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CHAPTER 3

Analysis of the impact of poor infrastructure provision on the quality of education in rural schools

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Abstract

Most developing countries tend to repeat the same mistakes of under-investing in school infrastructure meant to facilitate quality education. South Africa is no exception, with a significant decline in the quality of school infrastructure inevitably posing a serious risk to the quality of education provided. This study investigates the effects of poor infrastructure provision on the quality of education. The Sustainable Development Goals pioneered by UNESCO in 2016 identified the threat posed by poor school infrastructure facilities to human rights, safety, and the right to life of teachers and learners (UNESCO, 2016). A qualitative research approach was followed to generate and analyse data. A systematic literature review was preferred as the main source of the data-gathering process to answer the critical research question. This study built a multiple-case approach by carefully selecting peer-reviewed scholarly publications questioning the state of school infrastructure, non-governmental organisation Advocacy group 'Section 27' report, education policy, and the

learning process, including academic articles, research reports, books, and monographs on stumbling blocks impacting on effective education in South Africa. This painstaking process draws its discourse and conclusion from the analysis and synthesis of information, culminating in a set of propositions developed by the author. The choice of sources led to sound empirical evidence and plausible conclusions and recommendations. The study demonstrates that governments do not pay close attention to critical school infrastructure and associated amenities to promote effective education and quality of life. Infrastructure such as pit toilets in Limpopo, Eastern Cape, and KwaZulu-Natal are concerning. Again, the shortage and delays in the distribution of teaching materials and books, gang violence playing out in schools and social media harassment reported in media threaten teachers and learners alike and, as such, have a negative impact on the performance of learners, referred to in this study as stumbling blocks. This has serious long-term ramifications on the effective teaching and learning environment, indirectly perpetuating total neglect and lack of accountability by the Department of Basic Education (DBE).

Keywords: *rural schools, quality teaching, impact, school infrastructure, stumbling blocks, accountability*

3.1 Introduction

The high demand for basic quality education in South Africa is under threat because it cannot be equally matched with increased school infrastructure investment. In this study, the concept of school infrastructure refers to any physical structure and auxiliary service constructed to support quality education (Nasuna, Arinaitwe, Barigye & Kyayemagye, 2022; Nasuna, 2022). Most scholars and policymakers concur that infrastructure includes physical, services, and didactic infrastructure (Cuesta, Glewwe & Krause, 2016). The South African Schools Act, 1996 (Act No. 84 of 1996) contains regulations relating to minimum standards for public school infrastructure. South African Schools Act categorically specifies that no school must be without basic sanitation facilities based on the following four premises: first, all schools must have sufficient sanitation facilities (DBE, 2018). The regulation stipulates that sanitation facilities must be accessible to all learners and teachers, provide privacy and security, promote health and hygiene standards, comply with all relevant laws, and be maintained in good working order (South African Schools Act, 1996). The second requirement states that the choice of sanitation technology must be based on assessing the most suitable sanitation technology for each school (DBE, 2018). The third requirement for the Norms and Standards states that sanitation facilities could include one or more of the following: water-borne sanitation, small bore sewer reticulation, septic or conservancy tank systems, ventilated improved pit latrines, and composting toilets (DBE, 2018). The fourth requirement states that schools do not allow plain pit and bucket latrines (DBE, 2018).

Therefore, poor school infrastructure is one of the main factors impacting academic performance negatively (du Plessis & Mestry, 2019). The government's policies prioritised the eradication of the bucket system and pit latrine toilets with minimal success (Odeku, 2022). Thus, the Department of Basic Education (DBE) and the courts have been at loggerheads over the very slow-paced infrastructure delivery in rural schools. This dereliction of responsibility has cost the lives of innocent learners, and the DBE consistently fails to take accountability despite the legislated norms and standards. Studies have acknowledged that certain core components of the rights include the provision of school infrastructure for effective teaching and learning (Odeku, 2022; United Nations, 2015a). Failure to provide adequate infrastructure results in serious violations of fundamental human rights for the learners and teachers. However, investment in educational infrastructure maximises the accessibility and effectiveness of education (Barrett *et al.*, 2020).

