COVID-19 impact on support services in South African full-service schools: Views of support structures

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The 4 world-wide waves of the coronavirus disease (COVID-19) unsettled schooling, and the consequences were immeasurable as schools had to close and the eventual return to schools was staggered to reduce the possibility of infection. Due to the pandemic, the provision of support services was disrupted, and learners struggled to reach their academic goals and achieve success within their schools. Full-service schools are schools that are equipped to support learners who need a moderate level of support for their learning. In this article we explore the impact of the COVID-19 pandemic on the provision of learning support services in South African full-service schools. A qualitative approach was followed, and open-ended questionnaires and interviews generated data. Thirty teachers serving in the school-based support teams (SBSTs) from full-service schools and 12 district-based support team (DBSTs) officials from 3 South African provinces participated in this research. The findings indicate that challenges in rendering learner support during the COVID-19 pandemic in full-service schools, inadequate handling of the referral process, and insufficient capacitation for support services during COVID-19 restricted the efficiency of support services. We suggest learner support interventions be made to address the needs of learners experiencing challenges neglected during the pandemic as it created gaps in their learning.

Keywords: COVID-19; education support services; full-service schools; support structures

Introduction

In South Africa, Education White Paper 6: Special Needs Education (EWP6) was issued in 2001 (Department of Education [DoE], 2001) to delineate principles for achieving an inclusive education system. This policy document envisaged three types of schools: mainstream, full-service, and special schools to facilitate learner support at different levels of support needs. These types of schools form the structure of the inclusive education system and are intended to be inclusive, but full-service and special schools are intended to be equipped to be responsive to moderate and high levels of support needs where that support cannot be provided in mainstream schools (DoE, 2001; Engelbrecht & Muthukrishna, 2019). These schools are characterised by their capacity to provide additional support services and resources for learners with moderate support needs (Department of Basic Education [DBE], Republic of South Africa [RSA], 2010). Support services refer to the support that various stakeholders provide to accommodate diverse learning needs in different schools (Makhalemele & Nel, 2021). Therefore, to aid the provision of learner support, including accessing additional support services and resources in each school, EWP6 mandates the establishment of support structures such as school-based support teams (SBSTs) at all schools. Their primary role is co-ordinating pedagogical support services and developing individual support plans. Makhalemele and Payne-van Staden (2018) stipulate that the SBSTs are intended to be able to draw on district-based support teams (DBSTs) to address learner, teacher, and institutional needs while also providing support to the teaching and learning process. Research informs that functional education support services are one of the keys to reducing barriers to learning; their role includes building the capacity of schools through evaluating and supporting teaching that accommodates an array of learning needs (DBE, RSA, 2014; DoE, 2001).

Despite the existence of the SBSTs that are entrusted to provide efficient support, the COVID-19 pandemic frustrated support services at school level. The national lockdown led to complete school closure, presenting challenges in delivering learner support to schools and learners with diverse needs (Kamga, 2020). The DBE, RSA (2020) exposed that the lockdown disrupted education and support services to be rendered by SBSTs and other support structures to learners whose learning needs call for additional support. Altheimer, Duda-Banwar and Schreck (2020) and Seepe (2021) highlight that COVID-19 forced the world to move quickly into the digital space, and schools have had to quickly revise their online and digital platforms to save the academic project and human lives. Moreover, online learning was introduced to ensure that teaching, learning, and support activities, such as curriculum differentiation in schools, were implemented. However, online learning faced challenges, such as inequalities as a result of digital competencies, internet access, and online portals that had not been equipped with accessibility features to accommodate the support needs of learners with diverse needs (Alexa & Baciu, 2021; Trade Union Advisory Committee to the OECD Commission, 2020). These challenges lead the education system to compromise on providing ideal school support services. According to Kamga (2020) and Purwanto, Pramono, Asbari, Santoso, Wijayanti, Hyun and Putri (2020), learners with learning barriers did not gain the necessary additional support to attain learning as they were studying from home.

Although the learning of learners with barriers depends on providing additional support, research indicates that during COVID-19, no measures were taken to ensure that these learners received support when education

was shifted to online platforms (Dube, 2020; Kamga, 2020). We are of the opinion that COVID-19 negatively impacted all learners, specifically those requiring additional support, as it disrupted the provision of necessary support and learning. Shepherd and Mohohlwane (2021) indicate that one consequence of COVID-19 was that several learners with diverse needs dropped out of school due to inadequate support. Research suggests that school disruptions resulted in learning losses and an increase in the number (approximately 72,000,000) of those who cannot read or write globally (Shepherd & Mohohlwane, 2021). Consequently, our purpose with this article was to explore the impact of COVID-19 on education support services in full-service schools.

COVID-19 Challenges in Education Support Services

To protect equivalent education by revealing the exceptional potential of all learners and schooling prospects for all, the practice of education support services has become a priority at school level. Makhalemele and Nel (2016) argue that attaining learning through additional support is the right of those learners in full-service schools; therefore, support services are crucial. Despite the presence of the provision of support in schools, literature suggests that achieving the ideal deliverance of support in South Africa remains unfeasible (Makhalemele, Payne-van Staden & Masunungure, 2021; Nel, Engelbrecht, Nel & Tlale, 2014). This is due to the poor quality of teacher training on inclusive practices (Engelbrecht, Nel, Smit & Van Deventer, 2016), discrepancies due to political heritage in the obligation of education, and support in the education system of South Africa (Dreyer, 2017). Nkambule and Amsterdam (2018) warn that the functionality of support services is ineffective in the inclusion policy. This was exacerbated by COVID-19, which caused schools to have insufficient periods and platforms to support learners (Malindi & Koen, 2021).

Teachers in full-service schools were anticipated to adapt their teaching methodologies to accommodate learners with moderate support needs (Engelbrecht & Muthukrishna, 2019). One way to accommodate these learners is through a differentiated curriculum (Taole, 2020). Makhalemele and Payne-van Staden (2018) maintain that teachers understand curriculum differentiation but do not receive support to carry it out. Consequently, when teaching was shifted online because of COVID-19, they could no longer accommodate learners experiencing barriers, as differentiating curriculum could not be monitored in remote education (Nambiar, 2020). In cases where the curriculum is differentiated, the teacher monitors the progress of the child's learning. However, online schooling has not reached

hundreds of millions of learners. As reported by Hoadley (2020) approximately 78% of homes are without computers, and 90% have no internet access. Due to disparities caused by social and educational inequalities, learners experiencing barriers to learning could not access differentiated curricula, leading to learning loss (Das, Daniels & Andrabi, 2020). COVID-19 compromised support services as many stakeholders, such as SBSTs and DBSTs, could no longer support teachers effectively (Pressley, 2021).

