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## Strategies to support rural-based schools in teaching and learning during COVID-19: The case of the Maune circuit in the Capricorn North district

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With this study we investigated strategies to support rural-based schools in teaching and learning during the COVID-19 pandemic. The research was conducted in 6 secondary schools in the Maune circuit, Capricorn North district of the Limpopo province, South Africa. A qualitative research approach using a case study research design was followed in the study. The population consisted of 42 school management teams (SMTs) and school governing bodies (SGBs) in the Maune circuit. Purposive sampling was used to select 18 participants. Data were collected through individual semi-structured interviews. A thematic approach was used to analyse the data. The social realist theory was adopted as theoretical framework using the concepts of structure, culture and agency as theoretical lenses. We found that the Department of Basic Education did not train SMTs and SGBs, which affected teaching and learning. We concluded that due to the unavailability of ICT infrastructure within the Maune circuit, teaching and learning during strict lockdown (coronavirus disease [COVID-19]) were impossible and difficult when learners were rotating attendance. We recommend a shift from a blanket approach to school support to conducting an intensive needs analysis for each school in order to provide appropriate and relevant support. A social realist approach to school support is also recommended, where structure and culture are considered critical attributes for school development. It will be good for policy makers, role players and stakeholders to work together towards a common goal and carry out their agential role in ensuring that the needs of marginalised learners are met in schools.

**Keywords:** COVID-19; learning; school governing body; teaching; training

### Introduction and Background

The start of the 2020 school year took an unprecedented detour from what was expected. According to the World Health Organization or WHO (2020), a new virus outbreak started in Wuhan, China in December 2019; this virus is now known to be part of the coronavirus family and is referred to as COVID-19. The WHO (2020) explained that coronaviruses are a group of viruses that cause disease in animals or humans. Infections from this disease can vary from mild to severe symptoms, with most cases being classified as mild or moderate (Jordan, Adab & Cheng, 2020). The outbreak that started in China quickly escalated into a global pandemic, affecting many people around the world (WHO, 2020). Zhou, Zhong and Zheng (2020) added that the WHO declared this outbreak an international public health emergency on 30 January 2020. The coronavirus spread expeditiously from person to person through body fluids expelled from infected individuals (WHO, 2020). The ability of the virus to spread so quickly resulted in many countries taking very strict precautions to prevent the spread of the disease. Despite all the strict measures taken, the virus still managed to affect many individuals around the world – in the context of the education system in particular. It resulted in the closure of schools; therefore, online teaching, multi-modal teaching and rotation of class attendance came into effect.

The Department of Basic Education developed and distributed an orientation manual ([DBE, Republic of South Africa [RSA], 2020a) to schools to educate teachers, learners and parents on how the rotational model works as well as key attributes of online learning. However, the blanket orientation did not take individual schools' challenges in different contexts into account. Circuit teachers (principals, school management teams [SMTs], and school governing bodies [SGB]) orientated school communities, while learners were orientated by SMTs. Therefore, the support provided to schools did not cater for individual challenges experienced by schools. Mogale and Malatji (2023:98) argue that "curriculum support could be possible through realisation of cognitive, environmental, and behavioural factors." Reflecting on Mogale and Malatji's argument, the contextual/environmental factors of schools were not considered, and as a result, some of the schools (particularly those in rural areas) did not benefit from such support.

No specific support was provided to rural schools. Of all the affected industries, the education sector deviated considerably from its usual procedures due to the unforeseen outbreak of COVID-19. This pandemic affected the education system, causing many institutions to make extensive modifications to their teaching, training, and evaluating methods. Rural-based schools were most affected by COVID-19 as they were also expected to adjust to the changed circumstances. We investigated strategies to support the rural-based schools in order to cope with the so-called "new normal." Therefore, the main research question in this study was: How were schools in rural areas supported with regard to teaching and learning during the COVID-19 pandemic?

