enabling environments for growth and learning. In the midst of the crisis, uncertainty, and fear, generated by the reopening of sectors, it is important to focus the discussion on the present and future well-being of children and adolescents, and to do everything in our power to ensure a safe and productive teaching and learning environment, worldwide.

One of the sectors that has been the most affected since the onset of the health emergency has been education. We are experiencing a crisis that is unprecedented in recent human history. The Covid-19 pandemic has forced governments to take drastic measures that seek to contain infection rates and protect the lives of millions of people. While these measures were necessary in the short term to address the health emergency, it is important to restore the long-term vision, with regard to the costs that these measures may carry, for future generations.

Teaching and learning across the globe, has evolved into a formidable opponent, to any and all crises that may rear their ugly heads in the future. Teachers in general are strong-willed and confident and they are quite capable of navigating successfully through these temporal storms, to a victorious and brighter future, for generations of learners to come. Indeed, teachers will

continue to prove their worth in any manner of ways. *They are surely victors and not victims and they will continue pressing forward, headstrong and steadfast, for the sake of their learners.*

6.8. Chapter Conclusion

This chapter comprised of themes that developed from the data. It also presented an analysis of each participant's response, as well as an overall summarised section of participants' responses in tabulated form. Furthermore, the challenges and implications of Covid-19 for teaching and learning was presented along with ways in which we can overcome some of the challenges and implications. A narrative was also developed from the responses of participants. The next chapter presents the *Navigating Change Theory*, an intervention programme guide and model which arises from the data generated and the theoretical framework.

CHAPTER SEVEN: NAVIGATING CHANGE THEORY, AN INTERVENTION PROGRAMME GUIDE AND MODEL

7.1. Introduction

The previous chapter consisted of an analysis of the data that was generated in this study. This chapter will present a theory, an intervention programme guide and an intervention model based on the data generation methodologies and the theoretical framework of this study. The emerging theory is called the *Navigating Change Theory*.

Theorising includes producing compelling inferences to explanations grounded in data, such that it is a process of abstraction by the researcher that holds a capacity to form understanding and interpretation for others (Cornelissen & Durand 2014; Welch et al., 2011). The theory fabricates an intervention model which will serve as an aid to the educational realm during the Covid-19 pandemic and for future pandemics.

Teachers around the world had no choice but to conform to the new ways of teaching and learning (Petzold, 2020). As a result, the transition brought about many challenges for academic staff. Many of these individuals required higher levels of technology proficiency and skill than they had previously acquired, and learners suffered from feelings of isolation through not being able to interact with their classmates or attend in-person classes (Gillett-Swan, 2017).

Killerby et al. states that by far, most research published surrounding the impacts of Covid-19 on education either endorsed the benefits of practices of the Covid-19 health protocols, challenges faced by learners (Supiano, 2020), technology choices and resources (Darby, 2020), or the “bigger-picture landscape of education and consequences of suspending face-to-face instruction” (Ruf, 2020). Undeniably, according to Marek et al. (2021, p.21) “the only articles found in the scholarly press related to teaching and learning, because of the timeline required for empirical research, were editorials or reports on the course of the instructional transition in one school or geographic region, with limited quantitative data.” Marek et al. (2021, p.21) further express that “the actual experiences of teachers while converting their classes to distance instruction, and thereafter managing the classes, received little attention in the first weeks following the transition.”

This theory focuses on how teachers navigated the change during the Covid-19 pandemic. With change comes challenges, therefore, the intervention model will comprehensively provide ways in which the challenges in teaching and learning during Covid-19 and other pandemics

can be overcome. Additionally, the Navigating Change Theory is coupled with Kurt Lewin's (1951) Theory of Change, which illuminates the process of unfreezing, changing, and refreezing during a transition period, in this case, during Covid-19.

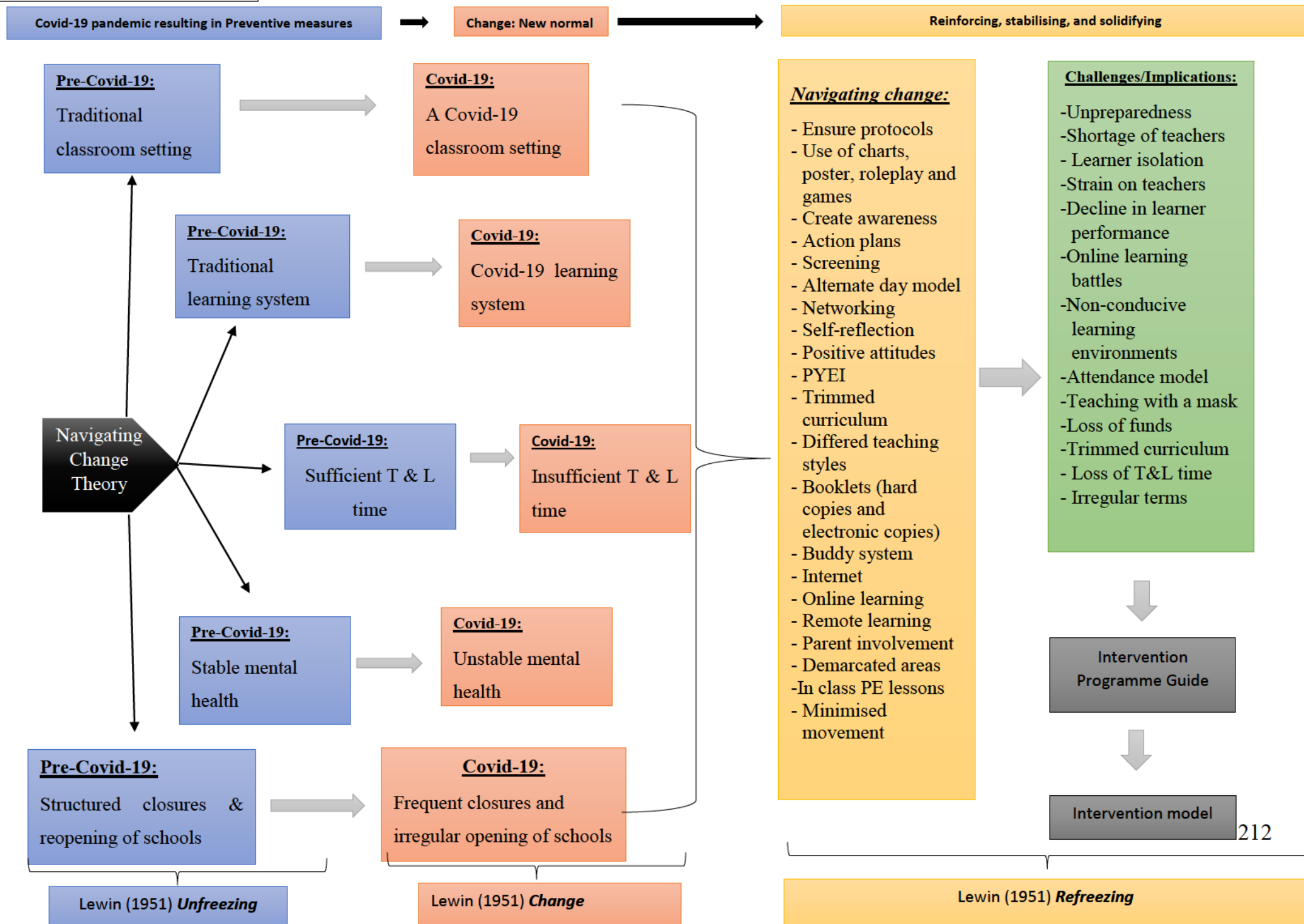
7.2. The Navigating Change Theory at a glance

It has indeed been a dark period in the world of teaching and learning, but through the mindful and consistent efforts of the teaching community, teachers have been able to overcome most of the obstacles facing the teaching profession. Teachers, across the world, have learnt to function in this unfamiliar order. They implemented new and better skills to achieve goals.

In stating so, the navigating change theory emerged from my study which aimed to explore the ways in which teachers navigate changes in teaching and learning during the Covid-19 pandemic. This study, "*Victors or Victims? An Exploration of How Teachers' Navigate Changes in Teaching and Learning during the Covid-19 Pandemic*", also developed a narrative which shows that teachers perceived themselves as victors during this pandemic. This theory explains how changes in a school and learning environment can be navigated.

