

Curriculum implementation challenges and responses during the COVID-19 pandemic in a rural secondary school in South Africa

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Background: The coronavirus disease 2019 (COVID-19) pandemic posed unprecedented challenges for curriculum implementation in schools globally, but little is known about how teachers responded to these challenges in a rural school context.

Objectives: The purpose of this study is to explore the curriculum implementation challenges and responses during the COVID-19 pandemic in a rural secondary school in South Africa.

Method: The study used semi-structured interviews and document analysis to generate data.

Results: The study established that COVID-19 highlighted pre-existing challenges such as lack of infrastructure, internet connectivity, learner-teacher support material and poor learner attendance and participation. These challenges exacerbated school closures, which created curriculum gaps leading to the prioritisation of certain topics and assessment tasks. Findings also revealed that teachers struggled with the necessary teaching strategies, as they were not trained to teach during a pandemic. In response to curriculum implementation challenges, the school in question installed Wi-Fi using the money allocation from the Department of Education, which enabled teachers to access programmes developed in other provinces and new teaching strategies used by other teachers. The findings highlighted that teachers engaged in team teaching and shared resources with teachers from neighbouring schools and the subject advisors.

Conclusion: The findings show that responses to the curriculum implementation challenges could be addressed through innovation and agency in rural schools. Therefore, curriculum implementation in South African rural schools requires the joint efforts of all stakeholders.

Contribution: This study provides insights into how teachers can be supported with skills and resources to negotiate, interpret and reconstruct their teaching practices to deal with curriculum implementation dilemmas in a rural school context.

Keywords: COVID-19 pandemic; challenges; rural school; teachers; curriculum.

Introduction

The emergence of the coronavirus disease 2019 (COVID-19) in early January 2020 in some countries and subsequently in South Africa at the beginning of March 2020 forced schools worldwide to make unprecedented decisions. Across the globe, the educational institutions had to close immediately, which resulted in the loss of teaching and learning time. The education stakeholders had to act quickly to devise strategies to address this problem. Remote schooling replaced face-to-face teaching and learning. Jena (2020) argued that in developed countries such as China, digital learning was simpler because they are more familiar with technology and computerised learning. However, digitalisation of teaching and learning in developing countries like South Africa presented many challenges. In developing countries, most households are poor and it is difficult to access online learning, for example, Ethiopia, a developing country where approximately 80% of the people living in rural areas are without electronic devices for online learning, digitalisation of teaching and learning had multiple challenges (Tiruneh, 2020). Similarly, a study conducted by Putri et al. (2020) in Indonesia established that teachers were faced with numerous challenges such as teaching online, the unavailability of infrastructure and not having enough time to familiarise themselves with the changes. Another problem was that many learners' homes were too unstable to sustain home learning. Bayradkar & Guveli explained that 'children from poor families lived mostly under deprived conditions' (2020, p. 5). They usually have a small house and children do not have their own rooms (Bayradkar & Guveli 2020), making it difficult for them to do schoolwork without

disturbance. In support of this, Harris and Jones (2020) confirmed that COVID-19 highlighted the inequalities of access to education because of household income differences. For this reason, Gustafsson and Deliwe (2020) argued that 'remote schooling in the context of the pandemic is neither feasible nor fair in developing countries' (p. 3). Most households are poor and cannot afford online learning.

In South Africa, where schools remained closed for nearly 4 months (from March 2020 to July 2020), the challenges were particularly pronounced. The Department of Basic Education (DBE) had established a strict time allocation within the curriculum for teaching and learning, with Grades 10 and 11 assigned 36 weeks and Grade 12 with 30 weeks designated for learning (DBE, 2012). The extended closure had severe consequences, leading to the loss of substantial teaching and learning time and consequently, a substantial impact on curriculum implementation (Mahaye, 2020). The disruption caused by the pandemic also extended to the 2021 school calendar. Initially scheduled to open on 13 January 2021, schools remained closed until 25 January 2021, owing to the COVID-19 second wave, as announced by the Deputy Minister of Basic Education, Dr. Mhaule (2021). Additionally, in July 2021, early winter holidays were mandated following the *Presidential Address to Curb the Spread of COVID-19 (Circular No. 52 of 2021)*, with an extra week of holidays granted by the KwaZulu-Natal Department of Education (DoE) (2021). These cumulative disruptions resulted in the loss of approximately 70 school days, placing tremendous pressure on teachers who had to find innovative ways to recover the lost time. In response to the aforementioned challenges, the DoE came up with various ways of replacing traditional face-to-face teaching. These responses include broadcasting lessons on television and radio and implementing online teaching. However, it became evident that not all students would have equal access to online education, revealing persistent inequalities within the education system, especially in rural schools (Khumalo & Mji, 2014). As Pillay (2021, p. 5) succinctly noted, 'the inaccessibility to online learning by poor and rural children has enforced the old saying that the poor become poorer and the wealthy continue to prosper'.