## Literature Review

In recent years, governments of many countries have been investing increasingly in resources to raise the availability of digital devices in schools and households. Scholars such as Msiza, Malatji and Mphahlele (2020) refer to a paperless classroom, which is still a dream for many countries. Escueta, Quan, Nickow and Oreopoulos (2017:14) point out that simply providing access or using digital technologies does not automatically lead to better academic results. Angrist and Lavy (2002) assessed the impact of Israel's Tomorrow-98 programme, which was launched in the mid-90s to provide schools with computers as well as teachers who have been trained in computer-aided instruction. In South Africa, rural-based schools are still struggling when it comes to the use of technology for teaching and learning. Therefore, a needs analysis for each school is required to provide appropriate support. According to Bulman and Fairlie (2016), more effective traditional instruction has been mainly attributed to the use of information and communication technologies (ICT) in the United States of America (USA). Teachers were, therefore, able to prepare and teach learners by using technology. Technological devices can be very helpful, as long as sufficient capacity and support are provided to every school, including rural schools and even during COVID-19 or related circumstances. Support for using technological devices in rural schools will help manage knowledge to be shared with learners.

It is critical to consider Bush's (2013:6) observation – although good practices are applied in schools, SMTs lack the capacity to manage curriculum delivery in the Limpopo province. Instead of the Department capacitating rural schools, while taking the environment into account, a blanket approach is used in the support of all the circuits – and schools in rural areas are blamed for poor performance.

According to Bush (2013), instead of supporting underperforming learners, SMTs argue that socio-economic challenges are to blame in most cases. This supports our study on investigating the role of the DBE in rural schools – namely, promoting the teaching and learning agenda during COVID-19 – since the SMT has run out of ideas for making the situation conducive for teaching and learning. Although the Employment of Educators Act (EEA) stipulates the duties and responsibilities of SMTs and the South African School Act (SASA) stipulates the role of SGBs at schools, it can be argued that less is being done to implement such. Paying class visits, securing meetings, controlling learner books, quality-assuring lesson plans, managing curriculum coverage, and moderating assessment tasks (both formal and informal), are some of the duties and responsibilities of SMTs not implemented in rural

schools. Other responsibilities of SMTs are to support, evaluate and develop teacher quality. School leaders must be able to engage in monitoring, evaluation and professional development of teachers.

In the context of the Capricorn North district, where the study was conducted, the standard operating procedure (SOP) (DBE, RSA, 2020b) for COVID-19 suggests that SMTs do not conduct class visits because of the ratio of 1:20 learners in a classroom, and keeping social distancing in mind. According to Milondzo and Seema (2015:2), resources are available but are not used to improve learner performance. Milondzo and Seema (2015) add that when teachers attend professional development programmes, the SMTs ensure that the teachers remaining at schools use the lesson periods of those teachers attending the programme to try to integrate technology into teaching and learning. To comply with the social distancing protocol, rotational schooling was introduced – which required more teachers. Therefore, such changes added pressure to those schools that were already under-staffed (DBE, RSA, 2020b).

While school-based assessment (SBA) was not done according to the schedule in place, curriculum coverage was also not monitored (Milondzo & Seema, 2015:6). It can be argued that SMTs in the Capricorn North district knew some of their roles, however, they faced some challenges that needed to be overcome and developed. As for curriculum coverage management, teachers did not regard managing the curriculum as one of their responsibilities – they did not implement it as is stipulated in the personnel administrative measures ([PAM] Department of Education, RSA, 1999). Furthermore, if monitoring of content coverage and assessment was done properly, SMTs would have been able to notice if teachers had content gaps in a particular subject and thus plan for development accordingly. Our study will help the DBE to produce knowledgeable, skilful, competent, and responsible adults if teachers, SMTs and SGBs execute their responsibilities properly.