The navigating change theory explicitly illustrates the pre-Covid-19 teaching and learning environment and the change in the Covid-19 teaching and learning environment. Moreover, it explains, through evidence and data, exactly how teachers navigated changes. The navigating change theory is guided by Lewin's 1951 Theory of Change. The navigating change theory directs a school-based intervention programme and an intervention model. The development of this theory is premised on the idea that change can take place at any time. Within the educational realm, educational institutions, policy makers, departments and teachers are required to be prepared for change at any time. Once change occurs, affected parties must act immediately. Due to the few challenges and implications that were noted by teachers, an intervention programme guide and model was necessary.

Figure 7.1 Navigating Change theory



7.3. Navigating Change Theory

Covid-19 pandemic resulting in preventive measures



Change: new normal



Reinforcing, stabilising, and solidifying

According to Lathabhavan and Griffiths (2020), individuals must comply with the Covid-19 preventive measures which include social distancing of at least 1.5 meters, schools, religious organisations, political gatherings and any other gathering indoors must operate at 50% or less of their capacity, masks need to be worn by everyone and regular hand washing or sanitizing protocols must be practiced. As a result, the traditional classroom setting, the traditional learning system, having sufficient teaching and learning time, having a stable mental health and the certainty of closing and reopening of schools as prescribed, became a thing of the past.

The new way of doing things became colloquially known as the ‘new normal’ which affected every sector in the world, including education. Considering this, the educational realm saw itself rapidly transitioning from traditional to this ‘new normal’. As a result, teachers were now faced with a Covid-19 classroom setting, a Covid-19 learning system, having insufficient teaching and learning time, having unstable mental health and experiencing frequent closures and irregular reopening of schools.

As a result of Covid-19, the changes in education needed to be reinforced, stabilised, and solidified so that teaching and learning could take place without contributing to the pandemic. Efforts must be made to guarantee the change is not lost, but rather it needs to be cemented into the organisation’s culture and maintained as the acceptable way of thinking or doing. The changes need to be reinforced to ensure that teaching and learning can take place in a manner that lowers the risk of infections in the schooling environment.

7.3.1. From pre-Covid-19 to Covid-19: a traditional classroom setting to a Covid-19 classroom setting

A traditional classroom setting had to change to a Covid-19 classroom setting. The differences are outlined below.

7.3.1.1. A Traditional Classroom Setting

According to Slade (2022), before Covid-19 interrupted our lives and required our learners to open their laptops and learn from home, the first day of school was a rite of passage which indicated the start of a life-determining expedition that has largely followed the same shape and rhythm for generations. From grades R to 12, classrooms are managed by teachers who teach lessons that begin and end with a bell. Teachers in their classrooms and with their learners managed the teaching and learning process. The traditional classroom and school setting comprised of in-person interaction and socialising, the teaching and learning environment was that of a stable, secure, and safe environment for teachers and learners, and learners were able to move about freely and work with their partners during activities and communicate freely and expressively through movement. Learners were able to share textbooks or other resources, and participate in group work and peer tutoring to assist learners who struggle to grasp concepts. Additionally, many disciplinary issues had to be resolved during class time (bullying, theft, etc.). Classrooms were also overcrowded as each classroom would have a minimum of 50 learners. As a result, it was a mammoth task to give learners individual attention.

The attendance of learners was constant as they attended school on a daily basis, covering the curriculum. Additionally, lessons were taught once to each unit and there was no repetition of lessons unless required for performance reasons. Teaching and learning has undergone unprecedented change due to the Covid-19 pandemic.

7.3.1.2. A Covid-19 classroom setting

Covid-19 preventive measures and health protocols have been introduced in the classroom, whereby social distancing, wearing of masks, frequent sanitizing and washing of hands, learning in isolation, and attending school on every alternate day were just some of the changes. In adherence with the Covid-19 preventive measures and health protocols, classrooms needed to accommodate only fifty percent of its capacity. As a result, any classroom during the Covid-19 pandemic would only see a maximum of twenty to twenty-five learners. This also meant that learners and teachers were not allowed to closely interact with each other which hinders

the teaching and learning process. These preventive measures and protocols consumed time and infringed on teaching and learning time. In stating so, learners were required to stand in lines and wait to be screened.

The screening process included questions about their health such as if they have a fever, cough, sore throat, runny nose, any flu like symptoms, and if they had been in contact with anyone who is Covid-19 positive. Moreover, their temperature would be checked and recorded. Thereafter, learners would be sanitised and sent to class. According to Kim et al. (2021), the screening process serves as frontiers for preventing transmission of the virus in a specific place. They further express that this process reduces public contact with those suspected of carrying the virus and prevents community-acquired infections.

Additionally, the school environment has demarcated areas such as dots painted on the ground for learners to stand on to ensure social distancing. The school and classroom walls had posters up that contained the Covid-19 preventive measures. Furthermore, learners were encouraged to stay at home if they were feeling sick and if they got sick at school, they would immediately be sent to an isolation room.

7.3.2. From pre-Covid-19 to Covid-19: A traditional learning system to a Covid-19 learning system

In addition to the classroom setting, the traditional learning system had to change to a Covid-19 learning system.

7.3.2.1. A traditional learning system

The traditional learning system comprised of learning through collaboration. According to Laal and Ghodsi (2012, p.486):

“collaboration is a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers. In all situations where people come together in groups, it suggests a way of dealing with people which respects and highlights individual group members' abilities and contributions as there is a sharing of authority and acceptance of responsibility among group members for the groups' actions.”

Learners were able to work in pairs (buddy system) and in groups to ensure the academic success of all learners. The traditional learning system was driven by a holistic curriculum that offered some extra learnings due to having sufficient time. Teaching and learning were confined to the school and classroom environment with truly little requirements of teaching and learning to be done remotely. As a result, teachers were able to use whatever resources were available to incorporate them for the enhancement of lessons. Keeping in mind that many schools are under-resourced, learners were allowed to share these resources. Moreover, the traditional learning allowed for everyday attendance, sporting activities, freedom of fear, anxiety and stress.

7.3.2.2. A Covid-19 learning system

During the hard lockdowns, lessons had to take place from home. Remote learning became a notion that every teacher and learner had to familiarise themselves with. At the start of the pandemic, schools were unprepared for a lockdown which left many learners without education for at least two months. When schools reopened, teachers compiled resource packs for learners to work with at home as not all learners returned at once. The resource packs included booklets that contained notes and activities for learners to complete. Upon all learners returning to school, learners saw themselves in a new learning system. Teachers were unable to encourage the collaborative methods in their lessons and learners were required to learn in isolation.

Teachers had to remain at the front of the class, away from learners and learners away from each other. Since most schools did not have the full complement of textbooks, teachers used worksheets to teach instead of textbooks. As mentioned before, learners attended on every alternate day which meant that for teachers, one lesson had to be taught at least four times over two days. This became exhausting for teachers. Additionally, teachers had to constantly think creatively and operate in innovative ways to work around the changes in the learning system during Covid-19. This included trying more than one teaching style or methodology, moving away from the learner-centred approach to a more teacher-centred approach and relying a lot on technology.

The Department of Education acknowledged that the alternate day attendance would not allow for the full traditional curriculum to be completed, and they trimmed the curriculum down and included only the important aspects. The trimmed curriculum had to ensure that the sections that were supposed to be covered during the lockdown were included when learners returned to school. As a result, sections or topics were taken out from all four terms and merged with

other terms. Thereafter, in 2021, the Department of Education implemented the Recovery Annual Teaching Plan Programme which began in 2021 and will be completed in 2023. This recovery programme aims to close the gaps created by Covid-19 in 2020.

7.3.3. From pre-Covid-19 to Covid-19: Having sufficient teaching and learning time to insufficient teaching and learning time.

Teaching during Covid-19 was particularly characterised by having insufficient teaching and learning time.