It is contradictory that in 2023, public schools in rural areas received less attention from the media, while affluent and urban schools with excellent infrastructure received significant attention. Dube (2020) argues that rural schools tend to suffer from decades of neglect from the government with regard to support, and to date, many schools remain underdeveloped. Some have their infrastructure vandalised by criminals who take advantage of years of neglect from local education districts and school authorities, including the School Governing Body (SGB) (du Plessis & Mestry, 2019; Dube, 2020). These authors conclude that most rural schools lack the basic resources and infrastructure for sanitation. Hence this study investigates the implication of poor

infrastructure provision and years of neglect on the quality of education. One report by SABC in 2019 exposed unsafe conditions under which teaching and learning occur in some schools. The report provides details of these schools as dilapidated, overcrowded, and still using pit toilets (SABC, 2019). A similar concern was raised in one letter to Gade, the SAHRC commissioner, who expressed unhappiness with the sanitation status in the Eastern Cape, KZN, and Limpopo. This justifies that many schools in the Eastern Cape still do not have access to water or any form of sanitation, violating several basic human rights of learners (TimesLive, 2021). This study commences with definitions of pit latrines/toilets and water, sanitation, and hygiene.

3.2 Pit latrine

Rural schools in South Africa rely on traditional technology design to construct non-ventilated pit toilets, also called latrines. Traditional latrines have provided sanitation in poor rural and semi-urban schools for over three decades, but they have recently become highly contagious and dangerous health hazards (Hossein, Whittington-Jones & Tandlich, 2014). Due to poor technological design, workmanship, and defective building materials used in the construction, these latrines have no reliable lifespan. They are cheap and convenient to construct but dangerously fragile. To construct pit toilets, Odeku (2022) states that holes (pits) are dug in the ground and usually covered on top with makeshift planks or wood to prevent offensive odour emission. Makeshift walls are constructed around the pit to protect human dignity when using such latrines. Odeku (2022) demonstrates that some of these latrines are not properly

constructed, and they often become death traps because they are prone to collapse without warning. Most school leaders fail to monitor the lifespan of such structures; therefore delay in decommissioning them since there are no safety guidelines.

Table 3-1: Number of schools using pit latrines and affected teachers and learners (Water & Sanitation Report, 2021).

Province	Number of schools using pit latrines	The number of teachers affected	Number of learners affected
Eastern Cape	2 236	24 705	653 516
KwaZulu-Natal	983	12 978	349 826
Mpumalanga	59	885	30 270
North-West	19	175	5 505
Total	**3 297**	**38 743**	**1 039 117**

Table 3-1 above depicts the number of schools still using latrines in 2021. During the COVID-19 pandemic, the DBE managed to access funds from the state of disaster to improve infrastructure such as water, sanitation, and hygiene. Still, the survey conducted soon after COVID-19 confirms that some schools were forced to revert to using pit latrines. The provincial education departments and DBE stopped maintaining the basic infrastructure identified during COVID-19 to address health concerns. Most provinces are mired in secrecy, suggesting that provinces could not confirm or deny the number of schools using pit latrines, nor are provinces prepared to provide current statistics confirming the number of

schools without sanitation infrastructure. The prevalence of latrines is a serious concern for thousands of teachers and learners who face these inhumane and hazardous environments. Eastern Cape province and KwaZulu-Natal remain the two in the lag in terms of schools using latrines. Many risks arise from using latrines, as lack of maintenance compromises the hygiene of the learners who are compelled to use these facilities (Madikizela *et al*., 2022).

Recently, social media exposed this inhumane pit latrine facility as the communities have captured and documented incidents where learners have died in real-time in both primary and secondary schools. Rural and peri-rural populations predominantly use on-site sanitation technologies (Lourenco & Nunes, 2020). Two categories of on-site sanitation are front-end and back-end. A latrine front-end refers to the part of the facilities where the users deposit excreta (squats or sits), and the back-end refers to the containment facility where the human excreta is stored, treated, or disposed of. Septic tanks, pit latrines, and soak-away pits are the most common types of latrine back-ends (WHO, 2022). Hence, due to the varied sanitation infrastructures, faecal sludge quantification and characterisation are crucial and difficult to access.

3.3 Water, sanitation and hygiene

Health concerns and the need for improved quality hygiene standards in schools have compelled countries to live up to the expectations of the World Health Organisation (WHO, 2022). Developing countries tend to neglect basic health protocols, citing a lack of sufficient infrastructure budget allocation and corruption

by school authorities. However, in a country such as South Africa, where the budget for infrastructure is either unused or returned to the national treasury, it is a cause for concern among many stakeholders in the sector. The policy position of DBE acknowledges the need to improve the quality of infrastructure to address the legacy of apartheid and poor education outcomes. The School Monitoring Survey conducted by NDP (2020) found that 72% of learners attended schools complying with minimum infrastructure standards. The WHO identified minimum standards to include electricity, water, hygiene, and ventilated toilets (WHO, 2022). The survey found many improvements concerning the availability of classrooms and toilets. However, water availability in many schools has dropped significantly across all provinces, compromising teachers' and learners' health and safety (NDP, 2020).