## Problem Statement

Primary and secondary schools in rural areas in the Limpopo province were experiencing challenges regarding support during the COVID-19 pandemic. All in-person educational instruction was shifted online as a result of the pandemic. A common worry among many teachers was that online learning would yield lower educational knowledge in learners (Soland, Kuhfeld, Tarasawa, Johnson, Ruzek & Liu, 2020). Teachers expected online learning to increase the gap between high and low-achieving learners as learning during COVID-19 was akin to missing a large portion of school (Soland et al., 2020). Due to the expected difference in knowledge from online learning,

teachers had to tailor their lectures on an individual basis per learner to account for the differences in knowledge (Soland et al., 2020). A greater range of learning assistance needed for learners created an additional challenge for teachers. Schwartz (2006) argues that if the training of teachers is compromised, it translates to incompetence in curriculum execution. Since the support to schools was provided using a blanket approach without considering the environment and schools' individual challenges, rural schools were negatively affected. Therefore, the objective with our study was to explore how schools in rural areas were supported with regard to teaching and learning during the COVID-19 pandemic.

#### Theoretical Framework

Archer's (1995) realist social theory was used to investigate learning, teaching and management in schools during the COVID-19 pandemic. The realist social theory is an offshoot theory that Margaret Archer developed in 1995 using this sociologist's morphogenetic theory. According to the theory, the term "morphogenesis" refers to change (genesis) in the shape of things (morpho) (Archer, 1995). The theory was relevant in looking at the strategies to support rural-based schools during COVID-19. The following aspects were regarded as important to assist in the research: structure, culture and agency.

#### Structure

Structure refers to all building materials and resources. Resources may include textbooks, newspapers, charts, maps, audio-visual and electronic instructional materials such as computers, radios, tape recorders, television, and videotape recorders. Archer (1995), in her realist social theory, regards issues of structure as one of the critical elements of promoting teaching and learning in schools. In the context of this study, structure refers to libraries, teachers and all teaching and learning materials used in schools. Researchers such as Rule and Land (2017) believe that resources play a significant role in promoting teaching and learning in schools. Therefore, using structure as a theoretical lens allows researchers to evaluate the extent to which a lack of structure (as outlined above) affects the teaching and learning proficiency of rural-based learners in the schools under study. Adeogun (2015) discovered a very strong positive significant relationship between instructional resources and academic performance.

#### Culture

Archer (1995) regards school culture as including, but not limited to, day-to-day practices of teaching and learning. The culture plays a pivotal role in shaping the school. School culture may either be positive or negative, which has an impact on the day-to-day running of the school. KS Malatji,

Soundy, Kafidze and Chiloane (2022) argue that the school may have a positive culture of competing with one another when it comes to learners' performance, which benefits everyone. On the other hand, the school may have a culture of laziness among teachers, which defeats the entire purpose of schooling. Therefore, teaching/practising positive culture in schools plays a critical role in the paradigm shift of a school. Linking culture with the previous lens (structure) as indicated above, a lack of teaching and learning resources may affect a reading culture in a school. The combination of teachers' and learners' attitudes may result in a negative teaching and learning culture at a school.

The cultural values of the society affect the school culture, as well as the teaching and learning culture of a school. The community where the school is located also has a considerable influence. Furthermore, the family background of the learners may affect the school culture and the learning culture. The particular culture subscribed to by teachers and learners in this study was tested during COVID-19 pandemic. Some schools with a positive culture responded very well to rotational teaching because of the culture of open communication with parents. Therefore, parents were aware of the kind of support they should provide to learners while at home.

We investigated the culture in six secondary schools in the Maune circuit to determine whether such culture complemented and affected the teaching and learning proficiency of learners. Therefore, this theoretical lens becomes relevant to investigate the implications of culture on the learning proficiency of learners. Sergiovanni (2000) states that all schools have cultures, whether strong or weak, functional or dysfunctional.