The COVID-19 pandemic waved to both emotional and psychological suffering for teachers due to COVID-related anxieties and teaching demands caused by the drastic shift from traditional face-to-face teaching to online teaching (Petrie, Aladin, Ranjan, Javangwe, Gilliland, Tuominen & Lasse, 2020). COVID-19 has exacerbated the challenges faced by teachers, impeding their efficiencies in their support responsibilities (Kramer, 2020). In addition, the mandate of providing quality support for all learners in a new platform led to demotivation and uncertainties for teachers as some lacked sufficient knowledge of information technology which was seen to be an alternative solution (Pokhrel & Chhetri, 2021).

Furthermore, one of the inclusion principles is recognising that all children are capable of learning, although some demand additional support (DoE, 2001; Klemenčič, Pupinis & Kirdulytė, 2020). In determining whether education is inclusive, it is imperative to look at the process of teaching as well as how support and differentiated instruction are provided (Makhalemele & Nel, 2021). However, online education and support became ineffective for learners with diverse needs as they were uninformed on how support would be provided. Research indicates that no reasonable information was provided to learners with diverse needs, preventing them from receiving support during COVID-19 (Dube, 2020; Kamga, 2020). Mseleku (2020) affirms that online schooling challenges learners due to connectivity, internet stability problems, and the unavailability of suitable software for those with diverse needs, which magnifies learning exclusion. The COVID-19 pandemic negatively impacted schooling in many ways, thus affecting learners' well-being. Keaton and Gilbert (2020) allude that besides teaching and learning, schools provide other critical services like school nutrition programmes, which were also disrupted by the COVID-19 pandemic. In reference to the World Food Programme, approximately 370 million children were deprived of school meals when schools closed due to COVID-19. This situation significantly affected children's immediate and long-term development (Andrew, Cattan, Costa Dias, Farquharson, Kraftman, Krutikova, Phimister & Sevilla, 2020). It is, therefore, noted that school

nutrition is one of the crucial support systems in schools as it has been known to be useful in maximising brain functioning, which enhances learning (Banks, Davey, Shakespeare & Kuper, 2021). This implies that despite anxieties caused by COVID-19, some learners were affected as they could not receive the nutritious food they were previously afforded at school.

Research Methodology

With this qualitative study we aimed to explore the impact of COVID-19 on support services in South African full-service schools. The study was undertaken in six schools from districts across three provinces in South Africa, including Sedibeng and Thabo Mofutsanyana in Gauteng and the Free State, respectively, and Oliver Reginald (OR) Tambo Inland in the Eastern Cape. Two full-service schools were purposefully selected from each district. The participants included 30 teachers serving in SBSTs and 12 DBST members who worked directly with teachers in these schools. We believed that these participants would provide relevant information as they were accountable for the support provided to learners and teachers in the participating schools. Interviews were conducted in the schools and participants' respective offices. Purposive sampling was employed to choose 42 participants who could offer the most detailed facts on the impact of COVID-19 on support services.

Data were gathered using open-ended questionnaires distributed via electronic mail (email) and WhatsApp groups and semi-structured interviews conducted individually. The interviews were scheduled at appropriate times for each participant to prevent interference with teaching responsibilities. COVID-19 protocols, including social distancing, were observed during data collection. A tape recorder was used to record the participants' responses. Thematic content analysis was done following the six phases suggested by De Vos and Strydom (2011). Interview recordings were transcribed, and the questionnaire data were also transliterated. The collected data were subsequently subdivided into meaningful units and accompanied by thorough descriptions. Codes were derived from identifying consistent patterns in the data, and themes were formulated by organising and capturing codes pertinent to the research question concerning the impact of COVID-19 on the delivery of education support services in full-service schools. The themes were further analysed and supported from existing literature.

To maintain the credibility of this study, ethical principles were followed, which encompassed obtaining informed consent from all participants, verifying and validating transcribed data with the participants, and ensuring transparency regarding the methods used for data collection.

Theoretical Framework

This study was underpinned by a narrow interpretation of the theory of change, which involves making predictive assumptions on the relationships among the interested transformations and the actions necessary to enact change (Connolly & Seymour, 2015). According to Fuhr, Acarturk, Uygun, McGrath, Ilkkursun, Kaykh, Sondorp, Sijbrandij, Ventevogel, Cuijprs and Roberts (2020), the theory of change provides a visual tool for identifying the factors necessary to achieve anticipated long-term outcomes. In this study, the theory of change was used to explain how interventions can lead to specific developmental changes in the extension of education support services in full-service schools during the COVID-19 pandemic. One advantage of this theory is its ability to provide information on the what, why, and how of an intervention (James, 2011). In this context, the "what" refers to the support provided, the "why" emphasises the necessity of support for learners facing barriers, and the "how" explores how these learners were supported during the pandemic. The theory of change also prompts stakeholders to consider assumptions and interventions (De Silva, Lee & Ryan, 2015). Given the adaptable nature of this theory, we employed it to examine how support structures provided interventions during COVID-19 and online teaching and learning.

Although the theory of change is known for its fluidity, it can be approached using four models: deductive, inductive, mental, and collaborative (Laing & Todd, 2015). In this study, we adopted the deductive approach, which involves gathering evidence from existing knowledge. This approach helped us explore how insufficient support services in full-service schools can impact learners' current and long-term learning, as their educational progress relies on the availability of additional support.

Findings

The findings are arranged and presented based on the themes that emanated from the data analysis. Teacher participants are referred to as TP, while the officials from the DBSTs are referred to as DP. The following themes emerged: challenges in rendering support during the COVID-19 pandemic, inadequate handling of the referral process, challenges in support provision, and insufficient capacitation for support services during COVID-19.

Challenges in Rendering Support Services During the COVID-19 Pandemic

All participants indicated that support provision for learners experiencing barriers was limited as it was done once a week or via telephone. Although participants were aware that limited support leads

to drawbacks for those learners who rely on additional support, they found it challenging to deliver the necessary support to learners with varying needs during COVID-19. This affirms what the DBE, RSA (2020) said regarding COVID-19 weighing heavily on schools, leading to limited and uneven support provision. COVID-19 negatively impacted how support was provided as teachers had to follow new norms introduced in the schooling system. Their responses to this finding were:

> *Since COVID-19 started, support provision slowed down, and sometimes we had to do it telephonically* (TP 11).
> *It was difficult to provide support even after lockdown terms were lifted because of rotational timetables, which allowed different groups to attend on different days* (TP 2).

