Management of school infrastructure in informal settlements around Soweto

by

Audrey Mamoneisa Dlamini

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Supervisor: Prof RN Marishane

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DECLARATION

I, Audrey Mamoneisa Dlamini, hereby declare that the dissertation, *Management of infrastructure in informal settlements schools around Soweto,* is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution. All sources that were consulted and quoted have been acknowledged in the list of references.

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The Research Faculty

66 Greenfield Rd

Greenside, Johannesburg

South Africa

Tel: +27 (0) 782-1401

info@theresearchfaculty.com

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DEDICATION

The dissertation is dedicated to my late grandmother Melika Veldman who was my pillar of strength in my years of elementary schooling and to my uncle Thabo Mokaba for his continuing support. It is also dedicated to my husband Alfred Tshweu Dlamini, without whose support I could never have completed it and to my children, Tebogo, Vangile, Nhlanhla, Luyanda and Thandi for all the sacrifices they made while I was studying.

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ABSTRACT

Infrastructure is one of the most imperative components of the school that directly affects teaching and learning. The preservation of it is thus important in ensuring that learners attain their education in a conducive and safe environment. This study examines how school management teams and governing bodies manage school infrastructure in informal settlements around Soweto. The study focused on three schools in informal settlements study applied a qualitative method which involved observation and conditions of infrastructure prevailing at the three (3) selected schools.   In-depth interviews were held with the school management teams (SMT) and school governing bodies (SGB) of each of the selected schools. A total of twelve (12) individuals were interviewed, of whom six (6) were SMT members and (6) SGB members.   The purpose of triangulation, documents such as the assets register, minutes of the maintenance committees and minutes of the safety and security committees were consulted and analysed to check if schools comply with educational policy on safety and security. The study establishes that, even though the Department of Basic Education is mandated to provide a nontoxic and protected environment for all learners, unfortunately learners and educators in schools are not afforded that opportunity.   The study points out challenges relating to school infrastructure in informal settlements.   Furthermore, the study revealed that schools where protection and dignity are at risk still reflect the demographic inequalities of apartheid. As a result, the study recommended that schools must have a maintenance plan to keep school infrastructure safe and secure.

Keywords: school infrastructure, school management, informal settlement, safety and security

LIST OF ABBREVIATIONS

Keywords: school infrastructure, school management, informal settlement, safety and security

DBE	Department of Basic Education
HoD	Head of Department
SASA	South African School Act
SGB	School governing body
RSA	Republic of South Africa
SMT	School management team

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CHAPTER 1 GENERAL ORIENTATION AND BACKGROUND

1.1 Introduction

A safe and secure atmosphere is crucial for both teaching and learning (Prinsloo, 2005). A supportive learning environment emphasises academic success, upholding high standards, fostering a strong rapport between faculty and learners, and promoting parental and community involvement (Schargel & Smink, 2001). Section 2 of the South African Schools Act, 84, of South Africa (1996) specifies that learners have a right to a safe and healthy environment, clean water, safe restrooms, as well as green setting (Laas & Boezaart, 2014). It is vital to create a school climate that does not tolerate bullying and intimidation. According to Section 16(3) of the South African Schools Act (SASA), the principal and the school governing body have main obligations to ensure that students are safe at school. According to SASA, Section 21, one of the duties of the SGB is to preserve the school's physical assets, especially the building and grounds, in order to ensure the safety and security of the learners.

Having schools in a good environment and conditions is conducive to learners achieving the results better (Barr, 2009). According to Teixeira (2017), there is evidence that good infrastructure, in addition to other advantages, enhances instruction enhances learners' outcomes inaddition to other advantages, it lowers failure rates. Teachers who work in schools with poor infrastructure experience an average 10% higher rate of teacher absenteeism than those who work in schools with strong infrastructure (Daniel, 2014). Research conducted by Daniel also indicates that schools with good infrastructure have a more significant effect on reducing teachers'nonattendance than educatorss' salaries. It means educators are motivated more by healthy working conditions, such as a safe school environment, than higher salaries. According to Municipal Demarcation Board, for the past 25 years, South African cities have been growing extremely rapidly (Kok, 2006). Many people migrate to Gauteng for better life chances, such as work opportunities. Previously disadvantaged South African schools often face resource challenges to ensure the delivery of an adequate education. The reason is that most of these schools are located in poverty-stricken areas, mainly townships, rural areas and informal settlements. These areas are historical black settlements, with poor socioeconomic conditions and characterised by dilapidated buildings, inadequate

furnishings, and poor educational infrastructure, including poor waste managemen(X aba, 2010). Some classrooms in informal-settlement schools are dilapidated, and the conditions at some schools are appalling, infringing on the right to quality education (Khakhau, 2019). According to Pillay (2006), houses in informal settlements are small and noisy, making learning difficult. This issue suggests that it is important for learners to have a good infrastructure to study and do their homework at school rather than at home, where they face challenges. Students feel uncomfortable having to come to school in dirty clothes, and the lack of water prevents them from bathing before coming to school, which can lead to foul odour (Pillay, 2006). The community in informal settlements cut school fences and put them around their shacks, steal toilets, cut pipes from the toilets, steal classroom doors and make illegal electricity connections. *Daily News*, 3 September 2018, reported that unlawful electricity connections are a danger to children in informal settlements.

Learners' safety is thus compromised because community members steal electricity from schools, leaving wires exposed. The majority of children in informal settlements sit in overcrowded classrooms and have to cope with poor infrastructure. However, they are expected to achieve at the same level as children whose reality is different and live in an environment more conducive to doing well Earthman (2009) argued that the state of school facilities has a strong effect on learner achievement and teacher efficiency. Earthman also indicates that comfortable classroom temperatures and noise levels play a vital role in learner performance. School principals in informal settlements are faced with the challenge of absenteeism, and teachers miss their classes due to a lack of adequate water and sanitation (Maarman, 2009). Girls are faced with the challenges of managing menstruation at schools, due to a lack of water and sanitation (Benshaul, 2019). Some girls choose to be absent from school during their menstruation period (Winter, Barchi, & Zombo, 2011). If sanitation is not catered for or taken care of, teaching and learning glitches will continue (Dryden & Vos, 2005).

1.2 Purpose of the study

This study aims to investigate how governing bodies and school management teams oversee educational infrastructure in informal settlements. The purpose of this study is to examine how school management teams and governing bodies manage school infrastructure in informal settlements around Soweto. This study is intended to get information that will inform SMTs and SGBs in informal-settlemnt schools to deal with challenges relating to the management of their infrastructure and provide possible strategies to improve the management of their infrastructure. Through this study, school management will make informed decisions based on the study's findings, and learners will hopefully obtain access to better education.

1.3 Problem statement

Although schools are expected to manage their infrastructure, such as buildings, grounds, and equipment, efficiently, there are serious challenges relating to how school infrastructure is managed in informal settlements. In my own experience, when I go to work, I do pass next to two secondary schools situated in an informal settlement. There are no fences or classroom doors and windows are broken at one of the schools. There are always big boys without proper school uniform sitting outside the classroom and smoking. The school building is dilapidated and appears to be exposed to vandalism.

According to Nkomo (2019), drug dealers come to school during lunch and give drugs to learners to sell for them. Twelve percent of students were reported selling drugs in one of the schools in the township (Steinman, 2005). Due to these factors, schools should be provided with the tools and resources necessary to combat drug use in the school environment and should pay close attention to student drug misuse (Mokoena, Mokoena, &Mokgatle, 2020). Selling drugs on the school premises is a sign of management problems and a threat to the safety of all the stake holders at the school. According to Tsinda (2013), 60% of the population resides in informal settlements, including the schools that experience in adequate and poor

quality infrastructure services. These issues suggest a problem of managing infrastructure in schools, which this study seeks to examine.

1.4 Research questions

1.4.*1* Primary research question

How do schools in informal settlements around Soweto manage their infrastructure?

1.4.2 Secondary research questions

The following are secondary research questions emanating from the main research question:

a. What infrastructure-related challenges do schools in informal settlements experience?
b. How do schools in informal settlements manage these challenges?
c. What strategies may informal-settlement schools use to better manage their infrastructure?

1.5 Rationale for the study

Schools located in challenging areas, such as informal settlements, face problems that affect the safety and security of their equipment, buildings and grounds. The school safety assessment found that the most common safety matters involve insufficient supervision of students, bullying and harassment, building access control and rare emergency communication (Yahnke, 2019). As a concerned parent, educator, and member of a school management team, I have a daily experience of challenges relating to the management of school infrastructure. These challenges worry me because they affect teaching and learning negatively. Chirume (2012) reported that thieves had stripped a primary school in Mpumalanga of its windowpanes, water taps, toilet seats, copper cables, lights and burglar bars. The school management team and the school governing body are responsible for ensuring the security and safety of the school. Learners find it difficult to go great distances to

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schools in the township, because their safety is compromised due to high crime rates. However, parents and guardians prioritise township schools instead of schools in informal-settlement areas because they lack resources (Ntombela, 2013).

According to Chaudhry et al. (2010), "poverty is a multidimensional existence, which encompasses the incapability to gratify one's basic needs, this is due to the absence of control over education and skills, resources, poor health, malnutrition, shortage of shelter, little or no access to clean water and sanitation, violence and crime". In August 2006, the Department of Education introduced a "no-fee" school policy that spares struggling parents the expense of paying school fees (Marishane, 2013). Parents are exempted from paying school fees even so, schools in quintiles 1 to 3 depend on what the government offers to maintain infrastructure. Needier schools and rural schools are allocated less funding per learner than rich and more urban provinces (Ally, 2016). Funding from the South African government to fund schools in disadvantaged areas is not enough to cover all the needs of the school. The Resource Target Table (RTT) for public school funding stipulates that 25% of the school distribution funds are restricted for maintenance and must be used for minor repairs. According to Mestry (2013), headmasters are advised not to diverge from this notice, making it challenging to maintain school infrastructure.

A recent study in South Africa by Wakefield and Trait (2015) indicated that South Africa has established a prosperous and progressive political framework to oversee efforts to prevent fraud and, violence. According to the survey, there are many legal infractions in informal settlements. According to School Infra Care (NPC), 11456 schools in South Africa utilise pit toilets, and 913 public schools lack toilets entirely. Furthermore, it is terrible and undesirable to construct schools in informal communities. High absenteeism, poor concentration in class, and infringement of the rights to basic education, health, equality, and privacy are all caused by these circumstances. For example, students at Rosettenville Elementary School almost suffered burns due to poor maintenance and management of power cords. These challenges

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continue, hough the lack of adequate infrastructure violates children's right to education (Mvlisi, 2013).

Gibberd (2007) discovered that South African schools have good infrastructure, while others lack basic services, such as water and sanitation. This study reveals the importance of how school infrastructure can be managed and will also help the government to improve school infrastructure in informal settlements. It will also assist school leadership in managing the infrastructure landscape by understanding the importance of managing infrastructure and helping develop strategies for managing infrastructure. The literature on school infrastructure management is limited. Consequently, this study substantially fills a vacuum in the literature on infrastructure management. This study therefore fills a major gap in the literature on the management of infrastructure in schools in areas as disadvantaged as informal settlements.

1.6 Conceptual framework

This study was based on a conceptual framework. A conceptual framework is a structure that researchers believe best explains the natural evolution of the phenomenon under study (Camp, 2001). The framework helps understand the experiences of schools in informal settlements around Soweto and helps demystify the assumptions and principles of the framework. The conceptual framework clearly defines various variables and their relationships. Of course, the framework was created for conducting the actual research. Additionally, research makes sense and is helpful for work using a conceptual framework it depends on the type of research.

In test research, conceptual frameworks are frequently used. You can present concrete ideas based on hypotheses. Based on evidence of causation, testing research is conducted, and this is reflected in the conceptual framework. In test studies, we work with precise expectations about the causal relationships represented by the conventional model. This model, however, is equally appropriate for exploratory research. Instead of using clearly defined variables, this paradigm frequently uses concepts with a broad

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definition. Specific connections are discovered after the fact in this kind of investigation, and factors are directly quantifiable and presented in very precise words (Mulder, 2017). Chapter 2 provides a comprehensive description of the conceptual framework.

1.7 Research methodology

The research approach followed in this study was qualitative. This research methodology includes the examination, analysis and interpretation of research results (Creswell, 2012). Qualitative research offers greater latitude in selecting a topic of interest because other research methods are likely to be constrained by the in ability to establish the necessary research conditions, because of insufficient data, the difficulty in drawing an adequate sample and other limitations, such as being devoted to studying the past but not ongoing events. Qualitative research is intended to divulge the meaning that informs the action or out comes typically measured by qualitative research. I chose a qualitative research approach, as being a researcher thoroughly immersed in the context, the subject of interest, the study's natural settings and habitats, and the backgrounds of the participants in the research process makes me an active participant in this process (Campbell, 2014). Inductive approaches are typically linked with qualitative research methodologies.

1.8 Research approach

The measures that direct the investigation are defined by the research design (McMillan & Schumacher, 2014). In conclusion, the study design identified common strategies used in this study. The analysis is interpretive because it is the central philosophical tradition of my research methodology, which is qualitative. In this research, an interpretivism paradigm suggests that one can only understand what other people feel, think and mean by what they tell through their voices. The only way to comprehend human experiences is from a person's point of view (Morgan, 2015). Thus, the reality of the participants will be a socially constructed phenomenon, since every participant has their

own experience. Therefore, multiple realities of the phenomenon will be investigated (Henning, 2004).

The advantage of interpretive research is that it will give the researcher awareness of the practices and observations of the participants. It will also enable them to understand the occurrence better, thus enhancing the study's trustworthiness. Furthermore, the potential challenge that the researcher may face is that the participants may not give her all the information needed because of the subjective nature of the approach.

1.9 Case Study

To fully describe the scenario and make sure that the evidence supplied was solid and reliable, a case study design was adopted, (Custaffson, 2017). Case studies use different types of data collection and gather the opinions, perceptions, experiences and ideas of different people related to the case to create a comprehensive picture of the entity. Finding a theoretical concept or procedure that works in practice is the major goal of case studies. Most of the time, issues can be hypothetically solved (Copland, 2018). A case study has limitations, such as it cannot generalise the results to the broader population. The researcher's subjective feelings may influence the case study, creating biased research. Usng a case study can also make it difficult to replicate the results and is time-consuming. According to Andrew and Elman (2008), the advantages of a case study are to allow one to test a multitude of hypotheses in a rough-and-ready waym, ost of the case studies demonstrate exceptional memory performance, and some case studies showed a more moderate performance.

A case study ensures that the topic is well-explored (Yin, 2006), this study intends to overcome the design weaknesses by not using topics with too many objectives for one study. A case study would help to build up a picture of the school holistically. It will also help to examine, observe, describe, and analyse the infrastructure to capture key issues of the case. I chose a case study design because it answers the "how" and the "what" question, and the study participant's behaviour cannot be controlled. Using case studies helps

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because people are given equal opportunities, to view their perspectives, experiences, or thoughts of varied individuals relating to the case.

1.10 Data collection methods

The researcher collected data through an interview strategy to solicit participant's pinions on the problem of managing infrastructure in schools. During data collection, participants were interviewed to identify information that could best enable the researcher to understand how schools in informal settlements manage their infrastructure. Data was collected telephonically because of the Covid-19 pandemic that prevailed at the time. The researcher interviewed principals, heads of departments and school governing bodies in informal settlements around Soweto. I concentrated on the challenges they come across when managing school infrastructure. The researcher conducted persistent observation because I needed enough time to identify specific aspects relevant to her study. When data was collected, several aspects were considered. These aspects included respecting the site, ensuring that all participants received no benefits (Patton, 2000), avoiding deceiving participants and respecting potential power imbalances (Kvale, 2007), and, lastly, avoiding collecting harmful information from the participants (Patton, 2002).

1.11 Data analysis

Researchers employ data analysis to transform data into narratives, which are then interpreted to yield insights. Large data blocks are broken down into more manageable pieces through the data-analysis process. This is logical. We used thematic analysis to analyse the data in this study. Thematic analysis, according to King and Horrocks (2010), is used to gather, classify, and synthesise study findings. With the help of this technique, themes found in the data can be found, analysed, and developed (Maree, 2016). Thematic analysis produces trustworthiness and riches of insight, allowing us to examine the reactions of study participants. Creswell (2009) describes data analysis as the process by which a study makes sense of the data collected.

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According to him, it is about analysing, reducing and interpreting data in research. Analysis of qualitative data is a dynamic process, according to Polit, Beck, and Hungler (2001), with data analysis beginning after the initial interviews have taken place. Data analysis is done concurrently with data gathering, starting as soon as the first batch of information is gathered, as each activity informs and infers the other (Millian & Schumacher, 2001). Researchers followed these steps in the data analysis process. In a nutshell, the researchers searched for interpretive themes from the coded data after transcribing and organising the study's data.

1.12 Population and sampling

The study population chosen entailed secondary and primary schools located in Johannesburg Central District, in Gauteng province. The study participants included school management teams and school governing bodies. Researchers must choose an appropriate sampling strategy before conducting. Sampling is a strategy for choosing a certain subset of the population for analysis (Maree, 2011). For the study's participants and participating schools, a focused sample was chosen. The motivation for using targeted sampling techniques is to allow researchers, as researchers, to select specific research participants they believe have the information they need to answer research questions (McMillan & Schumacher, 2014). One elementary school and two middle schools were included in the sample because they are all located in informal settlements. Three study participants per school, two members of the school management team (SMT) and two members of the governing bodies, were interviewed. The inclusion of both male and female study participants from varied social backgrounds was the justification for these study participants. These study participants, therefore, most likely came from different standpoints and ethnic backgrounds and had experiences related to the phenomenon the researchers discovered. A school and two middle schools were included in the sample because they are all located in informal settlements. The rationale for these study participants was that both male and female study participants from various social backgrounds were included. These study participants, therefore, most likely came from a

variety of standpoints and ethnic backgrounds and had experiences related to the phenomenon the researchers discovered.

1.13 Sampling procedure

The sampling process was done as follows: first, the researcher asked the principal to identify potential participants and explain my research to them before commencing with interviews. When this was done, the focus and purpose of the study were explained to them. Issues relating to ethics, their freedom to participate in the study or withdraw from it were highlighted.

1.14 Trustworthiness and credibility

Trustworthiness was used in this study to clear any confusion and demonstrated the accuracy of the research finding to the user or the reader. A qualitative researcher can use an enquiry audit to establish reliability, which requires an external person to review and inspect the investigation and data analysis to ensure that the results are trustworthy and repeatable. Trustworthiness in qualitative research helps to ensure the results of the study, according to the researcher, are trustworthy, transferable, demonstrable, and dependable. Cohen, Manion and Morrison (2007), insist that qualitative enquiry, trustworthiness or reliability can be observed as a fit between what the researcher accounts as facts and what happens in the normal situation that is presently studied. Trustworthiness includes member inspection or participant approval, questioning by peers, triangulation, undesirable event examination and review traces.

As indicated by Metler and Charles (2011), they accept the fact that specialists are managing the legitimacy of subjective information. they are engaged with triangulation, precision and credibility of the information. These authors also state that establishing research validity entails evaluating how accurate the findings are in relation to the study participants. To find out that the information was reliable, sound and trustworthy, the analyst applied triangulation. Triangulation alludes to the utilisation of different strategies or information sources in subjective exploration to foster a complete

comprehension of wonderful. I completed triangulation in my review to test legitimacy through the union of data from various sources.

1.15 Limitation and delimitations of the study

1.15.1 Limitation of the study

Limitations are "possible shortcomings in the study which are external influence to the researcher (Simon, 2011:2). Due to practical constraints, this study may not reach its fullest capacity. Only one case study and a limited number of members were used in this study. This means that the results cannot be generalised to larger populations. The survey applies partially to schools in informal settlements around Soweto and not to schools in other parts of the community. One discovered drawback was that participants, even those who under performed and did not want to be exposed and those who could not be trusted to provide truthful information, were allowed to exit from the study. This study cost-effectiveness could also be a drawback. It is possible that researchers will not have enough money to cover expenses like travel, data process and printing. In-depth data collecting is time-limited. This is because, in relation to the time provided, the study's breadth is vast. The study's scope had to be narrowed because of time constraints in order for it to be finished in the allotted amount of time.

1.15.2 Delimitations

"Characteristics that limit the scope and define the borders of the investigation" are the delimitations (Simon, 2011). Delimitations, however, are at the researcher's discretion. The study was carried out in the central district of Johannesburg. The primary and secondary schools in Circuit 5 in Soweto were the focus of the study. To prevent the interpretivism paradigm from becoming too broad and overlapping with other schools of thought, which would have led to misunderstanding, the study was likewise limited to this paradigm.

1.16. Ethical considerations

Ethics are steered by values and rules to protect research members, minimise potential harm, and increase integrity (Samaranayake, 2012). According to social examination, morals are defined as the ethical part of human behaviour (Miller, Birch, Mauthner, & Jessop, 2012). As a result, ethics describe the decision-making, accountability, and moral reflection that a researcher engages in when conducting a study. Hammersley and Traianou (2012) highlighted some ethical principles that the researcher in this study followed accordingly. One of the principles is minimising harmful meaning.

Researchers obtained approval from the University of Pretoria Ethical Clearance Committee and applied leading ethical standards. She then had to obtain permission from the Gauteng Minister of Education, participating schools and study participants. This study was conducted with approval from the Gauteng Minister of Education, participants, and the University of Pretoria. Participants received guarantees that their privacy would be protected. They had to formally agree on whether or not to participate in the study. To enable participants to provide informed consent, researchers clearly explained the purpose of the study and its role. Participants can decide whether or not to participate based on the information provided. The researchers then asked participants for written informed consent to participate.

1.17 Significance of the research

In the face of an ever-changing educational environment, research on the management of school infrastructure in disadvantaged areas, such as informal settlements, is inadequate, indicating gaps in the literature. These areas are constrained by the overzealous compliance and thin concerns of political analysts and policy makers. This research will help school leaders manage their schools effectively and minimise incidents that occur in schools that endanger the safety of learners and teachers. As they will be able to learn about the difficulties faced by principals in managing infrastructure in informal settlements, inexperienced principals may also benefit from this study. Inexperienced principals will also learn about potential answers to these

problems. Additionally, this study will assist school governors in comprehending the significance of their involvement in their children's education. The study's methodology and findings may offer important information to policymakers as they develop new regulations for the management of infrastructure in informal settlements.

1.18 Summary

The preceding chapter focused on the background of managing school infrastructure in informal settlements and the importance of teaching and learning in a safe and secure environment, the problem statement relating the challenges of how to manage infrastructure in informal settlements, the determination of the study, research enquiries, the rationale to guarantee that schools are safe and protected, the significance of the study, research design and methodology, data analysis and explanation, trustworthiness and credibility, ethical deliberations and study's shortcomings. In the subsequent chapter, available local and international literature on managing infrastructure in informal settlements is examined in detail, as well as the conceptual framework underpinning the study.

1.18.1 Overview of the chapters

Chapter 1

The research topic is presented in this chapter. The definition of the issue, the difficulties in managing infrastructure, the research topic, and the reliability of the study are all outlined in this chapter. We examine the body of literature that has the crucial data for our study and choose a theoretical framework to explain how the phenomenon under enquiry naturally evolved. The study design, data analysis techniques, and methodology are all discussed, along with the investigation, analysis, and interpretation of the research findings. The relevance of research to science and other stakeholders is highlighted, and ethical and political concerns that affect research are discussed.

Chapter 2

This chapter discusses reliable information sources, such as books, papers, publications, reports, and other materials pertinent to this study. The historical background and research goals of the focus of this study are also discussed. Local and international literature related to the study on managing infrastructure in informal settlements is reviewed, and the conceptual framework is presented.

Chapter 3

This chapter explains the qualitative research's design and methods and the considerations that went into selecting the case study design. Ontological and epistemological presuppositions are established, and interpretivism as a research paradigm is articulated. This chapter also describes the rationale behind the targeted sample approach and the choice of semi-structured telephone interviews for data collection. It also outlines the restrictions and boundaries of the investigation. The validity and dependability of the data gathered are acknowledged, and the rationale for selecting thematic analysis to analyse the data is given. The ethical issues that were noticed during data collecting are described.

Chapter 4

The information gathered is displayed in this chapter's produced topics. The reviewed literature is presented along with the findings once they have been analysed.

Chapter 5

This chapter summarises the information presented and deciphered in Chapter 4. It is followed by a discussion of the results. The study is summarised in the conclusion section, which also offers suggestions for future comparative studies research. The produced topics present the gathered data.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The focus of this study is to examine how schools in informal settlements manage their infrastructure. Chapter 1 introduced the research topic and defined the research problem. It also presented the research questions, outlined the rationale for this study, briefly revised the literature necessary for the study, and introduced the theoretical framework. Also, it briefly discussed the research procedure used in the study and the ethical and political features. This literature review focuses on how to manage school infrastructure in informal settlements around Soweto, the influence of infrastructure on education, the significance of managing school infrastructure, the scarcity of resources in informal settlements, and the difficulties in managing school infrastructure.

A crucial element of the framework for teaching and learning is infrastructure (Tozzi, 2019). Because a child spends so much time at school as a student, it is crucial to manage a school infrastructure. As a result, a school's infrastructure plays a significant role in how a child views the world as they grow up (Geetika, 2017). The infrastructure of a school makes it possible for students and teachers to use a wide range of equipment, facilities, and resources to assist in teaching and learning. For teaching and learning purposes, for instance, smart boards could be useful in schools in the informal settlements. But in this situation, using smart boards is impossible, due to a shortage of electricity.

The reason why there is a need to do the study is because there are many studies that focus on the management of school infrastructure in general but not in the informal settlement. For example, this study focuses on managing infrastructure in informal-settlement schools, while a study conducted by Marishane (2013) concentrated on managing school infrastructure within the framework of the no-fee policy in rural South African schools. In remote locations, managing the school infrastructure involves a number of activities, according to Marishane (2013) but the study does not exactly focus on informal settlements. He highlighted some challenges in managing

infrastructure. One of the difficulties is the National Norms and Standards for School Funding's restrictions on the amount of money that can be given to schools (NNSSF).

This shows that, though the school may have enough money to pay the building budget in an emergency, that money cannot be used to address the emergency, due to rigorous funding requirements. These researchers (Louton, Still, Pearson, Sitholimela, Mphahlele, and Shaylor 2015) contend that the management's needs, available resources, attitudes towards, and beliefs of the users of school sanitation are integrally tied to the infrastructure's success or failure. The study also emphasises how apartheid's racial disparities are now frequently replicated in schools where students' safety and dignity are at risk. A model and set of guidelines for the best design were developed as part of the Louton et al. (2015) study in order to evaluate the cleanliness and infrastructure of current rural school designs. After reading different articles on managing infrastructure, I have noted a gap in the sense that most of the articles deal with managing infrastructure in rural areas but not specifically in informal settlements.

2.2 Lack of resources and the effect of school infrastructure on learning in schools in informal settlements

School infrastructure has an impact on learning. The learning results of children can be impacted by school infrastructure, according to Barret (2019). The absence of facilities like laboratories, which are deemed as basic, has compromised the teaching of scientific subjects. The inadequacy of resources has made teachers resort to teaching practical subjects theoretically, as a way to adapt to the scarcity. This issue has reduced the effectiveness of teaching as basic needs to facilitate effective teaching are inadequate. As a result, learner performance ends up being compromised, as they require basic resources to be able to compete in opportunities where performance in specific subjects is key and mandatory (Mayama, 2012). The educational resources of schools play a pivotal role in reducing the effect of socioeconomic features on academic achievement and creating equal

chances for all learners. In this sense, it is extremely crucial to observe the relationship between the educational resources of schools and the academic achievement of pupils. It is known that the academic achievement of pupils is related to individual differences between pupils, socioeconomic features in which they grow up, and the educational resources of students' present schools. The relationship between socioeconomic features and academic achievement has been extensively studied within national and international contexts in recent years (Tomul & Savasci, 2012). Though, there is a lack of studies about the relationship between the educational resources of schools and academic achievement. Educational resources are of vital importance in terms of its role in reaching educational aims and objectives. In this sense, educational resources play a significant role in order to deliver equal opportunities for students by diminishing the effect of socioeconomic issues on academic achievement.

The extent of achieving an educational goal and objective is closely related to the availability of and utilisation of educational resources. The standard of education is directly impacted by the effectiveness and sufficiency of physical infrastructure and tools. A school with insufficient classroom space will be compelled to accept more students than is ideal. Resources like teachers will be under a great deal of strain as a result, and, as an adaptation strategy, they can compromise their methods (Raphael, 2015). According to Parnwell (2015), the state of school facilities plays a significant role in the educational process. For instance, instructors are free to keep their instructional materials in classrooms with windows and doors that can be locked for as long as they like. A study by Mokaya (20130, revealed that alack of infrastructure and under-resourced schools were directly associated with the academic failure of learners. According to Mokaya (2013), living in an informal community is associated with poverty and a lack of essential amenities. Teachers with experience and credentials prefer to work in well-resourced, well-established institutions. In the informal settlement, some educators are fresh from university, with no experience or educators who are redeployed. Based on the study done by Manga (1996), teachers who teach in informal settlements

do not have the necessary training and experience needed to teach children English.

Education is a human right, and therefore quality education supports all human rights. According to Collier (2005), teachers who work in informal settlements work in conditions with a lack of resources, which eventually leads to frustration. Today teaching and learning revolve around technology, so it is frustrating for teachers to give learners homework or to do research and learners do not have smartphones or electricity as infrastructure to do research. As a result, learning will be totally dependent on what the teacher instructs the students. The lack of media centres and internet access severely disadvantages students. Learners in South Africa write the same school assessment tasks for which, in most cases, learners need to do research. Thus, it is a disadvantage for learners in informal settlements because of a lack of resources, such as the unavailability of electricity and Wi-Fi.