This study explores the multifaceted challenges encountered in curriculum implementation during the COVID-19 pandemic within the context of rural secondary school in South Africa. Guided by two fundamental research questions, this research seeks to shed the light on the experiences of teachers facing these challenges: (1) what were the curriculum implementation challenges encountered by teachers in a rural secondary school during the COVID-19 pandemic? (2) How did teachers in a rural secondary school respond to the curriculum implementation challenges during COVID-19?

Rural context

In the literature (Langa, 2015; Marongwe & Giridzarai, 2021), a rural context is defined both in terms of geographical location and historical segregation, for example, of the South African apartheid government policy. In the context of the

colonial and apartheid-driven land settlement in South Africa, Langa (2015) defines a rural context as a setting where agricultural activities are the main means of economic gain in areas that are densely populated. According to the DBE (2013), rural contexts are defined as farms and traditional areas characterised by low population, low levels of economic activity and low levels of infrastructure. A farm school is one that is built on a farm and usually the parents of the learners work on that farm.

There are rural schools located in areas that are under tribal authorities led by *izinduna* (headman), *amakhosi* (chiefs) and counsellors. Customarily, these schools are far from towns and are located in places where there is very little development. Therefore, farm and rural schools are usually ranked in Quintile 1. In the South African context, schools are ranked from Quintile 1, the poorest schools, to Quintile 5, the wealthy schools. The Quintile 1 schools receive the highest subsidy from the DoE, which is R1466 per learner (Maistry & Afrika, 2020). This quintile system aimed to distribute equitable funds to both poor and wealthy public schools in order to achieve equity in education; however, the system has not achieved the goals that were envisioned (Van Dyk & White, 2019). Although the Quintile 1 schools receive big amounts per learner, the rural schools are still faced with numerous curriculum implementation challenges.

Prior to COVID-19, the rural schools had been experiencing a number of challenges that impacted the way in which Curriculum and Assessment Policy Statement (CAPS) was recontextualised. Khumalo and Mji (2014) stated that many rural schools did not have the necessary infrastructure. Du Plessis and Mestry (2019) also noted that some rural school buildings were built of mud blocks, exposing the learners to physical harm as mud structures could fall at any time. Marwan et al. (2012) discovered similarities in their study of rural schools in Malaysia, where the shortage of urinals was one of the challenges. A school should be safe for learners; however, lack of buildings that are fit for use puts the learners' lives in danger and makes it difficult for teaching and learning to continue smoothly. This is the same as not having enough teaching and learning material, which Fesi and Mncube (2021) confirmed added to the difficulty of teaching in a rural school.

Additionally, inadequate furniture makes it difficult for the teaching and learning process to continue smoothly. Moreover, Du Plessis and Mestry (2019) stated that it was difficult for rural schools to find qualified teachers who were willing to teach multiple grades in one classroom. Another issue was that farm and rural schools receive very little support from the DoE, and it is difficult for teachers to attend development workshops as they have to travel long distances (Du Plessis & Mestry, 2019). Teachers need to be constantly developed if teaching and learning are not to be affected, causing learners' performance to drop. The aforementioned challenges create the gap between the planned curriculum and the enacted curriculum. Little is known about how teachers in a rural school context responded to these challenges as they escalated during COVID-19.

Dilemmatic spaces theory

Several research scholars (Fransson, 2016; Fransson & Grannäs, 2013; Lofving et al., 2023; Westerholm & Lindqvist, 2023) attest that for a better understanding of the teachers' challenges, a theory of 'dilemmatic spaces' should be used. According to Lofving et al. (2023), the concept of dilemmatic space in a teaching situation concerns aspects of control and is affected by expectations from both people and curricula. Hence, this study adopted the dilemmatic spaces theory as a framework for understanding curriculum implementation challenges and responses in a rural secondary school during the COVID-19 pandemic. The study conducted by Maree (2022) on managing the COVID-19 pandemic in South African schools established that COVID-19 came with a lot of changes for society and, in particular, for education, it transformed educational contexts resulting in turning challenges into opportunities. In relation to dilemmas, when teachers are responding to the challenge, they can turn them into opportunities. A dilemma, a problem that one has to find ways of dealing with, is explained by Chen et al. (2017) as a circumstance that one needs to manage, as it cannot be resolved, just as societies are still learning to live with COVID-19. Fransson and Grannäs (2013) cited Honig (1996), explaining that 'dilemmas should not be regarded as specific situations but things that are ever-present in people's living spaces' (p. 7). They quoted Lampert (1985), adding that teachers have a lot of work to do under difficult circumstances that end up resulting in practical dilemmas.