7.3.3.1. Sufficient teaching and learning time

Prior to the Covid-19 pandemic, the curriculum, school day and attendance model had accommodated for more than enough teaching and learning time. The prescribed curriculum paced the teaching and learning process which allowed for all aspects to be covered. Many extra and co-curricular activities such as sports, competitions, science fairs, debates etc. were conducted and learners would participate and still have enough time to focus on what was being taught in the curriculum. Moreover, teachers had enough time to plan for lessons without many interruptions or protocols to follow.

7.3.3.2. Insufficient teaching and learning time

With the Covid-19 pandemic, significantly less time was available for teaching and learning. The Covid-19 health protocols mandated a screening process, which was time consuming. This would take place twice a day, in the mornings and after break. Unfortunately, this infringed on teaching and learning time. As a result, there was lesser teaching time. Although few months into the pandemic, the Department of Education employed screeners, the infringement of this process still affected teaching and learning time. Keeping in mind the Department of Education did implement a trimmed curriculum, the alternate day attendance model did not necessitate enough time for teaching and learning. Teachers were required to be flexible and had to ensure to use every minute of the day was used prudently.

7.3.4. From pre-Covid-19 to Covid-19: Stable mental health to unstable mental health

This period was also characterised by increased mental health issues.

7.3.4.1. Stable mental health

Before the Covid-19 pandemic, teachers and learners were faced with anxiety, stress and worry that related to attainment of academic goals, performance levels, and the completion of the

curriculum. There was more certainty in teaching and learning, as both teachers and learners were fully aware of the processes to attaining the academic goals and completing the curriculum. Due to this certainty, teachers were able to set out clear expectations without having to worry about any external hindrances. During this time, teachers and learners would enjoy their freedom in the teaching and learning process as they could interact and collaborate with each other. Through the use of various teaching methodologies, teachers need not stress when learners failed in grasping topics. Teachers would simply, change their teaching methodology, and in most cases, they would encourage the collaborative methodology.

7.3.4.2. Unstable mental health

As noted throughout this thesis, the Covid-19 pandemic is coupled with fear, stress, depression, and anxiety. According to WHO, some of the psychological impact of Covid-19 can be associated with elevated levels of stress or anxiety. The virus itself creates personal situations in which, in addition to the disease's symptoms, human emotions such as fear (Asmundson & Taylor, 2020), worry, panic, anxiety, or depression-related distress (Bao et al., 2020) can appear more commonly among people. In teaching and learning, teachers, parents, and learners found their psychological states hindered. Teachers had to ensure that all protocols were followed whilst completing the curriculum, ensuring that learners are performing at a certain level, meeting deadlines, ensuring that resources are available for learners, adapting to the changes during the pandemic and the risk of contracting the virus.

Learners were also faced with similar mental health issues as adapting to changes during Covid-19 was challenging. Some learners were not able to effectively access learning material during the various lockdowns due to their socio-economic standing which resulted in stress, and anxiety relating to passing the term and year. Remote learning did not benefit all learners and it created panic and fear. Moreover, attending a public setting with large numbers of people, where each individual comes from different places, can be very stressful for teachers and learners in the sense of contracting the virus.

Media, news, and broadcasts displayed the number of new infections and deaths on a daily basis. This sparked fear, stress, and anxiety as many lost their loved ones. In schools, when a learner or teacher would test positive, levels of fear, stress and anxiety would elevate further. Due to these mental health issues, individuals such as teachers and learners were not able to fully embrace teaching and learning during the pandemic as they were more concerned with

doing everything to protect themselves from the virus, even in the teaching and learning environment.

7.3.5. From pre-Covid-19 to Covid-19: Structured closures and reopening of schools to frequent closures and irregular opening of schools

Irregular opening and closing of the schools were also a challenge experienced.

7.3.5.1. Structured closures and reopening of schools

Education, pre-Covid-19, saw itself with a structured system regarding the terms in a year. Calendars would often print the four school terms so that interested individuals would take note of it. The curriculum (CAPS) would pace the teaching and learning process for a term over 9 to 10 weeks. There were no sudden closures of schools or any uncertainty surrounding the reopening of schools after a holiday or break. Teachers, parents, and learners planned around the stipulated dates as it was always adhered to. Schools could effectively and plan for a year.

7.3.5.2. Frequent closures and irregular opening of schools

During the Covid-19 pandemic, uncertainty loomed around the closures and reopening of schools. National lockdowns regularly occurred and many precautionary measures were set in place when an individual tested positive for Covid-19; in the schooling context, the school would close for a few days for deep sanitizing and decontamination of the building.

7.3.6. Navigating Change

The educational realm has never faced such drastic changes before. The new methods of operation during Covid-19 in teaching and learning had to be adapted to and embraced. Therefore, teachers found themselves having to constantly ensure and reiterate the Covid-19 health protocols, which is to wear a mask, social distance and sanitize regularly. This was done by the integration of the protocols in lessons, using charts, role plays, games, and activities. Moreover, areas were demarcated for learners to stand on to ensure social distance. Teachers often found themselves taking the roles of parents and medical experts by explaining the severity of the virus so that it can be taken seriously. Schools had to become proactive, so they created action plans which delegated duties to educators so that the process of screening and checking of temperature could be done effectively. The attendance models which were implemented by the Department of Education assisted in the management and accommodation of learners. The classrooms were set in adherence to the protocols and was frequently sanitised.

Teachers encouraged individual and whole class discussions rather than collaborative methods such as group work. Furthermore, staggered breaks, reduced class sizes, markings on the ground to ensure social distancing, minimised movement, distribution of soap and sanitisers were other ways in which teachers navigate this change in the teaching and learning process during the Covid-19 pandemic. Teachers constantly ensured that there was proper air ventilation and that classrooms were not overcrowded.

As time progressed, the Department of Education initiated a programme for unemployed South African citizens called the Presidential Youth Employment Initiative (PYEI), whereby individuals aged 18 to 35 could apply for an educational assistant (EA), general services assistant (GSA), sports assistant, psychological assistant and a reading champion position to assist in schools. These vacancies helped teachers navigate changes in teaching and learning during the Covid-19 pandemic, as the educational assistants would assist with screening, making of booklets, distribution of worksheets and any teaching and learning administrative related duties.

The general service assistants helped the school with sanitizing and following the Covid-19 protocols. The sports assistants helped teachers with sporting activities, including the management of learners and the adherence to the Covid-19 preventive measures. The psychological assistant played a significant role in the teaching and learning process for teachers and learners by speaking and offering counsel for those affected by the pandemic or any other psychological issue. Additionally, the reading champion position assisted learners in reading, and they aimed to address the gap that was caused by the Covid-19 pandemic.

Due to the elevated levels of stress, depression and anxiety during the pandemic, teachers found it beneficial to share their experiences with other teachers and they networked innovative ideas around their coping skills. Moreover, they had to maintain positive thoughts and become mentally strong. Significantly, teachers created a safe and supportive interaction system so that learners do not have to feel alone or isolated. They allowed learners to express themselves.

To address the issue of time loss and frequent closures of schools, many institutions had to utilise online platforms such as Zoom, Microsoft classroom, Skype, WhatsApp and Telegram as remote learning was the only way for education to continue. WhatsApp chat groups were created and learning material with guidance was posted in these groups. Electronic copies of the resource packs, worksheets, booklets, and other learning material were posted on these groups. Once schools reopened, teachers would compile booklets with work for the entire term

in it, so that learners would not miss anything. Furthermore, the Department of Education had to trim the curriculum to accommodate for the changes during Covid-19. This allowed teachers to teach aspects that are most important.

Teachers had to assess learners as the sections were completed due to the unannounced closures of schools. As mentioned before, due to the Covid-19 preventive measures, teachers were unable to use the tried and tested, collaborative methodology in the classroom. Teachers changed their teaching methodologies by encouraging whole class discussions and individual work. However, in some cases, with adherence to the Covid-19 protocols, the buddy system became operational which became an effective method in the teaching and learning process during the Covid-19 pandemic. Teachers used some time in lessons to do exercises which formed part of physical education.