Many schools do not have maintenance plans to manage infrastructure. Here are some incidents that took place lately. Parents at Ennerdale told News 24 that they are worried about the safety of their children at school because a walkway connecting two blocks appears unstable, and vibrates when they use it. This happened after the incident in Hoërskool Driehoek where three learners were killed after a walkway collapsed on the school grounds. Managing infrastructure is very important to prevent incidents that may occur and to secure the safety of learners at school. Teachers and learners are motivated by good and well-maintained infrastructure. There is compelling evidence that improved instruction, higher student outcomes, and lower dropout rates are all made possible by high-quality infrastructure. According to Fisher (2000), uncomfortable and inappropriate furniture can lead to issues including backaches, short attention spans, and writing challenges, which decreases learning chances. The majority of schools lack air conditioning in the classrooms. Tacir (2003) asserts that inadequate indoor air quality has a negative impact on instruction and learning. A lack of access to fresh air may cause teachers and students to become ill and cause a rise in absenteeism. For instance, Romanian schools in impoverished areas have the highest investment demands, which places the pupils who attend these schools at a

disadvantage (Swinkel, 2014). These pupils attend underfunded schools and are primarily from low-income, rural homes, claims Janssen (2017). For instance, in South Afric's rural secondary schools, approximately 40% lack indoor restrooms and 72% lack a scientific laboratory. Students suffer from poor learning surroundings and infrastructure (Janssen, 2017).

2.3 Challenges of management in managing school infrastructure

There are several challenges schools face when managing their infrastructure. These challenges include managing sanitation, maintaining school furniture and the atmosphere of the classroom, facilities and ground, safety and security in school, water and electricity and absenteeism. The following subsections discuss the challenges the schools face when managing their infrastructure.

2.3.1 Managing sanitation

An international study from Domestos (2017) shows that nearly 1 in 5 children experience physical discomfort or inability to concentrate from 'holding it in' and not going to the toilet at school because the facilities are dirty or unusable. More than one in ten children deliberately skip food or drink to avoid using a school toilet. The issue is felt across the world as the study delivers findings that are matched across India, the UK, Poland and South Africa. Interventions should not just be about the construction of safe facilities but about offering children the dignity they so deserve through conducive facilities that are clean and offer the privacy that the learners deserve. The terrible passings of Viwe Jali and Michael Komape exposed the humiliating conditions that ordinary South Africans face every day in a democratic country (Khoza, 2018).

Some schools still have buildings from the apartheid era, when local communities were required to build their own schools out of mud. Though the Constitution has a whole section devoted to children's rights, these mud schools still operate even today, (Conway-Smith, 2010). To this day, numerous, eenage girls have a predicament of missing school as a result of

their menstrual cycles. Furthermore, these girls constantly face a challenge of not being able to change their sanitary towels in a private space due to poor facilities, which also hinders their rights as well. Over and above, the majority cannot even afford sanitary towels because of how expensive they are. In order to alleviate this situation, organisations including non-profit organisations, privileged schools, businesses, and people have considered it their responsibility to donate to those in need. A good sanitation environment has been recognised as one of the drivers of increased school attendance and retention among children (Fresh, 2013). This is not the case in informal settlements because there is a lack of water, electricity and sanitation. According to the South African Constitution of 1996, everyone has the right to an environment that is not damaging to their health and to get an education in a peaceful and carefree setting. If there is no school fence around the school premises, learners are at risk again and it is the issue of managing school infrastructure.

2.3.2 Maintaining school furniture and the atmosphere of the classroom

The classroom environment is an essential element of teaching and learning that supports the processes of teaching and learning by fostering student motivation and confidence (Lee & Mak, 2018). Desks and tables are significant in any classroom because they have a serious impact on teaching and learning environment (Moore, 2017). The classroom setting is a crucial division of teaching and learning because it encourages student motivation and self-assurance, which promotes the processes of teaching and learning. Every teaching strategy needs an effective classroom arrangement (Renard, 2019). A shabby classroom setup does not provide a stimulating learning environment. When combined with other types of damage, it gives a bad impression of a school and may need more regular furniture replacement, along with all associated expenditure. Classroom setup is an important component in a learning environment because it is an essential piece of

classroom management to support both teaching and learning. Cox (2019) asserts that the physical environment of the classroom may support and enhance learning while also putting a halt to behavioural problems. For both teachers and students, creating a positive learning atmosphere is crucial. This is so because a learning environment has a significant impact on the behaviour of both teachers and students. Therefore, a well-structured classroom along with effective classroom management has the power to enhance student learning and behaviour. Cox also holds that employing classroom management to organise your desks is important for creating a welcoming, secure, and helpful learning environment. A positive or negative day can depend on the presence of a conducive learning environment.

Many people think where students choose to sit in class indicates how motivated, engaged, and eager they are to stud (Fernandez, Huang and Rinaldo, 2011). The physical framework of the classroom is where students engage in hands-on learning. Classroom seating must be taken to consideration (Harvey & Kenyon, 2013). This in essence indicates that the entire classroom should be utilised to enforce and support learning and its activities. The dimensional structure of the classroom, the seats that students occupy, their movement and the entire atmosphere in the classroom have to be taken into consideration, along with how the classroom will be set up to fulfil the children's intellectual, social, and emotional needs (Cox, 2019). Furniture placement in the classroom should be adaptable, representative of the student body, and consistent with the needs of all students (Moore, 2017).

2.3.3 Facilities and ground

A building's quality and lifespan are significantly impacted by its upkeep, the methods used for servicing and repairs, and the rate at which needs and requirements change (Molefe, 2012). The upkeep of school facilities and grounds is the responsibility of principals and school governing bodies. This involves routine upkeep to extend asset lifespan and lessen the reliance on urgent repair tasks. Regular maintenance should be carried out to fulfil these

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obligations. Regular maintenance supports the upkeep of educational facilities and averts the development of new maintenance problems. To prevent deterioration and support the upkeep of the structure and grounds, routine maintenance duties are streamlined into small, recurring tasks. Each school has its own unique maintenance task profile that is specific and tailored to itt.

The maintenance requirements of one school may differ from the needs of another school. Therefore, schools are encouraged to design routine maintenance tasks that meet their needs and fit their own individual profile. However, the following six key routine maintenance activities are essential to avoid expensive and future condition-based jobs with significant risk. These include foundations and structural beams, down-pipes and guttering pest control (including termite treatment), storm-water grating, channels, and drains, roads, parking lots, and retaining walls.

The Department of Education categorically emphasises the importance of rooftop maintenance, as it forms an impression of the state of the building. Regular cleaning and removal of debris and leaves are essential, as it enables easy detection of any parts that require repairing. The consistent checking and repairing of down pipes, storm-water drains, grates and channels also enable easy detection of any pipes which will be easily repaired as opposed to waiting till there is a fault. This will ensure that major damage is prevented, thus saving on costs for repairing.

According to the Department of Basic Education, school maintenance plans (SMPs) help schools better create a maintenance plan. Their buildings and grounds are maintained according to a budget, timeline, and management. This includes problems found when using an internet gateway to access the RFE. Plans for maintenance also give schools the chance to keep track of building hazards, manage them, and develop a routine maintenance schedule that will address and prevent problems through condition-based maintenance. Management is the driving force of a curriculum in schools. Management together with school governing bodies must make sure that teaching and learning take place in schools.

However, management faces great challenges, which include external factors, such as legislation, departmental policies and school structures, to maintain standards in which the school operates, the drafting of budgets for the school and interpersonal processes (Chaplain, 2001). Marishane (2014), conducted a study of the South African school-based management's effects on the implementation of the national policy for school infrastructure. The study had important practical ramifications for infrastructure management in schools. Thwala (2010) discovered that school administrators have trouble using the funds given to their institutions. There are requirements relating to the actual expenditure of the state-allocated financing once such funding is delivered to the schools, for instance, if they want to use the money for infrastructure repair. The study shows that there are management problems in informal settlements.

2.3.4 School safety and security

In most cases, a significant barrier to learning in schools is school safety. Concerns of violence, abuse and criminal activities affect communities at large, including schools. There are threats, victimisation and intimidation that are aimed at schools, which further threatens effective teaching and learning. Controlling and responding to crime and violence, the Department of Basic Education and the SAPS are committed to preventing such situations from happening in schools. Preventative measures and early intervention are the most economical and dependable approaches to guarantee support in educational institutions. This will guarantee that education does not stop in schools and that it does so consistently in a setting that is both physically and socially secure. Additionally, it is advisable for schools to create and sustain a safe school committee. The members of a safe school committee are both internal and external parties. These include students, teachers, members of the school governing body, security guards, and outside actors, such as the SAPS, the Metropolitan Police, ward council members, social workers and a community police forum (CPF). According to De Waal (2014), it follows that classroom instruction and learning must respect both the educational demands of students as well as their basic human rights. The right of students

to a quality education, which uses many philosophical approaches to teaching and learning to mediate learning that is sensitive to their changing needs, is emphasised in the South African constitution. Keeping schools non-violent is paramount in enabling learners and educators to look forward to effective teaching and learning. A safe environment promotes creative learning and allows learners to engage better with one another socially. However, a compromise in the security and safety of teachers and learners would render learners at risk. The risk is of not showing up to school or, when they do show up, they remain uncomfortable throughout the entire day. These may lead to disengagement from learners, thus prohibiting effective learning from taking place.

Safety rules to be followed in schools in order to protect learners inside the classroom (Paavan, 2020). The educator must teach learners proper classroom etiquette. Proper classroom etiquette includes abiding by classroom safety rules, being committed to practising good manners and ensuring that classroom equipment and furniture are protected from any intentional damage. Elementary safety concerns must be taken seriously in schools. For instance, flexible tubing must be used in schools to keep electrical cords out of reach of students. Additionally, it is crucial to keep wires out of locations where teaching and learning take place, such as school hallways and office spaces. Second, the entrance to the classroom should be secure, and uncluttered. To guarantee that there is always a clear exit in case of danger inside the classroom, the doorway must always be open. Live plants must be present in classrooms in order for them to function as natural air filters. Thirdly, live plants that serve as natural air filters must be present in classrooms. This will decrease the usage of artificial plants, which are difficult to maintain and frequently harbour bacteria. Sheer curtains can be of used to filter intense light while still allowing natural light to enter the room. Window shades and blinds must always be open. In order to ensure that natural light may pass through the windows, neutral-coloured window treatments must be employed. Computers should not be placed next to or directly under windows, since the brightness may cause students to become distracted from their studies.

2.3.4 Absenteeism and poverty

Regular absence from school has detrimental consequences on academic performance, both immediately and over time (Millan & Schumacher, 2010). Bullying, perceived lack of safety, health issues or demands of other family members, inconsistent parenting, and an unfavourable school climate all seem to contribute to chronic absence (Claudia, 2018). Due to management issues, including absenteeism, poor schools were the focus of a study by Millan and Schumacher (2010). According to the report, there are management issues in the informal settlement that need to be looked at, including socioeconomic concerns. Children who live in poverty might not have access to materials that can help them learn. Children's learning abilities can be impacted by poverty, which also causes social, emotional, and behavioural issues. Living in poverty as a student is simple.

Mwoma and Pillay (2016) found that, although schools provide feeding programmes, children from poor backgrounds lack meals in their homes and therefore they come to school without taking breakfast, which may impact negatively their concentration. Many learners in informal settlements live in poverty. Children from middle-class and upper-class families typically succeed at a higher level than those living in poverty (Garris, 2014). The management of a school has to account if the results of the school are below the target set by the district. Govender (2010) highlighted challenges that the principals of previously disadvantaged schools face, such as the fact that they compete in the open market, as parents could send their children to any well-resourced school.

2.4 The value and importance of managing school infrastructure in informal settlements

School buildings must improve conditions of teaching and learning. It is of utmost importance that there is no damage to the school infrastructure Tanner (2000). This is because buildings play a significant role in attracting visitors

and significant individuals at large (Cooper, 2021). One of the first things that parents observe when they want to enrol their children at a school is the school buildings. This is because the outlook of the building demonstrates the kind of leadership that is obtained at the school. To maintain the school buildings, it is pivotal that leaders ensure that the buildings are well-repaired and painted at all times. Poor school infrastructure has been linked to concentration levels of learners being low and the lack of motivation to learn, which subsequently leads to an increase in school absenteeism, which are detrimental to both students' academic and general health (Sellwane, 2019).

Thousands of children from South Africa attend schools every day with terrible facilities. Many students are taught in dangerous and sometimes fatal situations (Draga, 2011). Research by Amsterdam (2010), students in schools serving informal communities were asked to describe the facilities there. They characterised their classrooms as unclean and littered, and they also complained about how bad or inoperable the restrooms at their schools were. Some students did not use the restrooms at school because they lacked bowls or lids. The maintenance-related problems, such as broken or missing doors, also caused worry among the learners. These concerns raised by students are all connected to the administration of the educational infrastructure. Learners are attracted by good-looking buildings and good sport facilities (Gary, 2010). A good infrastructure promotes good behaviour and plays an important role in learners' achievement. It is easy for teachers to present lessons without waste of time and that improves the results of the school. Teachers are more likely to stay in their jobs if the school is in good condition (Zippin, 2014).

A study by Bullock (2007) describes the importance of schools having good infrastructure to improve the performance of the students and to improve the school system. McGowen (2007), found that infrastructure can influence the behaviour of learners. Learners behave better in a school with better facilities and good infrastructure. Learners in a school with bad infrastructure behave badly. School facilities that are not in a good condition could be the cause of poor student behaviour and conduct in the classroom (Zippin, 2014). It is easy for learners to destroy school properties and disrespect educators. If the

educator takes about five to ten minutes calming down noise, that will impact badly on the curriculum and educators will be unable to finish the syllabus.

According to a study by Barrett, Davies, and Zhang (2015), there is a connection between high school facilities and student achievement, attendance, behaviour, graduation rates, and teacher turnover. The data collected by Barret et al. 2015) also demonstrate the close relationship between educational facilities and student learning. There is a gap that needs to be filled of managing infrastructure in informal settlements, hence, this research project. Zhang (2006), emphasised the fact that what school a learner attends makes a bigger difference to how much he or she learns. Learners who attend schools where infrastructure is well maintained have self-control and spend more time in class and that supports the fact that the management of infrastructure is very important. I want to know, if learners are taught responsibility for respecting the school's infrastructure, would it help to solve the problem of vandalism, graffiti, breaking of chairs and desks, breaking of windows, stealing school lights   will that assists in improve learners' bad behaviour and help with the management of infrastructure? Learners need to learn in a conducive environment which will help them to concentrate and produce good results. Gibberd (2007) presents a strategy that can help with both the immediate need for basic services and the long-term support of the creation of a sophisticated and more effective educational environment. He outlines the essential elements of school infrastructure needed to ensure an equal and high-quality educational system. He also emphasises the ongoing infrastructural issues and the shortcomings that must be fixed in order to fulfil the required requirements. Furthermore, Gibberd uses a performance indicator to look at the importance of planning and managing infrastructure that is required in order to support teaching and learning. He does mention the role of the management of infrastructure but the "how" part is still missing. How to manage infrastructure is important because most studies emphasise the importance of the buildings or facilities.

The availability of infrastructure, according to Ulubasoglu (2006), is a problem that significantly influences educational decisions and results. The Development Bank of Latin America indicates that for students to achieve

excellent academic results, infrastructure is one of the key requirements that needs to be in perfect condition. The school dropout rate in Latin America is 17% and it is significantly higher in rural regions, according to UNESCO. Furthermore, several studies discovered that physical school conditions have a direct impact on the students' desire to complete school, the completion rate increase in new students' enrolment. Teachers are motivated by good infrastructure. Some learners choose a school because of the availability of good infrastructure. Some schools do not take care of the facilities until it is too late. The management of infrastructure is the key to all the problems.

For learners to think creatively and perform above average, they need to be taught in a conducive environment. Some schools in Gauteng province use smart boards, and for a teacher to operate a smart board, he or she needs electricity. If the school performs below expectations and cannot provide a quality education owing to infrastructure issues, The management must take responsibility. The managing of infrastructure is still a problem in informal settlements. Angie Motshekga, the Minister of Basic Education, set norms and standards for school infrastructure in 2013 that are legally binding. Minimum norms and standards are regulations that set the tone for how infrastructural conditions of the school ought to be.

Norms and standards stipulate the minimum criteria of the level of infrastructure that every school must meet in order to properly function. As a result, norms and standards serve as a framework for both top-down and bottom-up accountability. Because of a lack of infrastructure, South African schools are not able to provide students with the quality education to which they are legally entitled. This undermines the significance of basic norms and requirements (Lolwana, 2004). Earthman (2002), argued that the state of affairs of school facilities has a vital effect on learners' achievement and teachers' efficiency. Based on his study, he found that comfortable classroom temperature and noise level play a vital role in a learner's performance. He also argues that old school facilities frequently have difficulties with the thermal environment and noise levels.

Some learners at informal-settlement schools have a problem studying at night because they stay in a one room house with six or more family

members. While learners try to study at night, other family members will complain about the light that disturbs them and that they want to sleep (Pillay, 2006). Therefore, some students prefer studying and doing school work at school because that is the only environment where they can have some peace and quiet. It is a known phenomenon that school is vital in moulding students' personalities and their learning processes. The importance of infrastructure can be directly linked with an experienced teacher and their teaching pedagogy, which is equally important in shaping the students' academic lives. It enables students to develop holistically in a favourable environment. Moreover, it is a known fact that parents invest financially more in secured environments where students' safety is a priority during teaching and learning. This further allows students to enjoy their academic lives, thus allowing them to further thrive academically. Studies suggest that students in underprivileged areas tend to perform poorly academically, due to poor infrastructure, compared to those with proper, fully functional academic facilities (Siebritz, 2022). This indicates that school infrastructure is pivotal in students' academic success and holistic growth. There is no doubting the vital role that education plays in developing a student's personality and all-encompassing learning process (Datrow, Park & Spillane, 2022).

A well-equipped library full of informative and useful books, internet facilities that are fully functional and uplifting ambience attract students to want to learn and be empowered through education. In addition, an inspirational environment enhances the curiosity among students to explore interesting ideas as their minds continue to develop and their curiosity is at its peak. These settings also provide a favourable setting for interactive lessons where students may exchange knowledge and improve their reading and writing skills (Akash, 2018).

2.5 The relationship between the school, community and infrastructure

Community involvement has become an integral part of many schools (Owens, 2015). School buildings are usually the most prominent buildings

especially in rural areas. Therefore, the outer appearance of the schools directly affects the learners' senses (Montessori, 2013). Students will learn that their school places less value on them and their academic worth if it has a run-down appearance, broken windows, and is located in a degraded natural setting. The schools also act as centres where civic activities take place. Furthermore, the buildings further facilitate social engagements and sporting events, as well cultural activities for the communities at large, which enhance a number of skills for the society at large. Based on the study done by Maarman (2009), some parents who live in informal settlements are self-employed, selling sweets by the road side and near the schools. The reasons why communities need to be involved in education and schools in their areas are covered in some of the following parts.

2.5.1 The benefits of community involvement in protecting school infrastructure

The relationship between the school and community secure school security for infrastructure. A community becomes eyes and ears to protect the school infrastructure. Community involvement plays an integral role towards the students' success academically and holistically. Schools do not exist in isolation. Schools and their communities cannot be considered separately (Needu, 2018). For the community involvement to effectively take place, there must be constant communication. Communication is key in demonstrating transparency and trust among all stakeholders involved in education. The purpose of this study, the benefits of community involvement in education, are grouped into three categories. Education cannot achieve its goal without community involvement (Ahmad & Said, 2013).

There is a correlation between public involvement in schools and improved results. According to research, there are both immediate and long-term advantages to community involvement in schools. These benefits are not only experienced by the students, but also all stakeholders. When effort is put into developing programmes that enforce and support engagement with the public, it demonstrates that all stake holders are willing to work together for the

betterment and the success of the students. A statistically significant rise in reputation is observed for schools with greater public involvement (Russell, 2009). This results from the community's desire to be involved in all significant choices. As a result, the school assumes greater importance as a setting where one can get direction and assistance, leading to improved academic success.

The infrastructure of the school is secured by the relationship between the community and the school. The community become eyes and ears to protect the school infrastructure. Community involvement plays an integral role towards the students' success academically and holistically. Schools do not exist in isolation. Schools and their communities cannot be considered separately (Needu, 2018). For the community involvement to effectively take place, there must be constant communication. To demonstrate openness and trust among all parties involved in education, communication is essential. The advantages of community involvement in education are divided into three categories for the purposes of this study.

2.5.1.1 Boost academic performance, attendance, and retention for students

The results of interactions between the community and the schools are favourable. Communities should play a vital role to ensure that schools deliver optimal learning environments to ensure happy, healthy and successful learners (Daly, 2022). It is said that, where there is unity and community involvement in public schools, students perform better and they achieve better academic outcomes (Eisenstein, 2019). Furthermore, learners attain literacy achievements at a faster pace and more learners reach secondary education thus reducing the rate of drop outs. It has also been demonstrated that community and family involvement in schools has a significant impact on student attendance.

2.5.1.2 Trust, respect, and transparency between the school and the community.

The relationship between a school and a community can serve many goals, ranging from enhancing learner's achievement and development (Sipple, 2015). The capacity to foster transparency, respect, and trust between the school and community is one of the key elements of a school's success. The community needs to feel heard for the school administration to be able to hold the school accountable for its performance. The community members who may not be able to avail themselves to attend the meetings pertaining to the schools can be kept informed through technology. In such instances, technology plays a fundamental role in ensuring that there are engagements taking place between the school's board and the community. Empowerment comes from staying informed and being kept up to date with the daily activities of the schools. Leveraging the right technology, the school can form a coalition with all stakeholders, which will allow the smooth running of the school.

2.5.1.3 Maintaining stronger school performance and reputation

Education cannot achieve its goal without community involvement (Ahmad & Said, 2013). There is a correlation between public involvement in the schools and improved results. According to research, there are both immediate and long-term advantages to community involvement in schools. These benefits are not only experienced by the students, but also all stakeholders. When effort is put into developing programmes that enforce and support engagement, with the public, it demonstrates that all stake holders are willing to work together for the betterment and the success of the students. A statistically significant rise in reputation is observed for schools with greater public involvement (Russell, 2009). This results from the community's desire to be involved in all significant choices. As a result, the school assumes greater importance as a setting where one can get direction and assistance, leading to improved academic success.

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2.5.1.4 Issues in informal-settlement schools

Research shows that the poor receive a far inferior quality of education when compared to their wealthier counter parts (Spaull, 2011). It is therefore imperative that the quality education provided to the poor is improved drastically. While it is easy to comprehend reasons why well-off schools outnumber the poor schools in performance the same cannot be said about the poor schools that perform far better than other poor schools where resource allocation is almost the same. The question is, is the difference brought about by the school management of infrastructure? Or perhaps differences in teacher quality, parental education, and preschool education (Bayat, 2014). While a response cannot be easily obtained, it can be confirmed that the quality of education is central in social transformation and economic development. However, South African schools perform far more poorly when compared to international standards and even among African countries.

Educational quality and its development are therefore regarded as indispensable for the teaching and learning process (Rena, 2008) and, as a result, should be improved in South Africa. According to Kunnaya & Opoko (2016), infrastructure in informal settlements is a serious issue. Often people in informal settlements build shacks very close together thus, when a fire occurs, most shacks burn. Learners lose their stationery and textbooks and it becomes a problem for school management to replace the textbooks and issue replacement stationery.   Residents in informal settlements and townships are particularly at risk of infectious diseases, as it is difficult to

practice social distance in overcrowded conditions. Overcrowding makes studying at the informal settlement a difficult task for learners. Dwellings are close to each other, therefore, there is more noise that makes studying difficult. A lack of water and lighting at the informal settlement makes life difficult. Learners feel embarrassed that they have to wear dirty clothes to school and sometimes they have a bad odour because they were not able to bathe (Pillay, 2006).

In informal-settlements parents cannot afford to send their children to preschool. A significant number of children in informal settlements is excluded from quality preschool education, which compromises their chances of further formal schooling. Parents cannot afford to pay for preschool in informal settlements and they normally ask the grandmother from next door to take care of their small children (Likoye, 2016). The location of schools has led to an increase failer rates of learners. This is due to walking long distance that have caused dropping out from school and most of the girl students fall pregnant, which therefore hinders their ability to attain their set academic goals (Monona, 2015). It is said that community secondary schools will continue to perform poorly academically, if nothing is done to improve the current standard of education (Mhiliwa, 2015). Schools in informal settlements offer poor households additional resources in the form of childcare. The only place that will be suitable for learners to study in informal settlements is at school. That is reason enough why it is important to ensure that the school has electricity, security and safe buildings.

The Development Bank of Latin America (2016) study clearly shows that it is important to have good school infrastructure. The research also indicates that good school infrastructure with transformed space makes it possible for children and youth that live in re mote areas to study and, in addition, tends to improve the attendance and interest of students and teachers in learning. For these reasons, investment in school infrastructure has an essential role in solving access problems in learners' performance (Jenkins & Zeinall, 2015), The managing of school infrastructure is important in informal settlements. Education is imperative in the reduction of poverty around the world. Higher paying job opportunities require education and therefore the attainment of

education will ensure that all students get an equal opportunity to improve their lives. Furthermore, they will be able to also end the cycle of poverty that has   prevented communities from developing for many years. Though there are other factors that influence the type of jobs that one can access, it can be concluded, if a country wants to elevate poverty, it can invest in the betterment of schools' infrastructure. That way, all students will get the opportunity to be hired in the highest-paying job opportunities.

2.6 Why does education infrastructure matter for learning?

Education infrastructure, which includes buildings, classrooms, laboratories, and equipment, is an essential part of the learning environments at schools and universities. Strong evidence supports the notion that high-quality infrastructure enhances learning, enhances student outcomes, and lowers dropout rates, among other positive effects (Janssen, 2017). Research showed that schools in secluded areas in Romania require an increased investment (Unqureanu, 2010). This means that the students attending these schools face double the disadvantages. This is because the pupils come from rural families that make the federal minimum wage and attend schools with inadequate facilities. For instance, approximately 40% of secondary schools in rural areas lack indoor toilets and 72% lack a scientific lab.

Urban schools are more well-equipped than rural ones yet many of them are overcrowded. In metropolitan regions, one in four pupils attends a school that is overcrowded and runs on a shift and rotation schedule. As such, it can be concluded that overcrowded classrooms are not ideal for teaching and learning (Gresham & Amoroso, 2017). The investment in maintaining the infrastructure of the schools has a positive effect on three aspects, according to contemporary literature. The dimensions below are listed in this manner.

2.6.1 Attendance and finishing the academic year

According to UNESCO 2021 studies, the dropout rate in Latin America is 17%, with the number being greater in rural areas. Further research revealed

that a significant factor for students to complete their education is the physical state of a school, particularly the school buildings. Moreover, there has been an increase in cycle completion rates and registrations. In Peru, studies noted a significant increase in students' attendance. This is an indication that taking care of the schools' physical condition yields the best results.

2.6.2 Motivation for teachers

Evidence from Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda shows that absenteeism in schools with better infrastructure is often 10% lower than absence in schools with poor infrastructure. In fact, the study discovered that the impact of infrastructure on absenteeism reduction was bigger than that of teacher pay or the impact of administrative

2.6.3 Learning results

The infrastructure of schools and standardised exams used to gauge learning processes in some regions of the United States of America have been found to positively correlate, according to studies conducted by the 21st Century School Fund in 2010. It was discovered that the lower the student's socioeconomic levels, the higher the results. Therefore, proper maintenance must be performed at regular intervals to ensure that the schools remain in a good condition throughout. This entails taking precautions to prevent any harm to the school, as it is crucial to bringing in visitors and maintaining a high student enrolment. The first thing that parents notice when they visit schools to enrol their children is the physical condition of the buildings. To ensure that the buildings are well maintained, it is imperative that all repairs are done and that the school is continuously painted. Furthermore, another aspect of the buildings that must be considered is the ability of a building to withstand all types of weather. Additionally, the school yard must have properly constructed boundary walls, roof covering, roof fixings, glazing, window fixings, ceiling fixings, services to structural supports, and parapet wall restraints (Kapur,

2017). This is to ensure that the occupants of the school are safe and that effective learning takes place.

2.6.4 School location

The location of the premises of the school has a significant impact in creating a suitable atmosphere and an environment that has a conducive ambience. The school should be located in an area that is far from noise and pollution. The area should promote a healthy learning environment where learners can easily absorb the wells of knowledge being taught without disturbance. The setting should be serene, roomy, with high-quality amenities and utilities in aesthetically pleasing surroundings. According to Moschandreas and Shaughnessy (2011), the location of the school is crucial. Locating a secondary school in an area that would inevitably result in subpar learning settings has been shown to be a factor in irregular student attendance, school abandonment, teacher absenteeism, and the ability of teachers to participate in the teaching and learning process. Cohen (2010), despite acknowledging that studies conducted on environmental conditions and the positive academic performance of students are limited, informs that the quality of the school environment is essential to positive learning outcomes.

He identifies two major sources of environmental problems in schools: the quality of the land on which the school is built and the quality of the school facility itself. Cohen (2010) continues by saying that environmental planners should be brought in by stakeholders to help them focus on the facilities in question and the surrounding area where the school will be built. Environmental injustices have an impact on the student and staff populations at schools, so school staff members should be involved. Their participation is essential because, without it, observations about the school's quality and the degree to which it might affect or influence other structures and changes in the neighbourhood, city, or region would be lost.

