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Abstract

This study examines the impact of the COVID-19 lockdown on teaching and learning in the Foundation Phase (FP) at Moonlight Primary School, a rural Quintile 1 school in Capricorn South District, Limpopo Province, South Africa. Employing a qualitative case study design, data were gathered through in-depth interviews with three FP educators, document analysis, and field notes. Findings reveal that limited technological infrastructure, inadequate access to learning materials, and insufficient digital literacy training posed major barriers to effective teaching and learning. Educators adopted low-tech coping strategies such as distributing printed materials, using phone calls and SMS to engage parents, and utilising community radio programmes to sustain learning continuity. However, persistent challenges, including the digital divide, inconsistent parental involvement, and limited institutional support, deepened educational inequalities. The study underscores the need for targeted investment in digital infrastructure, comprehensive educator training in blended learning, and decentralised support mechanisms to enhance educational equity and resilience in under-resourced rural contexts.

Keywords: COVID-19, Teaching and Learning, Foundation Phase, Capricorn South District, Limpopo Province, South Africa

Introduction

The COVID-19 pandemic has profoundly disrupted education systems worldwide, exposing deep-rooted inequalities and challenging conventional modes of teaching and learning. In South Africa, the nationwide lockdown implemented in March 2020 forced schools to close abruptly, compelling educators to adopt alternative strategies to sustain learner engagement. These disruptions were particularly severe in rural areas, where limited access to digital infrastructure, low levels of parental support, and systemic resource constraints hindered effective teaching. FP educators who are responsible for the early development of literacy, numeracy, and life skills, faced unique challenges during this period. Their pedagogical approaches, typically reliant on direct and face-to-face interaction, were difficult to replicate online. The absence of structured classroom environments and the reliance on caregivers to facilitate learning at home further complicated the situation.

The Department of Basic Education [DBE] introduced several interventions, including radio and television lessons, online platforms, and printed learning materials, to mitigate learning loss. However, these measures often failed to reach rural and under-resourced communities where connectivity, devices, and educator preparedness were limited. Grounded in the digital divide framework, which emphasises disparities in access, skills, and utilisation of technology, this study investigates how FP educators at Moonlight Primary School navigated the lockdown period. It examines their coping strategies, the barriers encountered, and the implications for equity and resilience in rural education. By situating the experiences of these educators within the broader context of digital exclusion and educational inequality, the study contributes to ongoing debates about technology integration and educational justice in South Africa's post-pandemic recovery.

Literature Review

The COVID-19 pandemic prompted a surge of global scholars examining how education systems adapt during crises. Literature reveals that disruptions to traditional schooling have exacerbated pre-existing inequalities, particularly in access to digital tools and pedagogical support (Bozkurt et al.

2020; Daniel 2020; UNESCO 2021). In South Africa, studies by Spaul and Van der Berg (2020) and Mhlanga and Moloi (2020) highlight how school closures disproportionately affected learners in rural and low-income communities due to limited infrastructure and digital readiness.

The literature on education during times of crisis emphasized the dynamic intersection of digital inequality, pedagogical innovation, and systemic resilience as foundational to sustaining learning continuity. Scholars such as Hodges et al. (2020) and Trust and Whalen (2020) emphasise the need for context-sensitive strategies that enable educators to navigate sudden transitions to online learning environments. Within the South African context, the focus has shifted toward understanding how educators develop coping strategies in resource-constrained settings where digital exclusion persists. By contextualizing the experiences of educators at Moonlight Primary School within broader scholarly discourse, this review reveals how global and local responses to educational disruption shape the coping strategies employed in under-resourced rural schools.

Global Responses to School Closures

The COVID-19 pandemic prompted diverse educational responses worldwide, shaped by each country's infrastructure, policy agility, and socio-economic conditions. In high-income contexts, governments rapidly deployed digital platforms, television broadcasts, and mobile applications to sustain learning (UNESCO 2020). Countries like China, South Korea and Finland leveraged pre-existing e-learning systems and educator training programs to facilitate online instruction (Chung and Yi 2021; Reimers and Schleicher 2020).

In contrast, low- and middle-income countries faced significant constraints. Limited access to devices, unreliable internet connectivity, and uneven digital literacy among educators and learners hindered the effectiveness of online learning (World Bank 2020; Owusu-Fordjour et al. 2020; Belay 2020). Many relied on radio, printed materials, and community-based interventions to reach marginalized learners.

Rather than framing these responses as binary opposites, scholars emphasize the importance of context-sensitive strategies. Reimers and

Schleicher (2020) argue that successful adaptation depended not only on technology, but also on inclusive planning, stakeholder collaboration, and pedagogical flexibility. These global patterns provide a backdrop for understanding the localized coping strategies employed by FP educators in rural South Africa.