The alternate day model allowed schools to accommodate all learners and to maintain the Covid-19 health protocols. Teachers encouraged learners to attend school in their groups and by ensuring that all learners received the same work. Teachers also navigated this change by giving extra work to learners so that they could work with it on the days that they were not attending school. Teachers saw this as positive because some felt that learners were able to receive individual attention. Moreover, parents became more involved, as they were required to supervise, monitor and even teach their children.

7.3.7. Challenges and implications

The number one quality for operating in any educational realm is to be prepared. Unfortunately, the Covid-19 pandemic took the educational realm by surprise. Institutes, teachers, learners, and parents were unprepared for Covid-19. The national lockdowns aimed to minimise the spread of Covid-19. Learning transitioned to online. Learners who are from privileged backgrounds and are supported by their parents were able to participate in online learning, however many learners were unable to have access to online platforms which disadvantaged them during this time.

The Department of Education already faced challenges surrounding the employment of teachers. Schools employed teachers through the school governing body (SGB), however, due to Covid-19, many of these SGB-employed teachers were retrenched because schools were unable to pay them for their services, due to parents not paying school fees.

The isolating that was required due to Covid-19 meant that close interactions with others was prohibited. This meant that learners were required to complete tasks on their own. This is seen as a disadvantage, given the different ways children learn and the different ways teaching can occur.

Much strain was placed on teachers as they were required to take on additional roles. Teachers were required, on a daily basis, to ensure that: learners were screened, sanitised, present on the correct day, temperatures were recorded, different resources and teaching styles were used, the trimmed curriculum was adopted, the curriculum was completed, learners were assessed, scripts were marked, learning material was compiled, and parents were engaged with.

During Covid-19, the performances of learners declined drastically. This occurred because of the loss of teaching and learning time, lack of concentration in class, fear and anxiety, the numerous lockdowns which resulted in the closure of schools, and the demotivation in learning due to non-conducive learning environments (home learning). The challenges in their learning environment hinders their learning process, for example load shedding, noisy homes, distractions from learning, and limited space to learn in. Due to learners being at home during this period, some of them have indulged in substance abuse and engaged in unhealthy sexual behaviour. As a result, learning materials have been ignored. Many teenagers became pregnant and had to drop out of school. Moreover, some learners had to look for jobs to support their families which also resulted in them dropping out of school. Moreover, on one hand, the foundation phase learners (Grades R-3) have been most disadvantaged as they were phased in towards the end of the staggered phase in approach as they lost a lot of teaching and learning time since the start of the pandemic. On the other hand, lower pass rates lead to poor results so learners exiting secondary education may not be accepted to meet the requirements of tertiary entrance education as they do not achieve the required results.

The attendance day model provoked much confusion amongst learners as they would attend school on the wrong day. Moreover, further strain was placed on teachers as one lesson had to be taught four times over two days. This became tedious and extremely difficult. It is believed that this also disadvantaged the learners in some way because by the time the teacher got to teach the fourth lesson, the teacher would have been exhausted and would have not done justice to that lesson.

Another challenge presented in the teaching and learning environment, during Covid-19, is the wearing of masks. When teaching with a mask, teachers strain their voices, and it also

negatively impacts on teachers' ability to deliver their lessons. The use of masks made it practically difficult for learners to interact. Covering the lower half of the face reduces the ability to communicate, interpret and mimic the expression of those with whom we interact.

The trimmed curriculum was implemented due to the loss of school days. It then became a recovery plan. The trimmed curriculum created a sense of discontinuity as at times the concepts are not interlinked and this makes it difficult for learners to understand. The closures and reopening of schools sparked frustration, anxiety and worry among teachers, parents, and learners. It was also frustrating that personal protective equipment was delayed, which further added to the uncertainty of schools reopening. It was disheartening and worrying when schools were closed because valuable teaching time was lost.

The major concern in education is the loss of teaching and learning time. The Covid-19 protocols infringed on already limited teaching and learning time. There was limited time to complete the syllabus and help learners catch up. Moreover, there was very little instruction, feedback or interaction between the teacher and the learner. Learners often complain that the tasks and activities given in the booklets are difficult to do because there is no teacher guidance like in a normal classroom.

7.4. Navigating Change theory coupled with the Theory of Change (Lewin, 1951)

7.4.1. Pre-Covid-19: Unfreezing (Lewin, 1951)

According to Lewin's (1951) theory of change, which is the theory that underpinned this study, the process of change from pre-Covid-19 to Covid-19 is aligned with the unfreezing stage. The unfreezing stage assumes that past observational understanding and social influences outline human behaviour (Wirth, 2004). Schein (2002) states that the way humans behave is founded on a 'quasi-stationary equilibrium' underpinned by a force field of driving and restraining forces. In relation to the navigation theory, the education system that was in operation prior to Covid-19 had become the norm in education and there was no drive for changes. In saying so, the driving forces and restraining forces were at a state of quasi-stationary equilibrium as a new era or generation (advancement in technology) during education prior to Covid-19 was seen as the driving forces and the inability to meet the needs of the new era due to socio-economic issues were seen as the restraining force. In other words, despite the challenges prior to Covid-19, not much effort was made to bring about change to break the quasi-stationary equilibrium. Lewin (1951) states that for change to occur, changes would have to be made to this force field. Lewin suggested that breaking the state of equilibrium, which is the current way things are

done, is needed for change. Hence, the Covid-19 pandemic broke the state of the quasi-stationary equilibrium which has resulted in change in teaching and learning.

7.4.2. Covid-19: Change

As mentioned above, the result of the Covid-19 pandemic broke the quasi-stationary equilibrium which brought about change in the teaching and learning environment. According to Lewin (1951), the unfreezing step stimulates motivation for change, however, it does not always predict or control the direction or extent of change. Since preventive measures were put in place, it stimulated motivation for change in the teaching and learning environment. Because many countries, including South Africa, had never faced a pandemic of such severity, the direction or extent of change was unknown. Most of the changes had to be done on a trial-and-error basis. “Role model imitation and problem solving on an individual level through trial-and-error learning are characteristics of the change activities in this process.” (Wirth, 2004, p.25).

Lewin (1951, p.50) “recognized that change is a process where the organization must transition or move into this new state of being.” During this stage, change becomes concrete. It is also, consequently, the time that most people struggle with the new reality. Wirth (2002), notes that there will be dissatisfaction with moving away from the current status quo and moving into change. For change to take place without many difficulties, a vision of the new way of doing things must be created. The process of change in the teaching and learning environment during the Covid-19 pandemic resulted in dissatisfaction, with teachers being more concerned about their livelihoods, and education became secondary. Nevertheless, as time progressed, individuals saw the need to continue with their lives and to adapt to the changes. When schools re-opened, many teachers battled with the changes, which resulted in dissatisfaction.

Lewin (1951, p.50) “recognized that change is a process where the organization must transition or move into this new state of being.” This changing step, also referred to as ‘transitioning’ or “moving” is recognized as the implementation of the change. During this stage, change becomes concrete. It is also, consequently, the time that most people struggle with the new reality. It is a time marked with uncertainty and fear, making the hardest step to overcome. During the change step, people begin to learn the new behaviour, processes, and ways of thinking. As a result of the Covid-19 pandemic, there are many changes in teaching and learning. The changes in teaching and learning that became concrete include a Covid-19 classroom, a Covid-19 learning system, insufficient teaching and learning time, unstable

mental health and frequent closures and irregular opening of schools. In this step, teachers and learners had to adapt and learn new behaviors, processes and ways of thinking in the teaching and learning environment.

Within this stage of the theory of change, Lewin (1951) speaks about scanning, which relates with skimming several methods of communication with people, reading, exposure to new material, all of which could provide solutions to the problems that are being experienced regarding change (Schein, 2002). Teachers used this process of scanning as they often sought information from the internet, medical scientists and reading materials which influenced the way they are able to operate in the teaching and learning environment.