The school should be neat and well-lit, with essential amenities like libraries, restrooms, a playground, sinks, and multipurpose rooms, among others.

According to a 2013 University of Salford study from Manchester, UK, a student's academic achievement in a classroom can vary by up to 25% over the course of a year.

2.6.5 Classroom environment

The shared perceptions of the students and teachers in the classroom are used to characterise that environment (Fraser & Pickett, 2010). Teachers can foster a healthy learning environment in the classroom in a different way. Starting the year with high expectations, promoting student involvement, making the classroom physically appealing, involving parents, and using effective praise and effective criticism are some recommendations for fostering a happy learning environment in the classroom. In a traditional school system,children spend most of their time in the classroom. The purpose of setting expectations must be made clear by teachers in order to promote a healthy learning environment. The creation of a positive environment must involve students as well. They will be able to participate in the learning process and a climate of shared values will be fostered by their involvement (Andrews, 2008).

This new found sense of responsibility enables learners and parents to see classroom facilities and interiors carefully. Comfortable benches to sit on, accurate student-teacher space ratios are a must. Do not expect a quality education from a student-stuffed class. Students cannot focus unless they sit in a comfortable and spacious classroom (Reinisch, 2020). Check the conditions of walls and the blackboard. A holistic development requires a good ambience to enable students to focus. Imperfect interiors can ruin your child's mood to study and perform better in academics. See if the classrooms have equipment for online learning. Many schools use projectors for better explanations of subjects. Be attentive when you visit your child's school for admission. Classrooms speak a lot about a school.

2.6.5.1 Play Area

Many schools talk about physical development but do not have space to conduct physical activities for students. Well, even if they manage to conduct indoor activities, having a play area for students is a critical need for a school. Children are active and growing individuals. Learners require different physical activities and sports to develop mentally and physically (Clark, 2005). Choosing a school without a play area or sports area is not advisable. It stops your child from performing activities and thus creates a hurdle to their overall development.

2.6.5.2 Library

Having a place to search better and, learn peacefully is very important for students. A library gives exposure beyond textbooks (Singh, 2021). Students can satisfy their curiosity to know things, develop a healthy habit of book reading, connect dots to their textbooks and broaden the horizon of their concept learning, and more. Many schools may not have a library in their initial years. Still, as time passes, the school administration chooses to set up a library in the school. Parents must check if the school has a library facility. Libraries provide information and ideas that are fundamental to the needs of learners (Omenyo, 2016). If yes, well and good and, if not, check with the administration about the library in its forthcoming plan. This aspect can be looked after in somewhat of a relaxed manner. It is advisable to look for a school with a library.

However, if the school does not have it, do not make it the only point to remove a school from your list. Analyse the overall school infrastructure and then decide. Schooling becomes a way of living for students until they remain part of the school. They spend most of their productive hours in school. Hence, parents must look for a school with good infrastructure. A place where children feel comfortable, happy, and growing is the place for your child. Do not rush for admission to the nearby school and compromise your child's development due to poor infrastructure. If you are in India and looking for a

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school with rich infrastructure and world-class education, connect to us. Right from quality education to creative learning methods and excellent infrastructure, a school is the best place to enrol your child and secure their formative years.

2.6.5.3 Challenges of school infrastructure during Covid-19

It is paramount that we focus on investing in school infrastructure, notable, school building ventilation, to protect students from Covid-19 (Daniels, 2020). Schools need to learn more about how the schools must adjust to life under Covid-19. The Covid-19 pandemic altered people's understanding of how school ventilation ought to be in order to protect people from viruses and bacteria in the air. It demonstrates how pivotal it is to ensure that classes are well-ventilated and spacious. Many school administrators have been prompted by the epidemic to spend money on ventilation-system upgrades, but the advantages of creating a secure learning environment go far beyond safeguarding children from the corona virus. According to Persico (2019), pollution exposure not only affects students' academic performance but also has a significant impact on the achievement gap between children from higher- and lower-income families. Furthermore, evidence indicated that, with proper ventilation, students were protected from contracting Covid-19 and many other harmful microorganisms floating in the air.

Research further suggested that schools experienced high numbers of infections when there were high infection rates in and around that specific community. Additionally, children could still get Covid-19 in poorly ventilated school facilities (Persico, 2022). A school is considered the second home for children. During their school life, students learn many life lessons from books, peers, and even the school environment. It is because a child develops a magnificent personality by undergoing a holistic learning process.

Like the role of teachers and their teaching pedagogy in sculpting a student's academic career, infrastructure also has a vital role. A good infrastructure creates a favourable environment for students' overall development. Every parent wishes to invest money where children feel good while learning. For

this reason, the school's facilities must adhere to safety regulations and provide amenities that make learning enjoyable. According to certain research, pupils attending schools with subpar infrastructure perform worse academically than those who have access to stronger infrastructure resources. As a result, school infrastructure is an important factor to take into account. Additionally, a tense atmosphere and a crowded classroom have an impact on pupils' ability to learn. This is why there should be a cap on the teacher-to-student ratio. Through the platform of Good Schools in Rajasthan, parents may look up Affordable Schools in Rajasthan.

2.7 Educators, students, and schools in informal settlements have difficulties.

The first factor to consider is the circumstances of the children living in informal settlements, as their standard of living impacts how they see education. They might have a beneficial or bad impact on the students, depending on their perspectives and experiences. Children's environments and the function of education in informal settlements are crucially important. Children living in informal settlements often face challenges (Verster, 20160. The majority of the time, they are malnourished and are forced to study in an environment that does not stimulate the mind to be eager to learn.

Students are often dis-empowered and do not receive positive interventions as a result of their circumstances, which makes learning very hard. Furthermore, there are adverse social problems that the students come across in their daily lives. These challenges include drug addiction, poverty, crime and challenge parenthood. Children frequently have just one parent or they must care for ailing parents, many of whom have HIV/AIDS. Informal settlement dwellers often face challenges when it comes to child maintenance. They have little to no means to provide for their young ones and the environment in which they reside usually does not promote the healthy development of the children and it is also not mentally stimulating. Therefore, many suffer from a number of illnesses which they cannot attend to as a result of the unavailability of proper means of transportation and medical facilities.

Children sometimes have to walk a great distance to get to school, since schools are located far away. In informal-settlement regions, there are numerous difficulties for students, teachers, parents, and families. Vester (2016) also made a note of the fact that students' wellbeing is frequently harmed by living in unofficial housing. In this regard, three factors need to be taken into consideration: the environment, educational problems, and a theological assessment. The difficulties faced by students and teachers in informal settlements are highlighted by empirical research at a primary school close to Phase 7 in Mangaung. Like Christ, the church must engage with youngsters and teachers. The church must empower the needy, particularly the poor child. The difficulties that students from slum areas face when attending urban schools are covered in the following subsections.

2.7.1 Learners' low self-esteem

Urban school students who come from informal settlements often feel misunderstood by their teachers and fellow students, among other negative emotions. At the informal settlement, they face difficulties that inhibit their ability to fully comprehend what they are taught in school. Unemployment and poverty are factors that further exacerbate their negative experiences, which makes them feel predisposed. To ensure that learners from informal settlements are given an opportunity to participate meaningfully in schools, schools must take cognisance of the learners' backgrounds and their context, as well as their cultural and socioeconomic situations. This will prevent any negative experiences that would be experienced by both learners and educators in schools.

Furthermore, students from adverse backgrounds should be taught by educators who are fully trained to be able to accommodate them and the context from which they come (Pillay, 2004). This will prevent the students from feeling out of place because of the lack of empathy and understanding they would receive from less-trained educators. Students from the informal settlement have feelings of humiliation and embarrassment, especially when they cannot do their assignments and students from more affluent families

refer to them in negative words. There are some positive connotations towards students from poor economic backgrounds, as there is a sense of pride in them when they attain the same good quality education as affluent students.

2.7.2 Misunderstanding

Students from poor backgrounds feel misunderstood in class, as their reasons for not doing their home work are often treated as just mere excuses to not do the work and that they do not want to learn even if their reasons are valid based on their context. There is a presumption that students from informal settlements are less likely to succeed academically because of their living environments. The United Nations Convention on the Rights of the Child supports inclusive education, which calls for fundamentally altering the way in which the disabled are educated in the past. However, in economically poorer areas, for example, low socio economic groups in South Africa, many learners are vulnerable to exclusion in education, not just the disabled (Miles, 2003). African children have historically received unequal and inferior education in South Africa (Sedibe,2006) with unequal expenditure and allocation of resources. Apartheid policies have left disparities which are evidenced in poverty-stricken families today (Engelbrecht & Green, 2003).

Therefore, the education legacy includes millions of South Africans who are illiterate and inequalities in educational facilities, which have resulted in failure and high dropout rates. The government must take the lead in reversing the unfavourable experiences that students from the informal settlements have had. The many parents who are unemployed must find ways to provide jobs so that students can afford to attend school. It must provide electricity and water so that students may study and complete their assignments without having to spend time gathering firewood and water for household duties.

The status of the students has to be improved by collaboration between the various government departments. For instance, the Department of Health might create food and nutrition plans for both schools and settlements. Students could feel protected thanks to the Department of Safety and

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Security, especially from adults who misuse drugs and obstruct learning. The Departments of Finance and Social and Welfare may offer financial aid to students, especially for school supplies, uniforms, and transportation costs. The Department of Education is responsible for seeing that policies are carried out, such as the language policy that supports students who use English as a second language. Second, all initiatives in schools should start with a method of individual and collective empowerment.

Learners ought to be exposed to activities in this setting that assist them in altering their unfavourable self-perceptions. They can be taught that, although coming from a difficult environment, they can still feel valuable and inspired to develop as people. They can still gain trust and confidence in both themselves and other people while feeling at ease with both. This could be attained in classrooms through courses on life skills, workshops on teamwork, conflict resolution, diversity management, anti-bias techniques, and the formation of support groups. In order for them to learn to respect and value one another as human beings, I propose that the groups should include both students from the informal settlements and students from within the Indian population. There should be a chance for the students to talk to Indian students and teachers about their experiences living in the informal settlements, until they accept themselves and their circumstances. This should aid in educating them about the emotions and practical challenges faced by the students in the informal settlements.

2.8. Why are minimum norms and standards important?

Minimum norms and standards are laws that outline the physical requirements needed to qualify as a school. They outline the minimal requirements for infrastructure that each school must meet in order to operate effectively. The infrastructure required to give students the excellent education to which they are legally entitled is lacking in thousands of South African schools. Schools in the Eastern Cape and KwaZulu-Natal are in the worst condition, according to the Department of Basic Education (2011) National Education Infrastructure Management System (NEIMS) Report, which was released in May 2011. However, the issue of inadequate infrastructure is not unique to rural

provinces. Thembisa, Gauteng Pikoli schools' sanitation was recently audited by Equal Education (2013). The audit, which examined 11 secondary public schools, found that many of them have inadequate infrastructure or a broken sanitisation system. Despite being the richest province, Gauteng has serious infrastructure deficiencies.

Detailed figures on the shortage of resources at public schools around the nation are also provided in the NEIMS Report. The survey also showed that there is still a problem with infrastructure in schools though the government has issued norms and standards that control and define the physical attributes that designate a school as a school. The National Education Management Information System (NEMIS) is a web-based data management tool that gathers data and information from educational institutions, analyses and reports on the status of designed indicators, and gives the sector a solid foundation for efficient management to ensure that every learner counts. The online platform monitors student and faculty performance mobility to guarantee effectiveness and efficient use of educational resources.

In the Eastern Cape, there are more than 400 "mud-schools" many of which are made of mud and shacks (Damba-Hendrik, 2020). The provincial departments have three years to eliminate schools made of unsuitable materials, such as mud, wood, metal, and asbestos, according to the Norms and Standards for Public School Infrastructure. South African education is incredibly unequal (Accram, 2019). Historically, White schools got more funding than schools in Black, Coloured, and Indian populations due to decades of Apartheid legislation. Years after the establishment of our new democracy, many of the injustices brought forth by Apartheid still exist.

2.8.1 Norms and standard for educators

The norms and standards policy for educators outlines the duties of educators and the credentials (standards) and applied competency (norms) that go along with them for professional development (Makhaya, 2017). Additionally, it outlines important strategic goals for the improvement of educational programmes, credentials, and norms. The responsibilities and related

competencies listed below are intended to provide an overview of what it takes to be a competent educator. This will improve the ability of school management to manage the infrastructure of the school. The responsibilities and competencies must be integrated into the learning program and should influence the qualification's exit level outcomes and the assessment criteria that go along with them. The qualification should ultimately be applied and integrated competence. All educator qualifications must evaluate this proven capacity to combine theory and practice in teaching. The seven roles are:

2.8.1.1 Learning mediator

The educator will facilitate learning in a way that is sensitive to the varied needs of students, including those who face learning obstacles; create inspiring learning environments that are appropriately contextualised; and effectively communicate while demonstrating respect for others differences. A teacher must also exhibit a thorough understanding of the subject matter and a range of guidelines, techniques, and tools pertinent to teaching in South Africa.

2.8.1.2 Interpreter and designer of learning programmes and materials

The educator will comprehend and analyse the offered learning curricula, create unique learning curricula, assess the needs of a particular learning context, and produce appropriate textual and visual learning resources. Additionally, the teacher will choose, organise, and pace the lessons with consideration for the diverse requirements of students living in informal settlements.

2.8.1.3 Leader, administrator and manager

The educator will engage in school decision-making frameworks, manage classroom learning, carry out administrative tasks effectively, and make decisions that are appropriate for the level. These competencies will be

carried out in democratic ways that assist students and coworkers and exhibit responsiveness to the changing demands of schools in informal settlements.

2.8.1.4 Scholar, researcher and lifelong learner

By engaging in reflective study and research in their subject area, in broader professional and educational issues, and in other related fields, like the significance of managing school infrastructure, the educator will continue to grow in their personal, academic, occupational, and professional lives.

2.8.1.5 Community, citizenship and pastoral role

A devoted, and honourable approach towards fostering a feeling of respect for and duty for school facilities shall be practised and promoted by the educator. The educator will uphold the law and promote democratic principles and behaviours in the classroom and in society educating students about the significance of and appreciation for school facilities.

2.8.1.6 Assessor

The educator will exhibit the capacity to meet the educational and other needs of students and other teachers while also creating an environment that is supportive and empowering for the learner. Additionally, based on a critical perception of concerns related to environmental and community betterment, the educator will build positive relationships with parents and other important people and organisations.

The teacher will be aware of the importance of assessment in the teaching and learning process and will know how to include it into it. The instructor will be able to give learners useful feedback because they will grasp the purposes, processes, and outcomes of the assessment. The educator will plan and oversee both formative and summative evaluation in methods that are suitable for the level and purpose of learning and satisfy accrediting body standards. The teacher shall maintain comprehensive and diagnostic records of all assessments. When writing assessments, the teacher will recognise the

value of school infrastructure, including neat classrooms and furniture that can accommodate students.

2.8.1.7 Learning area/subject/discipline/phase specialist

The educator will have a solid foundation in the knowledge, abilities, attitudes, rules, and practices pertinent to the field, topic, area of study, stage of research, or professional or occupational practice. The educator will be knowledgeable about many approaches to teaching and learning (and, where necessary, research and management) and how to utilise them in ways that are suitable for the setting, the learners, and both. The educator will be well-versed in the knowledge pertinent to the specialisation.

2.8.2 National Norms and Standards for School Funding

Proposed changes to the National Norms and Standards for School Funding are included in this paper (Notice 2362 of 1998). The policy sections dealing with school allocation and fee exemptions in public schools are covered by these suggested revisions (Mestry, 2013). Schools servicing the most underprivileged areas of the nation will be dubbed "no fee schools" There are no mandatory school fees allowed in these schools. As a result, funding for schools in informal settlements is insufficient to cover costs, particularly for upkeep of facilities. In informal settlements, access to education depends on what the government provides. Management of the schools infrastructure becomes challenging. The minister will establish and modify the standards for the declaration of no-fee schools as needed. The criteria will be based on the level of government financing and community poverty.

2.8.3 Norms and standards on school infrastructure

Angie Motshekga, the Minister of Basic Education, released norms and standards for school infrastructure that are enforceable by law. The law also requires that every school must have access to running water, power, internet, functional restrooms, secure classrooms that may hold no more than

40 students, security, and then libraries, labs, and sports facilities. Minimum Norms and Standards are laws that outline the physical requirements needed to qualify as a school. They outline the minimal requirements for infrastructure that each school must meet in order to operate effectively.

These legally obligatory standards provide a benchmark for provincial education departments to strive towards, a yardstick by which they can be judged, and a way for citizens to hold elected officials responsible. As a result, norms and standards serve as a framework for both top-down and bottom-up accountability. All South African public schools must abide by the norms and standards regulations. This is very important because it ensures that all South African students, regardless of race or class, will have access to learning spaces with the necessary facilities.

Maintaining school resources

By making such a plan public, communities and students will be able to plan ahead for government action and collaborate to retain school resources. According to Pikoli (2013), they requested the MEC reveal the plan for maintaining school resources by 5 January 2014, in a letter sent to her on 2013. She still has not done it as of the time of writing. A permanent and long-lasting solution to the sanitation crisis must be provided by the MEC, according to Pikoli, who also state that they aim to keep an eye on the situation in schools. Tembisa students should be able to attend schools that have:

- enough functional restrooms to accommodate all students needs
- enough taps and a consistent supply of quality water
- access to toilet paper and soap for all learners
- a number of functional sanitary bins
- a sufficient number of clean toilet blocks that learners can use without loss of dignity.

2.9. Conceptual framework

Other concepts and empirical research from the literature are included in a conceptual framework (Mulder, 2017). In qualitative social and behavioural science research, conceptual frames are frequently used. A conceptual framework is a graphic representation that aids in demonstrating the anticipated causal chain in a financial environment. It is also known as a research model or conceptual model. The model includes many variables and the presumptive relationships between those variables, which reflect expectations. An analytical tool with several applications and settings is a conceptual framework. It may be useful in various fields of work where an overall picture is required. It is employed to categorise concepts and arrange ideas (Swaena & George, 2022).

A tool utilised before for a study is this framework. A conceptual framework becomes an analytical tool as a result. It is employed to assemble many thoughts and draw conceptual differences. Strong conceptual frameworks enable the actualisation of the intended aim, according to Seuning, and Muller (2008). Actually, the problem statement or research topic is represented by the conceptual framework. It also appears to be quite easy. A conceptual framework can be started when the independent and dependent variables have been established. There are several benefits of using a conceptual model when working. The user is initially "forced" to consider the variables carefully and provide accurate descriptions of them. The guidelines also assist you in coming to a decision. To ensure that everyone having access to the variables is aware of what is anticipated, the standards that are decided upon in advance will be compatible with this framework (Mulder, 2017).

CONCEPTUAL FRAMEWORK

Understanding the background of schools in informal settlement around Soweto

Diagnostic Analysis	Values and expectations parents	School Management Task

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                    │ Analysis │         │   of schools in  │        │          │      │    ng    │
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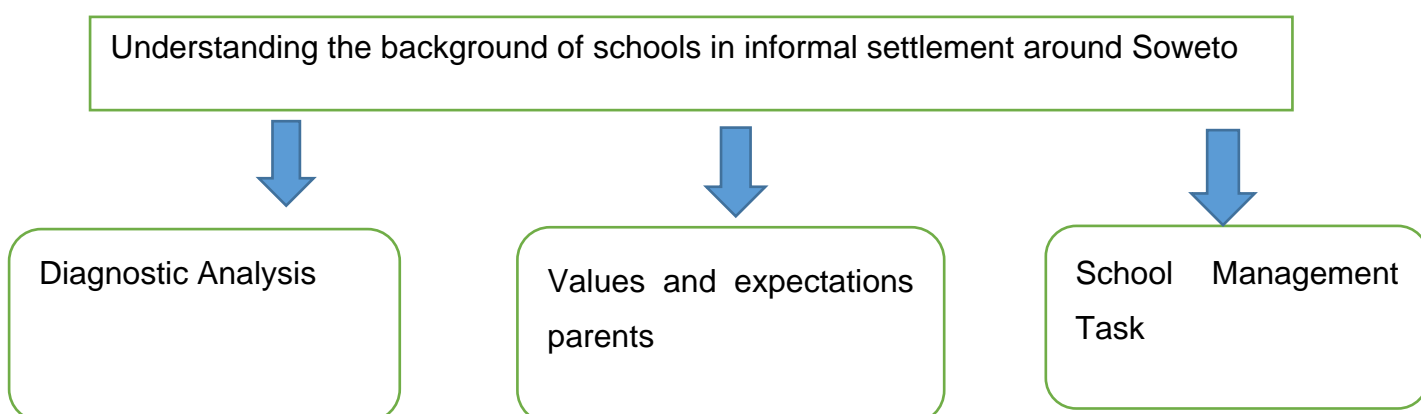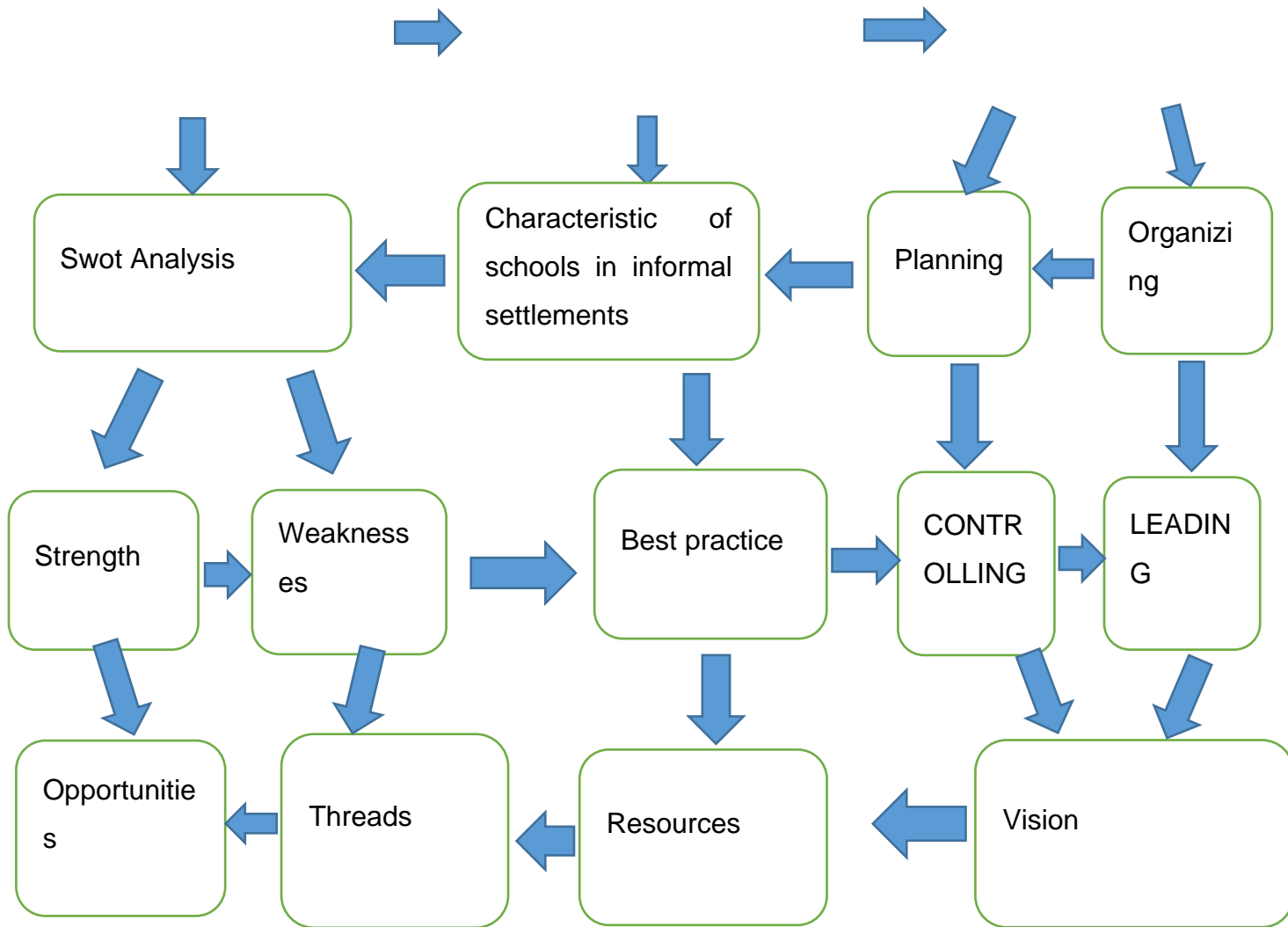
2.10.1 Swot analysis

Strength: Improve health, skills and wellbeing, access to basic services and increase knowledge.

Weaknesses: Shortage of funding and difficulties in accessing funds, skills shortage in terms of intellectual abilities to engage and inappropriate longitudinal planning policies, and imperfect system of land management and growing urban poverty.

Threats: Relational teamwork and willingness to engage and cultural differences.

Opportunities: Standby economic chances or systems, human dignity and enablement, and inclusivity.

2.10.2 Values and expectations of parents (Benta, 2017)

Parents in informal residence base their expectations of their children on the behavioural that may be associated with sharing information and creating wealth opportunities. The academic performance of learners is respected not only by parents but also by society. Raising children serves as social protection for parents (Heikou, 2005).

2.11.1 Planning

Planning is the process of deciding what are your objectives and how to attain them in advance. It is one of the most important duties of a leader. Before doing anything, a manager should have an opinion on how to approach particular job. Planning is therefore strongly correlated with discovery and creativity. But managers must first set goals. Planning is an important step for managers at all levels. A decision has to be made because an alternative mode of performance has to be chosen.

Planning helps education managers anticipate problems and opportunities, think proactively, and contributes to the effectiveness of other management functions. Planning is therefore the job of effective school leaders to establish the basis for management within the school and to set priorities so that emergencies focus on what is important.

Planning Process

Planning is an act, and there are certain smart actions that every manager should follow.

Set goals

This is the first step in developing a plan to set school goals. What the school wants to achieve. The planning process begins with setting goals. Objectives are the results that management seeks to achieve through its activities. Goals must be specific and measurable. The school as a whole sets goals for all

departments and then departments set their own goals within the organisational goals.

Make planning assumptions

The plan is generally forward-looking and there are certain events that are expected to influence policy decisions. Such actions are external in nature and will adversely affect planning if ignored. Effective planning requires your thoughtful and fair judgement. Such events are the expectations upon which the plan is based and are called the planning premises.

Identifying alternative courses of action

Once objectives are established, assumptions are made the next step is to encourage them There are many ways to act and reach your goals. All alternative actions must be identified.

Evaluation of an alternative course of action

This step should assess the advantages and disadvantages of each option in relation to the goals to be attained. Each alternative is evaluated for low cost, low risk and high return within the planning assumptions and capital availability.

Choosing the best alternative largest plan, which is the most profitable plan with the least negative impact, is taken and executed. In such cases, management involvement and judgement play a decisive role in choosing the best alternatinative

Implementation of plan

The stage where other management functions work. This phase deals with doing what is necessary. At this stage, managers clearly communicate the plan to employees and help put the plan into action. This phase includes resource allocation, labour organisation, and machine purchases.

Follow-up action

The process of constantly monitoring the plan and getting regular feedback is called follow-up, monitoring the plan is crucial to ensure the implementation of the plan is on schedule. Periodic review and comparison of results against established standards to ensure objectives are met.

2.11.2 Controlling

Monitoring ongoing activity and making corrections. To guarantee that controls function effectively, internal controls are crucial. Management and third-party assessments are used in monitoring to find problems and inform the right people so that corrective action can be implemented. It is controllable. Adopting a capable monitoring system can help a business address problems quickly and effectively at a very low cost. Individual assessments, ongoing school activities, or a combination of both can make up school monitoring systems.

All concentrated on risks that the school had identified. To ensure that existing evaluation procedures can ensure that they are strictly followed, management needs to emphasise the overall ethical environment through their daily actions and behaviours, setting a "top tone" as it is more commonly called. Setting up a daily, weekly, and monthly monitoring system schedule is essential. Teams should be held accountable by management for comprehending the problems that have been discovered and the timelines for their resolution.

2.11.3 Leading

Leading motivates educators to work in the best interests of their schools. Effective school management steer schools in the right direction and learn from others. School management follows pre-agreed procedures and considers feedback from outside and inside the school to make supportive corrections and necessary changes in managing school infrastructure. Here the managers spend time bonding with their subordinates. Leadership

qualities include inspiring, communicating, motivating and influencing educators for efficient performance. Not all managers are leaders, but all leaders are managers. Managers have all legitimate powers so employees obey all orders from their managers. However, one employee believed in his leader and willingly followed his instructions. The leadership function consists of three basic components:

- Motivate educators and subordinates to work in informal-ettlement schools
- Influence educators and subordinates to achieve desired organisational goals

Leadership roles help each school move forward and reach its goals

2.11.3.1 Importance of leading in management

Business management that is focused on driving efficiency and achieving corporate objectives is essential. One of the many responsibilities of leadership is to ensure the progress of the subordinates and to direct them towards the objective. The following points are discussed in order to support the significance of leadership in a business management context.

2.11.3.2 Guidance and development

The duties of managers in schools are to initiate the project according to plan, a project that will help the school with maintaining school infrastructure. To ensure its success, the educators must be reliable and effective at their work. It is a manager's responsibility to ensure that the workforce is doing its part of the job properly with full knowledge. If needed, managers might have to help the educators in their respective tasks. Management must provide real-time support to help the educators to grow and ensure the best performance in their working area.