In the teaching profession, there are always different challenges, which might not only be caused by the subject content, but, arising from the environment, they also end up affecting teaching and learning, forcing teachers to learn to deal with them on a daily basis. Chen et al. (2017) cited Fransson and Grannäs (2013), explaining that just as dilemmatic spaces are deep-rooted in the teachers' work, external contexts can also result in dilemmas for teachers. For example, COVID-19 caused disruptions to teaching and learning. The theory of dilemmatic spaces enhanced an understanding of important aspects of the nature and complexity of teachers' work in the rural context. As teachers sometimes find themselves in situations where they have to try their best to overcome challenges that they face in the teaching profession, the dilemmas of everyday practice might differ from teacher to teacher. Fransson and Grannäs (2013) explained that depending on the context, one teacher might experience something as a dilemma and another may not. For example, a rural school teacher's dilemma would not be the same as that of an urban school teacher. Fransson and Grannäs (2013) pointed out that handling dilemmas sometimes needs knowledge about different or possible solutions. Hence, teachers had to find ways of managing the dilemmas in order to effectively implement the curriculum.

Research methods and design

This study adopted a qualitative case study to provide a representation of real people who are in real dilemmas, resulting in in-depth understanding of the situation (Cohen et al., 2007). Using the case study enables researchers to

explore a general issue within a limited and focused setting (Rule & John, 2011). The study was conducted in 2021 at Lihlithemba (pseudonym) secondary school in KwaZulu-Natal. Lihlithemba is categorised as Quintile 1, a no fees-paying school with 450 learners and 14 teachers. Purposive sampling was used to select the four participants (from one secondary school in a rural context) teaching in the Further Education and Training (FET) phase. The participants were given letters explaining what the study was about and requesting their participation. They were also given consent letters to sign. For confidentiality reasons, participants were allocated the numbers 1–4. Teacher 1 had been teaching geography for 5 years, Teacher 2 taught mathematical literacy with 18 years of teaching experience, Teacher 3 had been teaching agricultural sciences for 8 years and Teacher 4 had been teaching IsiZulu home language for 4 years.

The participants were selected because they taught in the FET Phase, which was the grade phase that was first allowed back to school during the COVID-19 pandemic. The participants all had more than 3 years of teaching experience in the same rural school. Data collection was through semi-structured interviews and document analysis. Because of COVID-19, the semi-structured interviews were conducted via Zoom. The documents that were analysed were teachers' annual teaching plans (ATPs), the school's logbook and the minutes of the staff meetings. In the teachers' ATPs, to check the curriculum implementation, a comparison was made of what was taught with what had not yet been taught and with what should have been taught. The school's logbook is the heart and soul of the school. Therefore, any challenge that is faced by the school or the teachers is recorded in it. Moreover, if there is any support provided to the school in order to overcome curriculum implementation challenges, it should be recorded in the logbook. The minutes of the staff meetings were reviewed to find out what was discussed regarding the challenges that affected curriculum implementation. Thematic analysis was adopted to analyse the transcribed qualitative data from the semi-structured interviews. Data from document analyses were also thematically analysed. Relevant gatekeepers' permission for the study to be undertaken was obtained from the DBE and UKZN ethics committee.

Ethical considerations

Ethical clearance to conduct this study was obtained from the University of KwaZulu-Natal Humanities and Social Sciences Research Ethics Committee (HSSREC) (No. HSSREC/00003354/2021).

Results

Challenges that existed before the coronavirus disease 2019 pandemic

Shortage of classrooms and furniture

All the participants were concerned about the shortage of classrooms and furniture. This was cited as the reason teachers had challenges when implementing the curriculum.

Although this challenge had been in existence long before COVID-19, it was exacerbated, as during the pandemic learners had to keep a social distance. The shortage of classrooms and furniture in the school resulted in the implementation of a rotational timetable. Teacher 2, a mathematical literacy teacher, outlined that:

'Space, desks and chairs are the biggest challenges in this school. There is no space to accommodate all the learners to attend daily.' (Teacher 2, 47 year old, male)

The minutes dated 26 August 2020 indicate that the classroom numbers were insufficient to accommodate all the learners. Because of this shortage, learners had to attend school on a weekly rotation. Prior to the arrival of COVID-19, forcing social distancing, learners in this school had to share desks. As a result of the additional requirements, the rotational timetable was the only option, as stated in the school's logbook and minutes of the meetings. The aforementioned findings confirm the findings of a study conducted by Du Plessis and Mestry (2019), where lack of space, water and electricity had a great effect on teaching and learning.