All participants were vocal in that no efficient support was provided during COVID-19, meaning that those learners whose learning depended on support were marginalised. Mpaza and Govender (2022) found that the lack of support disadvantaged learners by infringing upon their rights to equality and fundamental education. Online teaching and support services had many challenges, and their inclusivity was questioned as there were no clear indications of how support services were carried out to ensure that the constitutional right of all learners, especially those with diverse needs, was not violated (Kamga, 2020). The following participants affirmed this finding:

> *No efficient support was provided during COVID-19, and learners whose learning depended on being supported ended up being marginalised* (TP 8).
> *I think the lack of support provision is failing learners, we did not know how to assist them, and unfortunately, with some, there were improvements before lockdown, and you could see that they were no longer dependent on close monitoring ... failure to support them was as good as violating their rights to basic education and equality.* (TP 18)
> *Online teaching and support services had no clear indications of how support services were carried out to ensure that the constitutional right of all learners was not violated* (TP 26).

Inadequate Handling of the Referral Process
Referring learners to where they will benefit from learning is mandatory in ensuring that no learner is discriminated against in the education system. Suspended referrals during levels 4 and 5 of the COVID-19 lockdown restrictions led to long waiting lists and discouragements to those learners whose learning could be attained in a full-service school. There were delays and ineffectiveness in referring learners to schools equipped to cater for the nature and level of their support needs (Kamga, 2020). Participants shared the following responses in this regard:

> *A proper referral process was not followed during COVID-19, as everything had to be suspended during lockdown levels 4 and 5. Sometimes a parent or a teacher would come to us with a child who needed to be referred* (TP 3).
> *COVID-19 affected the referral process as teachers with comorbidities were ineffective as they could not attend* (TP 2).
> *Referrals were affected as we have an overdue list to be assessed by the DBST* (TP 20).

The referral procedure is expected to be preceded by several consultations and interventions by a teacher, parent and the SBST. Thus, COVID-19 affected not only the procedure but also the process itself. Disturbances in referring learners to schools where their learning can be provided for exacerbated exclusionary experiences towards learners with diverse learning needs within the classrooms where they cannot be supported (Stanforth & Rose, 2020).

Challenges in Support Provision
Participants were aware of some strategies implemented to ensure minimal support during the COVID-19 pandemic. However, while they acknowledged these strategies, they emphasised that many challenges persisted during and after the pandemic, hindering them from coping with the demands of their work. Most of their worries were related to their responsibilities in support services, inadequate resources, and personal challenges, indicated by the excerpts below:

> *The list of learners we need to assess is long due to the lockdown and the strict restrictions of levels 4 and 5, which kept us working at home* (DP 12).
> *The usual programme had to be cancelled. Also, the screening programme, such as school readiness for learners, was not done due to COVID-19. Teaching and learning were also compromised* (TP 17).
> *The district is too rural, and there are network challenges to support schools. Some schools are unable to access health facilities* (DP 6).
> *I need support because I can't cope with the stress caused by COVID-19. It got worse when one of the teachers in this school passed on. Maybe I could be a better teacher if district officials could provide support through counselling.* (TP 9)

Makhalemele and Nel (2016) argue that providing effective support services by the DBSTs in South African schools remains a formidable challenge. This lack of support negatively impacts teachers' self-efficacy, as they cannot effectively address the pressures and difficulties inherent in teaching (Makhalemele & Payne-van Staden, 2018). All the teachers who participated expressed that the absence of support from the DBST resulted in their inability to adapt the curriculum to facilitate learning for learners, thereby preventing further learning disruptions during the COVID-19 pandemic. Here are some statements by participants:

> *We are just drilling learners to answer the assessment questions because we try to cover the*

> *curriculum as prescribed, although no support is shown from the district members* (TP 12).
> *Although the department streamlined the curriculum to close the gap caused by Covid, the district officials are ineffective in supporting teachers on curriculum adaptations* (TP 22).

Regarding the deficiency of DBSTs' support, the results from the questionnaires and interviews were contradictory. In this instance, most teachers who participated responded to the questionnaires that the support offered by the DBST was insufficient. However, in the interviews, it was recommended that they were well-trained to adapt the curriculum during the COVID-19 pandemic, and district officials followed up to support them. Two participants commented as follows:

> *Fairly speaking, we are well-prepared and trained by the district officials, and all teachers in our district understand how to teach and assess the adapted curriculum for COVID-19. The district also provided us with an adapted curriculum. However, some teachers do not clearly understand it, which is a problem.* (TP 4)
> *The districts supported schools with Education Assistant Teachers and General Assistants. These people are helpful in the classrooms and on the school premises. I know our principal is reporting to the district about their performance* (TP 20).

TPs further mentioned that the communication services between them and district officials were mostly affected negatively, making teachers feel incompetent. When individuals communicate effectively, they can openly discuss their thoughts and foster mutual comprehension (Brinia, Selimi, Dimos & Kondea, 2022). Effective communication helps teachers and district officials to share essential and relevant information about learners. This was highlighted by TP 16, who said: "*The revised district calendar and special purpose notices that address matters and need to be brought to the attention of parents and teachers are communicated very late. This affects teachers, as we feel incompetent in doing our work.*" The DBST members also affirmed inadequate access to additional resources, including communication services, during the challenges posed by COVID-19, which disrupted the learning process and resulted in educational setbacks or exclusion. DP 5 said: "*We have revised the curriculum adaptation plan, circulars, and special purpose notices. However, it came to my attention that some reach the schools late and retard teachers' progress in supporting learners.*"

The role of the administration in schools is not limited to the implementation of educational policies and objectives, but also that of enhancing the generations and aligning them to a rapidly changing era (Badarna & Ashour, 2016; Faulkner, 2015). Zahran (2012) confirms that school administrators are crucial in helping learners develop well in all ranges to be respectable citizens responsible for themselves and their respective countries. As much as the TPs were verbal about poor communication between the stakeholders, some accused the administrative services of rendering inconsistent services in helping the teachers. Some of the participants shared the following:

> *COVID-19 made us not have enough time to convene the SBST meetings. The support team co-ordinator did not send the referral forms to the district. Even the learner's forms referred to our school's support team are piling up, and we are unsure which ones to prioritise.* (TP 24)
> *We have many referrals from different schools kept in the admin office... It will take time for the administrator to register and allocate them to the DBST members* (DP 2).