#### Agency

Agents are the people in the socio-cultural system (in this study, rural-based schools) into which they enter and who operate within a particular structural and/or cultural system. Archer (1995) argues that the agential role of both learners and teachers in teaching and learning is likely to be affected by the structure and culture of the school. Therefore, there is a relationship between the three theoretical lenses in Archer's (1995) realist social theory. In the context of this study, the agency of learners and teachers determined the success of learners with regard to learning. For instance, the school may have proper structures and cultures that support learners with regard to teaching and learning. However, if learners and teachers do not want to take it upon themselves (agential role) to engage in teaching and learning practices, their learning proficiency is likely to be affected. Therefore, to determine their agential role, we investigated how often learners and teachers engaged in teaching and

learning practices in the schools under study. The social realist theory gives direction to this article. The three concepts – structure, culture and agency – give a clear theoretical lens that lays out a focus and strong theoretical grounds.

### Research Methodology

We followed a qualitative approach with a case study research design. Tracy (2020) argues that in qualitative studies, researchers systematically analyse everyday actions to provide a better or deeper understanding of a problem. In this case, the interpretive paradigm was used to interpret day-to-day practices of teaching and learning at rural-based schools during COVID-19. The population of this study was drawn from SMTs and SGBs from secondary schools in the Maune circuit of the Capricorn district. The total population consisted of 42 participants. Babbie (2021:199) describes a population as “the theoretically specified aggregation of the elements of a study”, thus, the elements from which a sampling unit is drawn. Purposive sampling was used to select 18 participants from the schools under study. Du Plooy-Cilliers, Davies and Bezuidenhout (2021) argue that in purposive sampling the researcher has the privilege of choosing participants based on a set list of characteristics. In this study, participants selected experienced similar challenges in their respective schools. Data were collected through individual semi-structured interviews and document analysis. Data were analysed thematically by identifying emerging themes from the data collected.

### Results

The results of the study are presented according to the following themes: SMT and SGB support in order to perform their roles with regard to teaching and learning; challenges that hinder SMTs and SGBs from performing their roles; and measures that could be implemented to assist SMTs and SGBs in performing their roles during the COVID-19 pandemic.

#### SMT and SGB Support In Order to Perform Their Roles with Regard to Teaching and Learning

Equipping schools and personnel with the required skills through investing in SMTs and SGBs – by training and professional development and providing improved school supervision and support – should improve the quality of education. When SMTs and SGBs were asked about the support of teaching and learning, they responded differently:

*Yes, training was done, even though it was not anticipated that it would be something that will be with us for a long period. It was done to prepare us on how to deal with learners and teachers when they return to school after a long period of lockdown. In other words, it was short term and*

*not preparing us for long term. (SGB1 & SGB2)*

*It is exciting but not an easy thing to implement because we didn't get enough training and we are expected to use the smartboard. Not everybody is good with technology, but it is a good thing (SMT3 & SMT 5).*

Reflecting on the responses, it shows that inadequate training of SMTs and SGBs on how to execute their duties during COVID-19 negatively impacted the effectiveness of the implementation of electronic learning (e-learning). For this reason, it will be better if SMT and SGB can be provided with a step-by-step manual to assist them to fulfil their management and governance duties. The section below outlines challenges that hindered SMTs and SGBs in performing their duties.

#### Challenges that Hinder SMTs and SGBs from Performing Their Roles

During the research it emerged that, despite online learning seeming to be one of the best ways of learning during COVID-19, the innovation was hampered by the unavailability of infrastructure for SMTs and SGBs in rural areas. Schools needed specialised instructions, tools, techniques, and equipment to support them for teaching and learning to take place during the pandemic. Moreover, it should be ensured that the infrastructure is conducive for effective teaching and learning and that it caters for the rotational teaching model that was suggested as a mode of delivery. The above was supported by the following:

*Lack of infrastructure hinder [sic] the smooth and successful practice of teaching and learning during COVID-19 ... virtual meetings were creating problems such as bad signal, and lack of knowledge on ICT (SMT 11).*

*Lack of resources is putting a strain on what already existed. SMT has too much workload and not [sic] get enough time to look at other things like monitoring and support to both teachers and learners especially in rural schools. (SMT 2)*

Reflecting on the preceding response, it shows that inadequate resources and infrastructure in rural-based schools were negatively impacting effective teaching and learning during the COVID-19 pandemic.