Lack of internet connectivity

During the COVID-19 lockdown, school buildings were closed and schooling migrated to an online environment (Kaden, 2020). The participants highlighted that they transitioned to online teaching and learning using WhatsApp, but they had to stop because of the poor internet connection in some areas where learners live. Although internet connection had always been poor in the area, it affected participants more when teaching and learning had to move to the online platforms. As a result, they could not communicate with all the learners because of the unavailability of a signal. Teacher 1 explained:

'When the schools were closed I tried teaching online but learners were not able to attend because there was no signal in the area. Most of the parents were also not able to buy data bundles for the learners.' (Teacher 1, 30 year old, male)

This correlates with what Kaden (2020) had argued about online teaching and learning when she pointed out that there were going to be problems with internet connection, especially in poor households. According to the four teachers, it was unfortunate, because had there been a good internet connection for all the learners, they could have continued implementing the curriculum online.

Challenges that arose because of the coronavirus disease 2019 pandemic

More frequent school closures affecting the teaching and learning times

The aforementioned pre-COVID-19 challenges intensified during the pandemic. The findings suggest that because of pre-COVID-19 challenges, the school did not meet the requirements of the regulations passed during the pandemic period. The participating school had frequent closures compared to other schools because it lacked proper

sanitation. During the interview, when asked about the challenges they faced in their school when implementing the curriculum during COVID-19, all the participants reported that their school had to close more often than other schools, which greatly interrupted curriculum implementation of teaching timeframes per subject (Department of Education, 2012). For example, Teacher 1 lamented about the reason for regular closures that caused learners to be left behind in geography topics:

'Our school had to remain closed for two consecutive weeks because we did not have water and toilets. Our learners were left behind and the topics could not be covered as stipulated in the ATP.' (Teacher 1, 30 year old, male)

These closures were also noted in the school's logbook. There was one closure that was related to a COVID-19 case, from 19 July 2020 to 26 July 2020. There were two other closures where the school closed because there were no toilets; the first closure started from 02 March 2021 to 12 March 2021 and the second closure was from 26 July 2021 to 05 August 2021. These closures resulted in the loss of 5 weeks of teaching and learning. This was also evident in the school's logbook entry dated 08 March 2021 (Figure 1), showing that the DoE officials found that the school needed toilets. The available pit toilets were found to be in terrible conditions.

In this school, the shortage of required toilets led to the closure of the school. The poor conditions of toilets in some South African schools were also raised by Bantwini and Feza (2017), that in most farm schools there is a great lack of proper toilets and sanitation. This was in spite of the DoE asserting that it was working hard to get rid of pit toilets. This school is therefore one of the 2753 South Africa schools that are still using pit toilets (Dano, 2021).

Gaps in subject content and assessments

Curriculum implementation seems to have been greatly affected, judging by the gaps that appeared in the ATPs of the four participants. These gaps arose when teachers decided to teach certain topics and omit others because of the shortage of time. The teachers' ATPs indicated that they did not teach everything as stipulated in CAPS. Teacher 3, an agricultural sciences teacher, declared:

'In Grades 10 and 11, I end up focusing on what will be assessed mostly at the end of the year.' (Teacher 3, 34 year old, female)

Similarly, Teacher 4, an IsiZulu home language teacher, elaborated:

'In Grade 12, I started with the topics that I had left out in the previous grade such as other transactional writings that are in this year's ATP.' (Teacher 4, 27 year old, male)

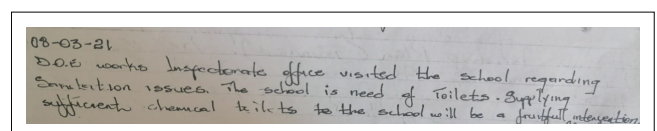


FIGURE 1: School's logbook entry (08 March 2021).

Confirmatory to that, three participants said that they prioritised certain topics. Teacher 2, a 47-year-old male with a teaching experience of 10 years, confessed: 'In mathematical literacy I focused more on the topics that had more marks in the exam.'

For example, Teacher 3, a 34-year-old female who has a Postgraduate Certificate in Education (PGCE), detailed that: '[i]n Grade 11, I prioritised on the content that linked with what would be taught in Grade 12.'