Participants also mentioned the disruption of the school feeding programme as another challenge in the support provision. School feeding programmes are implemented to close gaps in macro- and micronutrient deficiencies for the learners. Moreover, school meals boost learners' learning, increase enrolment, and improve school attendance (Mafugu, 2021). According to Kadosh, Muhardi, Parikh, Basso, Jan Mohamed, Prawitasari, Samuel, Ma and Geurts (2021), ensuring adequate nutritional support optimises brain function and enhances learning. Therefore, it is evident that supporting the child's overall health is crucial for achieving optimal academic success. Some participants responded as follows:

> *The feeding programme was cancelled due to fear of COVID-19. Learners who benefited from this programme suffered at home and could not learn* (TP 16).
> *I have noticed the impact of discontinued feeding scheme on most learners during Covid; most returned with an evidenced decreased attention span, high illness rate, and absenteeism* (TP 29).

Insufficient Capacitation for Support Service during COVID-19

The importance of in-service training cannot be underestimated, particularly amid a crisis like the COVID-19 pandemic, which can have significant repercussions. As Osamwonyi (2016) suggests, the absence of continuing in-service training contributes to feelings of uncertainty, low self-esteem, insecurity, and a dearth of ground-breaking teaching methods within the classroom. Mashau, Steyn, Van der Walt and Wolhuter (2008) also emphasise that this can lead to resistance and negative attitudes toward learners struggling with their learning. One of the participants alluded to a need for training to curb negative attitudes: "*We did not have enough in-service training during COVID-19. Perhaps if we had many, we would be motivated and develop necessary skills to support learners experiencing barriers in our classroom*" (TP 18).

Speculating that the enhancement of teachers' subject knowledge is inappropriate or unbeneficial

amid the COVID-19 pandemic should be avoided. Insufficient subject support advisory services and courses can result in ineffective teaching, as teachers are likely to impart incorrect or misleading information (Mashau et al., 2008). In some instances certain school subjects require substantial administration and organisation. As a result, teachers of these subjects can be assisted, guided, and advised by subject advisors in order to present subjects effectively (Sithole, TF 2020).

Many participants highlighted that the opportunities for the teachers to attend subject courses during COVID-19 were minimal. Consequently, there was no improvement in their instruction and knowledge and they taught learners with low self-confidence, as indicated by the following:

> *Only a few subject courses were offered to us during Covid, and they were not related to our specific subject/learning area, but focussed on managing and observing Covid regulations* (TP 7).
> *Our subject advisor stopped the meetings as planned for the year. She only contacted us via WhatsApp to check the progress. That was ineffective as we struggled to support learners experiencing barriers to learning in our subjects* (TP 21).

As stated by Sanger (2020), inclusive learning aims at providing all learners with equitable accessibility to educational choices and effective pathways, creating an environment where they feel a sense of belonging. Consequently, leaders who prioritise inclusive learning recognise that every individual has the potential to contribute to enhanced learning outcomes (Qeleni, 2013). Among the key contributors to successful full-service schools, the principal's role is paramount. The principal's active engagement serves as a crucial predictor for successfully implementing changes, improving services, and charting a new direction (Moening, Fuentes & Stetson, 2020). The principal is central in facilitating systemic changes and guiding schools to embrace new attitudes and practices. However, some participants were concerned about the principals' ability to effectively manage schools during the COVID-19 pandemic. They emphasised that the DoE could have provided continuous capacitation to principals until the end of the pandemic. The participants opined:

> *I observed that some principals struggled to manage their schools during the COVID-19 pandemic. Such schools experienced a high rate of teachers and learners having COVID-19. This hampered their schools' effective teaching and learning* (DP 1).
> *Our principal struggled to manage the school during COVID-19 because the rate of absenteeism from teachers and learners was very high. The district could have provided continuous capacitation to such principals* (TP 10).

In addition, the participants emphasised that teachers assumed leadership roles throughout the day. They served as leaders by setting an example through their actions, expressions, and behaviour and guiding their learners through challenging and engaging learning activities (Cotton, 1988). Moreover, they also took on additional teacher leadership responsibilities within and beyond the classroom (Cosenza, 2015). It is expected that the school management capacitates teachers to perfect their leadership roles. Participants in this study mentioned that members of the management teams did not acknowledge their leadership capabilities. As a result, teachers did not put much effort into leading some of the activities to support the school. The remarks below confirm this finding:

> *There was an instance where all management members were not at school due to training held at the district. That day the leadership was handed to a post level one teacher who managed the school well. I wish our SMT could recognise such teachers with good leadership qualities.* (TP 15)
> *We do have good teachers among us with good leadership skills when supporting learners with barriers to learning, especially during Covid. However, it is very rare that the school management gives such teachers a chance. Instead, they are instructed to cover the syllabus.* (TP 5)

Discussion
The findings demonstrate that with the COVID-19 impact, education support services in full-service schools remained poor because of factors that weakened the quality. This concurs with the discoveries of Nel et al. (2014) that the functionality of teachers at most full-service schools contradicted what educational authorities and policies suggested. The ramification was that their ineffectiveness would have an undesirable impact on continual support services.

Globally, the COVID-19 pandemic presented a crucial opportunity to promote inclusive education. Despite the unprecedented circumstances, schools were able to implement inclusive home-based learning (Organization for Economic Cooperation and Development, 2020; Popescu, 2021). Extensive research studies consistently emphasise the essential nature of well-functioning and co-ordinated support services in full-service schools (e.g., Children's Rights Alliance, 2015; Mulholland & O'Connor, 2016). The effectiveness of providing support in these schools is further enhanced when teachers receive optimal support and capacity-building from the education district (Trucano, 2020). However, in the South African context, although such schools exist, research has highlighted that the effectiveness of these full-service schools was still a challenge (Makhalemele & Nel, 2016; Makhalemele & Payne-van Staden, 2018), which was further exacerbated by COVID-19 (Malindi & Koen, 2021). Full-service schools have been declared as the primary institutions that deliver quality

education by accommodating diverse learning needs (DoE, South Africa [SA], 2005b). They should make further efforts to acquire access, quality, equity, and social justice in the field of education.

Consequently, all schools are to provide acceptable support services as a legal requirement. We observed that the members of support structures believed that rendering support services in full-service schools during and after COVID-19 was limited. The findings show that some schools made efforts to support learners with diverse needs, although the mechanisms used were ineffective. Participants specified that support was provided once a week or sometimes by telephone, which was inadequate and discouraged learners. In this respect, S Sithole (2021) claims that schools that implement the provision of support once a week usually fail the support process as expected in schools. Moreover, Hay (2021) warns that the use of telephones in support services can be detrimental, although the effective use thereof can spread knowledge as wide as possible without demanding support staff to leave their places of work. Makhalemele and Nel (2021) opine that effective support determines inclusivity in the education system. Thus, we conclude that the challenges in the successful execution of support services still violate the rights of learners.