The study by UNICEF (2018) documented that children learn better in a conducive environment where school facilities such as clean water, toilets, and soap for washing hands are readily available. The state of physical and service infrastructure was exposed during the COVID-19 pandemic, where the DBE was forced to acknowledge the urgent need for safe and hygienic sanitation as a containment measure and part of health protocol to reduce infection in schools. According to the Water Sanitation Report (2021), DBE spent over R600 million to provide emergency water and sanitation infrastructure.

Table 3-2: Number of schools with no water and affected teachers and learners (Water and Sanitation Report, 2021).

Province	Number of schools with no water for sanitation	The number of teachers affected	Number of learners affected
Eastern Cape	199	3 006	63 676
Free State	10	213	6936
Limpopo	113	1 427	49 741
North-West	44	783	2 298
Total	**366**	**5 429**	**122 651**

The table above indicates the number of schools unable to access water for ablution purposes (Table 3-2). Put differently, the number of schools that lack basic infrastructure is high, considering the public outcry since 1994. The report details the lack of infrastructure, such as using Jojo tanks for rainwater harvesting, local reservoirs and dams, boreholes, and municipal supply (Water & Sanitation Report, 2021). Nine schools out of 44 in the North-West province have no access to potable water. The remaining 35 schools have no water or sanitation facilities, forcing many teachers and learners to use unsafe pit toilets (Section 27, 2020). This analysis underscores blatant incompetence, disregard for human life, and the level of human rights abuse suffered by schools for many decades. The sore part of this analysis points to the level of frustration and low morale both for teachers and learners. The Provincial Department of Education in the North-West continues to underspend on its infrastructure budget for

2019/2020 and 2020/2021, resulting in funds returned to the national treasury only to be redirected later to the needy provinces.

3.4 Infrastructure in rural schools

The classification of schools based on 5 poverty quintiles confirms the magnitude of infrastructure challenges facing rural public schools in South Africa (South African Schools Act, 1996). Most of these schools fall between quintiles 1 and 3, with a deep level of dependency on government allocation, grants, and intervention to improve ailing school infrastructure. The bulk of budget allocation is spent on improving the infrastructure and other critical facilities replete in poor schools. Taylor (2008) concluded that most learners in rural schools receive poor quality education compared to learners in many of the poorest neighbouring countries. Recently, many stakeholders in the DBE sector have admitted that the sector is in distress due to massive budget cuts for school infrastructure funding (Dube, 2020).

The Constitution of the Republic of South Africa (Republic of South Africa, 1996b) guarantees every learner, irrespective of socio-economic background, equal access to learning and teaching, similar facilities, and equal educational opportunities. Most recent studies indicate that thousands of schools in South Africa lack the infrastructure necessary to provide learners with the quality education they are legally entitled to receive (Dube, 2020; Equal Education, 2015). The DBE published the National Education Infrastructure Management System (NEIMS) Report in August 2019, and it verifies that schools in the Eastern Cape and KwaZulu-Natal are in the worst condition but that the problem of

poor infrastructure is not exclusive to rural provinces. To initiate sustainable resource distribution in rural schools, Mashau, Netshandana, and Mudau (2015) concur with the NEIMS report but further propose that provinces are required to use a targeted approach of prioritising resources to schools based on their socio-economic levels of development and physical resources, which is known as 'Target Resources List'. In tandem, Dube (2020) affirms the principle of pro-poor resourcing necessitated by the desire to redress unequal funding concerning non-personnel, non-capital (NPNC). The established National Funding Norms legislated that provincial departments need to spend seven times as much on the poorest 20% of schools as on the least poor 20%. However, this model seems vulnerable to abuse as SMT in rural schools flout regulations, leaving them outstripped for teaching and learning (Mashau *et al.*, 2015).

In South Africa, most public schools always request more allocation from the national government to refurbish dilapidated infrastructure. The allocated infrastructure grant by the treasury is underutilised and later returned while the infrastructure is not fixed. The North-West Education Department was exposed and embarrassed in the infamous SABC documentary of 2019 for failing to spend its infrastructure grants. This blunder led to the money being transferred to its Eastern Cape counterpart, and the Department vows such a blunder will never repeat itself. The decision to transfer infrastructure grants has proved to be a wrong decision. Similar to the North-West saga, the Eastern Cape Department of Education was recently rebuked for failing to improve sanitation, relying on pit toilets, and risking the lives of

pupils by SAHRC in a letter sent on 29 September 2021 (TimesLive, 2021).