2.11.3.3 Motivating educators

Motivating employees and bringing the best out of them is one of the prime aspects of leading in an organisation. If educators are motivated according to their needs, they try to be more efficient with their work and they work more effectively, helping management in managing school infrastructure. A leader leads the educators by keeping them motivated so that they can do their part of the job properly. Motivation can be authoritarian or participative and a leader has to decide which one to choose according to organisational culture and the employee's cooperative behaviour history.

2.11.3.4 Initiating the first step

Planning a structure that will be followed to achieve the school's goal and lead the educators towards it is an important aspect. Leading educators properly plays the most important role in the organisation. An ideal manager has to decide whether the steps being taken are necessary or not. Good communication, enough knowledge, and a clear view of the school goal can help a leader initiate the first step of planning but leading them the whole time and ensuring success is more important. A manager decides what needs to be done, by whom it is going to be done, and what tasks are included in the plan and leads them. A skilled workforce can only help to achieve only if they are being led properly.

2.11.3.5 Building morale and satisfaction

Being confident and having a sense of satisfaction in the back of the mind helps educators to achieve efficiency and effectiveness. It will lead to the organisational goal and an ideal leader will use this by leading them. A leader should try to build a sense of satisfaction that the educators are missing and building morale within them will turn them into assets for the organisation. And a leader's job is to use those assets and lead the employee to the betterment of the company. But educators can get frustrated by workloads and new challenges. Leading educators and helping them through that by building

confidence in them and ensuring the school goal is achieved is an important aspect.

2.11.3.6 Ensuring a proper work environment

For the stable and sound growth of the school, a proper work environment plays a vital role. Leading the subordinates in an environment where the workforce is comfortable can help achieve school goals. To ensure the best results, proper leading has to be implied. A proper work environment can help with the comfort of the educators and managing them efficiently is essential. A great manager is a person who listens to their educators and manages them to a close to perfect solution for that problem. The educator must be treated with proper respect and having a work-friendly environment where their voice can be heard intrigues educators to put more effort into the school's goal and growth.

2.11.3.7 Coordination among all

An organisational goal can only be achieved if the whole workforce and management are on the same page. Being clear about the words, conveying the right message, and holding confidential information away from the workforce are important aspects. While leading, this must be made sure, that proper coordination among the workforce is being ensured. Proper synchronisation among the organisation can be achieved only if effective coordination is present within the organisational structure.

2.11.4 Organising

Organise: decide how best to group your activities and resources. Organising is one of the principles or functions of management following a plan. It is the function in which human, physical, and financial resources are synchronised and combined. All three resources are critical to getting results. As a result, organisational functions help achieve results that are really important to the

functioning of the business. According to Chester Bernard, "Organization is the function by which a company can define the positions of roles, the tasks involved, and the coordination between authority and responsibility". Need to do it. The manager uses the following steps to perform the organising function.

Activity identification

First, all the tasks that the business must complete must be identified, for instance, planning classroom activities, student evaluations, record keeping, quality control, and inventory management. These should all be organised and broken down into units. Activities are organised by departments. Managers try to organise related and similar tasks into departments or units in this step. A department is a structure that separates the entire business into distinct departments or departments in this manner.

Classification of authority

Once departments are established, managers are happy to assign authority and scope to managers. A hierarchy is the assignment of managers to different management levels. Top management is involved in formulating policies and strategies middle management is involved in departmental oversight of various departments, and lower management is involved in overseeing foremen and supervisors. Clarifying authority will lead to more efficient operations. This helps you achieve efficiency in running your business. This saves time, money and effort, avoids duplication and duplication, and keeps your business running smoothly.

Alignment of authority and responsibility

Building relationships between various groups enables easy interaction to attain company objectives. Each person is aware of their position of power, understands who to obey, who to answer to, and to whom to report. All educators are given access to a crystal-clear organisational framework. Her

second-ranked core managerial function is organisation. This entails creating an organisational structure, assigning resources, and making sure those resources are used as effectively as possible. It aids in the most effective achievement of your organisation's objectives. An administrative structure generally indicates an organisational design. The integration of structure, technology, resource allocation, human resource management, and other factors is known as organisational design. Creating specific duties for an organisation is another aspect of organising. Individual bodies' obligations and liabilities are part of decision-making. The significance of organisation in small firms is covered in this article.

2.11.4.1. Importance of organising in schools

To achieve organisational goals with structured management, coordination is an essential aspect that increases its importance. According to the internal and external environment, the organisation of school management varies, but the significance of this process stays the same. Aspects of organising by school management that make this part so crucial are discussed below.

Clear communication

Organising the workforce enhances clarity in communication among the people within the organisation. It specifies the work for a specific group or individuals. Clear communication is a complex nuanced and teachable practice essential for successful leaders and educators. For which the relationship among the people increases. An increase in communication results in among the workforce. Communication gets more effective and reliable with defined organising. Since the discussion gets clear, the administrative relationship builds stronger and achieving goals gets easier for the whole workforce. Proper organisation helps with clear communication, as a blessing in disguise.

Benefit of specialisation-

The advantage of specialisation is the process by which the staff members get their defined work that they are comfortable with. The results of specialisation are maximised by organising in school management. Supporting the whole structure, the work and the relation are adequately defined. For that, people within the school are more aware of their responsibilities. Organising plays a crucial role in education. This enhances the benefit of specialisation. Educators get more specialised in their work and the workflow enriches that can only be achieved by proper organising.

Efficient administration

It is the process by which similar jobs are brought under one specialisation. This enhances the whole administrative process and makes it easier. With proper organising in the business, management administration gets more efficient, and organisational goals are achieved within the given time. People who work together create a bond with each other. Defined work and the organisational structure make the workforce more efficient, and coordination among departments makes it more convenient for them to achieve organisational goals and turn the organisation into a work-friendly environment.

Optimisation of resources

A comprehensive approach of organising in school management maximises resources in a good manner. Having a defined responsibility creates a scope for the workforce to get experts in their part of the job. It increases the capabilities as a whole, and workflow gets more fluent. Not having a defined responsibility leads to confusion in the workplace, which can hinder the process. With implementing the organisation in school management properly, schools can achieve goals that have a vision with little to no complication.

Transparency

A written document called *job description* clearly defines the responsibilities of all educators and, with its help, every detail of the workforce can be tracked. This brings clarity within the business organisation. The administrative relationship is clear and the authority is clear. Organising helps build this document with every responsibility defined. Organising fixes, the command hierarchy, and the whole connection gets vividly clear to the entire organisation. Managers have a much clearer view of their subordinates and head, and they know whom to ask when they need something to get done.

Expansion and growth

Since all the resources are appropriately utilised with the help of organising, the constant development and the growth of the school is bound to happen. Defining all the responsibilities and having a clear vision of what needs to be done, educators know precisely what to do and when to do it. Reporting to the head is more comfortable and efficiency within the organisation grows. Educators stay motivated, and organisations' growth happens rapidly. Organising is essential to the development and growth of the school organisation.

2.11.4.2. Other benefits of organising in school management

Defined duties

Duties are defined everybody knows what duties and responsibilities they have. There is no confusion regarding job definitions in the organisation.

Authority recognition

Everyone knows who they should report to who. A well-designed hierarchy will be there on who should report to whom.

Strong employee relation

When employees work in an organised structure, they develop a strong relationship.

Specialisation

An organisation is divided into different departments. Educators do their work with responsibility and competitiveness. They become specialised day by day.

Highest utilisation of resources

When everything is organised properly, every resource is utilised most efficiently.

The scope of innovation

There can be room for innovation, if the school is flexible in such a way that individual decision-making freedom is there.

2.11.5. Resources

National education for Christians during the apartheid era was based on the rise of African nationalism and isolated and limited education to limit the

movement of blacks in the labour market. This was characterised by large inequalities in education funding, with Africans receiving the least money. Here is the capital government spending in 1994 R4687 for an Indian child. For children it is R3691. The average for African children is R1715. Policymakers and the public at large are increasingly asking teachers to ensure that educational resources are used appropriately. This demand, combined with higher standards and a shrinking budget environment, poses significant challenges for small, low-income schools in rural areas Roelike (2003), provided an overview of recent research on resource-allocation issues in rural areas and small schools. Structural limitations that can obscure the resource-allocation process of rural and small schools include disjointed school schedules.

Central and state strategies for curriculum delivery, teacher certification, and special services. The definition of a teacher's job is not flexible. Professional programmes that may be on the fringes of an academic mission. A meta-analysis and literature review revealed a high level of discrepancy between studies on the cost-effectiveness of different investments in education, such as reducing class sizes and reducing teacher salaries. Policy makers and school leaders should creatively reallocate existing resources, consider successful school-wide improvement models, and develop non-traditional sources of income and new sources of local, small-scale funding. By pursuing, you can find guidance and support for addressing resource-allocation challenges and low-income schools.

2.11.6 Characteristics of schools in informal settlements

Intentional discrimination in access to essential utilities, including water, power, and sanitation, and poverty, instability, inadequate infrastructure, and improper environmental conditions are characteristics of informal-settlementschools. A lack of aneffective government which will supply all necessary basic needs, such as water, electricity and sanitation (Maarman, 2009). Schools in informal settlements are categorised as Quintile 1 'no fee school schools'. According to research surveys, approximately 4.4, million

people in South Africa—or at least 10% of the country's 4.4, million residents—live in urban informal settlements (Misselhorn, 2010). The occupants of these areas often have subpar living circumstances, due to issues like the build-up of solid waste, inadequate access to basic water and sanitation services, frequent shack fires, different health problems, and dangers to their safety and security. Most highly populated informal settlements are located in ecologically sensitive areas. Due to the poor design of building structures and the inappropriate use of land, which results in degraded habitats, this creates a concern (Na, 2006). Numerous flaws in policies have been highlighted by research, which show a failure to adequately address the socioeconomic and spatial issues that are fostering the expansion of these informal settlements (Charlton, 2001). If you enter a school in an informal settlement, you will not find a soccer or rugby field there; instead, you will see schoolchildren of all different colours sprawled on the floor, writing on their laps. A few fortunate people share a textbook, while sitting on wooden stools. One teacher in the same classroom is working hard to be heard by his children while not upsetting a colleague who is moving his students around the room. It might sound like a story from the time of the Carthaginians, but that is how things are at Danho Primary School. Danho is based in Dunstan, a squatter community in Harare next to Hatfield. Because of the extremely high population concentrations in informal-settlements around the world, most schools frequently confront environmental hazards. Environmental risks in informal settlements include pollution, fire, demolitions, sanitation challenges, and electrical faults, among others. The budgets of many metropolitan bodies' formal needs often do not include informal settlements. A lack of critical services leaves students in schools in informal settlements more vulnerable to many dangers. In terms of risk kinds, variables affecting vulnerability to risks and mitigation strategies, this study will address the issue of education institutions' and students' vulnerability to environmental disasters.

2.11.6. Vision (Dynamic Woman for Children future projects)

Provide the impoverished children of informal settlements with necessary professional counselling to deal with the hurts of the past. Break the chain of poverty among the children and families and give them a chance of a better future. Invest in the development of a child who will lead a purpose-driven life in future. A vision statement is used as a framework to guide management. It identifies our common priorities and serves as a reminder of our goals.

2.11.6.1 Great vision for public schools

Every youngster is entitled to a top-notch public education. We are committed to ensuring that all children have access to excellent schools, as parents, students, teachers, and community members. This implies that there are significant social-justice and equity issues in education, on the whole experience of children, and on the greater purpose that schools serve in our community (Sayed, 2020). Parents want public policies that support our public schools: adequate, equitable, and sustainable public funding (Fredual-Kwarteng, 2022).

2.12 Summary

An outstanding school is a cornerstone of the neighbourhood, a place where students feel safe and supported and where parents are proud to send their children. This literature review focuses on the issues of managing school infrastructure, the influence of infrastructure on learning, the value of managing school infrastructure, the lack of resources in informal settlements, and how to manage school infrastructure in informal settlements around Soweto. According to researchers Louton, Still, Pearson, Sitholimela, Mphahlele, and Shaylor (2015), management's needs, available resources, attitudes towards users of school sanitation, and their views are the factors on which infrastructure success or failure is largely dependent on these factors.

According to Parnwell (2015), the state of school facilities plays a significant role in the educational process. According to Mokaya (2013), inadequate school resources and facilities directly contribute to student academic failure. Establishing high standards for school workers and giving them the tools they need to thrive can help foster an environment of success. The major goals of infrastructure improvement in elementary schools are to boost student academic achievement and attendance motivation. Infrastructure management strategies are lacking in many schools. Some schools still have buildings from the apartheid era, when local communities were required to build their own schools out of mud. These mud schools still exist today.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The literature on managing infrastructure in informal settlements was evaluated in the previous chapter. The following issues were discussed: the influence of school infrastructure on learning, shortages of resources in informal settlements, challenges of managing school infrastructure, and the importance of managing school infrastructure in informal settlements. This chapter also gives an indication of the research design and methodology active and how they are used. It focuses on the processes and steps followed to gather and analyse data to increase the understanding of the focus of this research. Included in the topics presented are the research paradigm, approach, strategy for conducting enquiries, data analysis, and special information on reliability and ethical concerns. In the informal settlements surrounding Soweto, this study aimed to examine how school management teams and school governing bodies oversee school infrastructure. The methods I employed to address the following study topics are highlighted in this chapter:

Primary research question

How do schools in informal settlements around Soweto manage their infrastructure?

Secondary research questions

a.   What infrastructure-related challenges do schools in informal settlements experience?

b.   How do schools in informal settlements manage these challenges?

c.   What strategies can schools in informal settlements apply to improve the management?

3.2 Research Design

The formalised method by which researchers intend to perform their research is known as study design (Walter, 2013). A research design is a statement of the parameters that govern an investigation (McMillan & Schumacher, 2014). In the end, the study's entire approach was defined by the research design. The study's design integrates several research methodologies in a logical and cogent manner, outlining the overall approach selected to guarantee that the research question is successfully answered. An intricate tool developed during the research process, data gathering procedures, data examination, and report writing is known as a study design. A research design is a strategy the researcher creates to control how she will conduct the study, with the aim of generalising the results and inferring the implications of the participant experiences. According to Walter (2013), research plans should also outline any constraints or challenges that might arise when carrying out the suggested research. This floor plan should be straightforward and simple to implement. Although the distinctions between the occurrence and the framework are not immediately apparent, different sources of advice are taken into consideration.

The most important aspect of conducting research is interpreting the participants' experiences. The term study design suggests all the problems involved in preparing and conducting a research question and points to the difficulty of reporting and publishing results (Punch, 2009). Denzin and Lincoln (2011) state that a research design defines the approach to information gathering, the information to decipher the research question, and the rationale for the research. This study employed a case study methodology. An experimental survey that investigates a contemporary occurrence within the confines of its actual existence framework is what is known as a case study (Maree, 2007). This design was chosen because multiple sources of evidence were accessed to gather data from the participants' natural environment and their experience managing infrastructure in informal residential schools. Case studies are intended to shed light on human actions that take place in the real world, while taking the surrounding circumstances into account (O'Hara, Carter, Dewis, Kay, & Wainwright, 2011). This suggests that a case study is a

methodical examination of an incident with the aim of offering an explanation of the phenomenon of interest.

3.2.1 Benefits of a case study design

The case study approach has advantages, since it is a versatile form of analysis and is ideal for looking into specific events in the natural world (Maree, 2016). We were able to learn what the participants knew about managing the infrastructure of informal settlements, thanks to the case study design. Case studies offer a comprehensive and in-depth description of the current situation in addition to generic findings. Anderson (2010) aided in the clarification of social phenomena and the understanding of behavioural conditions from the perspective of study participants. McMillan and Schumacher (2014) explain the course of this study from beginning to end.

We were able to gather data using different methods, including observations, audio recordings, and video recordings, thanks to the case study design. The ability to generate case theories is improved and research validity is supported by the information gathered utilising these techniques (Maree, 2016). The interview schedule for this study was created to encourage study participants to discuss their perspectives on parental participation in education. Their enthusiastic comments gave us the opportunity to offer further details that improved our comprehension of their viewpoint.

3.2.2 Shortcomings of a case study design

Utilising tiny sample sizes that are not representative of the entire community is a significant flaw in the case study design (Suri, 2011). Small sample sizes make it impossible to generalise incidence or behaviour from the results (Maree, 2016). Additionally, it may result in researcher biases that influence how results are reported (McMillan & Schumacher, 2010). However, in this study, I listened carefully to their comments without interjecting, which allowed me to maintain my objectivity and knowledge throughout the research process. The case study is time-consuming and difficult, due to the

considerable documentation and reporting (Crowe et al., 2011). In addition, reports may be lengthy as research participants recount their experiences, and time constraints may mean that some material is lost or not recorded (Crowe et al., 2011). But in this case, the digital tape recording allowed us to keep the entire interview and repeat it if necessary without losing any data.

3.3 Research methodology

The use of methodology explains how a researcher carries out research (McMillan & Schumacher, 2014). The exact processes or methods used to categorise, pick, process, and analyse data regarding a subject are known as research methodology. The methodology section of a research paper enables the reader to evaluate a study's overall validity and dependability (Wilkinson, 2000). Research methodology is simply the "how" a certain piece of research is conducted in practice.

More clearly, it is about how a researcher, methodically designs a study, to guarantee that the results address the research aim and objectives (Jansen & Warren, 2020). More precisely, the methodology chapter should validate the design choices, by showing that the selected methods and techniques are the best fit for the research aim and objective and will deliver valid and reliable results. A good research methodology offers scientifically sound findings, whereas a poor methodology does not.

3.3.1 Qualitative research

We used a qualitative research methodology in this study. In order to assess social life through surveys of target populations or locations, qualitative research collects and analyses non-numerical data before attempting to understand its significance (Crossman, 2020). According to Newby (2010), the focus of qualitative research is to study an individual's personal engagement and recognise the importance of an individual's response to precise events, symptoms, and behaviours.

In this study, we employed a qualitative research methodology. Before attempting to grasp its importance, qualitative research gathers and analyses

non-numerical data in order to evaluate social life through surveys of target populations or regions (Crossman, 2020). There are many methods of qualitative research, but they tend to be flexible and focused on maintaining rich meaning when interpreting data. Common methods include grounded theory, ethnography, action research, phenomenological research, and narrative research. These approaches have common connections but emphasise different goals and perspectives (Bhandari, 2020). The utilisation of exploratory qualitative research methods allowed for a deeper understanding of the participants.

The purpose of qualitative research is to reveal the meaning that guides the action or results that are commonly measured by qualitative research. When conducting a study using the qualitative research approach, the researcher actively participates in the process by immersing themselves in the context, the topic of interest, and the participants' environs (Campbell, 2014). A qualitative research methodology investigates real issues. It is a natural-setting methodology in which human behaviour and actions are scrutinised (Creswell, 2014).

As much as a qualitative research methodology has its advantages, it also has disadvantages. The major disadvantage of this methodology is that it tends to focus on the meanings and experiences of the participants and leaves out contextual variables (Rahman, 2017). As the focus was on listening to people's views and experiences, the environment under which such experiences occurred was often ignored. The qualitative approach empowers investigators to gain a deeper understanding of this occurrence, through collaboration with participants in a specific location. This research method is seen as the right one to study this phenomenon. This approach also permits the researcher to clarify behaviours not measure by using a survey (Creswell, 2012). Additionally, this method enables the researcher to use small, open-ended samples for analysis. In this instance, the researcher only examined a limited sample of the phenomenon under investigation. To relate to the participants in this study, the qualitative approach was employed

to sample two high schools and one primary school and listen to their opinions through one-on-one semi-structured interviews.

3.4 Research paradigm

A research paradigm is a method or model for conducting research that has long been accepted by the scientific community and has been used for hundreds of years (Dash, 2005). A research paradigm, according to Myers (2009), is a group of philosophical assumptions that researchers hold when conducting research. A research paradigm is a technique for carrying out research, according to Stephen, Antwi, and Kasim (2015). Every researcher uses a paradigm to direct them, describing a crude and broad grouping of approaches to studying a specific topic. The paradigm used in this work is interpretivism. An interpretivist paradigm is one that allows individuals to communicate their beliefs regarding current events. Interpretivists emphasise the viewpoints of individuals and groups of persons since people are various people and have varied perspectives on the world. According to Creswell (2007:20), the researcher aims to comprehend the world through the participants' perspectives and experiences.

The interpretivist paradigm enables academics to derive deeper meaning from many angles presented by school administrators and leaders. In interpretive societies, the social reality is moulded through individual interactions rather than by the presence of stable structures (Bartlett & Burton, 2012). According to O'Hara et al. (2011), interpretivism tries to show how study participants make judgements in social contexts. The interpretivist paradigm provides a qualitative research methodology for gathering rich participant data (McMillan & Schumacher, 2010). I choose the interpretivist paradigm because it allowed me to consider how the participants in my research interpreted their surroundings. According to interpretationists, all human behaviour has a purpose and must be understood in the context of social practice. I had to interpret what research subjects were trying to say about the subject at hand. As a result, I engaged in participant interaction and generated knowledge that was both transactional and personal. To put it another way, I required a

common understanding about the administration of school infrastructure with my research subjects in order to be an interpretivist researcher.

3.5 Ontological and epistemological assumptions

Well-considered ontological and epistemological assumptions served as the foundation for this investigation. The viewpoint from which the investigation developed was provided by these expectations.

3.5.1   Ontological assumptions

Ontological presumptions concerning a certain occurrence and what constitutes reality are taken for granted (Grix, 2001). This study was founded on the idea that, by working together, the researcher and the participants can uncover multiple realities. Wahyuni (2012), contends that a phenomenon's veracity is decided by the participants' erceptions and experiences, whereas the social phenomenon's subjective meaning underpins accurate knowledge. According to Guarino (2009), different groups employ ontology in different ways. It is related to this research because it examines the infrastructure's existence and management. I conducted the research and, based on what the research participants told me, I came to understand their reality. The descriptions of all study participants' personal experiences on the subject were in line with their beliefs about what was accurate. I paid close attention to what they had to say and joined in on the experience as they shared their insights.

3.5.2   Epistemological assumptions

Epistemology is the study and discipline of knowledge (Scotland, 2012). According to Crotty (2003), epistemology is a system of inferring and articulating how we know what we know. Epistemology also seeks to provide a philosophical basis for determining what kind of knowledge is possible and how it can be ensured that it is accepted and authentic. Although Minister for Basic Instruction Angie Moshekga (2013) published legally mandated

regulations and standards for school infrastructure, infrastructure management in informal settlements is still a challenge. Gowen ((2007) found that infrastructure can affect learner behaviour. Learners do well in schools with better facilities and decent infrastructure. Learners in schools with poor infrastructure are being cheated of best quality education. Poor conditions of school facilities can lead to poor student behaviour and classroom behaviour (Zippin, 2014). The study's epistemological presumptions became clear when participants were asked to provide their opinions on infrastructure management in response to questions. Numerous study participants regarded their beliefs as being true. Therefore, how individuals saw infrastructure management in their area was influenced by their emotional state and guiding beliefs.

3.6 Population and Sampling

According to McCombes (2019), sample refer to a group of separate samples that you will collect data from. There are sampling techniques that use probability and those that do not. Systematic, cluster, simple random, and stratified sampling are all examples of probability sampling. Purposive, quota, snowball, and convenience sampling are examples of non-probability sampling techniques (Maree, 2011). For this study, the relevant population was recognised using one primary school and two high schools in Circuit 6 of Johannesburg Central District. The sample consists of school management teams and school governing bodies from all the schools. Participants were selected based on specific qualities they may possess.

A purposive sampling method was selected. Crossman (2018) describes purposive sampling as a non-probability sample based on population characteristics and the study's objective. According to Flick (2011), purposive sampling is better suited for qualitative research. Purposive sampling permits small groups of a population likely to possess the knowledge and experience of the phenomenon being studied (Babbie, 2007). There are sampling techniques that use probability and those that do not Systematic, cluster, simple random, and stratified sampling are all examples of probability

sampling. Purposive, quota, snowball, and convenience sampling are examples of non-probability sampling techniques. There were network connectivity issues due to load shedding, and study participants had to be called back when reception improved. Telephone interviews are one-dimensional. Only verbal communication will be evaluated. Telephone interviews are generally not recorded and cannot be revisited. In other words, the evaluation must be immediate. Currently, the assessment is a fairly short providing insufficient information to other stakeholders.

Finally, telephone interviews have zero economies of scale for interviewing 100 candidates and have to repeat the same process 100 times. Telephone interviews are one-on-one.

This means that candidates can only be rated during the call. Due to other duties that research participants had to do, interviews had to be rescheduled or postponed. Due to Covid-19, some participants did not perform well and had to reschedule. There were network connectivity issues due to load shedding, and study participants had to be called back when reception improved. Telephone interviews are one-dimensional. Only verbal communication will be evaluated. Telephone interviews are generally not recorded and cannot be revisited. In different words, evaluation must occur immediately. Currently, the assessment is a fairly short note, providing insufficient information to other stakeholders. Finally, the phone interview shows that there is zero economy of scale with interviewing 100 candidates and that he has to repeat the same process 100 times.

3.6.1 Advantages of purposive sampling

Researchers can choose different study participants who, in my opinion, are the primary custodians of the data required to address the research topic by employing targeted sampling techniques (McMillian & Schumacher, 2014). In order to gather data on school infrastructure management, we were also able to choose a diverse group of study participants, not all of whom were managers. Samples from test sites close to where I live were taken. Targeted sampling was acceptable and economical. Additionally, this method took less

time because only eligible research participants and the study location were sampled (Sharma, 2017).

3.6.2 Disadvantages of purposive sampling

Researcher bias can result from targeted sampling (Sharma, 2017). It is not a good justification if the researcher's judgement informs the target sample's selection; doing so raises the risk of researcher bias. Additionally, it is challenging to guarantee that the sample represents the population when using focused sampling (Gerrish & Lacey, 2010). Researcher bias can result from targeted sampling (Sharma, 2017). It is not a good justification if the researcher's judgement informs the target sample's selection; doing so raises the risk of researcher bias. Additionally, it is challenging to guarantee that the sample represents the population when using focused sampling (Gerrish & Lacey, 2010).

3.7 Data collection methods

Data collection includes specifying procedures to be followed to find information applicable to research. Data collection is the process that allows researchers to identify and select study participants and interview them to obtain data from them (Creswell, 2008). Participants were interviewed to identify the information that best understood how schools in informal settlements manage their infrastructure. In this study, telephone interviews were conducted with selected study participants. We conducted flexible, easily adaptable semi-structured telephone interviews (Maree, 2016). It additionally enabled me to ask specific queries when I required clarification. The interview is a two-way exchange of information and ideas between the interviewee and the subject (Creswell, 2013). This entails interviewing individuals and gathering information to discover more about their beliefs and sentiments.

Semi-structured interviews with one principal, two department heads, and one principal were done for each school. This led to three telephone interviews with him, one for each school. There were three participating schools so there

were 12 participants. Study participants were from different cultural backgrounds and of both genders. Additionally, interviews enable researchers to perceive the world from the perspective of research subjects (Maree, 2016). The opinions and comments of research participants on the research topics are welcome and may be responsible for additional data to answer research questions. Predetermined questions were used to obtain data that answered the research questions. In addition, we considered other questions arising from the research process and related to the data needed to answer the research questions. Interviews are a potent tool for understanding phenomena, but they must be used in connection with other methods of data collection. Respondents in interviews only share information about their observations of events that they want to share (Alshengeeti, 2014). Interviews are highly susceptible to unintentional bias and possible discrepancies. As individuals, we are vulnerable to unconscious biases, which are mental heuristics that cause us to form snap judgments and conclusions, claims Caccavale (2020). While quick-fire thinking often helps us get through the day, this type of decision-making method can stop us from making objective and accurate judgments. In interviews, candidates are often unnoticed or unfairly favoured based on factors that have nothing to do with their genuine ability.

The researcher, however, made sure of the following in order to make the interview meaningful: creating a suitable environment through which interviewees felt at ease and thus talked freely; making sure that there was a mutual relationship between participants and myself; and clearly outlining the purpose of the interview (Montoya, 2016). In order to allow participants to express their opinions, the researcher also created open-ended questions (Torkar et al., 2011). The following factors were taken into consideration when gathering data and were disturbed as little as possible keeping participants honest and respecting any power imbalances (Kvale, 2007), are lastly avoid collecting harmful information (Patton, 2002).

3.7.1 Semi-structured interviews

Semi-structured individual interviews were conducted using individual experiences from school management teams and school governing bodies One method for gathering qualitative information is the semi-structured interview, in which the researcher asks informants a sequence of planned but open-ended questions. Wherever was most convenient for them was chosen for these interviews. SMTs were the key informants, regarded as having expert knowledge in the subject under investigation. Interviews took an hour and a half for both SMTs and SGBs. An interview protocol guided all the participants. The interviews were intended to cover the management of school infrastructure. Interviews with the school management team (SMTs) facilitated the triangulation of responses regarding leading, managing and teaching.

3.9 Data collection strategy

Data collection involves the precise processes the researcher has chosen to finding relevant reviews. The investigator usually uses several techniques for gathering data. All techniques have strengths and weaknesses. The investigator was careful in picking out the applicable techniques of gathering data in investigating the management of infrastructure in informal settlements. Specific procedures and techniques were considered to investigate managing infrastructure in informal-settlement schools. The following approaches were engaged in for collecting data: single-mindedness group, document analysis interviews and semi-structured interviews.

A research interview is an interactive discussion between two persons that produces information about a research subject (Merriam, 2009). At the same time he may be interviewed by more than one participant. This type of interview is called a focus group interview. Similarly Maree,(2007) states that interviews include discussions aimed at obtaining information from participants through evaluators, in order to examine their behaviours, beliefs, opinions, views, and ideas. Newby (2010) adds that interviews can be conducted collectively with either individuals or groups. According to Cohen et al., qualitative interviews are a versatile technique for data collection, with the

goal of observing the world through the participant's eyes. Interviews allowed researchers to show their comprehension while individuals discussed their experiences. The participants' mutual trust was cultivated and established as a result.