The referral intervention is significant in creating instruction appropriate to support learners with diverse needs. When practised appropriately, the school setting becomes inclusive. According to Engelbrecht (2008), the lack of an appropriate referral system makes the prevailing support services challenging to serve the needs of learners. This became apparent in this study as participants explained that during COVID-19 referrals were suspended in schools, leading to long waiting lists, discouragement of learners with diverse needs, and an increased dropout rate of learners already in the referral process. However, it must be noted that such situations were experienced even before the pandemic and seemed to occur at a faster pace. Moreover, teachers with comorbidities, rotational timetables, platooning systems, and poor communication with stakeholders appeared to be prominent obstacles in handling the referral process (Stanforth & Rose, 2020).

According to Makhalemele et al. (2021), full-service schools ought to be able to effectively address diverse learning needs, despite disabilities, social difficulties, or variations in learning style or pace. However, what is concerning is that support in full-service schools faces numerous challenges, and the actual practice does not align with the intended goals due to insufficient resources, personal obstacles, and inadequate communication. Based on the participants' accounts in this study, support services in their schools were hindered by resource limitations, which impeded their ability to effectively achieve the demands of their work. This concurs with Nkoma and Hay (2018), who support structures claiming that the lack of resources is viewed as a barrier because it greatly hampers their roles.

Engelbrecht et al. (2016) acknowledge that insufficient material and human resources pose challenges to implementing support in accordance with the envisioned goals.

The DoE, SA (2005a, 2005b) prioritised continuous assessment of the needs of teachers, along with well-designed programmes to address such needs, as a key strategy to minimise barriers to learning in full-service schools. However, the participants in this research highlighted that they faced personal challenges due to a lack of support, suggesting that this priority remained unfulfilled. In this context, personal challenges refer to issues that affect them within their circumstances. Lauermann and König (2016) note that inadequate support negatively impacts teachers' sense of self-efficacy and hampers their ability to address teaching challenges effectively.

Makhalemele and Payne-van Staden (2018) recommend a policy that recognises the formal role of the DBSTs in addressing the personal concerns of teachers. Studies have affirmed that if the DBSTs can effectively fulfil this responsibility, teachers will be more empowered to teach in full-service schools and improve their levels of self-efficacy (Nel et al., 2014). Additionally, the strategies outlined in the DBE's guidelines on the functions of SBSTs in 2010 emphasise the importance of collaboration among teachers, parents, and school management to find effective means of communication when accommodating diverse learners' needs.

In this study, participants appear to encounter a range of trials in providing support to learners amid the COVID-19 pandemic. Makhalemele and Tlale (2020) explored challenges faced by SBSTs and revealed that SBSTs were constrained by the co-ordinator's inability to communicate effectively with team members and other teachers at school. Research has confirmed that employing good communication strategies is important to overcoming challenges and meeting the diverse needs of learners (Nel & Grosser, 2016). Therefore, assessing and refining processes to address the afore-mentioned challenges is crucial to ensure effective support in full-service schools.

International literature confirms that the quality of support at school level has grown exponentially because continuing capacitation for support services for teachers is considered the most significant element of inclusion (Metts, 2000). The emphasis is on capacitating teachers to address the learners' needs. Crispel and Kasperski (2021) assert that special education teachers are not only in

the know of programmes intended to empower the learning of learners who are at risk; all teachers should also be conversant in terms of practising inclusive education. Moreover, participants appeared incapacitated as they expressed the need for ongoing in-service training, inadequate subject advisory services and subject courses, and the ineffectiveness of principals in managing schools during COVID-19. The necessity to capacitate teachers in full-service schools to provide adequate support to deal with learners' needs cannot be overemphasised. Nel and Grosser (2016) allude that effective teaching strategies to address diverse learners' needs and overcome challenges include providing sufficient training and support for teachers to accommodate at-risk learners. These findings align with the assertions made by Frankel, Gold and Ajodhia-Andrews (2010), who emphasise that to effectively support learners in schools, teachers require appropriate training and support from the DBE.

Conclusion

In this study we explored the impact of COVID-19 on providing education support services in South African full-service schools. We recognised various challenges encountered by support structures when providing support in full-service schools. A significant argument is that in challenging conditions like COVID-19, the full-service schools managed to provide minimal support services although there were challenges that hindered the efforts. Therefore, it is imperative that support services be strengthened for hybrid instruction to ensure that, should a hindrance like a lockdown arise, an online platform, with which learners with barriers to learning are familiar with, exists. It is significant to understand that if teachers and other support stakeholders are not empowered to defeat those challenges, this might perpetuate insufficient provision of support services in full-service schools and negatively impact the academic success of learners with various needs.

Our study was not without limitations. For example, only three of the nine South African provinces were involved in the study. Involving other provinces might yield better results. Furthermore, teachers and district officials who did not serve in the support structures did not participate in the study. It would be interesting to understand such teachers' and district officials' opinions on the subject. It would also be intriguing to replicate the research by including a broader range of full-service as well as special and mainstream schools. COVID-19 also presented a constraint, as it limited the methods available to gather data, restricting us to using qualitative methods. It would have been valuable to explore the perspectives of support structure members through focus-group discussions to gain a more

comprehensive understanding. While we did not aim for generalisation to other contexts, the transferability of the findings to similar settings is likely to a certain extent. It has become evident that full-service schools in South Africa should have exerted greater efforts to ensure access to educational support for learners deprived of such services during the COVID-19 pandemic.

Finally, learner-support contingency plans should be in place with strategies to address the learning setbacks experienced by learners who could not fully access support in full-service schools due to the impact of COVID-19. Support structures at schools and district levels should acknowledge their roles as mediators who are trusted to effectively support all learners, including those with diverse needs.

Authors' Contributions

TM wrote the introduction and the methodology, while PPM wrote the literature review and the theoretical framework of the manuscript. Both authors analysed the data and contributed to the writing of the findings, discussion, and conclusion. Both authors reviewed the final manuscript.

Notes

References

Alexa S & Baciu EL 2021. 15 challenges in supporting disadvantaged children's access to education during the COVID-19 pandemic: The experience of a Romanian nonprofit organization. *Revista de Asistenţă Socială*, 20(1):43–58.

Altheimer I, Duda-Banwar J & Schreck CJ 2020. The impact of Covid-19 on community-based violence interventions. *American Journal of Criminal Justice*, 45:810–819. https://doi.org/10.1007/s12103-020-09547-z

Andrew A, Cattan S, Costa Dias M, Farquharson C, Kraftman L, Krutikova S, Phimister A & Sevilla A 2020. Inequalities in children's experiences of home learning during the COVID-19 lockdown in England [Special issue]. *Fiscal Studies*, 41(3):653–683. https://doi.org/10.1111/1475-5890.12240

Badarna LK & Ashour MA 2016. Role of school administration in solving students' problems among Bedouin schools within the green line in Palestine. *Journal of Education and Practice*, 7(6):182–190. Available at https://files.eric.ed.gov/fulltext/EJ1092488.pdf. Accessed 31 October 2023.