It seems that prioritising certain topics worked to their advantage, as they were preparing learners for Grade 12. It was clear that none of them were able to follow the planned curriculum as they should have, and there were many topics that were not covered, especially in Grades 10 and 11. According to the teachers' ATPs, in geography, mathematical literacy and IsiZulu, 70% of the subject content had been covered, while in agricultural sciences, it was 60% of the subject content and it was the last term of the year.

Each subject has its programme of assessment (PoA) containing assessment tasks for the grade. All four teachers mentioned that it was impossible to cover all the subject content and conduct assessments in a short period of time. Regarding assessments, Teacher 3 elaborated:

'I ended up focusing on what will be assessed mostly at the end of the year compared to teaching the learner to get knowledge.' (Teacher 3, 34 year old, female)

This concurred with Teacher 4's explanation:

'We start doing assessments early and are instructed to assess what we taught, so in most cases, I teach for assessment.' (Teacher 4, 27 year old, male)

Conducting assessments early was also noted in the minutes of the meetings dated 26 May 2021 (Figure 2), where the report from the department officials insisted that assessments be done early.

These findings suggest that teachers were teaching for assessment, by not covering the whole content, but selecting topics that assessment would be based on.

Teaching strategies

Because of COVID-19, teachers had to find new teaching strategies. According to Kaden (2020), the unprecedented interruption affected the work of many teachers. As the participants (teachers) worked in a farm school where the resources are not adequate, they had to find new teaching strategies that would work best during the pandemic. One of the strategies that the four teachers tried was online teaching,

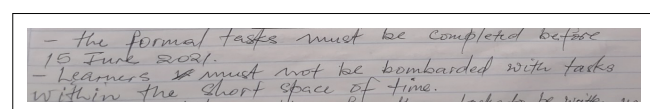


FIGURE 2: Minutes of the meetings (26 May 2021).

which was not successful because of the reasons presented in the section concerning the lack of internet connection. However, a lot of changes occurred in the teaching and learning process. For example, as Teacher 4 explained:

'So far I have covered 90% of the curriculum; however, I will not be able to do revision like I used to before.' (Teacher 4, 27 year old, male)

Teacher 4 explained that he used to teach and then have time for revision. However, because of the shortage of teaching and learning time, he was not able to do that. Likewise, Teacher 3 elaborated how things had changed:

'Other learners might be left behind because as a teacher, I do not have much time to accommodate learners with special needs due to the reduced number of school days.' (Teacher 3, 34 year old, female)

If teachers are not able to use the teaching strategies that work, curriculum implementation is affected and the learners with special needs do not get the attention they need.

Shortage of learner-teacher support material

Another challenge noted from the data was not having enough teaching and learning resources. In the minutes of the meetings dated 26 May 2021, teachers had raised their concerns about not having enough textbooks. In the interviews, Teachers 2 and 4 mentioned that this affected curriculum implementation. Teacher 2 declared:

'There aren't enough mathematics literacy books for each learner. Before COVID-19, they used to share, but now sharing is not allowed.' (Teacher 2, 47 year old, male)

From the interviews, it emerged that textbooks were the main resource that was used in teaching and learning. Teacher 3 revealed that it was not only textbooks that were in short supply but also other resources that were needed to do practicals. She elaborated:

'Since our school does not have resources, we used to visit agricultural exhibitions where learners learnt about the marketing of agricultural products. We also used to visit a neighbouring school where learners learnt about the handling of tools and agricultural production. However, as from 2020 it became difficult to organise such because of the COVID-19 regulations. Hence, I end up focusing on the theorised part only which makes it difficult for learners to understand all the content.' (Teacher 3, 34 year old, female)

It was not only Teacher 3 who could not do practicals but also Teacher 1:

'I used to take my learners to nearby farms when doing economic geography practice where we would compare different types of farms. Now that there is COVID-19, we cannot not visit the farms because the farmers do not allow people to get in.' (Teacher 1, 30 year old, male)

Without the required learner-teacher support material (LTSM), teaching and learning could not be carried out successfully. In the school, teachers could not teach effectively

because of the shortage of the needed material. Malebese (2017) argued that rural schools are usually undersupplied with relevant teaching resources, which makes it difficult to provide quality education. According to Bantwini and Feza (2017), most farm schools faced a severe lack of resources necessary to facilitate the teaching and learning process. From the literature, it is clear that lack of LTSM is not a recent thing, but it is longstanding.