7.4.3. Navigating change, challenges and implications and intervention model: refreezing.

According to Lewin (1951), during this step, efforts are made to stabilise the new quasi-stationary equilibrium, to make certain that the new behaviours are comparatively safe from regression. This stage involves applying the novel changes and ways of doing things into the daily routine of the school (Wirth, 2004). Efforts were made by teachers that guaranteed the change is not lost. The ways in which teachers navigated change provides a clear depiction that the changes were cemented into the organisation's culture and maintained as the acceptable way of thinking or doing. However, many challenges arose that were beyond the control of teachers. As part of refreezing the changes, the intervention programme guide and the intervention model that has been derived from the navigation theory will assist institutions, teachers, and learners to reinforce, stabilise and solidify the desired changes as per Lewin's (1951) theory of change.

7.5. Intervention programme guide

Every school is unique in their infrastructure, resources, staff complement, learners, delivery of the curriculum and teaching and learning environments, therefore, there cannot be a 'one size fits all' intervention programme. This intervention programme guide provides the Department of Education, schools, and teachers with explicit guidance on overcoming the challenges in teaching and learning during the Covid-19 pandemic, and potential future pandemics. Moreover, it states who should be responsible for the stipulated intervention and who will benefit from it. The intervention programme guide will allow the responsible individuals to use the information and to create a tailor-made intervention programme that best suits a school.

7.6. Intervention Model

Bush and Glover (2009), Spillane (2004) and Taylor (2007) note that sound classroom practice from specialist educators, sufficient and suitable learning materials, sound and proactive leadership and management of learning are three fundamental requirements for developing effective teaching and learning in schools. Moreover, learners also play a vital role in the success of teaching and learning. Through the research, it can be noted that during the Covid-19 pandemic teachers navigated changes considerably well. This intervention model, which is an example of how the intervention programme guide can be used, can assist interested individuals in creating a more conducive teaching and learning environment with minimal effects. The model provides interventions for teachers, learners and schools in overcoming the challenges in teaching and learning during Covid-19.

Intervention Programme Guide

Intervention	Overcoming challenges	Responsible	Who will benefit?
<p><u>Short-term goals:</u></p> <p>Senior Management Teams (SMTs) must create platforms for the timeous sharing of relevant resources and support to assist in teachers and learners being unprepared. When schools are required to close, the Department of Education and school principals must ensure that teachers, and other education personnel are provided with relevant and timeous guidance and directives. Schools must be in discussions with the Department of Education and teacher unions to select, develop, and dispense direction on curriculum, important subjects, and assessment of learning during crisis, and to workshop accelerated/remedial education approaches with teachers.</p> <p><u>Medium-term goals:</u></p> <p>School principals must ensure that learners, teachers, and other education personnel are informed of the risk of future Covid-19 outbreaks and constantly reiterate the key prevention measures.</p> <p>There should be a vested interest in conducting various professional development workshops to staff. The focus of professional development should, be on using ICTs for pedagogy and preparedness training for delivery of remote education, but also on education in emergencies/conflict such as the recent floodings in KwaZulu-Natal which resulted in the closure of</p>	<ul style="list-style-type: none"> ✓ Teachers and learners being unprepared. ✓ Online learning troubles. ✓ Remote learning. 	<ul style="list-style-type: none"> • Department of Education. • Schools, SMTs, Teachers. 	<ul style="list-style-type: none"> • Teachers • Learners

<p>schools. Furthermore, the professional development workshops must equip teachers to adapt to new technologies.</p> <p style="text-align: center;"><u>Long-term goals:</u></p> <p>The Department of Education should ensure that there is adequate internet connectivity across the country. Government must involve mobile network companies such as Telkom, Cell C, Vodacom, Mweb, Web Africa, Intel cellular and others to ensure that all areas in South Africa have internet connectivity. Thereafter, the Department of Education must ensure that local libraries in the different areas are fully equipped for online learning. This means that there should be enough laptops or tablets available for stakeholders to engage with. Alternatively, the Department of Education must provide tablets or laptops to learners.</p> <p>As we move into a technological era, this will be beneficial for the future as well. If this is impossible, the government must build learning centers across provinces and cities. As school systems settle, technology must be integrated into teaching and learning processes as well as routine needs. The sole purpose of learning centers should be for learners to have an opportunity to engage with online learning. The Department of Education must provide training for teachers and learners to utilise online platforms and technology. Since WhatsApp has been utilised the most, online learning should start there and then move onto other platforms. Once teachers and learners have been</p>			
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accustomed to online learning, learning can then be taken to Zoom, Microsoft Teams and Google classroom.			
<p><u>Short-term goals:</u></p> <p>The Department of Education and schools' senior management teams need to ensure that teachers and other education personnel have access to resources to help strengthen their own socio-emotional skills during the pandemic. This can be done by setting up a helpline or other support mechanisms for teachers to access for counselling support.</p> <p><u>Medium – Long-term goals:</u></p> <p>Professional development programmes should include aspects of social-emotional competence that must be done regularly as a continuous support mechanism.</p>	<ul style="list-style-type: none"> ✓ Psychosocial issues faced by teachers ✓ Mental health issues 	<ul style="list-style-type: none"> • Department of Education • Schools • SMTs 	<ul style="list-style-type: none"> • Teachers
<p><u>Short-term goals:</u></p> <p>The school governing bodies should appeal to retired teachers to offer their teaching service to schools that have a shortage of teachers. Moreover, school governing bodies should ensure that fundraising initiatives, which are in accordance with Covid-19 protocols, are conducted so that the funds can be used to employ SGB teachers.</p>	<ul style="list-style-type: none"> ✓ Teacher shortages ✓ Strain on existing teachers 	<ul style="list-style-type: none"> • School governing bodies. • Department of Education • Principals 	<ul style="list-style-type: none"> • Schools • Learners

<p style="text-align: center;"><u>Medium – Long-term goals:</u></p> <p>Principals can appeal to the Department of Education to gather funds to employ teachers.</p>			
<p style="text-align: center;"><u>Short-term goals:</u></p> <p>Teachers must incorporate learner-friendly teaching and learning strategies, such as the whole class discussions, paired/buddy system and other innovative teaching strategies that are in adherence to Covid-19 preventive measures. The professional development programme should cover the aspects of the various teaching and learning strategies or methodologies to improve learner performance. Teachers must become active agents for change, not just in implementing differed teaching and learning strategies or methodologies, but in designing them too.</p> <p>The execution of creative, innovative teaching and learning strategies should be advocated in all educational settings. This includes developing and applying suitable strategies to assist and expedite learners’ transition from secondary schooling to tertiary teaching and training, especially for learners belonging to rural areas and under-resourced schools.</p> <p style="text-align: center;"><u>Medium – Long-term goals:</u></p> <p>The Department of Education must encourage the exchange of ideas and collaboration between stakeholders such as learners, parents, teachers, researchers, scholars, professional bodies, labour unions, and provincial education departments on the future (post-Covid-19) of teaching and</p>	<p>✓ Decline in learner performance</p>	<ul style="list-style-type: none"> • Teachers 	<ul style="list-style-type: none"> • Learners

learning in general, and on e-strategies and intervention methods specifically.			
<p><u>Short-term goals:</u></p> <p>Reassessing or revisiting the curriculum is crucial for preparing learners to deal with evolving and yet indefinite challenges brought about by the current pandemic. There is a need for constant assessment to identify the levels of learners. In doing so, teachers must be prepared to assess learners regularly so they can identify what key content and skills have been lost and need restoring. This will also assist in detecting warning signs of learners who are at risk of dropping out.</p> <p>The professional development programme for teachers must include support for undertaking effective remedial education. Remedial programmes can be conducted during breaks, after school hours or weekends to compensate for the time lost. Building a strong foundation in reading, writing, and basic literacy skills during the foundation phase is deemed vital. Therefore, the foundation phase educators must ensure that learners are proficient readers. If possible, plans need to be set in place to accommodate at least 400 hours (approximately over three to four months) of high-quality, properly sequenced instruction, delivered with appropriate methodologies to allow learners to become independent readers by the end of grade 3. If this plan is overly ambitious, then it can be planned for in higher grades (intermediate to</p>	<ul style="list-style-type: none"> ✓ Trimmed curriculum ✓ Loss in teaching and learning time ✓ Learner isolation 	<ul style="list-style-type: none"> • Department of Education • Schools • Teachers 	<ul style="list-style-type: none"> • Learners