Banks LM, Davey C, Shakespeare T & Kuper H 2021. Disability-inclusive responses to COVID-19: Lessons learnt from research on social protection in low-and middle-income countries. *World Development*, 137:105178. https://doi.org/10.1016/j.worlddev.2020.105178

Brinia V, Selimi P, Dimos A & Kondea A 2022. The impact of communication on the effectiveness of

educational organizations. *Education Sciences*, 12(3):170. https://doi.org/10.3390/educsci12030170

Children's Rights Alliance 2015. *Report card 2015*. Dublin, Ireland: Author.

Connolly MR & Seymour E 2015. *Why theories of change matter* (WCER Working Paper No. 2015-2). Madison, WI: Wisconsin Center for Education Research, School of Education, University of Wisconsin–Madison. Available at https://files.eric.ed.gov/fulltext/ED577054.pdf. Accessed 31 October 2023.

Cosenza MN 2015. Defining teacher leadership: Affirming the teacher leader model standards. *Issues in Teacher Education*, 24(2):79–99. Available at https://files.eric.ed.gov/fulltext/EJ1090327.pdf. Accessed 31 October 2023.

Cotton K 1988. *Monitoring student learning in the classroom* (School Improvement Research Series Close-Up #4). Available at https://educationnorthwest.org/sites/default/files/monitoring-student-learning.pdf. Accessed 11 November 2022.

Crispel O & Kasperski R 2021. The impact of teacher training in special education on the implementation of inclusion in mainstream classrooms. *International Journal of Inclusive Education*, 25(9):1079–1090. https://doi.org/10.1080/13603116.2019.1600590

Das J, Daniels B & Andrabi J 2020. *We have to protect the kids*. RISE Insight Series. 2020/016. https://doi.org/10.35489/BSG-RISE-RI_2020/016

Department of Basic Education, Republic of South Africa 2010. *Guidelines for full-service/inclusive schools*. Pretoria: Author. Available at https://wcedonline.westerncape.gov.za/Specialised-ed/documents/GuidelinesforFull-service-InclusiveSchools2010.pdf. Accessed 31 October 2023.

Department of Basic Education, Republic of South Africa 2014. *Draft Policy on Screening, Identification, Assessment and Support*. Pretoria: Author. Available at https://www.gov.za/sites/default/files/gcis_document/201409/sias-revised-final-comment.pdf. Accessed 31 October 2023.

Department of Basic Education, Republic of South Africa 2020. *Standard operating procedure for the containment and management of COVID-19 for schools and school communities*. Pretoria: Author. Available at https://wcedonline.westerncape.gov.za/documents/BackToSchool/Revised%20STANDARD%20OPERATING%20PROCEDURE%20FOR%20THE%20MANAGEMENT%20AND%20CONTAINMENT%2015%20Sept2020%20%20Final%20Version%20%282%29.pdf. Accessed 2 November 2022.

Department of Education 2001. *Education White Paper 6: Special needs education. Building an inclusive education and training system*. Pretoria: Author. Available at http://www.education.gov.za/LinkClick.aspx?fileticket=gVFccZLi/tI=&tabid=191&mid=484. Accessed 31 October 2023.

Department of Education, Republic of South Africa 2005a. *Conceptual and operational guidelines for the implementation of inclusive education: District-based support teams*. Pretoria: Directorate Inclusive Education. Available at https://www.education.gov.za/Portals/0/Documents/Policies/Inclusive%20Education/Guidelines%20for%20District%20Based%20Support%20Teams.2005.pdf?ver=2016-04-16-203834-000. Accessed 31 October 2023.

Department of Education, South Africa 2005b. *Conceptual and operational guidelines for the implementation of inclusive education: Full-service schools*. Pretoria: Author. Available at http://www.education.gov.za/LinkClick.aspx?fileticket=LgU29rjb2Hg%3D&tabid=452&mi d=1036. Accessed 31 October 2023.

De Silva M, Lee L & Ryan G 2015. *Using theory of change in the development, implementation and evaluation of complex health interventions: A practical guide*. London, England: The Mental Health Innovation Network.

De Vos AS & Strydom H 2011. Intervention research. In AS De Vos, H Strydom, CB Fouché & CSL Delport (eds). *Research at grass roots: For the social sciences and human service professions* (4th ed). Pretoria, South Africa: Van Schaik.

Dreyer LM 2017. Constraints to quality education and support for all: A western Cape case. *South African Journal of Education,* 37(1):Art. # 1226, 11 pages. https://doi.org/10.15700/saje.v37n1a1226

Dube B 2020. Rural online learning in the context of COVID-19 in South Africa: Evoking an inclusive education approach. *Multidisciplinary Journal of Educational Research*, 10(2):135–157. https://doi.org/10.17583/remie.2020.5607

Engelbrecht P 2008. Changing roles for education support professionals. In P Engelbrecht & L Green (eds). *Promoting learner development: Preventing and working with barriers to learning*. Pretoria, South Africa: Van Schaik.

Engelbrecht P & Muthukrishna N 2019. Inclusive education as a localized project in complex contexts: A South African case study. *Southern African Review of Education*, 25(1):107–124. Available at https://www.saches.co.za/dmdocuments/SARE-Vol25-Issue1-Aug2019.pdf#page=107. Accessed 31 October 2023.

Engelbrecht P, Nel M, Smit S & Van Deventer M 2016. The idealism of education policies and the realities in schools: The implementation of inclusive education in South Africa. *International Journal of Inclusive Education*, 20(5):520–535. https://doi.org/10.1080/13603116.2015.1095250

Faulkner C 2015. Women's experiences of principalship in two South African high schools in multiply deprived rural areas: A life history approach. *Educational Management Administration & Leadership*, 43(3):418–432. https://doi.org/10.1177/1741143215570306

Frankel EB, Gold S & Ajodhia-Andrews A 2010. International preschool inclusion: Bridging the gap between vision and practices. *Young Exceptional Children*, 13(5):2–16. https://doi.org/10.1177/1096250610379983

Fuhr DC, Acarturk C, Uygun E, McGrath M, Ilkkursun Z, Kaykh S, Sondorp E, Sijbrandij M, Ventevogel P, Cuijprs P & Roberts B 2020. Pathways towards

scaling up Problem Management Plus in Turkey: A theory of change workshop. *Conflict and Health*, 14:22. https://doi.org/10.1186/s13031-020-00278-w

Hay J 2021. An integrated vision of effective education support services in South Africa. In J Hay, M Malindi & T Makhalemele (eds). *Reconceptualising education support services in South Africa*. Cape Town, South Africa: AOSIS Books. https://doi.org/10.4102/aosis.2021.BK208.10

Hoadley U 2020. *Schools in the time of COVID-19: Impacts of the pandemic on curriculum* (Resep Non-Economic Working Paper). Stellenbosch, South Africa: Research on Socio-Economic Policy (RESEP), Department of Economics, Stellenbosch University. Available at https://resep.sun.ac.za/wp-content/uploads/2020/11/COVIDCURRICULUM-WORKING-PAPER-FORMATTED-1.pdf. Accessed 31 October 2023.