3.8 Data collection techniques

The research system selected is just as crucial as the study methodology (Yin, 2011). The precise methods the researcher has selected to locate pertinent reviews are part of the data-collection procedure. The investigator usually uses several techniques for gathering data. All techniques have strengths and weaknesses. The investigator was careful in picking out the applicable techniques of gathering data in investigating the management of infrastructure in informal settlements. Specific procedures and techniques were considered to investigate managing infrastructure in informal-settlement schools. The following approaches were engaged in for collecting data: single-mindedness group, document analysis interviews and semi-structured interviews.

A participant triangulation study provided cross-validation among the data sources as an exercise of validation and a way of ensuring data collection through interviews. The interviews were documented after receiving consent from participants. The voice footage ensured that data was collected and kept in the same manner it had been given (Blaxter et al., 2001). In order to collect data for persons who are immersed in the location of normal existence from which the study is drawn, the investigator compiles words and descriptions about the actual occurrence (Maree, 2010). The process of data collection from participants in this study was through interviews.

A research interview is an interactive discussion between two persons that produces information about research (Merriam, 2009). At the same time he may be interviewed by more than one participant. This type of interview is called a focus group interview. Similarly Maree (2007) states that interviews include dialogues that sought to learn more about participants' behaviours, beliefs, opinions, viewpoints, and ideas from them through evaluators.

Interviews with both individuals and organisations can be performed collectively, according to Newby (2010). The goal of qualitative interviews, according to Niewenhuis (2006), is to observe the world through the participant's eyes, while Cohen et al. note that it is a versatile technique for data collecting. Through interviews, researchers demonstrated understanding and participants shared their experiences. This built and established trust and among the participants.

3.8.1 Interview schedules

For various study participants, we created varied interview schedules. Every study participant had a 20-minute interview slot reserved for them. Questions used in interview preparation are intended to elicit pertinent data about a phenomenon (Adams, 2015).) Flexible interview questions make up the plan (Weller et al., 2018). Additionally, a "what" question and closed-ended questions were included in the interview plan to encourage study participants to express themselves (Weller et al., 2018).

3.8.2 Preparing for the interview process

The preparation stage of the interview process was very important. For maximum success, researchers should plan their interviews (Napara, 2020). To make the interview successful, I took the following steps:

• I thoroughly read the interview questions and comprehended their objectives.

• I requested that each research subject telephone and schedule a time for an interview. It was done in order to prevent breaks.

• I pledge to always conduct myself in a casual, cosy, impartial, and professional manner.

• The reason for the interview and the goal of the study were conveyed to the study participants.

• I explained the entire interview procedure to all research participants. I was also told that I would be taking notes during the interview and that the entire interview would be recorded on a digital tape recorder. Permission was obtained from the study participants to turn on the speakerphone at high volume and use a digital tape recorder before conducting the interview.

• However, the duration of the interview was indicated on the informed consent form and the subject recalled that the interview would last approximately 20-40 minutes. After briefly describing her interview process, the survey participant was asked if she had any questions and if any part of her interview processes needed clarification.

3.8.3. Semi-structured telephonic interviews

We had originally intended to do semi-structured face-to-face interviews, but the Covid-19 outbreak forced us to alter our research strategy. According to Suppawittaya, Yiemphat and Yasri (2020), medical practitioners thought social exclusion was the most effective strategy to stop the spread. Semi-structured interviews were used as the main technique for gathering data. In order to share fresh perspectives on the procedure and its administration, the practicalities of conducting semi-structured interviews are taken into consideration (Dearnley, 2005).

3.8.3.1 Advantages of semi-structured telephonic interviews

Face-to-face semi-structured interviews were what we had initially planned to conduct, but the Covid-19 epidemic compelled us to change our plan. Suppawittaya, Yiemphat, and Yasri (2020) report that medical professionals believed social exclusion to be the most effective method for halting the spread. The primary method for acquiring data was semi-structured interviews. The practicalities of conducting semi-structured interviews are taken into consideration in order to share new viewpoints on the technique and its administration (Dearnley, 2005). In order to collect information for survey questions, pre-set questions were employed. All additional enquiries resulting from the survey process were also taken into account in regard to

the information needed to provide responses to the survey questions. Semi-structured telephone interviews provide the advantage of pre-prepared questions. You must be able to appear knowledgeable and capable during the interview process because of this (Maree, 2016).

3.8.3.2 Disadvantages of semi-structured telephonic interviews

If the questions are not prescriptive, semi-structured telephone interviews require careful planning. The participant's natural environment cannot be accessed during semi-structured telephone interviews. Naicker (2013) also makes a note of the possibility that some research participants may not wish to divulge certain details. Sitting down with respondents to conduct open interviews is inefficient and needs huge resources. Finding an interviewer with the proper training to properly conduct an interview can be thought-provoking. You need to interview the right people to draw conclusions and make decisions.

3.8.3.3 Limitations of semi-structured interviews

Although interviews yield a plethora of information, there is a possibility of data discrepancies and inaccuracies brought on by memory loss, mood swings, the incapacity to express thoughts, or a lack of time (Tansey 2007, 767). I have. One-on-one phone interviews are conducted. This implies that ratings of candidates are only possible during the call. Due to other duties that research participants had to do, interviews had to be rescheduled or postponed. Covid-19 caused some participants to perform poorly and require rescheduling. Due to load shedding, there were network connectivity issues, so study participants had to be contacted again when reception got better.

Telephone interviews have only one perspective. Only spoken exchanges will be assessed. Typically, telephone interviews are not recorded and cannot be reviewed afterwards. In different words, evaluation must occur immediately. Currently, the assessment is a fairly short note, providing insufficient information to other stakeholders. Finally, the telephone interview shows that

there is zero economy of scale with interviewing 100 candidates and that he has to repeat the same process 100 times.

3.9 Data analysis

Unprocessed data must be made meaningful through data analysis. Data that has not been processed needs to be further processed in order to make sense to the reader and be useful in practical applications. Data were analysed so that they could be saved as a finished good that was ready for use in the future. Data analysis, according to Mouton (2011:108), entails "breaking down" the data to determine its significance and applicability to a phenomenon. This implies that I unpack data to make it more accurate and useful. In this study, thematic analysis was applied to the research questions that may be found.

Data analysis entails structuring and organising information such that it makes sense. Analysing qualitative information is a procedure that is actively used. Thematic analysis is a technique that uses themes from the data to identify, examine, and present trends (Clarke & Braun, 2006:6). It is a technique that sorts and categorises the data so that data analysis can start once the first interview has been conducted (Beck, Polit, &Hungler, 2001).

Data analysis, according to Creswell (2009), is the act of comprehending the data used to obtain a study's data and incorporating the data's analysis, reduction, and interpretation into the study. New hypotheses regarding the phenomena being studied, such as the administration of infrastructure in informal settlements, are made possible through data analysis in qualitative research. Thematic analysis is the foundation of data analysis. Themes in data can be analysed, found, and improved using this technique (Maree, 2016). Data analysis creates confidence and a wealth of insights that enable research participants to be investigated.

Data analysis starts shortly after the first set of data is gathered and will run concurrently with data collection because each action informs the other activity (Millian & Schumacher, 2001). I used inductive data analysis, which aligns with an interpretative research approach. Inductive data analysis helps

me classify the representativeness that theoretically exists in the data. The inductive method examined all the transcribed interviews, which reproduced commonly stated designs (Thomas, 2003). Inductive data analysis allows study results to occur from recurrent, key or single themes in raw data without restrictions forced by structure procedures.

Open coding was used to look for themes. Coding is a procedure whereby new data is converted into a homogenous method (Babbie, 2007). The coding of documents and gathering of code relations for improved subjects that would flow into research was physically approved. Coding of data is the "process of segmenting and labelling text to form descriptions and broad themes in the data, which would be further interpreted into fewer theories" (Creswell, 2009). Therefore, essential themes were identified to establish the issues that are more relevant than others.

The table below reflects the codes used to identify the participants in this study.

Table 1: Participant codes

Public School A	Public School B	Public School C			
Principal A	Principal B	Principal C			
HOD A	HOD B	HOD C			
SGB 1	SGB 2	SGB 3	SGB4	SGB5	SGB6

3.10 Trustworthiness and credibility

A researcher must assess and check the research technique and the data analysis to ensure that the findings are consistent and repeatable, which is necessary for a qualitative researcher to establish dependability. The ability to be trusted enables researchers to produce research study results that are credible, practical, verifiable, and reliable. Shenton (2004) asserts that, in order to assure the validity of a study, researchers must meet four criteria:

dependability, credibility, transferability, and confirmability. In order to show that the phenomenon under investigation is accurately depicted, researchers engage in extensive engagement and observation (Korstjens, 2018). The following methods were employed to assess the study's reliability and credibility:

3.10.1 Member checking

In my research, I used membership audits to increase credibility (Gunawan, 2015). By employing member checks to confirm the accuracy of the data collected from the study participants, the study's dependability was made certain. Using this technique, researchers were able to check that study participants' interpretations of the data were accurate by interviewing them again (McMillan & Schumacher, 2014). It was possible for SMTs and SGBs to read the transcripts of the interviews in which they took part. You can then decide if the transcript accurately represents your opinions, sentiments, and experiences. Therefore, study results were open to participants for data validation. Researchers have worked hard to ensure credibility by ensuring there is consistency between research content and participants'perspectives.

3.10.2 Peer debriefing and triangulation

By sharing the research findings, conclusions, and analyses with my peers who assessed the study objectively, this study's reliability and dependability are guaranteed. Following peer debriefing, input was given that increased the value of the research findings. This work was exposed to peer reviews and critiques in order to be improved and established as trustworthy and reputable. Triangulation is the process of gathering information from several sources in order to get different perspectives (Anney, 2014:276). The goal is to increase the study's reliability and credibility. When used in the study, it reduced unfairness and double-checked the veracity of participants' responses.

3.10.3 Transferability

The extent to which other researchers can use research findings in similar contexts and produce comparable results is referred to as *transferability* (Mqulwana, 2010). By outlining the study's underlying assumptions, describing the study's context, and thoroughly describing its participants, transferability was made sure of. Applying comparable standards to evaluate the validity, reliability, and generalisability of quantitative research is one way to address the veracity, consistency, and transferability of qualitative research (Slevin, Eamonn & Siness, 2000)*.*

3.10.4 Dependability

Reliability describes the effectiveness of the systems for collecting data and analysing it and eventually, the ideas that result from those methods (McMillan & Schumacher, 2014). The emphasis on reliability highlights the researcher's aim to defend the dynamic environment in which research is carried out. We made sure that this study was reliable by keeping track of all findings and modifications.

3.10.5 Confirmability

Confirmability is the degree to which results can be independently checked in order to validate the researcher's conclusions and comprehension (Anney, 2014). Documenting the procedures taken allowed the data to be checked and verified repeatedly throughout the course of the study, which increased confirmability. Following the investigation, we carried out a data audit to review the information we gathered and the methodology of our research.

The final element of trustworthiness that a qualitative researcher must prove is confirmability. This criterion concerns the degree of assurance that the research study's conclusions are supported by the participants' accounts and words (Cutcliff, 2004).

3.10.6 Ethical consideration

The idea of ethics is defined as "doing right" and "doing any damage" The researcher is dedicated to upholding the code of ethics and respecting the participants. This made sure the researcher, participants, and participating institutions were all safeguarded. The University of Pretoria, the chosen institutions, and even the subjects themselves have a right to know the researcher's intentions, the circumstances, and possible outcomes (Densin & Lincoln, 2011). Principles and guidelines have been used to govern ethics in order to safeguard research participants, reduce potential harm, and uphold integrity (Samaranayake, 2012).

Ethics is concerned with certain rules based on what is morally good or bad inherently (McMillan & Schumacher, 2014). As a result, ethics are concerned with moral dilemmas on a personal level yet theireffects extend beyond the individual. As a result, I have complied with all ethical guidelines and professional standards thought to be essential for a sound study. I received approval from the University of Pretoria's Faculty of Education's Ethics Committee before beginning this study. In addition, it has received formal approval from the Gauteng Ministry of Education, the school management team (SMT) and school management board (SMB) of the sample school. Hammersley and Traianou (2012), highlight some ethical principles I would follow. One of the principles is minimising harmful meaning.

3.11 The following ethical principle were taken into consideration

3.11.1 Protecting anonymity and confidentiality

The defence of study participants' rights and privacy ranks among their most important considerations. Researchers must not disclose confidential information about research participants. There may be other people (patients, organisations, teachers, students) who are not respondents but who are directly or indirectly involved in and associated with the research. Sensitive information related to these individuals or groups should not be disclosed (Smith, 2003). Regarding confidentiality, I promised my study participants that they would follow the principles of anonymity and confidentiality. Anonymity

means protecting and maintaining the anonymity of participants. Although we protected study participants by not revealing their identities, each school involved had a School A, which was identified as School B and School C.

3.11.2 Obtaining conversant consent

An individual must give informed permission in order to actively, knowingly, and intelligently participate in research. An individual's independent right to take part in research is referred to as informed consent. Participants were informed of the study's objectives, role, potential advantages and disadvantages, by the researchers. I provided the study participants with an explanation of the study's purpose, methodology, and main points. A consent document was then provided to the participants for their voluntary signature. The consent form permitted them to take part in and record the interviews and declared that they understood the study's purpose. Participants in the study were made aware that they might revoke their consent at any time.

3.11.3 Freedom to withdraw from the study

At any point during the study, research subjects have the option to stop participating. Respondents should not be pressured into continuing if they wish to cease participating in the study, nor should they be forced to do so. They should be aware that they have the right to cancel at any moment (Wangle, 2020). I have assured the study subjects that their participation is voluntary and that they are free to stop at any time without injuring themselves.

3.11.4 Minimising the risk of harm

It is important to minimise any kind of harm to participants. There are many forms of harm that a participant may be exposed to without protection. They are physical harm to participants, emotional distress, embarrassment, social detriment, infringement of participant confidentiality and privacy. We have taken the following precautions to minimise the risk of injury.

Obtain the participant's informed consent. Protect participant privacy and confidentialityn. Avoid misleading conduct in research plans and granting participants the right to withdraw. The following strategies were used to control the study's credibility and trustworthiness: if the study was to get a perfect score on credibility and trustworthiness, it needed to be accessible to the participants.

This demonstrates how the respondents who gave the researcher the data read the study materials. Member checking was employed in this study to increase objectivity (Gunawan, 2015:10). The transcripts of the interviews in which the SMTs and SGBs took part will be made available to them. They could then assess how accurately the transcripts captured their thoughts, emotions, and experiences. The research data was exposed to the participants for data confirmation. Participants were made aware of the research in order to confirm the results. This open method suggests that the researcher's only goal was to improve infrastructure management in schools.

3.12 Political factors affecting data collection

I kept my political interests and affiliations a secret throughout the research procedure, as did the study participants. Political speculation was brought up by a few study participants, but I did not give it the slightest thought.

3.13. Significance of the research

I believe there are many challenges in managing school infrastructure in such places as informal settlements. These challenges include a lack of electricity, water and sanitation. This indicates that the government helps the school with funding there will still be challenges. This study will make a difference on how to manage infrastructure in underprivileged schools. In order to ensure that students learn in a secure and safe environment, the study was designed to look at how management manages infrastructure in informal-settlement schools. I selected the study because there is a gap in how informal settlements manage their school infrastructure. There are studies conducted

about managing infrastructure in urban and rural areas but not in informal settlements. This study will help principals to manage the school effectively and to minimise the incidents that take place at schools.

3.14 Summary

The qualitative research techniques used in this study were detailed in this chapter. This allowed us to collect data in natural settings and examine the role of school management teams and school management committees in managing school infrastructure in informal settlements. The study was conducted on a sample of Gauteng secondary and primary schools in Johannesburg Central District. Study participants and study sites were specifically tested. The data was gathered through semi-structured telephone interviews. As a technique for acquiring information, I also took notes. His challenges that occurred during data collection were highlighted. Reliability and reliability in data collection were assured and ethical considerations were defined.

CHAPTER 4: FINDINGS AND INTERPRETATION OF RESULTS

4.1 INTRODUCTION

In the previous chapter the study design and methodology were covered. That chapter provided an overview of the study procedures, paradigms, and design before discussing data collection techniques, sampling tactics, and participant selection. Analyses of the data, the validity and veracity of the study, and ethical issues were carried out. In this chapter, aim of this study is to look into how school management teams and governing bodies manage school infrastructure in informal settlements in Soweto. I offer and discuss the literature review. In order to develop the key ideas contained in the files, the first step in reviewing records is to carefully review and analyse the information gathered from interviews. The investigative instrument used to study files is the generic qualitative approach, which, according to Henning (2004), affords a set of inductive stages that would lead the investigator from reviewing tangible truths to interpreting abstract knowledge about them. The investigator started by first reading all the answers and remarks that addressed the study questions. All the developing themes were gathered and compacted, according to their relativity to each other, and coded. Furthermore, all the records that linked to each grouping were put together and an initial enquiry was achieved. From the data, the succeeding results, themes or classes appeared as illustrated in the table below. Participants in the research included all school principals, department heads, and school governing bodies from the schools that were purposefully sampled. The records were presented in a descriptive, expressive manner, which was then discussed in the section that followed.

4.3 Profile of principals, HoD and SGB

4.3.1 Profile of the principals

Characteristics	Principal A	Principal B	Principal C
Gender	Male	Male	Female
Age	57	33	47
Qualifications	STD BEd	BED (ECON & ACC)	Higher Diploma
Teaching experience	35	9	22
Years of experience as an HoD	10	2	2
Further study	Bed	HONS IN EDUCATION MANAGEMENT	0
Number of lessons taught per week	16	12	12
Subjects led	ENGLISH	ECONOMICS & ACCOUNTING	ENGLISH & AFRIKAANS

4.3.2 Profile of HOD

Characteristics of Hod	Hod A	Hod B	Hod C
Gender	Female	Male	Male
Age	60	54	48
Qualification	STD; ACE	BED	B. COMM
Years of experience	34	18	10
Further study	0	Clinical Psychology	Honours
Number of lessons per week	27	30	28
Subject taught	SESOTHO AND NS	GEOGRAPHY	ENGLISH AND HISTORY

4.3.3 Profile of the SGB

4.3.4 Information about the participating schools' demographics

Characteristics	SGB A	SGB B	SGB 3C	SGB D	SGBE	SGB F
Gender	Male	Male	Female	Female	Male	Male
Age	40	33	47	30	39	45
Qualifications	Matric certificate	Grade 10	Matric certificate	Diploma	Matric	Grade 11

Characteristics of schools	School A	School B	School C
Province	Gauteng	Gauteng	Gauteng
District	Johannesburg Central	Johannesburg Central	Johannesburg Central
Circuit			
Type of school	Special school	Ordinary Public School	Ordinary Public School
Grading	Post Level 4	Post Level 4	Post Level 2
Section	21	21	21
Quintile	1	1	4
Date of visit	22/11/2021	28/10/2021	20/01/2022
Staff Enrolment	42	45	43

The following are the themes that were developed in response to the research question:

I. How does it feel like working in the informal settlement? What stood out to you as the defining characteristics of the informal settlement?

II. What challenges do you have concerning the management of infrastructure? How do you deal with the challenges?

III. Do you get support from parents and the community?

IV. How do you feel about comparing schools in informal settlement to schools in the urban area?

Responses from principals

4.4 Theme 1: Defining characteristics of informal-settlement schools.

4.4.1 Data presentation

On the issue of how it feels like working in an informal settlement, the participants revealed that there will always be a feeling of insecurity and uncertainty in a school located in an informal settlement. This is caused by a lack of services. The community often blocks access to the school and, as result, the staff and children return home.

According to the information gathered during the interview, managing the school infrastructure in informal settlements presents different difficulties. The following were the issues that came up in the interviews: the following query led to discussions about furniture, water, electricity, and sanitation.

On the issue of how does it feel like working in an informal settlement; Principal A expressed: "ometimes it feels like going to war. One has to fight community for vandalising school infrastructure and drug dealers who are selling drugs during lunch".

One principal noted that working in informal settlements is very inspirational and a challenge at the same time and you experience new challenges every day.

Principal B indicated that the place is full of shacks and the streets are not clearly defined and stated that "…learners come late to school because they have to undergo certain processes before going to school …" Principal C remarked that,

> *Learners come to school hungry because they have nothing to eat. Most … learners have no school uniform. During rainy seasons they get wet and their books are drenched in water… There is a group of gangsterism in which many of the learners get involved. Teenage pregnancy is a common thing. Vandalism to the school takes place time and again. Theft is a problem in this area.*

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Principal A and Principal C had almost an identical response and stated the following characteristics of informal settlement: "…there is a problem of electricity" (Principal A); and "… most families have no … electricity at all" (Principal C). "Fires are common in the area some are even killed through fires. Streets are not properly measured or tarred. Poverty around the area is the order of the day".

The principal from School A mentioned that, "Despite the changes made to South African education since 1994, there are many challenges still being experienced within the educational system. These are the challenges experienced by learners whose backgrounds are that of poverty, particular those who dwell in informal settlements".

A participant principal from School B highlighted that working in and school is challenging both negatively and positively.

Negatively

> As a principal you must always borrow some resources from other schools and improvise to enhance teaching and learning. Most learners come to school hungry. Educators can play a significant role in informal settlements to improve the future of learners and people can live in harmony. Schools can be beneficial to the learners and the community by developing sound interventions strategies in the lives of these learners. A positive relation with the community can be of much importance for the future of the learners. In this regard real hope in informal areas can be achieve.

4.4.2 Support from literature

The availability of clean water is still a significant issue in low- and middle-income nations. Diarrhoea and time spent getting water can both have a negative impact on students' ability to attend school (Komarulzamane & Smith, 2019). Hygiene, sanitation and water are important aspects of any community, but informal settlements are not enough. General safety practices, the concept of well-being and general hygiene are common problems with simple solutions. Education and resources, these problems

remain unresolved, leading to illness and precarious living conditions. The non-sewage wastewater stream, the greywater sewer, flows through communities that breed bacteria and various diseases. Toilet facilities are poorly maintained and unsanitary, resulting in a safe and unsanitary living environment (Rodriquez, 2015).

Many issues affect educators, students, parents, and communities throughout Namibia in general, and in the city's Katima Mulilo informal area in particular. The wellbeing of students is frequently harmed by living in informal houses (Verster, 2018). There are three things to think about. The first is the environment, followed by the educational problem and the social problem. In Namibia today, many school-age children experience poverty and a lack of basic nourishment. They feel useless and uncared for under these circumstances, and this often forces them to use violence to regain a sense of power (Hartas, 2011). Residents of Cape Town's Dunoon Informal Settlement protested, prompting the closure of Maribonwe Boulevard, which straddles the N7 highway. SAPS (South African Police Service) law enforcement officers and Cape Town police officers were moved to tend to the crime scene. The chairman of the Nora Grove Regional Subcommittee of the Democratic League was on the scene and spoke to the protesters. Protesters agreed to stop to allow water trucks to enter the area. Residents demand electricity, good roads and sanitation.

Demonstrators said they would continue their protests and close roads if their demands were not met. Service delivery is a common problem in South Africa. From Durban's Harrismith, Free State's Hulong, Gauteng Deep,Thrut to Limpopo's Borobedu, Molaparala (Limpopo) and Vwani Ngwekru, communities have made countless protests against service delivery (Raophala, 2013). According to the former president of South Africa (Mbeki, 2000), the country has 4444 communities that still live in extreme poverty and inadequate infrastructure, despite efforts to address outstanding problems. Before the new political emancipation came into force in 1994, communities were completely deprived of basic services, creating tension and pressure on them.

4.4.3 Analysis and explication of the data

Principals admitted that a school located in an informal community will always have a sense of unease and unpredictability. The information gathered through the interviews showed that managing the school infrastructure in informal settlements presents a different set of difficulties. Challenges of electricity, water, sanitation and furniture and challenges of service delivery. When communities fight for service delivery, it affects schools in a negative way. It means on that day learners will not attend school because community members block streets with burning tyres and garbage. According to one of the principals, students arrive late to class because they must go through specific procedures before attending. Despite the modifications made to the South African educational system since 1994, according to School A's principal, the system still has many issues. Poverty is still a problem for students from underprivileged homes. Despite efforts to address unresolved issues, South Africa has communities that continue to live in extreme poverty and insufficient infrastructure.

4.5 Theme 2: Challenges concerning the management of infrastructure and how they are dealt with

4.5.1 Data presentation

Principal A indicated that, "We experience many challenges like breaking of doors, graffiti. Learners in this school behave in a bad manner and they do not take care and look after their school, they are the one who vandalise their school. Beautiful school buildings are usually vandalized. The is theft of important resources by the community". Principal B said, "It is very difficult to manage infrastructure because … of frequent burglaries". We have had solar panels supplying electricity stolen twice. Classes are broken into … and toilets vandalised. "Principal C mentioned that "mostly the infrastructure of the school is always vandalized by the community. However, some of it is preserved by the local people if allowed to use school facilities for church, weddings. Copper wires and pipes are always stolen".

4.5.2 Support from literature

The first step is to evaluate the circumstances under which children live in informal settlements, and their experiences and opinions of the situation. Children's educational needs and environments in informal settlements are also crucial. Children in informal settlements particularly struggle with daily life (Verster, 2016:235). Verster further mentions that the setting is unfriendly to learning and that students are frequently undernourished and the environment is not conducive to education. A situation with no help and interventions makes studying exceedingly challenging. In these locations, parenting can be challenging due to a number of social issues like drug addiction, poverty, and crime. A child's single parent is present in numerous situations. In fact, when the HIV/AIDS pandemic affects their parents, many households are made up of young children who must care for other children. Parents who are ill, many of whom have HIV/AIDS, frequently require care from children.

Education in these challenging areas is crucial because it gives the tools they need to better understand their surroundings, deal with illness and disease, and face and conquer problems. In order to better understand teachers' sensitivity to issues experienced by students and how they handle such challenges, a survey was carried out in a primary school in Mangaung. Between informal and formal settlements, inequality is made worse by a lack of infrastructure. The lack of infrastructure makes the disparity between informal and legal settlements more obvious. More importantly, the inequalities that exist in these urban environments lead to poverty and exclusion. As a result, informal settlements are often rife with crime and violence, adversely affecting human rights protection and the quality of life of residents. School safety is essential to improving children's learning.

Safety in schools is defined as actions by staff, parents, learners and other stakeholders. According to Boccanfuso & Kuhlefeld (2011), safe schools promote the protection of all learners and exposure to weapons and threats. Safety measures are designed to minimise risk conditions that can cause accidents, physical injury, and emotional and psychological distress. Accidents, if not prevented, can cause harm, including disability and death,

and emotional and psychological trauma can lead to low self-esteem and poor academic performance. Therefore, in a setting that is dangerous for both staff and students, meaningful teaching and learning cannot occur.

School safety is important in enhancing children's learning (Mwama, Nykwara, and Murungi, 2018). This article presents the results of a study focused on the safety and protection of pre-schoolers, conducted in a kindergarten in an informal settlement in Nairobi County, Kenya. The survey, conducted among 54 principalsmanagers 78 pre-school teachers and 4 education officers in 54 kindergartens in Nairobi City County, simultaneously conducted a qualitative and quantitative data-collection process. A mixed technique approach was used. The results show that the government is making efforts to develop procedures and minimum standards through various policies, but kindergartens in informal settlements face various challenges that negatively affect children's learning. These include poor infrastructure, with no playgrounds and equipment, overcrowded classrooms and unfenced schoolyards.

4.5.3 Interpreting and analysing the results

Participants' responses suggested that managing infrastructure in informal settlements presents certain difficulties. Principal A said he experiences many, challenges, such as door picking and graffiti. Some students are ill-behaved and do not care about school. They are the ones who destroy schools. The ecological and educational role of children in informal settlements is very important. Social problems, including drug misuse, homelessness, and crime also pose challenges to education in these fields. We found that, by making school facilities available to the community, we could avoid challenges. It was suggested that the government, in collaboration with other early childhood stakeholders, should develop model kindergartens in informal settlements conducive to learning environments.

4.6 Theme 3: Deal with the challenges of managing school infrastructure

4.6.1 Data presentation

Principals we questioned as to how do they deal with the challenges of managing school infrastructure. Principal A exclaimed that, "Meetings are being held with the community and so far burglaries have subsided. The community is invited to meetings to inform them that they are the owners of the school and they need to protect it as much as they can, and stop any person who could be seen trying to vandalise the property". She added by saying, "We have asked some community members who have experience or skills who are unemployed to help with the maintenance, such as fixing broken windows and door handles".

Principal B, however, said that it is challenging to cope with the issues. "We instil the culture of always telling learners not to vandalise the school. We always talk to them to stop the wrong doings. We sometimes encourage parents to pay for loss or damage, which at times is difficult since the parents are not working".

Principal C remarked by saying,

> The school had tried to employ security officers to keep an eye on the school. Interventions are needed. Much should be done concerning the environment in which the children find themselves. Poverty, unemployment, crime, and community challenges should be addressed. Schools can be vehicles of empowerment. Educators should also get involved in the community projects and be present among the people living in the community to better understand their challenges and living circumstances, and how they view themselves. The educator should try to give the learners some hope for the future by introducing them to activities that can be beneficial to their development, such as sport.