#### Measures That Could Be Implemented to Assist SMTs and SGBs in Performing Their Roles During the COVID-19 Pandemic

Based on the participants' responses, it was noted that the Limpopo Department of Education did not achieve their objective of ensuring that teaching and learning were effectively implemented in the rural-based schools in the Maune circuit. While factors that negatively affected teaching and learning during the pandemic were revealed by most participants, the importance of presenting strategies to ensure the success of teaching and

learning were imperative.

In addition, it was found that ongoing funding for teaching and learning was necessary to support online teaching which would enable teachers to complete the syllabus according to the annual teaching plans (ATPs). Participants alluded to the necessity of funds and sponsors to ensure that teaching and learning take place and to alleviate some of the challenges that schools faced daily.

Sharing best practices may be a way of changing the mindset of other SMTs and SGBs who think that the management and governance of schools are impossible during a pandemic. For this reason, identifying challenges and sharing common knowledge could positively affect the success of the teaching, learning and monitoring and governance at schools; therefore, cluster meetings were required.

### Discussion

The results from the study are summarised below under the following sub-themes: training of SMTs and SGBs; support and monitoring of schools; communication; ICT infrastructure; and transition from traditional teaching to e-learning.

#### Training of SMTs and SGBs

In this study we found that SMTs and SGBs were not adequately trained in performing their duties to ensure effective teaching and learning during the pandemic. In some instances, 2-day workshops, which were mostly theoretical, were presented for teachers. With the limited training offered, there was a need to extend the duration of training to a week, which should link the theoretical and the practical for teachers to relate. According to participants, the time for the training was not sufficient and the trainers did not consider the fact that many of the teachers were challenged with regard to the use of ICT (Msiza et al., 2020). Teachers are crucial to any learning innovation as they are the ones imparting knowledge and assessing learners. Therefore, it is important that they are trained to establish and increase their knowledge of computers and other ICT facilities (Msiza, 2018:143). Furthermore, continuous training could boost their morale and motivate them to be true ambassadors of their activities (Haßler, Major & Hennessy, 2016).

#### Support and Monitoring

We found that SMTs, SGBs and teachers had never received any ICT training, even before the pandemic hit. Therefore, these stakeholders were operating without being guided by any framework but drawing their leadership and governance from their experience and what they believed was the right thing to do. De Klerk, Nel and Koekemoer (2015:537) reiterate that education authorities should allocate funds towards the provision of ICT technical support to be accessed by schools.

Continuous support and professional development programmes for teachers could change teachers' attitudes towards e-learning and bring confidence to integration (Al-Harbi, 2014:39). The study also revealed that teachers in the rural-based schools of the Maune circuit reverted to the traditional way of teaching when the pandemic struck. While learners were at home during the lockdown due to the pandemic, teaching and learning never took place as expected (Mifsud, 2022).

#### Communication

The study revealed that the lack of communication between the Department and schools was one of the contributory factors impeding teaching and learning success during the strict lockdown and when learners were rotating in attending school. MJ Malatji, Mavuso and Malatji (2018) mentions the importance of communication for successful partnerships in schools. Most schools were not informed of what was expected of them when learners were at home during the strict lockdown. We found that not all the schools in the Maune circuit continued with teaching and learning during the strict lockdown. We discovered that teachers resumed with the traditional way of teaching when learners were allowed to attend school on a rotational basis as there was a communicate in this regard. Teachers reverted to the traditional way of teaching while learners referred to their traditional textbooks as before. Regardless of the structural challenges that the schools experienced (connectivity, lack of data), we found that if teachers were well prepared on blended learning, available ICT gadgets could be fully utilised for teaching and learning during rotational learning. Touray, Salminen and Mursu (2013:7) confirm that teachers and learners prefer the blended learning approach, which mixes traditional face-to-face teaching with online collaboration.