<p>senior phase). For this to effectively take place, networking and professional development needs to be conducted.</p> <p><u>Medium – Long-term goals:</u></p> <p>Revisiting and updating the curriculum frequently over the next few years will certainly be necessary to ascertain how well core contents have been covered. The contents that are no longer considered crucial or beneficial by subject field experts should be replaced by contents that promote the acquisition of robotics and coding as this is relevant and beneficial. In stating so, the introduction of new subjects such as robotics and coding will help learners' occupational future.</p>			
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Intervention Model:

Input

Teacher:

- Revisit curriculum
- Revisit teaching methodology
- Revisit personal teaching goals
- Revisit classroom setting
- Revisit assessment requirements/standards
- Ensure parent involvement
- Include sections for e-learning

Learner:

- Engage with learning material
- Be active participants
- Adhere to guidelines

Institutes:

- **DBE:** Employ teachers
- **DBE:** Provide technological resources
- **School:** Offer academic support
- **School:** Provide conducive T&L environments

Process

Teacher:

- Examine necessary and relevant topics and look at ways to retrieve knowledge.
- Include various learner centered approaches
- Set realistic teaching goals during Covid-19.
- Covid-19 health protocols must be easily identified in the classroom.
- Reassess learners' abilities and cater for all academic levels.
- Constant engagement with parents.
- Educate learners on e-learning materials

Learner:

- Utilise the various platforms for teaching (online and e-learning, booklets, textbooks)
- Contribute to lessons, complete tasks within set timeframes, ensure attendance at school, interact with teachers and fellow learners.
- Follow Covid-19 health protocols and revised classroom rules and requirements.

Institutes:

- Schools to employ SBG teachers
- Use technological devices to accustom learners to technology
- Provide support for teachers (resources)
- Provide clear instructions and updates for preparedness.

Output

- ✓ Successful teaching and learning processes
- ✓ Recovered curriculum
- ✓ Safe teaching and learning space
- ✓ Lower rates of Covid-19 infections
- ✓ Improved learner performances
- ✓ Possibility of closing the learning gaps
- ✓ Techno-savvy generation

7.7. Chapter conclusion

This chapter presented a theory, an intervention programme guide and an intervention model based on the data generation methods and the theoretical frame of this study. The emergent theory is called the Navigating Change Theory. The next chapter will present a concluding discussion on the findings of this study.

CHAPTER EIGHT: CONCLUDING DISCUSSION AND SUMMARY OF FINDINGS

8.1. Introduction

The previous chapter presents a theory, an intervention programme guide and an intervention model. This final chapter consists of a concluding discussion and summary of findings. It will also provide the limitations of the study and recommendations for further research.

8.2. Summary of study

The purpose of this study was to explore how teachers navigated the changes in teaching and learning during the Covid-19 pandemic and to provide guidance on creating an intervention programme. Exploring how teachers navigated changes in teaching and learning during the Covid-19 pandemic resulted in data that assisted in finding methods to embrace the changes in teaching and learning during the Covid-19 pandemic. Additionally, the theoretical framework allowed for a better understanding of how change affects an institution and the way in which change can take place. Teachers' resilience during this time of crisis led to my belief that they are victors in the face of change.

Data for this study was generated through the use of collages, reflective journals and structured interviews. There were eleven participants from primary and secondary mainstream schools that contributed to this study. Once the data was generated, presented, and analysed, the researcher formed themes that were in accordance with the data generation tools, research questions and objectives of this study. The following table comprehensively presents how the data of this study was analysed in reaching the aims and objectives of this study.

Themes	Questions / prompts from data production tools
Theme 1: The unfamiliar order.	<p><u>Data generation tool:</u> Collage</p> <ul style="list-style-type: none">• In the form of a collage, participants were required to put together a series of images and words that signpost the changes in teaching and learning during Covid-19.• Participants were asked to explain what their collage depicts.

<p>Theme 2: Teachers' functioning within the unfamiliar order.</p>	<p><u>Data generation tool:</u> Reflective Journal</p> <p><u>Participants:</u></p> <ul style="list-style-type: none"> • Reflected on their experiences of teaching during the pandemic by expressing their emotions or commenting on their mental health, and how they responded to this. • Reflected on how they navigated these changes, and embraced these changes in the teaching and learning process. • Reflected on the differences in the teaching and learning environment prior to Covid-19 and during Covid-19, and how they adjusted to this environment. • Reflected on the challenges in the teaching and learning environment and how they embraced them. • Reflected on learner attendance during Covid-19, and how they managed the accommodation of learners in a classroom. • Reflected on learner performance during Covid-19 and how they catered for the various learning levels. • Reflected on the overall management of learners during Covid-19 in accordance with health protocols. (Teaching and learning outside of the classroom)
<p>Theme 3: The aftermath of the unfamiliar order.</p>	<p><u>Data generation tool:</u> Structured Interviews</p> <p>Main probing question:</p> <p><i>How do these changes implicate teaching and learning?</i></p> <ul style="list-style-type: none"> • What do you think are the implications of Covid-19 for teaching and learning?

	<ul style="list-style-type: none"> • What do you think can be done to overcome these implications? • Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.
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8.3. Summary of findings

As data was generated and analysed it became evident that teachers experienced many changes in teaching and learning during the Covid-19 pandemic. These changes were discovered through the use of collages, and they include:

- Covid-19 health protocols: wearing of masks, social distancing. 1.5-meter distance, frequent sanitising and washing of hands and screening.
- Mental health issues faced by teachers and learners – anxiety, fear, stress, depression, and tension.
- Frequent closures and irregular reopening of schools.
- Loss of teaching and learning time.
- Online and remote learning.
- New attendance model with reduced class sizes.
- A halt in collaborative teaching and learning practices.
- Decreased learner performance and huge learning gaps.
- Better discipline.
- A halt in sporting activities.
- New classroom requirements.

As presented in chapter six of this study, participants discussed numerous ways in which they navigated the changes. The navigation was discovered through the use of reflective journals. Whilst navigating the changes in teaching and learning during the Covid-19 pandemic, participants note many challenges and implications. These include:

- Being unprepared for change
- A shortage of teacher
- Learner isolation

- A strain on teachers
- A decline in learner performance
- Online learning opportunities
- Non-conducive learning environments
- A new attendance model
- Teaching with a mask
- Lack of funds
- Trimmed curriculum
- Frequent closure and irregular openings of school
- Loss of teaching and learning time

By conducting structured interviews, the researcher was able to discover the ways in which teachers overcame the challenges of Covid-19 in teaching and learning. Building from the data generation process, a narrative was developed. “Hard pressed but not crushed: The Victors of Unprecedented Times” is a narrative that comprehensively expresses how teachers navigated the changes in teaching and learning during Covid-19; it also gives an account of the Covid-19, and the implications of the virus for teaching and learning.

Notably, from the data generation, the researcher created a theory called the Navigating Change Theory. The Navigating Change Theory explicitly illustrates the pre-Covid-19 teaching and learning environment and the change to the Covid-19 teaching and learning environment. Moreover, it explains, through evidence and data, exactly how teachers navigated changes. The Navigating Change Theory is guided by Lewin’s 1951 Theory of Change.

An intervention programme guide and model emerged from the study. The intervention programme guide provides the Department of Education, schools, and teachers with recommendations on overcoming the challenges in teaching and learning during the Covid-19 pandemic. Moreover, it states who should be responsible for the stipulated intervention and who will benefit from it. The intervention programme guide will allow the responsible individuals to use the information and to create a tailor-made intervention programme that best suits a school.

The intervention model, which is an example of how the intervention programme guide can be used, can assist interested individuals in creating a more conducive teaching and learning environment with minimal effects of the changes brought about by Covid- 19. The model

provides interventions for teachers, learners, and schools in overcoming the challenges in teaching and learning during Covid-19.

8.4. Limitations of study

The limitations of this study include:

- A dearth of information on Covid-19 due to its contemporary and evolving nature.
- Utilising a non-probability sampling method for the selection of eleven participants. As a result, results of the study may not be “generalizable from a non-random sample” (Neuman, 2006, p. 768).
- Due to the Covid-19 pandemic it was extremely difficult to generate data, as participants may have felt overburdened. Additionally, due to the Covid-19 preventative measures, in some cases face-to-face contact was prohibited and therefore, online platforms were used to generate data which may not provide the richness of face-to-face discussions.