The report compiled by NDP casts a spotlight on the warranted public concern around the poor physical infrastructure in many schools (NDP, 2020). The report by Amnesty International (2020b) draws a parallel link between school infrastructure conditions and their effect on learning outcomes and notes that this has been widely documented. A great concern is how the DBE violates policies and systems without consequences. The DBE's policies recognise detrimental effects emanating from the total neglect of key school infrastructure such as toilets, stationery, fencing, and vandalism of classrooms. The DBE policies on school infrastructure, the National Policy for the Equitable Provision of an Enabling School Physical Teaching and Learning Environment, highlights the negative effect of a poor schooling environment on learners. The report identifies irregular attendance and high dropout rates, among other consequences. Furthermore, the policy also recognises the negative effect of inadequate infrastructure on teachers, citing the high rate of turnover and teacher absenteeism due to having to work in such a challenging environment (Amnesty International, 2020b).

3.5 Education Infrastructure Grant and ASIDI

The DBE Gazetted an Education Infrastructure Grant on 17 May 2019 with a strategic goal in mind. The main goal of this grant was to supplement provinces to fund the provision of education infrastructure in line with the regulations relating to minimum uniform norms and standards for public school infrastructure (DBE, 2019). The condition of this grant was that those DBE and

provincial treasuries approve and sign off infrastructure plans with tabled prioritised project lists and also include the implementation plans for schools affected by natural disaster officers. The report on service delivery performance 2017/18 indicates that 731 sanitation was provided, indicating that schools have access to clean drinking water and adequate sewage disposal (toilets). The Education Infrastructure Grant Allocation is a fund allocated by the national treasury to enable schools to fix identified defects and refurbish and build new schools. Table 3 below depicts the trend over time of the infrastructure grant allocation by the national treasury. The budget allocation for education infrastructure grants decreased annually from 2015 to 2020.

Table 3-3: Education Infrastructure Grant, Real Allocations and Annual Percentage Change, 2015/16 – 2019/20

2019/20 rands Millions	2015/16	2016/17	2017/18	2018/19	2019/20
Education Infrastructure	R11.489	R11.597	R11.469	R10.588	R10.514
Real Percentage change	20.9%	0.9%	-0.9%	-7.9%	-0.7%

This fund provides necessary funding for provinces to supplement their equitable share allocation targeted specifically at school infrastructure development (Section 27, 2018). The Annual Performance Plan (2019/20) states that these funds are earmarked for building new schools, sanitation infrastructure, and toilets, upgrading and maintaining existing infrastructure, and providing school furniture. The National Department of Basic

Education has woefully underspent the School Infrastructure backlog grant from 2011-2012, 2012-2013, and fast forward to 2017-2018, 2018-2019, and 2019-2020. The reason, according to Section 27 (2018), for this underspending is poor capacity and incompetence within the DBE to plan and manage infrastructure programmes of the size of these poor rural and semi-urban schools.

3.5.1 International trends in school infrastructure

Many studies have demonstrated that poor school infrastructure is not only a South African phenomenon but a global problem. Most Asian countries, according to UNICEF (2018), experience poor school infrastructure, which requires careful and meaningful upgrading to improve the quality of teaching and learning. The Minister of Education (2020) released the most notable report detailing that 26% of the schools lack important resources such as hygiene infrastructure and clean drinking water. The policy framework suggests that the National Department understands the negative impact of poor infrastructure on the teaching practice and PLC.

One study commissioned by the United Nations General Assembly in 2010 (United Nations, 2015b) stressed that access to water and sanitation was formally recognised as a human right, essential to the full enjoyment of life and the realisation of all other human rights. Linked to this declaration is the commitment by the Sustainable Development Goal (SDG) 6 to ensure the availability and sustainable management of water and sanitation for all (United Nations, 2015b). Another report by UNICEF (2018) published shocking statistics regarding the state of poor sanitation

services in Brazilian schools. According to this report, 6 million (12%) schools lacked proper basic water, sanitation, and hygiene (WASH). A study by Ogunole and Abubakar (2020) identified adequate funding of education at all levels as the determinant factor for a quality educational system that is functional in any nation.