4.6.2 Support from literature

According to a study by Daneshmand (2015), countries without plans automatically form suburbs. On the one hand, the area is highly dispersed and unorganised, making it costly and difficult to provide infrastructure facilities in the area. Services including water, electricity, and telephone are available to residents, and home electricity is produced by stealing from the main power source. People use the newest phones that line the streets. The primary cause of this is the state institutions and unified administration's disregard for the law. People lack the resources to better their life. There are one to five locations that resemble informal settlements in Katima Mulilo, where the survey was done.

These communities' residents deal with societal issues that are similar to those in Namibia and other global informal settlements (Maemeko, 2021). Protection is a challenge in informal permanent schools. According to Mwama (2018), school safety is important for improving children's learning. It is defined as actions taken by staff, parents, learners and other stakeholders. This measure is designed to minimise, the risk of conditions that can lead to accidents, physical injury, and emotional and psychological stress. Accidents can lead to disability and death, if not avoided, and emotional and psychological trauma can lead to low self-esteem and poor academic performance.

Therefore, in a setting that is dangerous for both staff and students, meaningful teaching and learning cannot occur. Mwama notes that physical maladjustment or inappropriate physical environments contribute to unsafe environments for people with various social problems, such as drug addiction, crime, and poverty, and that parenting in these areas is also claimed to be difficult. In cases, where the child has only one parent, either the father or the mother. Many families consist of young children who have to take care of other children as their parents have fallen due to the HIIV/AIDS pandemic.

An effective policy environment is essential to ensure that orphans and vulnerable children, (OVCs), have access to basic education.   According to Pillay, South African public schools should have a tuition-free policy so that OVCs can attend classes. School safety is a crucial element of children's

education, according to the Kenya School Safety Standards Manual (Republic of Kenya, 2008). Expressive learning and teaching cannot take place in hostile circumstances for both students and teachers. In order to create and carry out preventative interventions—which include those that discourage potential criminals and provide potential and past victims more power—the Ministry of Basic Education collaborates with the South African Police. We offer qualified services for crime prevention in schools.

In order to create and carry out preventative and social interventions—which include those that discourage potential criminals and give potential and past victims more power—the Ministry of Basic Education collaborates with the South African Police. We provide proactive services for crime prevention in schools. Encourage a comprehensive network of child protection organisations to participate in an integrated, interdisciplinary approach to crime prevention and development services, transforming all schools into safe, caring and child-friendly institutions. Encourage the implementation of a community-based, all-encompassing strategy to satisfy the requirements of school communities through efficient school-based police services and crime-prevention programmes. Approve constructive interventions that support early childhood development and foster criminal behaviour resilience as soon as possible.

4.6.3 Interpretation of findings

By encouraging participation in the conception, implementation, support, and assessment of school safety programmes, you may strengthen the capacity of the school community, especially students, and avoid and manage school safety issues. Foster positive relationships between police, children, school communities, and schools, police stations, and the SAPS. Encourage the use of crime prevention to maintain student safety and foster awareness of the value of crime prevention and the shared responsibility that all staff members (departmental, individual, and organisational) have for crime prevention.

Answers from the participants uncovered that having meetings with different stake holders helps. Principal A exclaimed that meetings are being held with

the community and so far burglaries have subsided. The community is being invited to meetings to inform them that they are the owners of the school and therefor they need to protect the school as much as they can, and stop any person who could be seen trying to vandalise the school property. It was discovered that the school can use unemployed parents whose children attend the school who have experience or skills to help with maintenance, such as fixing broken windows and door handles.

In order to better comprehend the issues, circumstances, and self-perceptions of the residents of communities, educators must be present among them. It was also discovered that school can be a vehicle for empowerment. Teachers should try to give learners confidence in their future by introducing them to activities that help them grow. The Ministry of Education, in collaboration with the South African Police, has developed a preventative and proactive approach, characterised by deterring potential offenders and promoting and implementing interventions to empower potential targets and past victims. We provide professional school-based crime prevention services.

4.7 Theme 4: Support from parents and community

4.7.1 Data presentation

All three principals share similar sentiments Principal A "No we don't get support from parents". Principal B mentioned that. The support from the parents and the community is not positive because some parents do not care and they don't even pitch up when they are asked to come to school and solve any matter regarding wrong doing of their kids. The community at large is not taking care of their own school because the community also steals the school property.

Principal C explained that the support they get from parents and the community is "very minimal". Parents are not helping with learners' homework which gives teachers extra work to let the learners complete work. Parents are not willing to contribute money to help projects. The community is not willing to assist at school on things they will not benefit from.

4.7.2 Support from literature

Parental involvement in school activities is increasingly influencing school performance. It is crucial that parents get involved in their children's education in every way. As they have the greatest impact on their children from a young age, parents are the most significant educators of their children. Parental involvement in education is the first step towards parental engagement and, ultimately, parental collaboration, according to Ferlazzo (2011). The benefits to students are tremendous when parents and teachers collaborate to establish effective classrooms. Students who have involved parents perform better academically and have achieved higher rates of graduation, self-esteem, and attendance. The parent-teacher relationship goes beyond being only an extracurricular classroom perk.

They are essential to assisting students in the classroom and on an individual basis in realising their academic potential. If we do not allow parent-parent connections in our schools, as educators, we limit the ability of our classrooms to thrive. Chronic absenteeism of more than 20 days from school per year is also decreased by parental involvement. For instance, a teacher reduced student absenteeism by 20% when she engaged parents through home visits. Even when grade level and prior absenteeism are taken into consideration, students with parental participation report fewer overall absences from school. When parents and teachers communicate in two different methods, childattendance and participation in class increase every day (Blackboard, 2016).

Attend general meetings, parent conferences, school or class events. From 1996 to 2007, he participated in school volunteering and fundraising activities or on school committees, and his activism to support learners of the discipline increased in 2016. Lower than the 77% in 1996. In addition, 78% of pupils had a parent present for a planned parent-teacher conference, up from 72% in 1996. Fifty-six percent of parents participate in committees and volunteer work for students in grades K–2, compared to 51% for students in grades 3–5, 35% for students in grades 6–8, and 32% for students in years 9–12 in high school.

4.7.3 Interpretation of findings

Participants in this study discovered that a lack of parental participation frequently contributes to a lack of respect in schools. Educators and parents work together as a team to create successful classrooms. I know it will have a big impact on my students. Additionally, there is a lack of community involvement in schools, and communities in informal settlements are averse to lending a hand in situations when schools do not benefit them. Principal C states that he receives "very little" support from parents and the community. Learners with engaged parents not only score higher on tests, but they also help boost learner confidence and increase graduation rates. The parent-teacher relationship is more than an optional classroom asset.

Participants in this study found that a lack of respect in schools is most often caused by a lack of parental involvement. Educators and parents work together as a team to create successful classrooms. I know it will have a big impact on my students. There is also a lack of community involvement in schools, and communities in informal settlements are unwilling to help where they do not benefit from schools. Principal C states that he receives "very little" support from parents and the community. Learners with engaged parents not only score higher on tests, but they also help boost learner confidence and increase graduation rates. The parent-teacher relationship is more than an optional classroom asset. To better understand the issues, conditions, and perspectives of the residents of the community, educators should participate in community projects and spend time with them. By exposing them to things that can be good for their development, such sports, the educator should try to give the students some hope for the future.

4.8 Theme 5: How do you feel about comparing schools in informal settlements to schools in the urban area?

4.8.1 Data presentation

Principal A pointed out that, "In comparing schools in informal settlement and urban area, there is a huge difference in terms of infrastructure, teaching and learning, smooth running of the school, behaviour and results, to name a few". Schools in urban areas are better advantaged and as a result, heir learners from urban areas schools pass with good symbols and the environment is conducive for teaching and learning. Learners from urban schools later become good citizens because they are prepared and taught in an inviting, healthy and good environment (Principal A).

Learners from urban areas schools pass with good symbols and the environment is conducive for teaching and learning.

Principal B exclaimed, "It is of no use comparing school to urban areas because their background is not the same. It is good to stay and develop the place where you are and teach the community to value the schools that have been built for them. They have to teach their families and children about value of education".

Principal C indicated that, "In informal settlements, infrastructure is very poor. There are no sporting facilities. No electricity and running water. The ground is uneven. The fence is vandaliised".

4.8.2 Support from literature

Educators complained that learners in informal settlements were undisciplined, often late for school, and had difficulty doing homework. After numerous complaints from educators, researchers decided to conduct a study on the experiences of children in informal quarters of a predominantly Indian school in Lenasia. Pilot studies have shown that children's experiences in informal settlements must also be taken into consideration. Her eighth-grade students made up the sample for the poll, which had parents who resided in substandard housing as its target population. The exploratory, descriptive, and contextual qualitative research design of the study was focused on

experience from her informal dwelling. This study was conducted in two different phases (Pillay, 2014).

Education, according to American tradition, is the path to the middle class for individuals trying to break free from the chains of poverty. However, these poor urban public school learners are clearly inadequately educated to compete with their wealthier middle- and upper-income peers. For example, a lot is being said today about how important careers are to the future of young people and to the country. But a poverty-stricken high school maths class is twice as likely as she is to be taught by a qualified teacher. This is why poverty-stricken high school maths scores are so low. Similarly, science teachers in high schools with high poverty rates are three times more likely to obtain qualifications in non-science subjects than science teachers in high schools with low poverty rates (Wirt et al., 2004).

The stress management approach identifies structural factors that reduce student concentration, such as filthy restrooms and physical degeneration (Evans & Kim, 2013). Concentration issues and poor task are significant signs of low student engagement and motivation. However, all students can make academic success while pursuing their intellectual potential, provided educational institutions offer qualified help and resources. An urban youth performance and involvement increased, for instance, when given a laptop when computer use moved beyond simple skill practice (Penuel, 2006).

Improved standardised test scores, student inspiration, and technology literacy among 8th and 9th grade students were the results of an improvement project (Project Hiller) that provided laptop computers and wireless access to urban high schools (Light, McDermott and Honey, 2002). Pupils' agency in courses that are frequently out of reach for low-income urban students has increased thanks to an inventive project that employs video technology to teach physics principles to urban high school students (Elmesky, 2005). It is undeniable that poor quality curriculum, equipment and physical facilities are stressors sometimes found in poverty-stricken schools. However, well-equipped and technically sophisticated facilities and a challenging curriculum offer proven benefits for the intellectual development of all students.

4.8.3 Interpretation of findings

The study discovered that some schools in informal settlements do not get support from parents. Principal B mentioned that the support from the parents and the community is not positive because some parents do not care and they do not even attended when they are asked to come to school and solve any matter regarding the wrongdoing of their children The community at large is not taking care of their own school because the community also steals the school property. Principal B exclaimed that it is of no use comparing school to urban areas because their background is not the same.   While Principal C indicated that in informal settlements, infrastructure is very poor. There are no sporting facilities. No electricity and running water. The ground is uneven. The fence is vandalised.

The education that underprivileged urban students receive in public schools, however, that enables them to compete with their wealthier middle- and upper-class counterpart is inadequate. She was three times more likely to be knowledgeable in non-science subjects than science teachers at high schools with low levels of poverty in maths and science classes. This cutting-edge project will give students agency over issues that are all too frequently personal to low-income urban children by employing video technology to teach physics principles to urban high school pupils.

Response from other SMTs (HODs)

4.9. Theme 1: Defining characteristics of informal settlement

4.9.1 Data presentation

On the subject of operating in informal settlements, the HoDs were united in their viewpoint. This means that it does not affect just one school it has now become a district-wide issue. The following quotes provide a decent indication of how HoDs feel:

I think working in the informal settlement is challenging … at times. The learners don't have enough resources such as textbooks, calculators. It is also rewarding when you see learners doing well in your subject even if they are not well resourced. The defining moment for me to work in an informal settlement is to see learners sharing resources so that they help one another (peer to peer). (HoD B)

Some learners in an informal settlement are not much exposed to new development that are constantly brought to the department of education mainly … because whatever infrastructure is bought to school for development the community members destroy that and this hinders the learner's development. (HoD A)

Working in an informal settlement is not simple, it is so difficult dealing with learners coming from extremely poor and preciously disadvantaged background. Lack of parents in the teaching and learning of the learners. Other parents treat schools as places where their kids are kept so that they can have enough time to go on with their life (HoD C)

It feels challenging but every effort to change the learners' view on life counts. And it is fulfilling when I get through to them. This school being in a crime ridden community does make it hard for learners to realise their potential; so I try my best to help them see it. What stood out to me is the mind-set that the learners may have poverty is a mind-set and … it is hard to change a mind-set. It is easy for learners to fall into the trap of not hoping and striving for a better life. They fall into cycle of teenage pregnancy, dropping out of school. (HoD A).

The HoD in this study also emphasised that working in informal settlement is a challenge and fulfilling sometime

4.9.2 Support from literature

Educators described the problems children in informal settlements had, mainly lack of English proficiency Middle schools expect children to speak English. They understood that the issue was caused by different elements, such as a) student emotional, motivation, inappropriate classroom behaviour, and ethnic group and cultural differences b). mother-tongue education at previous schools c) parental socioeconomic status and illiteracy, d) social problems and lack of community support (Pilay, 2014). From another perspective, slums are seen as a continuous feature of the urban landscape, exhibiting low social mobility and structural barriers to progress.

Self-reliance cannot compete with systemic obstacles to human development and escape from poverty. From this perspective, people are encouraged and compelled to move to the slums by the insecurity and misery of rural areas. Without the skills employers expect, immigrants end up at the back of the job queue. They have they are best in lowest paid, least wanted positions that no one else wants. You will be relegated to a dead-end, precarious job. Some earn a living by collecting garbage in landfills, recycling waste, raising small livestock, and collecting wood to sell on the roadside (Turok, 2015). Poverty is a multifaceted symptom that includes the inability to meet basic needs. This includes lack of knowledge and skills, inability to manage resources, ill health, starvation, inadequate housing, little or no access to clean water and sanitation, susceptibility to crime and violence, shock, and substandard housing (Chaudhry et al. 2010).

Inclusion of having many facets, poverty also has a root cause. There are no indications that poverty can be eradicated entirely. There are numerous factors that contribute to poverty, including sociocultural, psychological, physical, and economic factors. These elements might be connected to their lack of participation in democratic processes and behavioural issues that are made worse by low literacy and education levels (Chaudhry et al., 2010). The most critical element in defining the difference between the poor and non-poor is education. Because it contributes to human freedom and productivity, education is highly valued in the theory of economic growth (Chaudhry et al., 2010). Today majority are highly inhabited informal settlements situated in

ecologically vulnerable regions. Due to improper land use and poorly built building structures, there are hazards of environmental damage (Na. 2006). The inability of policies to address the spatial and socioeconomic contexts and support the growth of these informal settlements is explained by a number of weaknesses, according to policy research (Charlton 2001).

4.9.3 Interpretation of findings

Statements made by participants make it clear that it is a challenge working in informal settlement. On the subject of operating in informal settlements, the HoDs were united in their viewpoint. Instead of affecting just one school, it has now become a district-wide issue. HoD A said some learners in an informal settlement are not much exposed to new development that are constantly brought to the Department of Education mainly because whatever infrastructure is bought to school for development the community members destroy and this hinders the learners' development. This study indicates how challenging it is to engage with students from extremely underprivileged families and the absence of parental involvement in student teaching and learning. Some learners forage for food in landfills, recycle unused waist raise small livestock, or collect firewood to sell on the roadside for a living. Poverty is a problem that causes people needs and wants to go unmet.

Lack of control over education and talent, wealth, poor health, malnutrition, shortage of housing, little or no access to clean water and sanitation, crime and violence vulnerability to shock. Factors related to poverty include socioeconomic problems and psychological factors. Few of these factors may be related to inability to participate in democratic processes and behavioural impairments exacerbated by low levels of literacy and education. Education is seen as the most prominent and important factor in drawing the line between the haves and the have-nots. Education has been placed on a high pedestal in the model of economic growth as part of human freedom and human capacity.

4.10 Theme 2: Challenges concerning management of infrastructure

4.10.1 Data presentation

Participants noted that school maintenance guard infrastructure and ensures that learners are safe and supports educational performance. As school buildings age, there is an ongoing challenge for teachers to maintain them at a level that allows them to meet the needs of their students.

HoD A mentioned that "Most of school infrastructure has been ignored in terms of maintenance for a long time. The school laboratories are almost non-functional because they have not been maintained".

HoDs in this study expressed their feelings about school infrastructure that is always vandalised, stolen and in some cases learners are the ones responsible for destroying infrastructure. This was revealed by HoD C statement: "Infrastructure is constantly destroyed by the community around the school and that only leads to going backwards in terms of school development".

HoD B revealed that their school building is old … and the roof needs to be repaired and to be painted. Money received from government is … not enough to repair the roof.

4.10.2 Support from literature

Some schools in South Africa have good infrastructure, while others lack even basic services such as water and sanitation. According to Gibbert (2007), large disparities in infrastructure provision pose challenges and raise many questions about school infrastructure planning and management. Planners, district officials, and school administrators responsible for planning and managing school infrastructure face it every day. At the national and state levels, the School Supplies Register (Ministry of Education, 2002) is used to assist planning. As a result, the competence of school leaders is seen as a national imperative, posing a major challenge to the education system. Professional school administrators are in high demand. A major challenge in the education system is finding visionary and competent leaders and

managers. These leaders require appropriate managerial skills and competencies in the field of professional education management.

Gauteng Department of Education (GDE) was approached in 2015 with a new technology to provide off-grid schools with solar power. Other solar projects I worked on before had solar panels lifted or destroyed within weeks.

With no electricity grid Pheasant Folly Primary School is powered by an expensive generator, but fuel alone is beyond the means of the school as it costs over R2000 a week. These are clearly not ideal conditions for schools and environments, so solutions that provide affordable access to energy and continuous learning are urgently needed.

4.10.3 Interpretation of findings

Participants found that effective school maintenance protects infrastructure Maintaining school buildings at a level that allows teachers to meet the needs of learners is a difficult task. Most resources should be allocated to schools with poor infrastructure. The directors also noted that the funds received from the government were insufficient to repair the infrastructure. Some schools have not modernised their asset registers and the asset management process is not well understood at the school level. The roles and responsibilities of school leaders should ensure that schools have clear and predictable goals for learning, the academic progress of learners, and maintaining the infrastructure to ensure that the school environment is benign and safe. Guaranteed setting clear goals for learner performance is central to effective leadership that guides the day-to-day practice and decision-making of all involved.

The principal responsibility is to describe the school infrastructure, collect data, analyse and interpret it, develop intervention strategies, and submit the analysed report to the district office. Responsibility meetings where responsibilities are discussed at all levels, from schools to school districts to prefectural governments. There was a culture in which everyone (teachers HODs learners, circuit managers, professional advisors) could hold everyone

else accountable, and it was regularly scheduled at all levels of the state system. Introduced through mandatory meetings.

4.11 Theme 3: Dealing with the challenges

4.11.1 Data presentation

The most common characteristic in informal settlements is the lack of official title deeds for the residents. In these areas, residents mostly enjoy illegal and informal models for ownership of land and residential components.

HoD A pointed out that "As a school we have partnered with SAPS to help us with combating the issue of crime in the school and community surroundings".

> As a school letters are always written to the department to assist with infrastructure. We have asked the Department of Education to … assists the school with tables and chairs for the learners but … it took forever to get assistance. (HoD B)

HoD C indicated that "There is lack of policies pertaining to what is done to whoever was found to have committed these cases. SGB has taken an initiative to formulate policies and involve other stakeholders".

4.11.2 Support from literature

South Africa and other countries in the Global South face the challenge of informal settlements. Attempts to intervene in informal settlements must be documented and reflected. This paper explores and analyses the application of a specific approach to informal settlement upgrades, reblocking in the town of Ekurhuleni, Gauteng province, South Africa, and examines the acceptance of good upgrades. Evaluate adherence to principles. Relocking essentially involves reorganising the structure of informal settlements to supply basic services, which can also reduce fire risks and result in more usable common spaces. There sealing process is also being evaluated as a collaborative planning tool for building capacity at the grassroots level. Grounded on a review of the literature and interviews with practitioners and scholars, the

principles of what can be regarded as good informal settlement upgrading were organised.

The policy context of upgrading in South Africa (particularly the Upgrading of Informal Settlements Programme) is revised, and the history of the reblocking approach in South Africa (implemented by Slum Dwellers International with the City of Cape Town, and subsequently accepted by the City of Ekurhuleni) is examined. The case study of reblocking in Ekurhuleni Municipality is then deliberated in detail. Finally, the dissertation compares the experiences of reblocking in Ekurhuleni with the principles of good upgrading and with the other South African approaches to reblocking, and makes recommendations for how informal settlements could be better addressed in Ekurhuleni (and elsewhere).

The key conclusion of the dissertation is that, while reblocking can be very beneficial in terms of providing services and empowering communities, the approach used in Ekurhuleni is less participator and thus has fewer social benefits than its counterpart in the City of Cape Town. Moreover, all resealing initiatives in South Africa have the potential to circumvent the legal security of property and even reduce the de facto security of property (many resealed settlements remain at risk of resettlement). This paper highlights the need to change mindsets, policies and bureaucracy to better accommodate the complex and dynamic nature of informal settlements, with increasing housing overhangs in the Council of Europe, South Africa and the Global South.

The Development Learning Centre (TDLC) Tokyo brought together experts and practitioners from Japan and around the world to undertake a technical deep dive (TDD) to improve infrastructure, services and livelihoods in low-income urban settlements. The event was held in Tokyo from December 2019. The event was held in Tokyo in December 2019, with delegates from 11 countries (Democratic Republic of the Congo, Uganda, Indonesia, Myanmar, Bolivia, Brazil, Colombia, Mexico Egypt Djibouti, Pakistan).

An implementation protocol was developed between the Ministry of Basic Education and the South African Police Service (SAPS) to prevent crime and violence in all schools. The protocol was signed on 12 April 2011 between

Honorary Minister Motshekga, Minister of Basic Education and Honorary Minister EN Mthethwa, former Minister of Police.

The thoughtful role and responsibilities of the SGB play an important role in defining the function or impairment of the SGB The following quotes provide insight into their consideration of their roles and responsibilities to support and ensure adherence to guidelines and implementation of school development plans, and to review progress achieved in the day-to-day operation of the school" (Parent 5B). The most important role of the SGB In the school is the principal to help children organise and manage school activities effectively" (Administrator Participant 9C). Thus, her SGB members who participated in this survey were aware of their roles and responsibilities.

Nearly all of the SGB members who participated in this survey had work experience from age 6 to10. Participants were well qualified, although other studies indicate a lack of SGB experience. There were only two SGB members who only had 10th and 12th grade Certificates. There fore I believe that all SGB members were well qualified and had a clear understanding of their roles and responsibilities. The main problem is that the language of SASA Act No. 84 of 1996 (RSA1996) appears to be unclear. So maybe it should be reviewed for more clarity. Erikson (2012) argues that without clear role descriptions, members are more likely to waste energy negotiating roles within a team rather than focusing on productive tasks.

4.11.3 Interpretation of findings

South Africa is facing the biggest issue of informal settlement. HoD A pointed out that schools have partnered with SAPS to help us with combating the issue of crime in the school and community surroundings. Findings exposed that there pressing issues that need to document and reflect on attempts to intervene in informal settlements. The Implementation Protocol was developed, in terms of the Intergovernmental Relations Framework Act, 2005 (Act No 13 of 2005), between the Department of Basic Education and the South African Police Service (SAPS), on prevention of crime and violence in all schools.

The main answers of the dissertation are that, while reblocking can be very helpful in terms of providing services and empowering communities, the approach used in Ekurhuleni is less participatory and thus has fewer social benefits than its counterpart in the City of Cape Town. HoD C indicated that there is lack of policies relating to what is done to whoever was found to have committed these cases. SGB has taken the initiative to formulate policies and involve other stakeholders. SGBs play a major role in determining the functionality of the school or the dysfunctionality thereof. The study discovered that the most important role of the SGB in the school is to help the school principal to manage the school activities in an efficient way. However, the major challenge is caused by the fact that the formulation in the SASA, Act 84 of 1996 (RSA 1996) appears to be unclear; as such it might need to be revised for more clarity. The role of the SGB in appointing staff is accepted, although educators feel that school governors should be trained for this and all other functions of the SGB. Many educators are concerned that the principal may dominate the SGB. Results further suggested that a purely legalistic approach to dividing the responsibilities of SGBs may not always be helpful (Van Wyk, 2004).

4.12. Theme 4: Support from parents and community

4.12.1 Data presentation

Mothers and fathers are the primary educators of their children. Support provided by parents affects children's development, learning, and subsequent educational outcomes. This contains uninterrupted support to learning before and during formal education.

HoD A mentioned that "There is lack of parental involvement in the teaching and learning of the learners. Some parents do not even bother to open the exercise books of their children. Some get involved in October just when the final exam is about to start".

HoD B said that yes "We do get support from the parents also from SGB they are helpful".

HoDs simply mentioned that, "The support from the public and parents in most cases is minimal. Some parents do check the learner's workbooks. In some cases, they do come to school, but these are isolated cases".

One of the HoDs HoD A mention that "We have to mould learners perspective of the HoD. All three HoDs unilaterally talked about how despite overcrowding, limited infrastructure, support and training HoD have had to take up the role of 'moulding the children' as parents were drunkards, while others struggling for living and were, therefore, unable to take parental and care giving responsibilities seriously. There is child abuse and incest in families and in the communities that the HoD C talked about and how they had to direct efforts towards making their pupils aware of these and at times they receive support to hold talks and demonstration session from community health nurses."

4.12.2 Support from literature

Role played by parents in the education of their children is very crucial. Supporting their children's health, learning and guid them successfully through school processes, and advocating for their children and for the effectiveness of schools. Parental engagement in schools is defined as parents and school staff working together to support and improve the learning, development, and health of children and adolescents. Parental engagement in schools is a collective responsibility in which schools and other community agencies and organisations are devoted to reaching out to engage parents in meaningful ways, and parents are dedicated to actively supporting their children and adolescent learning and development. This relationship between schools and parents cuts across and strengthens children's health and learning in multiple settings at home, in school, in out-of-school programs, and in the community (Allen, 2009). In some schools in informal settlement there is absence of parental and community participation. Children in poor performing schools their parents are often not involved in the education of their children. They do not receive regular response on the progress of their children. Communities around are not pleased with such schools and therefore disengage.

Non-black, non-Hispanic Asian/Pacific Islander, and Hispanic students their parents had lower rates of attendance at general meetings or school events or of volunteering their time, relative to parents of non-Hispanic white students. In 2016, 80% of non-Hispanic Asian/Pacific Islander students and 87% of non-Hispanic black and Hispanic students had parents who attended a general meeting, compared with 91% of non-Hispanic white students. Seventy-one percent of Hispanic and non-Hispanic Asian/Pacific Islander students, along with 72% of non-Hispanic black students, had a parent who attended school or class events, compared with 86% of non-Hispanic white students. Thirty-four percent of non-Hispanic black students, 36% of Hispanic students, and 42% of non-Hispanic Asian/Pacific Islander students had a parent who volunteered their time, compared with 49%of non-Hispanic white students. The lower participation by non white parents may reflect an incapability to attend school functions rather than any desire (or lack thereof) to participate in their children education. Non white parents are less likely to have flexible work rosters. However, students belonging to marginalised racial and ethnic groups experience similar levels of parental involvement in learning at home.

In school and family context parental involvement has been defined as representing different behaviours and practices presented by parents both at home and school. These practices and behaviours have been viewed as main factors to determine educational success in many schools. According to Levanda (2011), parental involvement includes a wide variety of actions parents take for the benefit of children academic success at school. These include parenting style, parental expectations and objectives, home rules and parental supervision, parents' attitudes towards children events, helping with homework, visiting the school to talk to teachers, and beliefs regarding their child education (Fan & Fen, 2001).

4.13. Theme 4: Comparing schools in informal settlement to school in the urban area

4.13.1 Data presentation

The HoDs were also asked about their feelings comparing schools in informal settlement to schools in urban settlements

> I am able to say that urban area schools are … at an advantage because of the community around them; they don't sabotage the school development, while … informal settlements are surrounded by crime and high use of drugs, that can be a challenge … for learners. Schools in informal settlement are worrisome. I feel that … schools in informal settlements are expected to achieve the same as urban schools whereas the playing field is not level. (HoD C)

This is what HoD B had to say: Working in the informal settlement is challenging at times. HoD A revealed the following: learners in informal settlement … are not much exposed to new development that are constantly brought by the Department of Education.

HoD B also pointed out that there is … a huge gap between the two in everything. Lack of planning and managing in informal settlements destroys their infrastructure. HoD A mentioned that most … of school infrastructure has been ignored in terms of maintenance for a long time. The school laboratories are almost … non-functional because they have not been maintained. HoD A mentioned that "there is absence of parental connection in the teaching and learning of the learners. Some parents do not even bother to open the exercise books of their children. There is child abuse and incest is common in families and in the communities that the HoD is talking about and how they had to direct effort towards making their pupils aware of these.

4.13.2 Support from literature

According to UK Essays (2018), populations consist of two learners who were quite different in ethnicity. The rural students give the impression of being

quite homogeneous nevertheless the urban students seemed to have a greater mix of race and cultures. The lack of opportunity of rural students to interact with persons of varying backgrounds is a restraining factor in their educational and sociological development. The high school curricula in the urban schools in the sample emphasised either academic education or vocational education. Limited students were in what might be called a general curriculum. However, one fourth of the students in the rural schools were enrolled in the general curriculum. Consequently, students may have seen the overall curriculum as better alternative to the academic curriculum, since it could be obtained at the home school.

SES scores were much lower for families in rural areas than for families in urban areas. Families were larger in rural areas. The educational level of the parents was higher in urban areas than in rural areas. Urban parents were more likely to expect their children to support their education beyond high school. All this factors are reflective of the differences in social context between rural and urban areas. The differences in the social framework of the two locations help to explain differences in the aspirations of students.