8.5. Recommendations for further study

As we enter the Covid-19 recovery phase, it will be of utmost importance to reflect on the role of educational systems in cultivating resilient cultures. Therefore, further research should explore how the Covid-19 pandemic has influenced the future of education in terms of cultivating resilient teachers and learners. As schools welcomed learners back in full capacity, without social distancing, further research can also explore the impact of easing the restrictions in education whilst still experiencing Covid-19. Conducting a similar study with additional participants, perhaps using random sampling would also add great value to learnings around the impact of Covid-19 on teachers. Additionally, Hoofman and Secord (2021, p.1079) express that there is “the widening of the gap for those whose families cannot absorb the teaching and supervision of education required for in-home education because they lack the time and skills necessary and are not addressed currently”, and research concerning this would be beneficial.

8.6. Chapter conclusion

Undoubtedly, the Covid-19 pandemic has affected and will continue to influence the delivery of knowledge and skills at all levels of education. Even though many stakeholders, such as the Departments of Education, schools, and teachers, will compensate for this interruption of traditional education and become accustomed to new modalities, many will struggle. This study

explores how teachers navigated the changes in teaching and learning during the Covid-19 pandemic and to provides guidance on creating an intervention programme. Exploring what and how teachers navigated changes in teaching and learning during the Covid-19 pandemic resulted in data that assisted in finding methods of how teachers can embrace the changes in teaching and learning. The objectives of this study were achieved, and the research questions were answered. The Covid-19 pandemic is not a subject that should be neglected, especially in the educational context. For successful educational practices to take place in these unprecedented times, it is imperative a body of knowledge is developed around this that could inform responses to future pandemics.

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APPENDIX A - Information letter and consent – Principal

LETTER TO THE PRINCIPAL

DEAR: PRINCIPAL

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is Mr. Lucas Pillay and I am a Ph.D candidate (Educational Psychology) at the University of KwaZulu-Natal, Edgewood Campus. I hereby request your permission to use your institution and educators to conduct research. The title of my research is: **Victors Or Victims? An Exploration of How Teachers Navigate Changes in Teaching and Learning During the Covid-19 Pandemic**

The main purpose of this study is to:

To explore how teachers navigate the changes in teaching and learning during the Covid-19 pandemic.

I know that confidentiality is very important to you. Therefore, a pseudonym will be utilized within this study to protect the identity of the school and its educators. All information that is gathered will be used for the purpose of the research study and will be kept in a safe place at the University of KwaZulu-Natal for a period of five years. Thereafter, the documents containing the research data will be destroyed. The research study requires data collection activities such as a collage, reflective journal and an interview with each participant.

Moreover, I will meet with participants for 1-2 hours per day for four days upon commencement of the data collection process. The data collection process will not interrupt or disadvantage the teaching and learning at your institution. Furthermore, an application for permission to conduct research in KwaZulu Natal Department of Education institutions has been completed and sent to Sibusiso Alwar via mail. The study is supervised by **Dr. V. Jairam** who is a Doctor in Education at the School of Education, UKZN. Dr. V. Jairam can be contacted telephonically on **031 260 1438**.

If you have any questions relating to the rights of research participants, you can contact Mr. Premlall Mohun who is a senior administrative officer in UKZN Humanities and Social Sciences Research Ethics Office on 031 260 4557.

In the event of any problems or concerns/questions you may also contact the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

If you require any other information about this study upon its completion, kindly contact the researcher

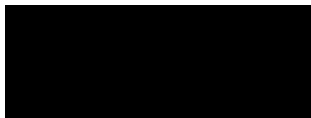
Mr. Lucas Pillay (213505629) on **071 330 7097** or via email;

LucasPillay@gmail.com 213505629@stu.ukzn.ac.za

Thank you for your assistance.

Yours Sincerely,

Mr. Lucas Pillay



PRINCIPAL DECLARATION

I, _____ (full name/s of Principal) hereby grant permission to the researcher to conduct research in my school. I understand that participants have willingly agreed to participate in this research study and that they are at liberty to withdraw from the research study at any time, so should they desire. I also understand that the name of the school, name of the participant and their responses will be kept confidential.

I give permission for the use of the following record devices during the group sessions and data production process:

	Willing	Not willing
Audio recording		
Photographic equipment (if need be)		

Signature of Principal

Date

APPENDIX B – Information letter and consent – Participants

LETTER TO THE PARTICIPANT INFORMATION SHEET AND CONSENT FORM

DEAR: PROSPECT RESEARCH PARTICIPANT

RE: REQUEST FOR PERMISSION TO PARTICIPATE IN A RESEARCH STUDY

1. Nature of the Research Study

My name is Mr. Lucas Pillay and I am a Ph.D candidate (Educational Psychology) at the University of KwaZulu-Natal, Edgewood Campus. I hereby request you to be a research participant in my research study. The title of my research is: **Victors Or Victims? An Exploration of How Teachers Navigate Changes in Teaching and Learning During the Covid-19 Pandemic**

The main purpose of this study is to:

To explore how teachers navigate the changes in teaching and learning during the Covid-19 pandemic.

I know that confidentiality is very important to you. All information that is gathered will be used for the purpose of the research study and will be kept in a safe place at the University of KwaZulu-Natal, Edgewood campus, for a period of five years. Thereafter, the documents containing the research data will be destroyed. Your confidentiality and anonymity are guaranteed. At any given point in time, you can withdraw from the study and will not be penalized for taking such action.

Your involvement is purely for academic purposes only, and there are no financial benefits involved. As a participant, you are invited to engage in the following activities as part of the data generation. The data generation methods utilized will be a reflective journal, interviews and arts-based methods referring to a collage inquiry. Moreover, sessions will take place at a convenient place and time. It will not disrupt your day-to-day functioning at your school and will be conducted out of your instructional time.

As a participant, you may contact the researcher or supervisor. The details are below:

Researcher	Name: Mr. Lucas Pillay Student Number: 213505629 Current qualification: M. Ed (Educational Psychology) Pre-qualification: Ph.D Doctor of Philosophy (Educational Psychology) Contact Number: 071 330 7097 Email Address: LucasPillay@gmail.com / 213505629@stu.ukzn.ac.za Postal address: 43 Cranbrook Road, Clayfield.
Supervisor	Name: Dr. Visvaranie Jairam Qualification: Ph.D. Doctor in Education Contact Number: 031 260 1438 Email Address: jairam@ukzn.ac.za

In the event of any problems or concerns/questions you may also contact the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

If there may be any unintended trauma/harm induced during your contribution to this study, it is advisable to seek professional help. Psychosocial support for teachers can be easily accessible through the Employee Health and Wellness Programme (EHWP).

Employees can contact the EHWP on their toll-free number: 0800 111 011 to have a confidential conversation with one of their counsellors or send them a “Please call me” at *134*664*38#

Other support provided by the EHWP:

The videos can be viewed at the following

link: <https://www.youtube.com/channel/UCgkdmSwmBcm13IWQGoFl43g/videos>

Infographics to support parents, where learners are returning to school, are in English, Afrikaans and isiXhosa.

Infographics to support teachers and learners are in English and Afrikaans.

These infographics can be accessed by clicking on the following

link: <https://sites.google.com/wced.info/cwed-learnerresources/learner-teacher-support>

2. Requirements of Participant

The main requirements of the participant are as follows:

- Participation will be voluntary and subject to informed consent.
- A participant is free to withdraw from the research study at any given point in time.
- Rights of a participant will be safeguarded in relation to the preservation of confidentiality, access to research information and findings, and misleading promises regarding the benefits of the research.
- Anonymity and Confidentiality will be ensured through a coding system to avoid the inclusion of personal identifiers. The participant will not be identifiable when the researcher presents his or her findings. Confidentiality will be maintained in storing and disposing of research findings.
- Any information given by you cannot be used against you. The data collected will be used for the purposes of this research only.
- Each session may take up to two hours and may be split depending on your preference.