James C 2011. *Theory of change review* (Report). London, England: Comic Relief. Available at https://www.theoryofchange.org/pdf/James_ToC.pdf. Accessed 27 January 2023.

Kadosh CK, Muhardi L, Parikh P, Basso M, Jan Mohamed HJ, Prawitasari T, Samuel F, Ma G & Geurts JMW 2021. Nutritional support of neurodevelopment and cognitive function in infants and young children—An update and novel insights. *Nutrients*, 13(1):199. https://doi.org/10.3390/nu13010199

Kamga SD 2020. COVID-19 and the inclusion of learners with disabilities in basic education in South Africa: A critical analysis. *African Human Rights Law Journal*, 20(2):558–583. https://doi.org/10.17159/1996-2096/2020/v20n2a9

Keaton W & Gilbert A 2020. Successful online learning: What does learner interaction with peers, instructors and parents look like? *Journal of Online Learning Research*, 6(2):129–154. Available at https://www.learntechlib.org/p/215616/. Accessed 31 October 2023.

Klemenčič M, Pupinis M & Kirdulytė G 2020. *Mapping and analysis of student-centred learning and teaching practices: Usable knowledge to support more inclusive, high-quality higher education* (Analytical Report). Luxembourg: Publications Office of the European Union. https://doi.org/10.2766/67668

Kramer PD 2020. Burials without funerals, grief without hugs: Coronavirus is changing how we say goodbye. *USA Today*, 2 April. Available at https://www.usatoday.com/story/news/nation/2020/04/02/funerals-during-coronavirus-pandemic-no-hugs-big-gatherings/5102855002/. Accessed 31 October 2023.

Laing K & Todd L (eds.) 2015. *Theory-based methodology: Using theories of change for development, research and evaluation*. Newcastle upon Tyne, England: Research Center for Learning and Teaching, Newcastle University. Available at https://www.ncl.ac.uk/media/wwwnclacuk/cflat/files/theory-based-methodology.pdf. Accessed 27 January 2023.

Lauermann F & König J 2016. Teachers' professional competence and wellbeing: Understanding the link between general pedagogical knowledge, self-

efficacy and burnout. *Learning and Instruction*, 45:9–19. https://doi.org/10.1016/j.learninstruc.2016.06.006

Mafugu T 2021. Challenges encountered in a South African school nutrition programme. *Journal of Public Health Research*, 10(1):1982. https://doi.org/10.4081/jphr.2021.1982

Makhalemele T & Nel M 2016. Challenges experienced by district-based support teams in the execution of their functions in a specific South African Province. *International Journal of Inclusive Education*, 20(2):168–184. https://doi.org/10.1080/13603116.2015.1079270

Makhalemele T & Nel M 2021. Investigating the effectiveness of institutional-level support teams at full-service schools in South Africa. *Support for Learning*, 36(2):296–315. https://doi.org/10.1111/1467-9604.12356

Makhalemele T & Payne-van Staden I 2018. Enhancing teachers' self-efficacy within full-service schools: A disregarded aspect by the District-Based Support Team. *International Journal of Inclusive Education*, 22(9):983–996. https://doi.org/10.1080/13603116.2017.1413687

Makhalemele T, Payne-van Staden I & Masunungure A 2021. Inclusive education and education support services: Global and local trends. In J Hay, M Malindi & T Makhalemele (eds). *Reconceptualising education support services in South Africa*. Cape Town, South Africa: AOSIS Books. https://doi.org/10.4102/aosis.2021.BK208.02

Makhalemele T & Tlale LDN 2020. Exploring the effectiveness of school-based support team in special schools to support teachers. *e-Bangi*, 17(3):100–110. Available at https://www.proquest.com/docview/2519043460/fulltextPDF/9280B39A007E49F2PQ/1?accountid=14717. Accessed 31 October 2023.

Malindi MJ & Koen MP 2021. Support for at-risk learners in South African schools. In J Hay, M Malindi & T Makhalemele (eds). *Reconceptualising education support services in South Africa*. Cape Town, South Africa: AOSIS Books. https://doi.org/10.4102/aosis.2021.BK208.03

Mashau S, Steyn E, Van der Walt J & Wolhuter C 2008. Support services perceived necessary for learner relationships by Limpopo educators. *South African Journal of Education*, 28(3):415–430. https://doi.org/10.15700/saje.v28n3a183

Metts RL 2000. *Disability issues, trends and recommendations for the World Bank* (Social Protection Discussion Paper No. 0007). Washington, DC: World Bank. Available at https://documents1.worldbank.org/curated/en/503581468779980124/pdf/multi0page.pdf. Accessed 31 October 2023.

Moening J, Fuentes S & Stetson F 2020. *The role of the principal in inclusive schools: Practical strategies, course*. Available at https://ctserc.org/events?trumbaEmbed=view%3Devent%26eventid%3D149076526. Accessed 15 November 2022.

Mpaza LSP & Govender S 2022. Primary school-based support teams' experiences and practices when supporting teachers. *Multicultural Education*,

8(2):272–285. Available at https://www.researchgate.net/profile/Sumeshni-Govender/publication/359009186_Primary_School-Based_Support_Teams'_Experiences_And_Practices_When_Supporting_Teachers/links/625569b8ef013420666d0ba1/Primary-School-Based-Support-Teams-Experiences-And-Practices-When-Supporting-Teachers.pdf. Accessed 31 October 2023.

Mseleku Z 2020. A literature review of E-learning and E-teaching in the era of Covid-19 pandemic. *International Journal of Innovative Science and Research Technology*, 5(10):588–597. Available at https://www.ijisrt.com/assets/upload/files/IJISRT20OCT430.pdf. Accessed 31 October 2023.