Educators, parents, learners, and families in area especially in Katima Mulilo town face many challenges. Living in dwellings in informal areas is often detrimental to the well-being of a learner (Verster, 2018). Many school going children in Namibia today suffer from poverty and basic essentials. These conditions make them feel worthless and neglected which in most cases forces them to resort to violence to restore their sense of power (Hartas, 2011). Lack of financial resources also affects school attendance among the absolutely poor in developing countries as highlighted by Chinyoka (2014). Learners who are from poor upbringings and who are suffering are more prone to dropping out of school as compared to those from well-off families. According to Chinyoka (2014), a certain study was conducted in rural China to ascertain the extent which learners from well off families are in relation to their education as associated to their counterparts in destitute families revealed that 'poor and credit-constrained children are three times more likely than other children to drop out of primary school.

The researchers sought to establish if these findings are true regarding learners in informal settlements in Katima Mulilo town in Namibia. Child labour, poverty, bereavement, truancy and shattered homes are sources of failure (Dzimiri & Tendai, 2018). The is a link between poverty and children's cognitive capabilities and social-emotional competence, arguing that parents' decisions on the allocation of resources like money to purchase books and time spent on children in joint activities are measured as investments that have the potential to enhance children's skills and language (ibid). Urban and rural students differed on the background characteristics of ethnicity, grade-point of enrolment, SES, and education level of parents (McCracken, 2008)

4.13.3 Interpretation of findings

HoDs were speaking with one voice on the issue of working in informal settlement. This meant it does not affect one individual school but it has become a district problem. This is what HoD B had to say: "Working in the informal settlement is challenging at times". HoD A revealed the following: learners in informal settlement are not much exposed to new developments that are constantly brought by the Department of Education. Working in an informal settlement, it is difficult it is difficult dealing with learners coming from extremely poor and disadvantaged background.

School infrastructure depreciate and as there is a continuing challenge to maintain at a level that enables teachers to meet the desires of their students. HoD A mentioned that. "Most of school infrastructure has been ignored in terms of maintenance for a long time. The school laboratories are almost non-functional because they have not been maintained". HoD A mentioned that some parents do not even bother to check classwork books or help learners with their homework. Children are being abused sexually and physically and the community know about this allegation and they keep quiet and do nothing. HoD talked about this and they create awareness making their pupils aware of these situations.

On the issue of comparing schools in informal settlement and urban areas. HoD C is able to say that urban area schools are at an advantage because of the community around them; they don't sabotage the school development,

while informal settlements are surrounded by crime and high use of drugs that can be a challenge. Schools in informal settlement are worrisome. I feel that schools in informal settlements are expected to achieve the same as urban schools whereas the playing field is not level. The is a huge gap between the two in everything.

A lack of financial resources also affects school attendance among the absolutely poor in developing countries. Learners who are from poor upbringings and who are suffering are more prone to dropping out of school as compared to those from well-off families. Learners from well off families are in relation to their education as associated to their counterparts in destitute families revealed that 'poor and credit constrained children are three times more likely than other children to drop out of primary school.

Responses from school governing body

4.14. Theme 1: Defining characteristics of informal settlement

4.14.1 Data presentation

The role of school governing body is to preserve and advance the school property, buildings and grounds, workbooks, educational materials and equipment for the school pay for services rendered such as water and electricity.

Participants revealed that "is challenging educators have to deal with disciplinary problems more than educational problems. We spend endless time at school dealing with disciplinary procedures. A teacher is the main provider of all resources because school is under resourced".

This is what SGB 1 had to say: "We have become responsible for a range of functions that were previously the responsibility of the Department of Education and it is stressful. He added by saying there s high rate of unemployment and parents are not working".

"I find it challenging … to be the member of governing body in informal settlement due to environmental conditions poverty and lack of services" (SGB 2).

SGB 3 highlighted the fact that there is "school extensive poverty, abundant drug and high level of addiction in school".

SGB 4 remarked that "Working school as a school governor it is not interesting, there are many challenges that need our attention for an example the environment is not conducive. We need to fixed that and some of us we are working; we don't have enough time".

Being an SGB member … in informal settlement is a full time job. We are always at school solving problems (SGB 1)

SGB 6 said that, "It is quite interesting and depressing at the same time. I am learning new things that I did not know existed".

Other principals just listed the following characteristics of the informal settlements:

- Lack of basic water (SGB 1)
- Overcrowding and poor management (SGB)
- Ahh…I don't know.

4.14.2 Support from literature

Informal settlements are where you find low-income earners and poor groups of people with high informal jobs are considered a method of unsustainable urbanism and create suitable grounds for appearance of social abuses (Sarrafi, 2002). Informal settlements encompass self-grown housing without legal identity that are randomly spread around cities (Hadizadeh, 2002). Its lodgings have been built by using cheap and less durable and worn-out materials and its equipment and urban services are inefficient. These settlements are mostly established outside the legal urban areas, swiftly and illegally (Kalhor, 2003). They enjoy the least life prerequisites (Sadeghi, 2006). Informal settlements refer to residential areas where a group of

residential components are developed on land without lawful ownership or resided illegally (Bego, 2003).

According to the difinition of human settlement released by the UN, informal settlements are recognised by using inappropriate building structures, unhealthy and dangerous environmental conditions, unsafe residency right, poverty and social deprivation. The world percentage of families exist in these slums is being doubled in number (UnHabitat 2005). The SGB must ensure that the school is governed in the best interest of all the participants. All SGB members must always put the best interest of the school before any personal interests. The South African Schools Act specifies that an SGB must:

- Endorse the best interest of the school and ensure its development
- Approve a constitution setting out how the SGB will operate
- Accept a mission statement for the school
- Accept a code of conduct for learners at the school which sets out disciplinary procedures
- Support the principal, educators and other staff members to perform their professional functions
- Decide on school policy which should include, among admissions, language and finance
- Manage and control the property of the school, buildings and grounds
- Inspire parents, learners, educators and other staff members at the school, to offer voluntary services to the school

The SGB may apply to the Head of Department, in writing, requesting to be allocated any of the following functions:

- To keep and improve the school property, buildings and grounds
- To buy textbooks, educational materials and equipment for the school
- To pay for services rendered to the school.

4.14.3 Interpretation of findings

SGBs are of the view that the Department of Basic Education did not do justice to them. They feel they were not prepared enough for the new job. They all confirmed that they had received assistance from the district office.

This is what SGB 1 had to say: they have become accountable for tasked that was beforehand the responsibility of the Department of Education and it is stressful. They find it challenging to be a member of a governing body in an informal settlement, due to environmental conditions, poverty and a lack of services. Being an SGB member in an informal settlement is a full-time job. They are always at school solving problems. The Department of Basic Education will make school governing bodies well-designed by:

Making the principal answerable for the SGB functionality as part of their job description, as required in the Education Laws Amendment Act of 2007. The assessment of the principals must include how he manages SGB matters. Creating a simple document to advise the SGB chairperson step by step on what to do in running a well-designed governing body. Providing a checklist to the school governing body to assess their own functionality. Circuit mangers will be obliged to hold regular prescribed meetings as a support mechanism to SGBs. Provide the SGB with a list of required topics that non-functional SGBs must be trained on. The rest of the training should be conducted on a necessity basis.

4.15 Theme 2: Challenges concerning management of infrastructure

4.15.1 Data presentation

The majority of school governing bodies (SGBs), especially those in rural and previously disadvantaged schools, do not adhere to the practices specified within the South African School Act of 1996 and they fail in their mandate.

SGB1 indicated that, "No proper handover and accountability from outgoing SGB; it is a challenge. As new SGB, we are supposed to learn from their experience. When we enter as new SGB, there was no SGB; they have left due to misunderstandings with the principal".

Being in the school governing body for the first time it is a challenge for some of members. For example, SBG 2 explained that "no training to handle challenges such as bulling, theft and drugs". While the other SGB member highlighted the fact that, "Money received from government is not enough to

handle the maintenance of the school. She went further and said, "We have to ask for donations".

As SGB we are required … to draft policies for the school. It is a serious challenge because it require special knowledge and expertise (SGB 2).

SGB 4 also indicated that, "There is lack of appropriate legislation".

SGB 5 share similar sentiments with SGB 4. He mentions that, "We lack necessary skills to perform the assigned duties".

We are not skilled before we start working … and this manifestedin difficulties such as unusualness with meeting procedures (SGB 1).

4.15.2 Supporting literature

These roles performed by the SGBs sometimes become difficult to play and the SGBs cannot participate in the affairs of the schools and execute their responsibilities (Clive & Richard, 2009). According to Xaba (2011), school governance in South Africa is a fundamental important element in the education system, but it encounters challenges and affirms that school governors cannot do their job because there is something to schools and education that requires knowledge and information that parents do not usually have.

The South African Schools Act (SASA) stipulates a set of consistent norms and standards for the learner's education at schools and the governance, association and school funding mechanisms throughout the "Republic of South Africa". Though, "It seems that efforts to have an effective school fall far short on the governance of a school" (Xaba, 2011). The "South African Schools Act (Act 84 of 1996)" defines the two parts of governance and management of a school as two separate events. The specialised management is responsible for the day-to-day teaching and learning activities, while the school governing body is responsible for the school governance (Heystek, 2006). According to Mabasa and Themane (2002), "SGBs are not trained before they start their work and this manifests in problems such as unfamiliarity with meeting procedures", absence of appropriate legislation, the

nonexistence of specialist language used in meetings, problems in managing large volumes of documents and feeling frightened in the presence of other members who seems to be more knowledgeable and perceived in skills as having additional skills and digital trends. In addition to this, Mncube (2009) indicated that practically, parents elected are not partaking fully in the SGB, since many of them lack the necessary skills to perform the duties and functions assigned to them. Stiglitz, Orszag Orszag (2000) indicated that the school governing bodies of any organisation in a nation must inculcate in them the technological aid that would help with effective governance.

According to them, output growth is the key to effective ruling. The most imperative contribution that information technology can make to economic performance is thus to recover productivity. The representative feature of the SGB implies that the SGB signifies four groups of the school community, which are the parents, educators, the non-academic staff and the learners. The chosen representatives need to know what their characters and duties are with regard to representing these groups. This study then focuses on how the SGBs understand their roles and the challenges they come across as far as representing and carrying their roles on this digital age. Mestry (2006) highlights some significant challenges facing SGBs, as lack of necessary skills and knowledge for financial management and communication and collaboration between principals and parents.

4.15.3 Interpretation of findings

The finding has revealed that SGB associates being the governors of the school initially for the first time and it is a challenge for them. Other SGB members highlighted the fact that money received from the government is not enough to handle the maintenance of the school. Some key challenges facing SGBs are a lack of compulsory skills and knowledge for financial management and contact and teamwork between principals and parents. SGB 4 indicated that they are asked to draft policies for the school. It is a serious challenge because it requires special knowledge and expertise. SGB 4 also indicated that there is a lack of appropriate legislation. SGBs feel that

other SGB members lack confidence and are not sure of their duties. The ability and reading ability level of parent members of the SGB may place limits on the operational SGB. There are three serious findings that transpire from the study. First is the distribution of the prescribed role and functions within the SASA (1996). Second, there is a misconception and misinterpretation of the roles and responsibilities of the SGB members and the legislation. Thirdly, there is a lack of capacity, knowledge and skills by SGB members to efficiently and effectively execute their required functions. Therefore, there must be a comparative study of the monitoring tools and techniques used to monitor the effectiveness of the SGB at the selected schools in Soweto. The South African Schools Act stipulates that an SGB must promote the best interest of the school and ensure its development. Adopt a constitution setting out how the SGB will operate. Adopt a mission statement for the school. Adopt a code of conduct for learners at the school which sets out disciplinary procedures.

4.16 Theme 3: Deal with the challenges of school infrastructure
4.16.1 Data presentation

SGB 1 explain how they have raised funds for the school as follows:

> We have to do fund raising by asking each learner to contribute R3 and … we wrote letters to parents asking them to give their children R3 every Friday and learners are allowed to wear their Sunday clothes but … that is not enough, because not all parents can afford to pay.

SGBs are responsible to purchase textbooks and stationery for schools; one of the SGB members mentioned that, "We asked donations from our suppliers. One of the suplies donated R10 000 and we used that to fixed girls' toilets."

> We used to have churches in our school using our premises on Saturdays and Sundays and tuckshops open during the week. Churches and tuckshop used to pay rent for using our school facilities. We spend some of the money for maintenance. Since Covid-19 … everything has stopped. (SGB 2)

SGB 4 indicated that, "I try my level best to attend all the trainings to empower myself".

SGB 5 indicated that, "As the school we have partner with SAPS (South Africa Police Services). We are involved in a programme called Adopt a COP. We have a police responsible for our school. They normally do a random search".

SGB 6 remarked by saying that, "We encourage the school to partnership with the community to help with security in our school".

4.16.2 Supporting literature

School management in South Africa is one of the most important elements of education facing seemingly insurmountable challenges. Given that it has been more than a decade since South African Schools Act was passed, efforts towards proactive school management appear to have fallen far short of the intended results. Despite many efforts to train and empower school leaders, there is a wealth of research reporting many school management challenges in South Africa, including the financial resources allocated to them (Brown & Duku, 2008). School administrators faced challenges because they were ill-equipped to meet these challenges. According to Mabasa and Themane (2002), a fundamental issue in school management is governance. While the provincial departments of education, through functional units at head offices and at district levels, have engaged in the training of school governing bodies (SGBs), the actual enactment of these roles is often less than ideal.

The very essence and effectiveness of the training that school governors receive are often questionable. Among other training constraints, Mabasa and Themane (2002) report that SGBs are not trained before they start their work and this manifests in problems such as unfamiliarity with meeting procedures,

problems with the specialist language used in meetings, complications in managing large volumes of paper, not knowing how to get involvement, not knowing appropriate legislation, feeling overwhelmed by the presence of other members who seem knowledgeable and perceiving their roles as simply endorsing what others have already decided upon. This can be attributed to irrelevant and inadequate training of SGB members, which does not really address the core functions of school governance. Mestry (2004) highlighted a significant challenge in SGBs, namely, essential knowledge and skills for financial management and, consequently, powerlessness to work out practical solutions to practical problems. Mestry (2006) also notes a lack of teamwork between the headmaster and other SGB members, as the headmaster is reluctant to share responsibility for running the school for fear of losing power. Another of his challenges, posed by Van Wyk (2004), relates to her SGB educators who feel that SGB are unsure of their duties and lack trust. I am here. In this regard, Maile (2002) argues that illiteracy among SGB members, especially parents and governors, may contribute to their own incompetence.

4.16.3 Interpretation of findings

The survey found that it is difficult to raise money in informal settlements. The Ministry of Education is developing school maintenance programmes for SMT and SGB to maintain school infrastructure and enable preventive programmes to run. Preparation of the SGB for the granting of 21 maintenance status to reduce bureaucracy in the management of funds by the department. The SGB can form a committee to facilitate this very important function. Many parents with the necessary know-how and networks are available to help obtain and repair broken items at school.

State Departments of Education have been involved in training school governing bodies (SGBs) through functional units at the headquarters and district levels, but the actual implementation of these roles is often less than ideal. An SGB lacked essential knowledge and skills in financial management and it was found to be unable to develop applicable solutions to practical difficulties.

4.17 Theme 4: Support from teachers and community

4.17.1 Data presentation

Parents have confidence and believe they know what is best for the school and they support the school by deciding what is essential.

"There is poor relationship … between us and the principal" (SGB 1).

SGB 2 said, "In most cases the principal, they do things themselves without consulting the SGB. We are asked to come and sign cheque even to sign blank cheques".

SGB 3 explained that, "We have good relationship with the principal and educators but it is not always the case".

"I cannot say … we have good relation with teachers. We have not yet been properly … introduced" (SGB 4).

SGB 5 mentioned that, "Yes we do get support from the principal and staff".

SGB 6 highlighted that, "I cannot say we get support from teachers and community. We normally work with the principal"

SGB1 "indicated that single parents, poverty, violence and many other issues are all challenges a learner brings to school every day. While some teachers and administrators try to work with children in less than perfect family environments, they can only do so much – especially when parents are often not willing to partner with the schools to provide for the children".

4.17.2 SUPPORT LITERATURE

There are schools in which serious cooperation, trust and support guarantee effective education. On the other hand, the relationship between the headmaster and her SGB in public schools in South Africa is not always good (Heystek & Bush, 2003). The South African Schools Act (Sections 20 and 21) assigns functions to the SGB and does not designate specific representatives responsible for carrying out functions within the SGB. Each SGB should regulate who should do the actual work, for example, being responsible for

the first draft of a new policy. Power plays and dominance are usually part of all teamwork and interpersonal relationships (Moon, Butcher, & Bird, 2000).

These forces may be conscious or unconscious, but they do occur. The headmaster trying to control the rest of the SGB, or the head of her SGB trying to control the headmaster in favour of the parents. This power play can adversely affect relationships of trust and mutual support. There are many examples of poor relationships between school leaders and school administrators. They range from simple misunderstandings or minor differences to the following reported in the media.

• Principals and governing bodies formally convict each other of misconduct (Rapport, 2001).

• The principal gets angry at the Tin Tyrant (parent of the governing body) who tries to get all the results out of his school. This may have even contributed to the directors' suicide (Sunday Tribune, 2001:3).

• Principal kicked out of the school yard by his disgruntled parents for dissolving the election of the governing body because the community believed it to be a fair election (Natal Witness, 2001). The importance of good excellent cooperation between school leaders and her SGB was also emphasised by the Educational Administration Development Task Team. The task team noted that the relationship between school leaders and her SGB is not always easy and that regular communication between policymakers and school leaders is essential to ensure effective relationships (Ministry of Education, 1996). The task team also noted that its list of SGB tasks in school "represented a great challenge in every respect" (Department of Education, 1996:41). The potential of task teams showed that building sustainable relationships with parents in SGBs was a difficult task for principals, even before the first SGBs were elected. I would like to connect trust with the specific functions expected of an SGB. All obligations of an SGB are set out in Sections 20 and 21 of the SA School Law. However, in this article, I would like to focus on their responsibility for school policy and budgets (South Africa, 1996: Sections 20, 21 and Chapter 4). These two functions may require more specialised skills and knowledge from both school leaders and parents.

Skills and literacy of SGB parent members

4.17.3 Interpretation of findings

This study outline the importance of good collaboration between school leaders and SGBs. The school leader is not only responsible for supporting and assisting her SGB, but also to her employer, the Ministry of Education. Principals serve a double role. The principal is expected to attend all her SGB meetings and update her SGB on policies and legislation. The poor relationship between SGBLS and principals was highlighted by SGB 1. The study also revealed that there are many examples of unhappy relationships between school leaders and school administrators.

Often he told his clients about SGB 2, that he would do it himself without consulting the SGB. They are asked to come and sign checks and even to sign blank checks. Other members of his SGB state that they have good relationships with principals and educators, but this is not always the case. Single parents, poverty, violence and many other issues were identified as challenges that learners bring to school every day. The importance of good cooperation between the principal and her SGB was also emphasised by the task team for the development of educational management. The ability and literacy level of the parent members of the SGB may limit the functioning of the SGB. The parents advised the students to expel the principal from the school. The accused principal had to flee for his life when children tried to throw stones at him.

4.18 Theme 5: Comparing schools in informal settlement to schools in the urban area

4.18.1 Data presentation

Whether a child resides in an economical high standard of living society or in a faraway not-so-developed isolated village, the right to education should be a priority for all. SGB1 and SGB2 had almost identical views as SGB3. SGB2 explained that, "Schools in urban areas have more support from parents.

Parents support institutions financially. They are paying school fees and there is less crime in schools as compared to informal settlement".

SGB 1 said, "Learners and parents in urban areas value education more than learners in informal settlements where everything is free. When it comes to maintenance, we fix one and the same thing over and over again because of Nyaope boys who are stealing all metal things and copper. There is no progress when it comes to maintenance. For an example, we buy new taps this week; next week they are gone".

While SGB2 explained that, "Schools in urban areas are well taken care of as compared to informal settlements schools. They have resources such as labs and sports facilities. Not all learners will go to university; some have talents like soccer talents; our schools don't have sports facilities, we won't know".

"Schools in urban areas are … beautiful, well-resourced and welcoming. Parents in urban areas … they asked for donations from where they are working to give to schools where their children attend" (SGB4).

SGB 5 indicated that, "Learners who attend schools in urban areas tend to enjoy a better disciplinary climate in their classes than students who attend schools in areas". SGB6 explain that "… learners who go to school in urban localities are more likely to be able to choose from a bigger number and wider range of extracurricular activities."

SGB4 highlighted the fact that "… many learners are still left behind when it comes to technology."

4.18.2 Supporting literature

Urban schools in urban areas tend to be larger than rural schools, have greater responsibility for resource allocation, are less likely to experience staff shortages, have more qualified teachers, and teacher ratios tend to be high. Especially cities in partner countries and economies (Achiron, 2013).

Private schools tend to control enrolment, so they have small classes of less than 30 students. Parents consider this, along with other factors such as distance, affordability, and academic performance, when choosing schools, as

they determine class size and influence educational effectiveness (Ngware, 2013). Traditionally, urban students in urban areas have better universal access to education, receive higher-quality education and outperform their rural peers. This "urban dominance" varies from country exists in both developed and developing countries.

A student socio-economic background does not contribute entirely to the difference in performance, but various benefits, such as increased access to educational materials and human resources, do. As the world continues to develop, education will be affected in many ways. In theory, as more of the world population moves to urban areas, more and more people will have access to education. However, in developing countries, there are significant barriers to education beyond just being in a rural setting. In particular, the formal and informal costs of attending school prevent the poorest children from getting an education.

It also creates additional problems. Informal settlements are on the rise as rural-to-urban relocation continues, which can make access to education more difficult and increase inequalities within schools. This study showed differences in the performance of rural and urban students. Rural and urban schools have their own strengths and their weaknesses. "Rural and urban schools are very similar in terms of resources and learning environments" (EQF, 2003, p. 45). Nevertheless, there are many variables that influence student performance, and these variables are directly related to whether a school is considered a rural or an urban school.

Several factors have been identified that contribute to differences in student performance in these two domains, and recommendations are also proposed to overcome this problem. Some recommendations are highlighted, but their solutions may not be trivial. A suggestion for educating student outcomes in rural areas is that students need to appreciate their environment and maintain internal resources, such as self-efficacy and self-esteem. From this study, it can be concluded that there are differences in the performance of learners in rural and urban schools. Students living in urban areas can take advantage of the excellent opportunities offered by the location. With urban students having easy access to many resources, there are opportunities that are not easily

accessible to rural students. Also, urban parents are more professional and understand the benefits of education. Parents of rural students were less likely to expect their children to improve their education.

4.18.3 Interpretation of findings

HoDs in this study stated that schools in urban areas have additional support from parents. Parents support schools financially. They are paying school fees and there is less crime in schools as compared to informal settlements. There is no progress when it comes to maintenance in informal-settlement schools. SGB 1 explained that they buy new taps this week; next week they are gone. Schools in urban areas are well taken care of as compared to informal-settlement schools. A learner's socio-economic upbringing moderately contributes towards the difference in performance but a number of advantages, such as better access to materials and human resources, broaden the gap.

Schools in urban areas have resources such as labs and sports facilities. It is a different case in schools. Not all learners will go to university; some have talents like soccer talents, because schools in informal settlements do not have sports facilities; they will not know. There are numerous variables that disturb students' attainment and those variables are directly linked to whether a school is considered a rural or an urban school. City learners have greater access to many resources and consequently have opportunities that are not easily accessible to rural students. There are many variables that influence student performance, and these variables are directly related to whether a school is considered a rural or an urban school. Parents are more professional and understand the benefits of education. Parents of rural students were less likely to expect their children to improve their education.

4.19   4.19 Theme 6: learners from urban areas vs learners from learners receiving same quality education

4.19.1 Data presentation

SGB I and SGB 3 share the same common goal SGB 1 pointed out that "learners get quality education because educators work hard; they are trying their best to produce quality results though thereis lack of resources".

SGB2 mentioned that, "I don't think so since there is no laboratory for physical science learners". While SGB 2 indicated that "educators work under bad conditions but they work hard. In most cases they have to improvise since most of the money is used for maintenance".

SGB 4 indicated that, "Education received in both areas is the same; the only difference is the issue of infrastructure. Schools in urban areas they have all the resources needed to perform better".

SGB 5 and SGB 6 shared similar sentiments and said, "Though our schools in informal settlements and lack resources, our learners, they do perform better". SGB 6 elaborated further by saying teachers work hard and they are dedicated to help an African child.

4.19.2 Supporting literature

Educational excellence is the social, emotional, intellectual, physical and cognitive development of the whole child, each student, regardless of gender, race, ethnicity, socioeconomic status or geographic location. Prepare learners not just for tests, but for life. Some argue that a focus on literacy and numerals alone will achieve the beginning of quality education, but the SDG recognises that this definition is inadequate and outdated. Education is more than just a content delivery system. Rather, it is a system designed to enable all children to reach their full potential and participate in society as full and productive citizens.

UN Secretary-General Ban Ki-moon said, in 2012, he launched the SDG process that every child should be in school and improve the quality of schools so that students are ready to lead the future. I declared that I needed to be ready to be a productive citizen. Value education offers resources and guides policies to ensure that respectively a child enters school healthy and learns about and practices a healthy lifestyle; learns in an environment that is physically and passionately innocent for learners and adults; is actively

engaged in learning and is connected to the school and broader community; has access to personalised learning and is reinforced by qualified, caring adults; and is challenged intelligently and prepared for achievement in college or further study and for employment and contribution in a global environment.

Quality teaching provides the results needed for individuals, communities, and societies to prosper. It permits schools to get in touch and participate fully with their communities and access a range of services across sectors designed to support the educational development of their students (Slade, 2020). Current enlightening research has examined rural and urban dissimilarities in their achievement. Many teachers, researchers, legislators and the public believe that students from rural schools mostly obtain an education that is substandard compared to students who live in urban areas.

Students' backgrounds also affect their grades, and it can be seen that many students living in rural areas have lower academic achievement than students living in urban areas. There are many issues that lead to differences in the performance of rural and urban students. Students in urban schools enjoy many additional advantages over those in rural schools. The National Education Association states that underperforming young people are in rural public schools (Brown & Swanson, 2001). The children of Mukuru Kwa Jenga, Nairob's informal settlement, wake up every day for an education and a fair chance to fight for a better future. But for many, quality education remains a mirage. The government failed to regulate private operators in the education sector. More public-private partnerships will ensure that children in these settlement areas have a fair chance of receiving a quality education and competing with other children (Shisanya, 2021).

4.19 3 Analysis and interpretation of findings

The learners do not have enough resources, such as textbooks and calculators. The school does not get enough funds from the government. This was revealed by SGB 2, who finds it challenging to be a member of governing body in an informal settlement due to environmental conditions of poverty and lack of services. SGB 3 highlighted the fact that there is , excessive drugs

and high levels of dependence in schools. The SGB and community should work together and approach big business to fund small businesses to alleviate poverty and create jobs. SGB 5 and SGB 6 shared similar sentiments and said, though our schools in informal settlements lack resources, our learners, they do perform better.

The findings also revealed that several school governing bodies, specifically those in rural and previously disadvantaged schools, do not obey stipulated rules within the South African School Act of 1996 and fail in their mandate. SGB 1 indicated that no proper handover and accountability from outgoing SGB, it is a challenge. The study also revealed the issue of accountability. It is essential to train school governors before an assumption of duty. One of the SGB members said we are not trained before we start working and this manifests in difficulties such as unfamiliarity with meeting procedures. It was also revealed that some SGB members feel terrified being in the presence of other members who seems to be further informed.

SGBs in this study expressed that we used to have churches in our school using our premises on Saturdays and Sundays and tuckshops. They used the money for maintenance. Since Covid19 everything has stopped".They know what is finest for the school and they sustain the school by deciding what is necessary. Not all SGB members agreed that education is the same; some believe that the only difference is where the school is located and the availability of infrastructure. SGB 1 pointed out that learners get quality education because educators work hard. They are trying their best to produce quality results, though there is a lack of resources. SGB 2 mentioned that I do not think so since there is no laboratory for physical science learners. SGB 3 indicated that educators work under bad conditions but they work hard. In most cases, they have to improvise, since most of the money is used for maintenance. The study revealed that it is pointless to compare schools in informal settlements with urban-area schools. More public-private partnerships will ensure that children in these settlement areas have equal opportunities to receive a quality education and compete with other children.

4.20 SUMMARY

This chapter discussed the results of the interviews, insights from the literature, and the interpretation of the results. Analysis of escalating problems from information found that the sentiments of a participant working in informal settlements differed from school to school in three schools. Three principals from a total of three schools experienced anxiety and uncertainty in schools located in informal settlements. Communities often block access to schools, causing staff and children to go home. The HoDs spoke with one voice on the issue of working in informal settlements.

This means that it is becoming a district issue rather than affecting a single school. I conclude this study by summarising the main features of each chapter and discussing the results after each topic. The significance and limitations of this study are detailed, followed by conclusions and an SGB indicated that training is required before working as an SGB. Survey participant responses reveal challenges associated with managing infrastructure. The school's infrastructure is ageing and ongoing tests are being carried out to ensure that the school remains at a level where teachers can meet the needs of their students. Schools in informal settlements have frequent break-ins, door break-ins, graffiti, and students who are ill-behaved and do not take care of their schools, making the infrastructure very difficult to manage. Several SGB members were first-time directors of the school. It is a challenge for them. They are not trained to deal with issues such as bullying, theft and substance abuse. The next and final chapter has recommendations.