The primary challenge for some of the commitments made through the UN General Assembly is acknowledging that water is a universal human right for everyone. Most developing countries, including South Africa, are reluctant to take full accountability to address the aspect of legal obligations with regard to these rights (Odeku, 2022). Hard choices have to be made with regard to which social and economic exclusions are justifiable on the grounds of legal rights. Odeku (2022, p. 2), in trying to respond to this question, made the following profound observation in the context of this study:

> *In the context of fragile states where the government may be an impediment to the more accountable and legitimate provision of basic infrastructure and other services, the role of civil society may be as – or more – important in demonstrating how service should be delivery, particularly for marginalised and vulnerable groups.*

Indonesia faces numerous challenges regarding water, sanitation, and hygiene in schools (Karon, Cronin, Cronk & Hendrawan, 2017). According to UNICEF (2018), most Indonesia government primary schools have basic sanitation facilities of the highest quality, while 17% are severely damaged and unusable based on the assessment conducted by the Education Management

Information System (EMIS) of the Ministry of Education and Culture (Ministry of Education and Culture and Indonesia, 2016). Hygiene practices are generally poor, as the average child-to-toilet ratio exceeds the MoEC standard of 1:60 for boys and 1:50 for girls. The situation in South-East Asia and West Pacific Regions is even much more severe than previously thought (DuChanios *et al*., 2019). These regions are experiencing inadequate sanitation infrastructure provision to tackle sanitation challenges. Studies have identified an increased rate of diseases such as diarrhoea due to a lack of sanitation facilities (Nasim, El-Zeim & Thomas, 2022). Unlike in Africa, pit latrines and other traditional forms of technology are not prevalent. Lourenco and Nunes (2020) concluded that rural and peri-urban populations exclusively use on-site sanitation technologies. The most popular components of on-site sanitation are the front-end and back-end (Nasim, El-Zeim & Thomas, 2022).

3.5.2 Infrastructure on the African continent

Du Plessis and Mestry (2019) characterise the current infrastructure trends in South Africa and other developing countries. Rural and semi-urban schools in developing countries still rely on unsafely managed sanitation systems for personal hygiene and the flushing of toilets (Nasi, El-Zein & Thomas, 2022). The lack of reliable data concerning the existing sanitation infrastructure and latrines is one of the major barriers to curbing unnecessary loss of life. It is interesting to delve into the state of school infrastructure in Uganda (Nasuna, 2020). Most studies concur that some schools have good infrastructure, while in other schools, the infrastructure is moribund (Dassah & Bisung, 2023;

Ogunode, 2020). Nasuna et al. (2022) and Nasuna (2022), point out that some schools lack basic access to water and electricity while several school facilities are in a sorry state, meaning that latrines, classrooms, and water sources are broken. In Nigeria, Ogunode (2020) argues that many stakeholders have lamented poor funding of schools as the reason for broken infrastructure. Inadequate funding is one of the major obstacles against which infrastructure is neglected and dilapidated beyond any comprehension. The budgetary allocation for public schools in Nigeria is grossly inadequate (Ogunole & Abubakar, 2020). Consequent to the financial difficulties facing public schools, infrastructure such as laboratories, water and libraries, and latrines/toilets are dilapidated and inadequate. Learners face serious learning difficulties due to poor learning conditions, such as overcrowded classrooms, inadequate water supply, and sanitation, conditions which dehumanise learners and teachers alike (Odigwe & Owan, 2019).

A strange phenomenon noted by many researchers in the African continent with regard to the adequate provision of sanitation and latrines needs to be understood. A review of government policies and guidelines suggests no consequence management for failing to use public funds to improve infrastructure. The conclusion to draw from this poor state of infrastructure is that developing countries in Africa lack the motivation to adhere to policies on providing basic infrastructure and facilities in schools (Dassah & Bisung, 2023). Uganda is a case in point, where schoolteachers and administrators only focus on the provision of classrooms and books as their main priority over sanitation and the eradication of latrines in schools (Dassah & Bisung, 2023; Zaunda *et al.,* 2018).

3.5.3 Aim of the study

This study aims to critically analyse poor quality and lack of infrastructure, such as sanitation and latrines, impacting the quality of education in rural South African schools. Again, this study specifically focuses on the state of sanitation and latrines as one of the infrastructures troubling the rights and dignity of teachers and learners in South African schools.

The objectives of the study are framed to:

- determine the impediments of poor-quality infrastructure provision, such as sanitation and pit toilets, in delivering quality education; and
- understand the bottleneck that derails the provision of basic infrastructure in rural schools.