Learner participation and low learner attendance rate

All four teachers mentioned in the interviews that the rotation of learners created many challenges in curriculum implementation. To accommodate learners, the timetable was designed for learners to come to school according to allocated weeks because of the shortage of classrooms and furniture, as discussed. Teacher 3 elaborated:

‘Since the learners started rotating, it became difficult to implement what is on the ATP because of the reduced number of school days.’ (Teacher 3, 34 year old, female)

This reduction was evident in the teachers’ ATPs, showing there was a big difference between the implemented curriculum and what should have been covered. The minutes of the meeting dated 26 May 2021 show discussions about giving learners informal assessments that were in line with CAPS on a regular basis. However, Teachers 1 and 4 were concerned about learners not doing their work. Teacher 1 confirmed that although they gave work to learners, most of them did not do it. Similarly, Teacher 4 argued:

‘Finishing the content is highly impossible because even if you give the learners work to do at home, they never get it done.’ (Teacher 4, 27 year old, male)

However, it emerged from the minutes of the meetings that the district officials had noted that learners’ work was not properly monitored. Teachers 1 and 3 agreed that most of the time they did not give feedback on the homework that was given because of the shortage of time. Teacher 3 explained:

‘You can give learners work for the whole week but it is difficult to see who understood and who did not because when they come back you want to teach new content.’ (Teacher 3, 34 year old, female)

The low learner attendance rate was another challenge that affected curriculum implementation. On the school’s logbook dated 07 July 2021, a district official had come to monitor spring classes and discovered that a lot of learners were absent. Additionally, Teachers 1 and 2 mentioned poor attendance as one of the challenges. Teacher 2 detailed that the main problem was transport. When parents lost jobs because of COVID-19, they could not pay for their children’s transport. He further explained:

‘Learners had to walk long distances to school which resulted in absenteeism. Curriculum implementation is affected because as a teacher you continue while other learners are left behind.’ (Teacher 2, 47 year old, male)

Similarly, in an article published in the Independent Online, Equal Education spokesperson, Mila Kakaza, was quoted by Nene (2017), agreeing that walking long distances was the cause of lack of concentration, late coming and absenteeism. As a result, curriculum implementation was greatly affected in the school.

Distress for teachers and learners because of coronavirus disease 2019

The data suggest that COVID-19 was traumatising and stressful for both teachers and learners. Teachers 2 and 4 attested that the school did not provide much help, as everyone had been confused, not knowing how to deal with the pandemic. Teacher 2 said:

‘Teachers are overwhelmed and not supported to do their work.’ (Teacher 2, 47 year old, male)

The fact that COVID-19 was known to have fast contamination scared most people, especially teachers and learners who interacted on a daily basis. Teacher 1 declared:

‘My confidence was affected because whenever I went to class, learners believed that I would infect them with COVID-19 as I lived in an urban area.’ (Teacher 1, 30 year old, male)

Teacher 2 affirmed this fear:

‘Learners were scared that they might get infected with COVID-19; this fear also contributed to poor learner attendance.’ (Teacher 2, 47 year old, male)

Fearing for one’s life because of unanticipated situations can cause people to be overwhelmed (Kukreti et al., 2021). The learners did not feel safe at school; as a result, learner absenteeism increased, affecting curriculum implementation.

Responses of teachers towards the curriculum implementation challenges in a rural secondary school during the coronavirus disease 2019 pandemic

Online teaching

When the schools were closed, online teaching became the solution for implementing the curriculum. However, from the interviews, it is evident that teachers from this school did try to teach online but were unsuccessful. In a study conducted by Mukuna and Aloka (2020) with the aim of exploring challenges to online learning during the COVID-19 pandemic at selected rural schools in South Africa, it was discovered that the reason for the failure of online teaching in rural areas was the lack of internet, electricity, network signal, data and Wi-Fi in the learners’ homes. Similar challenges were encountered in the school under study, which resulted in the teachers’ decision to stop teaching online as they could not reach all the learners.

Conducting extra lessons for Grade 12

As the school had closed several times because of the reasons discussed previously, in order to make up for the lost time, teachers conducted extra lessons. Teacher 4 confirmed this:

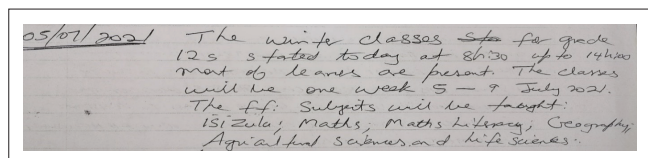


FIGURE 3: School's logbook (05 July 2021).

'We do extra classes for Grade 12 on Saturdays and holidays.'
(Teacher 4, 27 year old, male)

The school's logbook entry in Figure 3 also shows that Grade 12s had extra classes on the weekends, winter holidays and spring holidays.