#### ICT infrastructure

The study revealed a lack of stable internet connection to meet the learners' needs. As a result, we deduced that for teaching and learning to be effectively implemented, corrective measures had to be in place to resolve all these barriers. KS Malatji et al. (2022) argue that structural issues such as poor ICT infrastructure have major implications for successful implementation of e-learning. Hence, it would be imperative to find sufficient funding that would sustain this implementation. In support of ongoing funding, Wei and Yanyan (2010:451) reiterate that online learning could work effectively if sufficient funding was available to invest in properly furnished computer laboratories with internet provision for all learners. In support, Msiza (2018:42) also alludes that sufficient funding should be made available to make learning work.

Fullan and Longworthy (2013) add that schools could benefit from online teaching when these basic requirements are correctly implemented.

#### Transition from Traditional Teaching to E-learning

We found that SMT members who were struggling with technology but those who wanted to learn and make it work took the initiative to enrol for computer classes at their own cost. On the other hand, other SMT members who were good with technology wished to see successful teaching and learning during the pandemic. Due to their socio-economic status, some parents were unable to support their children with online teaching and learning. In order to regard parents as partners in education, the study revealed that SMTs were willing to share good practices (school-community partnership) during cluster meetings to motivate other SMTs and encourage them to keep on trying, despite the challenges. Afzal, Ali, Khan and Hamid (2010:81) argue that the SMT should find ways to motivate teachers and encourage them to use technology regardless of barriers.

In addition, Msiza (2018:132) emphasises that sharing good practices may enable SMT members to gain more insight and skills in the use of technology. To fulfil this role, Mphahlele and Rampa (2015) assert that teachers could use virtual cluster meetings as a platform to motivate and encourage each other as part of teacher development. Sharing good practices could enable SMTs to learn from each other's experiences and find other ways to improve the quality of management. Alternatively, teachers in close proximity of each other may hold regular meetings to discuss challenges encountered and help each other find solutions (Mphahlele & Rampa, 2015). Copriady (2014:121) states that motivated teachers are better positioned to integrate online learning willingly and confidently in their teaching and learning.

#### Conclusion

SMTs and SGBs together with teachers are the primary implementers of teaching and learning at schools. Hence, they require training, solid infrastructure, funding and support from all levels, including the wider community, to meet the needs of all learners and achieve the DBE's vision. Equal distribution of learning material to different schools and proper communication are priorities for consideration. Many countries have schools in poor, isolated areas that lack technology and other basic teaching and learning resources. It will be good to prioritise such schools and those that were previously disadvantaged in order to redress the imbalances of the past. More studies using the problem-based model can be conducted to support schools in rural and isolated contexts. There is also

a need to introduce some Scholarship of Teaching and Learning (SoTL) in school to deal with issues based on the contextual circumstances.

We recommend a shift from a blanket approach to school support to an intensive needs analysis for each school to provide appropriate support. The realist social approach to school support is also recommended; structure and culture should be considered critical attributes for school development. Therefore, it will be good for policy makers, role players and stakeholders to work together towards a common goal and conduct their agential role in ensuring that the needs of marginalised learners are met in schools. Moreover, we recommend that policy makers, role players and stakeholders work together towards a common goal of ensuring that the needs of marginalised children and the youth are met, regardless of gender, poverty, disability, ethnicity, religion, or geographical location. Working together will ensure that partnerships are formed to make funds available, to enable all schools to have training for teachers, ICT gadgets and relevant resources for teaching and learning. We further recommend that intensive training for SMTs, SGBs and teachers be implemented according to categories, as knowledge among stakeholders are different. In addition, we recommend meetings and provision for a separate budget for ICT in schools. Finally, we suggest the provision of alternative forms of distance education that include psycho-social support to protect children's youth and well-being in order to mitigate the impact of trauma during and after a pandemic.

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#### Authors' Contributions

M.L. wrote the abstract, introduction and background, the research questions, literature review and methodology. K.S. wrote the theoretical framework, discussion of the findings, conclusion, and recommendations.

#### Notes

- i. This article is based on the Master's thesis of Masilo Lucas Mangena, which was awarded *cum laude* by the Tshwane University of Technology.
- ii. Published under a Creative Commons Attribution

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