3.6 Theoretical framework

This study is rooted in Lev Vygotsky's Socio-Cultural Theory of learning effectiveness, published in 1978. Vygotsky submits that learning is a collaborative process that occurs within a socio-cultural environment through mediated tools. According to Vygotsky, the socio-cultural environment gives the learners a range of roles and demands and incorporates them into their world through mediation instruments. Mental engagement is the premise of a media process in which abstract and socio-cultural objects (technology) play an important role in the individual's life (Kozulin, 2002). "Learning as a mediated process is social in origin and then becomes individual as a result of mediated interaction between the child and teachers, making human relations to be mediated by physical and symbolic tools" (Wertsch 1991: 25).

The employment of mediational tools fundamentally shapes the activities in the learning environment. An integrated (mediated) technical process between teachers and learners results in efficient teaching and learning (Altinay-Gazi & Altinay-Aksal, 2017). The implication of the socio-cultural theory of learning efficacy by Vygotsky to this study is that it highlights that learning effectiveness is maximised when the learning environment promotes collaboration, interaction, and integration among learners and between learners and their instructors through mediated tools such as electronic resources. This means that the availability of essential services such as water, sanitation, and hygiene improves the quality of teaching and learning while traditional structures such as latrines act as barriers to education. Furthermore, access to good facilities and services enhances effective education and protects learners' dignity irrespective of the environment.

3.7 Research methodology

This study used secondary published sources from research articles, newspaper articles, government publications, and court judgements to critically understand the impact of poor infrastructure on teaching and learning. These reports provided detailed and relevant information about the current state of water, sanitation, hygiene and other physical infrastructure such as latrines in South Africa. Coming to terms with the fact that learners lose their lives due to the government's poor planning and neglect of rural schools violating their right to basic education and life is disturbing. Odeku (2022) provides a succinct account of how young learners fall into the death trap called pit latrines because

of the lack of provision of modern flush toilets in schools. The limitation of the research method concerns the smaller sample size, which raises the issue of generalisability to the entire population of the research.

3.8 Ethical considerations

This study served in the Scientific Committee of the University and the Ethics Committee for blind review before ethical approval was granted. The procedure and guidelines for participation were outlined prior to the commencement of the documentary review and analysis. Court cases (1416/2015; articles and policy proposals were gathered in advance as part of the data analysis.

3.9 Presentation of findings

3.9.1 Impact of infrastructure on teaching and learning

A school without proper infrastructure might theoretically have an exceptional teacher to inspire learners to perform and garner good results in a mud school and latrine environment. The psychological challenge arises when the teacher has to experience this extremely poor infrastructure with learners for years. A school with no toilet for the teachers will generally have no toilet for the learners either. Many studies, including non-governmental organisations like Section 21 and other media outlets, have exposed poor infrastructure demanding changes, but very little progress has been recorded to date (Ogunole & Abubakar, 2020). The more recent study, namely that of Odeku (2022) conducted in Limpopo confirms commitment both in writing and media statements, but the DBE has failed to develop a

practical strategy that deals with the sanitation and water backlog. Many children fall into these open pit latrines and die because of insufficient sanitation infrastructure in these deprived contexts. The case of Kopane lingers in the mind of the community of Limpopo and surrounding schools (Case number: 1416/2015). The death of Kopane sent shock waves throughout the country and forced the DBE to defend itself, and it took the court to scold the DBE before it could address the issue of sanitation and latrines immediately (Odeku, 2022). The court ruled against the Department in all these cases brought by Section 27, in the case of Kopane and Others v Minister of Basic Education (1416/2015) [2018] ZALMPPHC 18 (23 April 2018).

> *Before Komape's death, Lister Magongwa, aged seven, died after the walls of a toilet collapsed on him at Mmushi Primary School in 2013.*
>
> *Siyamthandwa Mtunu, and Lumka Mkweta, both from the Eastern Cape, fell into and drowned in pit latrines in 2017 and 2018 respectively.*

The study conducted by du Plessis and Mestry (2019) provides a more convincing account of the real impact of lack and poor-quality infrastructure in rural and semi-urban schools. They argue that various factors need to be closely scrutinised to understand the provision of quality education better. On top of the list is the lack of physical resources and basic infrastructure necessary for supporting learners to pay special attention to teaching and learning (du Plessis & Mestry, 2019). Learners spend most of their time at school; hence certain basic needs such as water and hygiene cannot be ignored in providing basic quality education.