Teachers 1, 3 and 4 agreed that these extra lessons were helpful to the Grade 12 learners.

According to the United Nations Children's Fund (UNICEF) (2021), South African school children lost approximately 54% of learning time because of school closures and rotational timetables. Hence, the teachers had to offer extra lessons to make up for the lost time when the school was closed and the curriculum could not be implemented.

Support from the subject advisors

The data from the interviews indicated that the subject advisors assisted teachers with lesson plans, revised ATPs and questions and memoranda booklets. In the interviews, Teacher 3 pointed out:

'Since we had to use the revised ATPs, the agricultural science subject advisor gave us ready-made lesson plans to ensure that all schools were on the same pace.' (Teacher 3, 34 year old, female)

Teacher 2 affirmed this support for teaching geography:

'My subject advisor sent supportive documents which had questions and answers. These documents made revision easier for me and the learners.' (Teacher 2, 47 year old, male)

The role played by the subject advisors seems to be in line with the DBE (2013) tasking subject advisors with facilitation of curriculum implementation and improvement of the teaching environment. Correspondingly, Dilotsothle et al. (2001) affirm that the roles of subject advisors included compiling worksheets for teachers, encouraging cross teaching and the sharing of resources among schools. It was evident that the subject advisors fulfilled their duties as expected.

Team teaching

The minutes of the meeting shown in the extract in Figure 4 and the data from the interviews both indicated that team teaching did occur and that it was encouraged in the school.

Teachers 1, 2 and 3 all mentioned that their respective subject advisors for geography, mathematical literacy and agricultural sciences sent teachers from other schools to assist

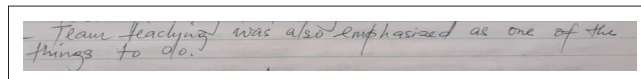


FIGURE 4: Minutes of the meeting (26 May 2021).

during the extra classes that took place during the holidays. They expressed their experiences as follows:

'By observing the lead teacher that was sent by my subject advisor, I was able to learn how they introduced topics from the learners' prior knowledge.' (Teacher 1, 30 year old, male)

'The highly experienced lead teacher that was sent by the subject advisor gave me tips on identifying topics that I had to focus on during revision and also gave productive feedback on my teaching.' (Teacher 2, 47 year old, male)

'The lead teacher taught the chapters that I felt needed to be stressed more to the learners. We discussed other strategies that could be used to help the learners with revision such as grouping them into groups.' (Teacher 3, 34 year old, female)

Importantly, this highlighted the supportive role of subject advisors and teachers from other schools in facilitating the implementation of the curriculum. In support, Moloi (2010) argued that 'there is power in a collective force' (p. 628). When teachers work together, they are able to tackle issues that pose a threat to curriculum implementation. Furthermore, this situation seems to be in line with the collaboration among teachers and encourages the formation of the professional learning communities (PLCs) in rural contexts.

Installation of Wi-Fi in school

In the school's logbook and the minutes of the meeting dated 12 October 2020, it was noted that the school installed a Wi-Fi network. Teacher 2 explained:

'The Wi-Fi network was connected so that teachers are able to communicate with the rotating learners.' (Teacher 2, 47 year old, male)

Additionally, Teacher 1 said he used the Wi-Fi to his advantage because he was able to search for the learning programmes developed from other provinces. He confirmed that these programmes were helpful to his subject as they also gave tips on how to best implement the curriculum, for example, teaching strategies that could be effective during the mentioned challenges. Delcker and Ifenthaler (2020) agreed that digital skills are essential to have in a modern workplace. During COVID-19, these skills were relevant because of the high need to be familiar with technology in order to use in the circumstances.

Discussion of findings

The findings of the study suggest that teachers encountered many dilemmas that affected teaching and learning. Mbatha (2016) stated that teachers play an important role in creating learning environments that enhance learning. However, the arrival of COVID-19 brought new and also highlighted existing challenges in farm schools which made it difficult for teachers to implement the curriculum.

Given that teachers in farm schools experience a lot of challenges when implementing the curriculum, Lofving et al. (2023) attest that dilemmas arise from the context where they work. Hence, teachers who worked in the farm school under study experienced a lot of challenges because of the environment they were in. The biggest challenge was the irregular school closures during COVID-19. The data show that the school closed regularly because of the shortage of toilets and water. However, in the school's logbook and minutes, it emerged that there had been a contractor who was building the toilets, indicating that the toilet issue might have resolved as soon as the construction had ended.