Mulholland M & O'Connor U 2016. Collaborative classroom practice for inclusion: Perspectives of classroom teachers and learning support/resource teachers. *International Journal of Inclusive Education*, 20(10):1070–1083. https://doi.org/10.1080/13603116.2016.1145266

Nambiar D 2020. The impact of online learning during COVID-19: Students' and teachers' perspectives. *The International Journal of Indian Psychology*, 8(2):783–793. https://doi.org/10.25215/0802.094

Nel M, Engelbrecht P, Nel N & Tlale D 2014. South African teachers' views of collaboration within an inclusive education system. *International Journal of Inclusive Education*, 18(9):903–917. https://doi.org/10.1080/13603116.2013.858779

Nel M & Grosser MM 2016. An appreciation of learning disabilities in the South African context. *Learning Disabilities: A Contemporary Journal*, 14(1):79–92. Available at https://www.researchgate.net/profile/Mirna-Nel/publication/301347821_An_Appreciation_of_Learning_Disabilities_in_the_South_African_Context/links/5713fa9708ae4ef74528bbc3/An-Appreciation-of-Learning-Disabilities-in-the-South-African-Context.pdf. Accessed 31 October 2023.

Nkambule G & Amsterdam C 2018. The realities of educator support in a South African school district. *South African Journal of Education*, 38(1):Art. # 1433, 11 pages. https://doi.org/10.15700/saje.v38n1a1433

Nkoma E & Hay J 2018. Educational psychologists' support roles regarding the implementation of inclusive education in Zimbabwe. *Psychology in the Schools*, 55(7):850–866. https://doi.org/10.1002/pits.22147

Organization for Economic Cooperation and Development 2020. *A "debt standstill" for the poorest countries: How much is at stake?* Available at http://www.oecd.org/coronavirus/policy-responses/a-debt-standstill-for-the-poorest-countries-how-much-is-at-stake-462eabd8/#endnotea0z2. Accessed 2 November 2022.

Osamwonyi EF 2016. In-service education of teachers: Overview, problems and the way forward. *Journal of Education and Practice*, 7(26):83–87. Available at https://files.eric.ed.gov/fulltext/EJ1115837.pdf. Accessed 31 October 2023.

Petrie C, Aladin K, Ranjan P, Javangwe R, Gilliland D, Tuominen S & Lasse L 2020. *Spotlight: Quality education for all during Covid-19 crisis* (hundrED Research Report #011). Helsinki: HundrED. https://doi.org/10.58261/CIAD8546

Pokhrel S & Chhetri R 2021. A literature review on the impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1):133–141. https://doi.org/10.1177/2347631120983481

Popescu C (ed.) 2021. *The impact of COVID-19 on inclusive education at the European level: Literature review*. Odense, Denmark: European Agency for Special Needs and Inclusive Education. Available at https://www.european-agency.org/sites/default/files/COVID-19-Impact-Literature-Review.pdf. Accessed 31 October 2023.

Pressley T 2021. Factors contributing to teacher burnout during COVID-19. *Educational Researcher*, 50(5):325–327. https://doi.org/10.3102/0013189X211004138

Purwanto A, Pramono R, Asbari M, Santoso PB, Wijayanti LM, Hyun CC & Putri RS 2020. Studi eksploratif dampak pandemi COVID-19 terhadap proses pembelajaran online di sekolah dasar [Exploratory study of the impact of the COVID-19 pandemic on the online learning process in elementary schools]. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1):1–12. Available at https://ummaspul.e-journal.id/Edupsycouns/article/view/397/223. Accessed 31 October 2023.

Qeleni MT 2013. Leadership for inclusion: School leadership that motivates teachers to build inclusive classrooms. MEd dissertation. Oslo, Norway: University of Oslo. Available at https://www.duo.uio.no/bitstream/handle/10852/38501/Leadership-for-Inclusion.pdf?sequence=1&isAllowed=y. Accessed 31 October 2023.

Sanger CS 2020. Inclusive pedagogy and universal design approaches for diverse learning environments. In CS Sanger & NW Gleason (eds). *Diversity and inclusion in global higher education: Lessons from across Asia*. New York, NY: Palgrave Macmillan.

Seepe S 2021. The impact of COVID-19 and 4IR on educational practice. *The Independent Journal of Teaching and Learning*, 16(1):7–9. Available at https://journals.co.za/doi/epdf/10.10520/ejc-jitl1-v16-n1-a3. Accessed 31 October 2023.

Shepherd D & Mohohlwane N 2021. *The impact of COVID-19 in education – more than a year of disruption (Wave 5 National Income Dynamics (NIDS) - Coronavirus Rapid Mobile Survey (CRAM))*. Available at https://cramsurvey.org/wp-content/uploads/2021/07/11.-Shepherd-D-_-Mohohlwane-N.-2021.-Changes-in-education-A-reflection-on-COVID-19-effects-over-a-year.pdf. Accessed 3 November 2022.

Sithole S 2021. *School functionality in the COVID-19 environment: Practical examples of what works and does not work*. Pretoria, South Africa: Department of Basic Education.

Sithole TF 2020. Curriculum leadership role of subject advisors for Mathematics improvement in South

Africa. PhD thesis. Bloemfontein, South Africa: University of the Free State. Available at https://scholar.ufs.ac.za/server/api/core/bitstreams/5a8fa7fc-8054-487a-b415-a656f7a1b571/content. Accessed 31 October 2023.

Stanforth A & Rose J 2020. 'You kind of don't want them in the room': Tensions in the discourse of inclusion and exclusion for students displaying challenging behaviour in an English secondary school. *International Journal of Inclusive Education*, 24(12):1253–1267. https://doi.org/10.1080/13603116.2018.1516821

Taole MJ 2020. Diversity and inclusion in rural South African multigrade classrooms. *International Journal of Inclusive Education*, 24(12):1268–1284. https://doi.org/10.1080/13603116.2018.1520310

Trade Union Advisory Committee to the OECD Commission 2020. *Impact and implications of the COVID-19 crisis on educational systems and households*. TUAC Secretariat Briefing. Available at https://tuac.org/news/the-impact-and-implications-of-the-covid-19-crisis-on-educational-systems-and-households/. Accessed 31 October 2023.

Trucano M 2020. How ministries of education work with mobile operators, telecom providers, ISPs and others to increase access to digital resources during COVID19-driven school closures (Coronavirus), blog post, 2 April. Available at https://blogs.worldbank.org/education/how-ministries-education-work-mobile-operators-telecom-providers-isps-and-others-increase. Accessed 4 November 2022.

Zahran I 2012. *The role of school administration in the face of crisis of values among second grade primary learners in light of the twentieth century variables*. Paper presented at the 11th Scientific Conference, Egypt, 29–30 May.