The prevailing socio-economic conditions of parents and the community in general place learners at a disadvantage. The general assumption is that communities in deprived contexts lack the confidence and capacity to organise themselves and talk with authority to question anomalies of government when promised basic services are not provided. The voice of poor parents has been silenced for too long, but with the advent of the information age powered by the digital revolution, schools, and DBE, as custodians of education, are paying the price of 29 years of infrastructure neglect. The documentary evidence captured by smartphones in real-time means that no one can hide the truth about the psychological impact of broken infrastructure and the lack thereof in our public schools.

The unemployment rate of around 32.7% only paints a picture of a failing government, and education is the biggest loser (StatsSA, 2022). Funds meant for infrastructure tend to dwindle, while some are repurposed to non-educational priority, and authorities consider their priority more important. In schools, poverty and unemployment directly influence the roles of teachers and the quality of education available to learners under these conditions. The incidents in Limpopo where learners drown in a pit toilet are indelible in the minds of teachers and parents. Odeku (2022) argues that teachers and learners lose focus on teaching and learning. Most children do not attend school regularly due to infections resulting from poor and non-availability of sanitation and good latrines during the menstrual cycle. National Development Plan (2020) identified the need for DBE to be proactive in addressing school infrastructure to support hygiene, which has been a dream for all schools in South Africa and needs to be

prioritised. Furthermore, Goal 24 in the NDP reinforces the notion that DBE must ensure that every school's physical infrastructure and environment inspire learners to want to come to school and learn and teachers to teach (NDP, 2020).

3.10 Infrastructural challenges

RSA Act 108 of 1996 of the constitution illustrates that everyone has the right to a safe and secure environment (RSA, 1996). Communities should be a safe zone where public school infrastructure is protected. Local communities live in fear because known thieves and gangsters have infiltrated, and they run communities amok. Acts of vandalism remain the order where malicious damage to public school property and equipment has become a norm and is the problem negatively affecting learners and teachers alike (Mojapelo, 2018). The actual budget for repairs to the broken toilet door cannot be estimated. According to Norms and Standards, minor repairs can be done at the school level, including broken windows, door handles, and teaching and learning equipment. Most rural schools do not have libraries or proper sanitation, or latrines, and those schools with these facilities are incessantly vandalised (Mojapelo, 2018). Besides libraries, textbooks for learning bought from norms and standards are not returned to school by learners at the end of each year, and those that are returned are vandalised, which means that the school procures the same books the following year. Mojapelo (2018) poses that preventing vandalism in public schools may save the budget for books and stationery. Principals and the SGB face this challenge yearly because, according to the law, the Education Act (1996) states that no learner should be deprived of

getting progress results due to lost books. Before 1994, learners who lost books or vandalised school equipment were forced to pay, or progress reports were withheld at the end of the year. This law violated the rights of the child according to the Constitution and Child Rights Act however, such incidents of vandalism were curtailed to a minimum.

National Development Plan (2020) repeatedly highlights the sudden decline in the infrastructure budget. It states that budget constraints have slowed progress recorded over the years in the area of infrastructure. This analysis represents the period between 2015 and 2020, where a record-breaking 23% percent drop occurred in real spending on infrastructure. It is not surprising to learn that NDP was sympathetic to the strain in the budget, which called for a lower cost of infrastructure development. According to NDP (2020), all schools in South Africa have been called to reconsider their cost-effective model for developing and maintaining school infrastructure. Wild generalisation such as this only serves to perpetuate abject failure and admission of failure on the part of the state.

3.11 Sanitation and pit toilets in deprived rural schools

The current state of infrastructure in South Africa needs to be audited to understand the magnitude of the infrastructure crisis better. Some of the infrastructure identified by the DBE bears the legacy of apartheid and exclusion and their sorry state. Under the leadership of the ruling African National Congress, the government is currently retreating from the main constitutional mandate and envisaged preamble they promised thousands of poor and marginalised schools. The signatory to the Treaty of

International Human Rights is a mockery. The number of cases reported over the last five years points to the kind of government whose mandate to provide quality infrastructure has been abandoned. It looks as though every school in many parts of the country experiences distress because of the current poor quality of infrastructure. In particular, the infrastructure responsible for providing sanitation and eradicating pit latrines is substandard. The nature of the built environment in most South African schools poses a major challenge in accessing sanitation facilities and latrines. The distance from school premises makes it physically impossible for young learners to access these facilities on their own, while learners with physical disabilities face difficulties in accessing latrines. This is due to barriers such as unpaved, rocky, and sometimes steep pathways and narrow doorways (Zaunda *et al*., 2018). Studies show that areas earmarked for sanitation and latrines are situated far apart from each other. Enforcement of hygiene standards (Dassah & Bisung, 2023) is neither possible nor feasible due to the quality of infrastructure, which poses risks to learners and is occasionally broken thus, unable to provide the service needed.