Khumalo and Mji (2014) argue that infrastructure is the most important element in teaching and learning. Teachers found themselves facing additional dilemmas because there was a great lack of infrastructure. The shortage of buildings and furniture resulted in the disturbance of curriculum implementation, as the school had to use the rotational timetable. When the learners were rotating, it was difficult for teachers to implement the curriculum because there were fewer teaching days than stipulated in the CAPS document. Another issue was the shortage of textbooks. Teachers could not teach effectively, as sharing was not allowed during COVID-19. To cover the curriculum gaps that had resulted because of curriculum implementation problems, teachers conducted extra lessons on weekends and holidays. However, this was provided for Grade 12 only and did not solve the problem for Grades 10 and 11.

According to Westerholm and Lindqvist (2023), the dilemmas teachers experience every day influence how they deliver subject content. Hence, the teachers under study tried various ways of interacting with the learners, such as teaching online. As Qoytimah et al. (2020) affirmed, whenever a teacher is faced with a dilemma, they have to develop ways of dealing with it. However, in this case, teachers faced challenges because of the lack of signal in the area. Their school even installed Wi-Fi to assist teachers in implementing online teaching and learning, but it was still unsuccessful. The school's ability to install the Wi-Fi shows that it had the capability of doing more, using the funds allocated by the government. These findings suggest a need for guidance and support on how the funds allocated to schools by the DoE can be spent on the required resources.

Although these teachers from a rural school were facing dilemmas because of COVID-19, teacher agency seemed to play a very big role in how they dealt with the challenges. The findings show how, for instance, Wi-Fi was used to learn new teaching and learning strategies. Fransson and Grannäs (2013) contend that handling dilemmas requires knowledge about different things, such as the internet, which can be exploited by teachers not only for teaching and learning but also to find solutions to their dilemmas. The findings indicate that the rural schools can exploit Wi-Fi to their advantage, using it to find teaching strategies and to connect with other teachers. Before

COVID-19, teachers took learners to well-resourced schools for their practicals. However, during COVID-19 they could not visit these schools and ended up teaching more theory. The findings also show that team teaching enabled the teachers to cover curriculum gaps, as other teachers taught different topics to their learners. This also highlights the importance of PLC.

Learner participation and feedback to learners is crucial in teaching and learning. The findings indicate that during COVID-19 the teachers were no longer checking work or giving feedback to learners, which might have been the reason for learners not doing their work. Another reason could be that parents are not involved in their children's education because of their level of education and work commitments. According to Kaden (2020), parents who work are not able to supervise their children's learning. As most parents in this study area work on the farm, most of the time they are not at home to help their children. Moreover, Ngwacho (2020) mentioned that the reason for parents not being involved in their children's learning could be their lack of education. On the farms, many parents are not literate and therefore do not know how to assist their children. Additionally, a high rate of learner absenteeism adds more to the challenges that teachers face when implementing the curriculum.

The findings suggest that during COVID-19 curriculum implementation was uneasy and stressful, as teachers had to be extra careful when interacting with the learners. McDonough and Lemon (2022) contend that the stressors that were a result of COVID-19 negatively impacted the teachers' well-being. Sfard (1998) argued that if a solution to a dilemma cannot be found, people learn to live with it. According to McDonough and Lemon (2022), COVID-19 affected the well-being of both teachers and learners. Hence, the solution was to teach the learners about COVID-19 and to incorporate it into every lesson, as was discussed in one of the staff meetings. The pedagogy during the COVID-19 lockdowns has been labelled by Schwartzman (2020) as pandemic pedagogy, which takes into consideration family dynamics and interaction and allows students to drive discussions. Although this study did not aim to focus on teacher well-being, it cannot be ignored that while the study findings show that the teachers were facing a lot of stressors, they do not show how teachers coped with their well-being during COVID-19.

Conclusion

This study established that COVID-19 broadened the pre-existing challenges in the rural secondary school under study. These were irregular school closures, shortage of classrooms, shortage of furniture, curriculum content coverage gaps, assessment, lack of internet connectivity, teaching strategies, shortage of LTSM, low learner participation and attendance rates and distress for teachers and learners because of COVID-19. It appears that responses towards some of these challenges facilitated innovation and agency in the rural school. However, the distress experienced by teachers and learners was too much and resulted in learners not receiving the quality education they should have received. From the findings of this study, teachers, the DBE and all the

stakeholders may gain insight into how rural schools could be supported to implement the curriculum effectively. Curriculum implementation in the South African rural schools requires the joint efforts of all the stakeholders. Future research is needed to show how teachers are closing the gaps in subject content that were not covered in the previous grades because of the challenges that were caused by COVID-19.

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Authors' contributions

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Data availability

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