3. Protocol for data collection process during the COVID19 pandemic:

The Covid-19 pandemic is affecting the way that we work in proximity. For this reason, many have adapted to work remotely. Initially, my study required face-to-face interaction for data collection through discussions and interviews. However, due to the pandemic, I will now utilize

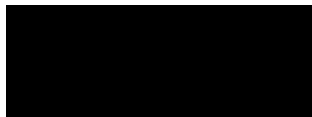
the text-based method of instant messaging (WhatsApp) and recorded video-calling method (Zoom) to obtain data.

- **Collage:** Participants will be required to photograph their collage and send it to the researcher via WhatsApp. A zoom meeting will be scheduled to discuss the collage. (Zoom meeting details will be given to the participant)
- **Reflective Journal:** Participants will be required to photograph their reflections and send it to the researcher via E-mail or WhatsApp.
- **Structured interview:** A zoom meeting will be scheduled to conduct the interview.

I value your contribution and your safety. Hence, the above protocol to obtain data has been put into place. Please indicate on the next page if you have access to the above methods.

Yours Sincerely,

Mr. Lucas Pillay.



PARTICIPANT DECLARATION

I, _____ (Full name/s of participant) hereby voluntarily agree to participate in this research study. I confirm that I understand the contents of this document and the nature of the research study. I have been briefed about the nature of the research study by the researcher in advance. I understand that I am at liberty to withdraw from the research study at any time, so should I desire. I also understand that the results of this research study will be used for the purpose of the study only, and that my identity will be kept confidential.

I give permission for the use of the following record devices during the group sessions and data production process:

	Willing	Not willing
Audio recording		
Collage Inquiry - and transcribed data		
Reflective Journal - and transcribed data		
Interviews – and transcribed data		

I have access to, and I am willing to utilize the following:

	YES	NO
Internet connection		
A device with a camera (for photography of collage and reflections)		
WhatsApp		
Zoom		
E-mail		

Signature of Participant

Date

APPENDIX C – Ethical clearance certificate from UKZN



27 July 2021

Mr Lucas Pillay (213505629)
School Of Education
Edgewood Campus

Dear Mr Pillay,

Protocol reference number: HSSREC/00003082/2021

Project title: Victors or Victims? An exploration of how teachers navigate changes in teaching and learning during the Covid-19 pandemic

Degree: PhD

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 08 July 2021 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. **PLEASE NOTE:** Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 27 July 2022.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee

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

Telephone: +27 (0)31 260 8350/4557/3587 Email: hssrec@ukzn.ac.za Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

INSPIRING GREATNESS

APPENDIX D – Ethical clearance certificate from DoE KZN



KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

OFFICE OF THE HEAD OF DEPARTMENT

Private Bag X9137, PIETERMARITZBURG, 3200
Anton Lembede Building, 247 Burger Street, Pietermaritzburg, 3201
Tel: 033 392 1063

Email: Phindile.duma@kzndoe.gov.za

Enquiries: Phindile Duma

Ref.:24/8/1775

Mr L Pillay
43 Cranbrook Road
Phoenix
DURBAN
4068

Dear Mr Pillay

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: **"VICTORS OR VICTIMS? AN EXPLORATION OF HOW TEACHERS NAVIGATE CHANGES IN TEACHING AND LEARNING DURING THE COVID-19 PANDEMIC: A CASE STUDY OF SIX PUBLIC SCHOOLS IN KWAZULU-NATAL"**, in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 01 July 2021 to 31 August 2023.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Miss Phindile Duma at the contact numbers above.
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

PINETOWN DISTRICT

Dr. EY Nzama
Head of Department: Education
Date: 06 July 2021

GROWING KWAZULU-NATAL TOGETHER

APPENDIX E – Instrument - Collage

INSTRUMENT:

COLLAGE

This data collection method addresses the following:

First research question:	First objective of this study:
What are the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic?	To explore the changes experienced by public-school teachers in teaching and learning during the Covid-19 pandemic.

Instruction to participant:

In the form of a collage, put together a series of images and words that signposts the changes in teaching and learning during Covid-19.

You required to create a collage expressing the changes in teaching and learning during Covid-19. Make use of magazines, newspapers, and the internet to gather pictures, words, or ideas to create your collage. Your collage can be completed on A3 paper (provided).

Time frame for collage:

You will be given five to ten days to complete your collage and you are required to work individually.

Completion of collage:

Once the collage has been complete, you will be required to discuss the collage by doing a write up.

The research participants will be provided with the following prompts when undertaking the collage:

- Explain the meaning of your collage. (Each representation)
- Explain the use of images and words.

Discussion on collage. (Write up)

Please answer the following questions based on your collage.

Explain, in detail, what your collage depicts. Try to refer to each image/ word used in your collage.

APPENDIX F - Instrument – Reflective Journal

INSTRUMENT

Reflective Journals:

This data collection method addresses the following:

Second research question:	Second objective of this study:
How do public-school teachers navigate these changes in teaching and learning during the Covid-19 pandemic?	To explore how public-school teachers navigate these changes in teaching and learning the Covid-19 pandemic

A notebook has been presented to you to reflect on how you are navigating through the changes in teaching and learning as expressed in your collage. This will serve as a type of diary where you will make regular entries during prescribed time frames.

Time frame for reflective journals:

Participants will be given a time frame of one to two weeks to complete their reflections.

Structure of the reflective journal:

<p style="text-align: center;">Reflective journal</p> <p style="text-align: center;">Participant: _____</p> <p>The aim of this journal is to keep a record of your thoughts, notes and reflections about your experiences of teaching during the Covid-19 pandemic and to discover how this pandemic inhibits teaching and learning.</p>

You may use the following guidelines:

- Reflect on your experiences of teaching during the pandemic by expressing your emotions or commenting on your mental health.
- Reflect on the teaching and learning process during Covid-19
- Reflect on learner attendance
- Reflect on the curriculum amendments or recovery programme
- Reflect on learner performance
- Reflect on the usage of resources

- Reflect on the management of learners during COVID-19 in accordance with health protocols
- Reflect on your experiences of teaching during the pandemic by expressing your emotions or commenting on your mental health. How have you worked around this?
- Based on the changes you have identified in the collage, reflect on how you navigate these changes. How have you embraced these changes in the teaching and learning process?
- Reflect on the differences in the teaching and learning environment prior to Covid-19 and during Covid-19. How have you adjusted to this environment?
- Reflect on the challenges in the teaching and learning environment and how have you embraced them.
- Reflect on learner attendance during Covid-19. How did you manage the accommodation of learners in a classroom?
- Reflect on learner performance during Covid-19. How did you cater for the various learning levels during covid-19?
- Reflect on the overall management of learners during Covid-19 in accordance with health protocols. (Teaching and learning outside of the classroom)
- Any other reflections on how you have managed the teaching and learning process during the Covid-19 pandemic

APPENDIX G – Instrument – Structured interviews

INSTRUMENT

Unstructured Interview Schedule:

This data collection method addresses the following:

Third research question:	Third objective of this study:
What are the implications of these changes for teaching and learning?	To examine what are the implications of these changes for teaching and learning.

Victors Or Victims? An Exploration of How Teachers Navigate Changes in Teaching and Learning During the Covid-19 Pandemic	
Date of interview:	
Length of interview:	
Participant's pseudonym:	
Grade:	
Number of learners in a classroom:	

Main probing question: *How do these changes implicate teaching and learning?*

1. What do you think are the implications of Covid-19 for teaching and learning?
2. What do you think can be done to overcome these implications?
3. Discuss any other effects of Covid-19 on the teaching and learning process. This can be currently or in the future.

APPENDIX H – Letter from editor

This thesis was academic and language edited by:



caitlinlisamartin@gmail.com
060 502 7370

11/10/2021

To Whom It May Concern,

This letter serves to confirm that I, Caitlin Martin, have edited Lucas Pillay's dissertation entitled "Victors Or Victims? An Exploration of How Teachers Navigate Changes in Teaching and Learning During the Covid-19 Pandemic" at the University of KwaZulu-Natal, Edgewood Campus.

Please feel free to contact me if you have any queries.

Kind regards,

Caitlin Martin