A study conducted by Madikizela et al. (2022) identifies privacy as another major concern arising from latrines without doors or locking doors in rural and township schools. The lack of privacy impacts all learners, irrespective of their gender and abilities. Some learners would rather not use latrines and sanitation in their school because they are afraid of being watched by others, or the lack of a door could result in other learners watching them while others might invade their privacy when using latrines (Dassah & Bisung, 2023). A broader concern arises from the absence of

school latrines, which may cause girls to miss school on their menstruation days and then drop out of school. The absence of latrines exposes pubescent girls to verbal and physical harassment at school, which is likely to impact their educational attainment negatively. In this study, I argue that improved school sanitation infrastructure and latrines impact the educational decisions of learners across their schooling careers.

3.12 The gaps in the policy allowing the DBE to defy the court's orders

The Constitution of the Republic of South Africa, 1996 (Republic of South Africa, 1996b), and the South African Schools Act (Republic of South Africa, 1996b) spell out plainly that policies and regulations on equity guarantee every learner's equal opportunity to equal access to teaching and learning. Furthermore, enacting these policies gives DBE and provinces absolute powers to address infrastructure backlog through the budget and other measures the state deems appropriate. The rationale behind this clear commitment was to alleviate pressure on SGBs and SMTs but give more powers to provincial and national governments to address these issues holistically. National Development Plan (2020) identified the need for DBE to proactively address school infrastructure to support hygiene, which has been a dream for all schools in South Africa. Furthermore, Goal 24 in the NDP reinforces the notion that DBE must ensure that every school's physical infrastructure and environment inspire learners to want to come to school and learn, and teachers to teach (NDP, 2020).

The High Court judgment in 2021 ordered the government to remove all pit toilets in Limpopo. However, this judgement cannot

be used in other provinces. The article published by the Citizen (22 March 2023) confirms a blatant disregard of the law by the DBE. More learners in the Eastern Cape continue to drown in these pit toilets, which, according to the South African Human Rights Commission (SAHRC), goes beyond a human rights violation. The report by SAHRC states that five provincial education departments were taken to court in a bid to get rid of pit toilets. The litigation was filed in 2022 in the Johannesburg High Court to compel all affected provincial departments in question to address infrastructure such as sanitation and pit toilets. In the court paper, SAHRC cited the following gruesome incident of the death of Kopane as justification for forcing DBE to comply with basic human rights.

3.13 Conclusion

The delivery of basic education remains a complex nightmare for all stakeholders. The government has developed world-class policies and guidelines to pave the way for the delivery of basic education for all. The lack and/or poor infrastructure provision remains a challenge at the expense of teaching and learning. Teachers and learners face difficult choices of either participating or dropping out of school due to the state of latrines and lack of sanitation, water, and hygiene. Infrastructure grant has failed to improve the situation, and HSARC has summoned education authorities and initiated legal litigation with little success. Non-governmental organisations such as Section 27 have been fighting DBE and the National government with little or no success. Academics have conducted numerous empirical research, hoping that DBE and the national government will use the findings, but to

no avail. In recent times, SABC and other print media have broadcasted many incidences resulting from poor neglect of infrastructure such as latrines, water, sanitation, and hygiene.

The basic education sector has dropped the ball, and today, it is in a conundrum. On the one hand, we have legislation that speaks directly to the provision of adequate infrastructure for all public schools, along with specific deadlines. The reasons for such legislation promised the need for equity and redress, which stem from decades of exclusions, poor provision of facilities and poor education. In addition, funding has been provided, and yet the DBE has not demonstrated the urgency required. On the other hand, reduced infrastructure grants in the face of inefficient spending proved detrimental to those whose education experience is marred by inadequate and unsafe facilities. The sluggish delivery, or non-delivery, of school infrastructure is the result of concomitant and systemic problems. Limited and flawed data on schools, outsourced work to third parties with unclear lines of responsibility and oversight, and the slow procurement of contractors and built environment professionals are challenges that face the government. Ultimately, implementing the Norms and Standards hinges on capable provincial and national leadership whose political will is unwavering and whose commitment to accountability is unequivocal. Furthermore, hand-wringing and dilly-dallying will undoubtedly compromise the realisation of the right of many South African children to safe and decent school infrastructure and their Constitutional right to basic education.

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