CHAPTER 5 SUMMARIES, CONCLUSIONS AND RECOMMENDATIONS

5.1   Introduction

The preceding chapter dealt with the presentation of data, the corroboration of the findings from the literature, and the interpretation of results. This is the concluding chapter of the study and a summary of the results found from the themes in the previous chapter is presented. It begins with a summary of the preceding chapters to ensure that it presents a comprehensive, all-inclusive view of the research undertaken for this study.   It then provides significant findings and approval plans for how school leadership teams and school administrators manage infrastructure. The chapter concludes by stating the importance and limitations of this study.

5.2 Summaries of the chapters

Each chapter is summarised to highlight the key issues discussed in this study. This is done to enhance understanding of the rationale for the research and to articulate the steps and the process followed to obtain the final results.

5.2.1 Chapter 1

In this chapter, the problem of a lack of effective infrastructure management in informal settlements was presented. This was supported by the rationale that I used my knowledge as a department manager to observe the day-to-day challenges associated with managing a school's infrastructure. The purpose of this study is to examine how school management teams and school administrations manage school infrastructure in informal settlements around Soweto.

In order to understand the infrastructure-related challenges experienced by schools in informal settlements and how they deal with them, we have outlined the survey questions in terms of examining the aspects of methods for dealing with these encounters and identified challenges. This study was

based on a conceptual framework. This framework helps to understand the context of schools in the informal settlements around Soweto and helps demystify the assumptions and principles of the framework.

The conceptual framework, the relationships between the various variables and their relationships are clearly clear. The research methods and research strategies used in this study were presented. A context was presented for selecting the study population. Data collection techniques, sampling strategies, and sample sizes were outlined. Methods of data analysis were presented and questions to protect the authenticity and reliability of studies were discussed. Study limitations were predicted and ethical and policy considerations for the study were outlined. The implications of the study were projected, followed by chapter summaries.

5.2.2 Chapter 2

This chapter reviewed both local and international literature that deals, which is based on managing school infrastructure in informal settlements. The literature on the conceptual was studied to understand the background of schools in informal settlements around Soweto. The framework is framed around seven principles, which cover SWOT analysis, diagnostic analysis, values and expectations of parents, characteristics of schools in informal settlements, school management task, best practice and resources. Review literature on the influence of school infrastructure on learning and the nonexistence of resources in schools, trials of management in managing school infrastructure, the significance of managing school infrastructure in informal settlements, why education infrastructure matters for learning, experiments experienced by teachers, learners in previously disadvantaged schools, and significance of minimum rules and values. In addition, review literature on managing infrastructure in developed countries and in South Africa.

5.2.3   Chapter 3

This chapter described the research methods and information-gathering systems used in this study. A case study design was chosen as the study design. An interpretation research model was adopted and ontological and epistemological expectations were discussed. Qualitative research and case studies were used to obtain responses from a carefully selected sample of participants. Survey locations were specifically selected principals, HoDs, and school administrators to assess participants' willingness to participate in this survey. Participants were interviewed using a telephone interview tool designed so that participant responses provided rich feedback on the research questions. Limitations of the interview procedure were clarified and the reliability and credibility of the data were established. The collected data was stored on digital tape records. Study participants and locations were then coded, and these codes were used to create themes that allowed us to report, analyse, and document our findings. Findings were obtained, recorded and analysed by thematic analysis. Ethical aspects that must be considered and adhered to when collecting data are presented and recorded.

5.2.4   Chapter 4

Outcomes achieved from the interviews with the participants were deliberated in this chapter. Chapter 4 provided an inclusive analysis of the data. The research conclusions were presented in terms of the themes and subjects which arose from the data collected during the interviews.

The following themes were created:

- Theme 1: Defining characteristics in informal settlements
- Theme 2: Challenges concerning management of infrastructure
- Theme 3: Dealing with challenges of managing infrastructure
- Theme 4: Support from parents and community
- Theme 5: Comparing schools in informal settlements with schools in urban areas

Each topic contains information provided by participants. The literature providing research data on this specific topic was reviewed. Each topic was

analysed according to the findings from the literature and the responses of the participants. The findings were then produced and explained.

5.2.5 Chapter 5

Building on the summary of the previous chapter, this section discusses the conclusions drawn from the findings. We discuss the importance of the study, its limitations, and recommendations for future research.

5.3 Summary of the Findings

5.3.1 Defining characteristics of informal settlements

There is a feeling of insecurity and uncertainty in a school located in an unplanned settlement. This is caused by a lack of services. The community often blocks access to the school and, as a result, the staff and children return home. There is no teaching and learning taking place on that day. The findings revealed that learners come late to school because they have to undergo certain processes before going to school. Learners come to school hungry because they have nothing to eat. Most learners have no school uniform. During rainy seasons they get wet and their books are drenched in water. There is gangsterism in which learners get involved. Teenage pregnancy is a common thing. Vandalism of the school takes place time and again. Theft is a problem in this area and a lack of electricity.

Most families have no electricity at all. Fires are common in the area. Some learners are even killed by fires. Streets are not properly measured or tarred. Poverty around the area is the order of the day. Although the South African education system has changed since 1994, there are still countless encounters within the education system. These are experiments conducted by learners from poverty backgrounds, especially those living in informal settlements. Learners do not have enough resources, such as textbooks and calculators. Principals have to borrow some resources from other schools and improvise to enhance teaching and learning. Children in an informal settlement are not much exposed to new developments that are constantly

brought to the department of education, mainly because whatever infrastructure is brought to school for development the community members destroy and this hinders the learner development.

There is a nonexistence of parental participation in the teaching and learning of learners in informal settlements. Parent treat schools as places where their children are kept so that they can have enough time to do their stuff That schools are in crime-ridden communities does make it hard for learners to realise their potential. The study also revealed that poverty is a mindset and it is hard to change a mindset. It is easy for learners to fall into the trap of not hoping and striving for a better life. SGBs spend most of the time at school dealing with disciplinary procedures.

5.3.2 Challenges concerning the management of infrastructure

This study uncovered that schools in informal settlements experience many challenges like the breaking of doors and graffiti. Learners in this school behave in a bad manner and they do not take care and look after their school; they are the ones who vandalise their school. There is theft of important resources by the community". Managers find it difficult to manage infrastructure because of frequent burglaries. One of the school in an informal settlement had a solar panel supplying electricity; it was stolen twice. Classes are broken into and toilets vandalised. The study also revealed cases of school infrastructure that is always vandalised by the community who stole copper from electric wires and pipes. However, some of it is preserved by the local people, if allowed to use school facilities for church and weddings.

Participants ensures children health and well-being and supports academic performance. Building maintenance is important. During the development stage of school buildings, there is always the challenge for educators to maintain school buildings at a level that allows them to meet the aspirations of their students. Most schools' infrastructure has been ignored in terms of maintenance for a long time. The school laboratories are almost non-functional because they have not been maintained.

This study expressed that learners are the ones responsible for destroying infrastructure and that only leads to going backwards in terms of school development. Money received from government is not enough to repair most schools. School governing bodies (SGBs) in rural and previously disadvantaged schools do not adhere to the practices set out in the South African Schools Act 1996, resulting in educational failures. There is no proper handover and accountability of the outgoing SGB. This is a challenge. Part of SGB members were first-time governors of the school, which was a challenge for them. For example, SBG 2 does not provide adequate training to deal with issues such as bullying, theft and substance abuse.

5.3.3 Dealing with the situation

This study formulated strategies that school management teams can use to deal with the challenges. Management exclaim that they held meetings with the community and so far burglaries have subsided. The community is invited to meetings to inform them that they are the custodian of the school and they need to guard the school as much as they can and stop any person who could be seen trying to vandalise the property. A principal asked some community members who have experience or skills who are unemployed to help with maintenance, such as fixing broken windows and door handles. Principals have toi nstil the culture of always telling learners not to vandalise the school.

They sometimes encourage parents to pay for loss or damage, which at times is difficult, since the parents are not working. Teachers should participate in community projects related to education and be among the people living in the community to better understand their challenges, living conditions and self-image. Educators should seek to instil hope in learners for the future by introducing them to activities that may help them progress in sport. Schools have partnered with SAPS to help them with combating the issue of crime in the school and community surroundings. School have written letters to the Department of Education to assist with infrastructure. The study revealed that there is a lack of policies pertaining to what is done to whoever was found to have committed crime at schools. SGBs have to do fundraising and asked

parents to donate R3 every Friday and that is not enough, because not all parents can afford to pay.

SGBs are responsible for purchasing textbooks and stationery for schools; one of the SGB member mentioned that they asked for donations from our suppliers. One of the SGB members mentioned that they used to have churches in the school using their premises on Saturdays and Sundays and tuck shops. They use money for maintenance. Since Covid-19, everything has stopped. An SGB also indicated that the school has a partnership with SAPS (South Africa Police Services).   They are involved in a programme called Adopt a COP. They have a police officer responsible for their school. They normally do a random search for drugs and dangerous weapons. SGBs encourage the school to partnership with the community to help with security in our school.

5.3.4 Support from teachers and community

All three principals share similar sentiments. They say they do not get support from parents because some parents do not care and they do not even arrive when they are asked to come to school and solve any matter regarding the wrong doing of their. The community at large is not taking care of its own school because the community also steals the school property. The support they get from parents and the community is "very minimal". Parents are not helping with learners' homework, which gives teachers extra work to let the learners complete work. Parents are not willing to contribute money to fund projects that schools initiate to fund-raise. The community is not willing to assist at school on things they will not benefit from. The study discovered that there is a poor relationship between parents and the principal. SGB 2 said in most cases the principal do things themselves without consulting the SGB. They are asked to come and sign cheques, even to sign blank cheques.

Some SGBs have a good relationship with the principal and educators but it is not always the case. Some have not yet been properly introduced; they normally work with the principal. An HoD mentioned that some parents do not even bother to open the exercise books of their children. Some get involved

in October just when the final exam is about to start. One HoD from the study said that they do get support from the parents, also from SGB; they are helpful. All three HoDs spoke separately about overcrowding, limited infrastructure, support, and training, etc. HoDs had to play a role in "shaping the kids" because their parents are heavy drinkers, while others have been bullied their entire lives and are unable to take responsibility for raising and caring for them. The families and communities the HoD spoke of had child abuse and incest, and how they had to work to get the students' attention, sometimes, given the opportunity by the community to give lectures or demonstration sessions. You can be a public health nurse.

5.3.5 Comparing schools in informal settlements to schools in the urban area

Principals said there is a huge difference in comparing schools in informal settlements and urban areas, in relation to infrastructure, teaching and learning, smooth running of the school, behaviour and results, to name a few. Schools in urban areas are better advantaged and learner from urban areas pass with good symbols and the environment is conducive for teaching and learning. Learners from urban schools later become good citizens because they are prepared and taught in an inviting, healthy and good environment. The study discovered that it is of no use comparing schools to urban areas because their background is not the same. It is good to stay and develop the place where you are and teach the community to value the schools that have been built for them. Parents have to teach their families and children about how valuable education is. In informal settlements, infrastructure is very poor. There are no sporting facilities, no electricity and running water; the ground is uneven and the fence is vandalised.

The HoDs were also asked about their feelings comparing schools in informal settlements to schools in the urban areas. They say that urban-area schools are at an advantage because of the community around them; they do not sabotage the school development, while informal settlements are surrounded

by crime and high use of drugs, that can be a challenge for learners. Schools in informal settlements are worrisome. They also indicate that schools in informal settlements are expected to achieve the same as urban schools, whereas the playing field is not level. The study revealed that whether a child resides in a society or in a faraway not-so-developed isolated village, the right to education should be a priority to all. Schools in urban areas have more support from parents.

Parents support schools financially. They are paying school fees and there is less crime in schools as compared to an informal settlement. Learners and parents in urban areas value education more than learners in informal settlements where everything is free. SGB pointed out that they maintain and fix one and the same thing over and over again because of Nyaope boys who are stealing all metal things and copper. There is no progress when it comes to maintenance. For example, they buy new taps this week; next week they are gone.

Schools in urban areas are well taken care of as compared to informal settlements schools. They have resources such as lab and sports facilities. Not all learners will go to university; some have talents like soccer talents, but, because of schools in informal settlements, they do not have sports facilities; they will not know. Schools in urban areas are beautiful, well-resourced and welcoming. Parents in urban areas are asked donations from where they are working to give to schools where their children attend.

5.4 Conclusion

Despite the changes in education after apartheid in 1994, the education system still faces some challenges. Previously disadvantaged South African schools often face significant challenges in sourcing resources to ensure the delivery of an adequate education. The reason is that these schools are mainly located in poverty-stricken areas, typically townships, rural areas and informal settlements. These are the challenges faced by learners living in poor environments, especially those living in informal settlements. Learners do not have enough resources, such as textbooks and calculators.

Children in informal settlements have little exposure to the new developments that are constantly brought to the Ministry of Education. This is mainly because community members are destroying the infrastructure purchased for school development and hindering the growth of learners. The purpose of this study was to examine how school administrators and governing bodies manage school infrastructure in informal settlements around Soweto. The results highlight the need for all stakeholders to work together to protect school infrastructure.

Recent research establishes that there is a shortage of infrastructure management. Though there are many challenges, various parents have a destructive attitude towards the education of their children. However, this revealed that the community at large is not taking care of its own school because the community also steals the school property. The study found that the relationship between parents and principals was poor.

Finally, teachers were encouraged to provide learners with a positive outlook for the future by introducing them to activities that would help them progress (such as sports). You should try to give encouragement. Schools must partner with SAPS to help them with combating the issue of crime in the school and community surroundings.

This research highlighted the importance of managing school infrastructure. The commendations authorise the need for the DBE to intervene and offer training to SGBs to provide infrastructure in informal-settlement schools. A necessary requirement for and school is to have a good relationship with the community where the school is located. Principals and educators must be visible and support projects initiated and start projects that will teach or empower the community. This will help to combat crime and the community will help to protect the school property. This study is expected to generate broad interest and awareness among policymakers and DBEs about the importance of school infrastructure management in informal settlements.

The utmost understandable areas in need of extra study are related to the research question for this study. As this study only focused on a limited number of participants and depended only on interviews as an information-

gathering tool, a similar study connecting a much larger number of participants and more detailed data-gathering processes is needed to be able to generate generalised findings.

5.5 Significance of the study

School infrastructure is important for positive teaching and learning in a safe and secure environment. Learners need to learn in a conducive environment. First-class infrastructure facilitates better teaching, advances outcomes and reduces dropout rates. The study will produce knowledge that informs schools in informal settlements and the management of schools to deal with challenges relating to the management of infrastructure, and the strategies on how to improve the management of their infrastructure.

Teachers and learners are motivated by good and well-maintained infrastructure. Schools located in such challenging areas such as informal settlements face problems that affect the safety and security of their equipment, buildings and grounds. Through this study, school management will be able to make informed decisions based on the findings of the study, and learners will hopefully obtain access to better education. This study will also help with the problem of parents who remove their children from schools in informal settlements and help the government to ensure that schools have maintenance plans to avoid unnecessary incidents that took place in schools.

5.6 Limitations of the Study

The three limitations of this study are outlined in the following subsections.

5.6.1 Limited access to schools

The schools that I first selected to take part in the study withdrew from the study for undisclosed reasons. This meant I had limited access in schools around Soweto and Johannesburg Central District.

5.6.2 Limited number of schools

This study was directed in three schools in one circuit of Gauteng province and the strength of the findings would be improved if a wider population of SMTs and SGBs within the area were investigated. Nonetheless, the findings of the study were recognised and may share light to many South African schools. This study has looked at two SMTs and two SGBs from the selected schools. Evidence from this study shows that it is important to manage infrastructure.

Exclusion of other schools in other informal settlements not around Soweto

Only three schools participated in this study because of the limited number of schools in informal settlements around Soweto. The majority of schools are based in location and have an informal settlement next to the school. The study focused only on informal-settlement schools around Soweto. I think if the study covered other informal-settlement areas, dissimilar results could have developed.

5.7 Recommendations for further research

The management of school infrastructure in informal settlements is a problem faced by many countries around the world. Both nationally and internationally, research on this topic is still inadequate, and much work remains to be done to address the precise questions. Future studies may be conducted with additional participants consisting of educators to learn educator perspectives on infrastructure management in informal settlements. Educators are important stakeholders in the school environment and often work in partnership with parents. This study examined only settled informal schools in the Soweto area. Therefore, research on other areas of informal settlements is mandatory to gain a purer and better perception of SMTs, SGBs and other local educators.

5.8 Conclusion

The study shows that teaching and learning are the primary activities of schools, and all forms of resources need to be dedicated to improving academic performance. However, the results of both the literature and this observed study indicate that there are many contextual factors that present challenges that impede effective teaching and learning in non-formal settlement schools. Today, some schoolchildren in Namibia suffer from poverty and basic-food shortages. In these situations, they feel worthless and neglected and, in most cases, are forced to use violence to regain a sense of power. It is located in an ecologically fragile area. This poses risks due to poorly designed building structures and inappropriate land use, leading to environmental degradation.

There are various social problems, such as drug addiction, poverty and crime, making it difficult to raise children in these areas. Children are usually single parents. There are various families made up of young children who have to take care of themselves and other children, as the HIV/AIDS pandemic plagues their parents. Parents must be involved in the upbringing of their children from the beginning. Educators teaching learners were dissatisfied with the discipline of their learners, who were often late to school and had trouble doing their homework. Low-performing school learners whose parents are often not involved in their children education. They do not receive regular feedback on their child progress. The surrounding community is not proud of such schools and keeps their distance from them. As highlighted by Chinyoka (2014), economic wealth also affects schooling for the poorest in developing countries.

Learners who suffer from bad experiences are more likely to drop out than learners from wealthy families. The role played by SGBs is sometimes difficult and SGBs do not have the power to participate in academic affairs and carry out their duties. SGBs are faced with pressing challenges and could not adequately meet these challenges. They lacked basic financial management knowledge and skills and, as a result, were unable to devise practical solutions to real problems.

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GAUTENG PROVINCE

Department: Education

REPUBLIC OF SOUTH AFRICA

For admin. use

GDE RESEARCH REQUEST FORM

REQUEST TO CONDUCT RESEARCH IN INSTITUTIONS AND/OR OFFICES OF THE GAUTENG DEPARTMENT OF EDUCATION

1. PARTICULARS OF THE RESEARCHER

1.1	Details of the Researcher	
Surname and Initials:	Dlamini A. M
First Name/s:	Audrey Mamoneisa
Title (Prof / Dr / Mr / Mrs / Ms):	Mrs
Student Number (if relevant):	14460051
ID Number:	7105250614088

1.2	Private Contact Details	
Home Address		Postal Address (if different)
164 Lawn Street		
Rosettenville		

	169
Postal Code: 2190	Postal Code:
Tel: (011) 9305218	
Cell:0785088614	
Fax:	
E-mail:dlaminia10@gmail.com	

2. PURPOSE & DETAILS OF THE PROPOSED RESEARCH

2.1	Purpose of the Research (Place cross where appropriate)	
Undergraduate Study – Self		
Postgraduate Study – Self		×
Private Company/Agency – Commissioned by Provincial Government or Department		
Private Research by Independent Researcher		
Non-Governmental Organisation		
National Department of Education		
Commissions and Committees		
Independent Research Agencies		
Statutory Research Agencies		
Higher Education Institutions		

2.2	Full title of Thesis / Dissertation / Research Project
Managing school infrastructure in informal settlements around Soweto	

2.3	Value of the Research to Education (Attach Research Proposal)
The purpose of this study is to give informal settlement schools a body of knowledge from which can derived understanding of how to better manage their infrastructure	

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2.4	Proposed date of completion of study / project and submission of research findings to GDE
Completion date:	2020/10/30
Submission to GDE date:	2020/08/27

2.5	Student and Postgraduate Enrolment Particulars (if applicable)	
Name of institution where enrolled:		University of Pretoria
Degree / Qualification:		MEd Education Management, Law and Policy
Faculty and Discipline / Area of Study:		Education
Name of Supervisor / Promoter:		Dr Nylon Marishane

2.6	Employer (where applicable)	
Name of Organisation:		Lavela Secondary School
Position in Organisation:		Head of Department
Head of Organisation:		Mbatha S.M
Street Address:		1586 Dlamini Street
		Zola North
Postal Code:		1884
Telephone Number (Code + Ext):		(011) 9305218
Fax Number:		
E-mail:		

2.7	PERSAL Number (where applicable)

1	8	6	5	8	4	4	0

SMT	Interview	30-1hour
SGB	Interview	30-1hour

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

CONSENT FORM

I_____ (your name), agree/do not agree (delete what is not applicable) to take part in the research project titled: Managing school infrastructure in informal settlements around Soweto. I understand that I will be interviewed about this topic for approximately one hour at a venue and time that will suit me, but that will not interfere with school activities or teaching time. The interview will be audio taped.

I understand that the researcher subscribes to the principles of:

➤ Voluntary participation in research, implying that the participants might withdraw from the research at any time.

➤ Informed consent, meaning that research participants must at all times be fully informed about the research process and purposes, and must give consent to their participation in the research.

➤ Privacy meaning that the confidentiality and anonymity of human respondents should be protected at all times.

➤ Trust, which implies that human respondents will not be responded to in any acts of deception or betrayal in the research or its published out comes.

We also would like to request your permission to use your data, confidentially and anonymously, for further research purposes as the data sets are the intellectual property of the University of Pretoria. Further research may include secondary data analysis and using the data for teaching purposes. The confidentiality and privacy applicable to this study will be binding on further research studies.

Signature: _____   Date: _____

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

ANNEXURE B: REQUEST TO PRINCIPAL TO CONDUCT RESEARCH

Dear Principal

I am a student studying through the university of Pretoria. I am currently enrolled for Bed (Masters) in the faculty of Education. I have to complete a research module and one of the requirements is that I conduct a research report about my work. I request you to allow me to conduct a part of this research in your school.

The topic of my research is "Managing   school infrastructure in informal settlement around Soweto". It is important to teach and learn in a safe and secure environment. A safe learning environment focuses on academic achievement, maintaining high standard, high quality infrastructure facilities, better instruction, improves learners' results and reduces the dropout rate among other benefits.

The study is likely to produce knowledge that informs school in informal settlement and the management of informal settlement schools to deal with challenges relating to the management of infrastructure and the strategies on how to improve the management of their infrastructure. Through this study school management will be able to make informed decisions based on the findings of the study and learners will hopefully obtain access to better education.

 I intend to interview two School Management Team (SMT) members and two school Governing Body (SGB) members. I have attached a copy of the interview schedule for your information. Interviews will be conducted at a venue and time that will suit the SMT and SGB but it will not interfere with teaching time. It will be audio taped and transcribed by me for analytic purposes. Only my supervisor and I will have access to this information.

SMT and SGB participation is voluntary and can be withdrawn at any time. The identification of the school and all will be protected. Only my supervisor and I will know which schools were used in the research and this information will be treated as confidential. Pseudonyms will be used for your schools' SMT and SGB during data collection and analysis. The information that will be collected will only be used for academic purposes. Collected data will be in my possession or my supervisor's and

will be locked up for safety and confidential purposes. After completion of the study, the material will be stored at the university's Education Management, Law and Policy in the Faculty of Education according to the policy requirements.

If you have any question, do not hesitate to contact my supervisor or me at the numbers given below, or via Email.

Signature of student

_____

_____

Name of student: _____

_____(Supervisor)

Contact number for student: _____

_____

INFORMED CONSENT

VOLUNTARY PARTICIPATION IN A RESEARCH PROJECT

I, _____, (Full name) understand the information given to me and I am willing to participate in the study with the title *Managing school infrastructure in informal settlements around Soweto.* I understand that my participation in this study is voluntary and that my identity will be protected and remain confidential.

_____   _____

Participant's Signature   Date

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ANNEXURE C: INVITATION AND CONSENT FORM FOR SCHOOL MANAGEMENT TEAM

Faculty of Education

Department of Education Management and Policy Studies

University of Pretoria, Groenkloof Campus

Pretoria 0002

RE: REQUEST FOR PERMISSION TO DO RESEARCH IN YOUR SCHOOL

Dear SMT

My name is Audrey Dlamini. I am currently enrolled as a Master's student at the University of Pretoria and would like to ask for permission to conduct research at your school. The title of my study is: *Managing school infrastructure in informal settlements around Soweto.* The study focuses on challenges experienced in the management of school resources such as buildings, grounds, services and teaching and learning equipment. As part of my study, I have to interview school principals, members of the School Management Team and members of the School Governing Bodies.

As a participant in this study, you will be requested to take part in an interview session which will last for 45 minutes. With your kind permission, the interview will be recorded for subsequent transcription and data analysis. The data derived from the interview will be kept strictly confidential and stored in a safe place where only my supervisor and I will have access. Your participation in this study is voluntary and your right to privacy will be respected by ensuring that your identity is not disclosed.

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For this reason, your real name will be replaced by a pseudonym to ensure anonymity. I would like to assure you that you will be treated with respect and should you decide to withdraw from participating further in this study at any time, you will be free to do so without any consequence.

I also would like to request your permission to use your data, confidentially and anonymously, for further research purposes, as the data sets are the intellectual property of the University of Pretoria. Further research may include secondary data analysis and using the data for teaching purposes. The confidentiality and privacy applicable to this study will be binding on future research studies.

If you are willing to participate in this study, please complete the consent form attached to this letter.

_____

Audry Dlamini   Dr RN Marishane

Student Researcher   Supervisor

University   of   University of Pretoria

CONSENT FORM

I_____ (your name), agree/do not agree (delete what is not applicable) to take part in the research project titled: Managing school infrastructure in informal settlements around Soweto. I understand that I will be interviewed about this topic for approximately one hour at a venue and time that will suit me, but that will not interfere with school activities or teaching time. The interview will be audio taped.

I understand that the researcher subscribes to the principles of:

➢ Voluntary participation in research, implying that the participants might withdraw from the research at any time.

➢ Informed consent, meaning that research participants must at all times be fully informed about the research process and purposes, and must give consent to their participation in the research.

➢ Privacy meaning that the confidentiality and anonymity of human respondents should be protected at all times.

➢ Trust, which implies that human respondents will not be responded to in any acts of deception or betrayal in the research or its published out comes.

We also would like to request your permission to use your data, confidentially and anonymously, for further research purposes as the data sets are the intellectual property of the University of Pretoria. Further research may include secondary data analysis and using the data for teaching purposes. The confidentiality and privacy applicable to this study will be binding on further research studies.

Signature: _____ Date: _____

ANNEXURE D: INVITATION AND CONSENT FORM FOR SGB

Faculty of Education

Department of Education Management and Policy Studies

University of Pretoria, Groenkloof Campus

Pretoria 0002

RE: REQUEST FOR PERMISSION TO DO RESEARCH IN YOUR SCHOOL

Dear school Governing Body

My name is Audrey Dlamini. I am currently enrolled as a Master's student at the University of Pretoria and would like to ask for permission to conduct research at your school. The title of my study is: *Managing school infrastructure in informal settlements around Soweto.* The study focuses on challenges experienced in the management of school resources such as buildings, grounds, services and teaching and learning equipment. As part of my study, I have to interview school principals, members of the School Management Team and members of the School Governing Bodies.

As a participant in this study, you will be requested to take part in an interview session which will last for 45 minutes. With your kind permission, the interview will be recorded for subsequent transcription and data analysis. The data derived from the interview will be kept strictly confidential and stored in a safe place where only my supervisor and I will have access. Your participation in this study is voluntary and your right to privacy will be respected by ensuring that your identity is not disclosed.

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UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

For this reason, your real name will be replaced by a pseudonym to ensure anonymity. I would like to assure you that you will be treated with respect and should you decide to withdraw from participating further in this study at any time, you will be free to do so without any consequence.

I also would like to request your permission to use your data, confidentially and anonymously, for further research purposes, as the data sets are the intellectual property of the University of Pretoria. Further research may include secondary data analysis and using the data for teaching purposes. The confidentiality and privacy applicable to this study will be binding on future research studies.

If you are willing to participate in this study, please complete the consent form attached to this letter.

_____

Audry Dlamini   Dr RN Marishane

Student Researcher   Supervisor

University   of   University of Pretoria

I, _____, (Full   name) understand the information given to me and I am willing to participate in the study with the title *Managing school infrastructure in informal settlements around Soweto.* I understand that my participation in this study is voluntary and that my identity will be protected and remain confidential.

_____   _____

Participant's Signature   Date

SCHOOL MANAGEMENT TEAM INTERVIEW PROTOCOL

MANAGING SCHOOL INFRASTRUCTURE IN INFORMAL SETTLEMENTS AROUND SOWETO

Interview question

Time of interview_____   Duration_____

Place_____

1. Please provide some background to your teaching career.

2. How long have you worked at this school?

3. What is the capacity of the school?

4. How old is the school?

5. Tell me how does it feel like working in the informal settlement? What stood out to you as the defining characteristics of the informal settlement?

6. What challenges do you have concerning management of infrastructure?

7. How do you deal with the challenges?

8. Do you get support from parents and community?

9. How do you feel about comparing schools in

informal settlement and school in the urban area?

SCHOOL GOVERNING BODY INTERVIEW PROTOCOL

MANAGING SCHOOL INFRASTRUCTURE IN INFORMAL SETTLEMENTS AROUND SOWEINTERVIEW QUESTION

Time of interview_____   Duration_____

1. Please provide some background relating to school governance

2. How long have you been with the school?

3. Tell me how does it feel like to be a member of School Governing Body in an informal settlement

4. What challenges do you have concerning management of infrastructure?

5. How do you deal with these challenges?

6. Do you get support from the teachers and community?

7. How do you feel about comparing schools in an informal settlement and schools in the urban area?