South African Educational Landscape During COVID-19

South Africa's response to the COVID-19 school closures reflected both systemic inequalities and adaptive resilience. The DBE introduced various online learning initiatives, including television and radio broadcasts, online platforms, and printed learning materials (DBE 2020). However, the effectiveness of these interventions varied significantly across provinces and socio-economic contexts. In urban and well-resourced schools, digital platforms such as MS Teams and Google Classroom were adopted with relative ease. In contrast, rural schools, particularly those in Limpopo Province, faced severe challenges due to limited internet access, lack of devices, and low levels of digital literacy among educators and learners (Spaull and Van der Berg 2020). These disparities were compounded by infrastructural deficits and socio-economic constraints, which hindered equitable access to learning.

Scholars such as Jansen (2020) and Soudien et al., (2022) argue that the pandemic exposed the fragility of South Africa's education system, particularly its reliance on face-to-face instruction and uneven resource distribution. While some schools demonstrated remarkable innovation and community-driven support, others struggled to maintain basic educational continuity.

Rather than viewing rural and urban responses as oppositional, it is important to recognize the diverse coping strategies shaped by local conditions, institutional support, and educator agency. This study contributes to that understanding by examining how FP educators in Capricorn South District navigated these challenges during the lockdown.

Foundation Phase Teaching and Learning

FP education in South Africa emphasizes holistic development, focusing on literacy, numeracy, and life skills for learners in Grades R to 3. Teaching in

this phase relies heavily on face-to-face interaction, tactile learning materials, and structured routines that support early cognitive and social development (DBE 2011). The COVID-19 lockdown disrupted these pedagogical foundations, forcing educators to adapt to online modalities that were often misaligned with the developmental needs of young learners.

Research by Spaull and Van der Berg (2020) highlights that FP learners are particularly vulnerable to learning loss during extended school closures. Their limited ability to self-regulate, coupled with the absence of structured classroom environments, made online learning especially challenging. Moreover, the lack of parental support, often due to low literacy levels or work-related constraints, further hindered continuity of learning at home (Mphahlele and Mosehlane 2023). Educators in rural contexts faced compounded difficulties. Without access to digital tools or printed materials, many relied on informal strategies such as WhatsApp messaging, community drop-offs, and oral instruction to maintain engagement. While these efforts reflect commendable resilience, they also underscore systemic gaps in early childhood education policy and infrastructure.

This study builds on existing literature by foregrounding the voices of FP educators in Capricorn South District, offering insight into how pedagogical adaptation unfolded in under-resourced settings during the pandemic.

Coping Strategies in Education

The COVID-19 pandemic compelled educators worldwide to adopt a range of coping strategies to sustain teaching and learning under restrictive conditions. In South Africa, these strategies varied across contexts, shaped by resource availability, institutional support, and educator agency. FP educators, in particular, had to navigate the dual challenge of maintaining learner engagement and adapting pedagogical practices to online formats.

Studies by Mphahlele and jikpamu (2021) and Spaull and Van der Berg (2020) highlight that educators employed both formal and informal methods to reach learners. These included the use of *WhatsApp* groups, printed learning packs, community drop-offs, and radio lessons. In some cases, educators

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collaborated with local stakeholders, such as school governing bodies and NGOs, to distribute materials and monitor learner progress. Such strategies reflect a form of grassroots resilience, where educators leveraged available networks to mitigate the impact of school closures.

However, these coping strategies were not equally effective across contexts. Many educators struggled against the absence of reliable digital infrastructure, inconsistent parental support, and growing emotional fatigue (Motala and Menon 2020; Spaul and Van der Berg 2020). As Jansen (2024) cautions, it is important not to romanticise educators' resilience without acknowledging the systemic inequalities that make such endurance necessary. Although creativity and adaptability were evident among educators (Bozkurt et al. 2020; Trust and Whalen 2021), these efforts often emerged out of sheer necessity rather than sustained policy or institutional support. This study contributes to the discourse by documenting the lived experiences of Foundation Phase educators in Capricorn South District, offering insight into how coping strategies were shaped by local realities and professional commitment.

Parental Involvement in Foundation Phase Learning

Parental involvement is widely acknowledged as essential to early childhood education, influencing learner motivation, academic achievement, and emotional development. During the COVID-19 lockdown, this role became even more critical as educators depended on families to support home-based learning. Research shows that in South Africa, school closures intensified educational inequalities and placed greater pressure on parents, particularly in low-income communities, to fill instructional gaps (Haffejee et al. 2024). A systematic review also found that effective parental engagement during online learning was shaped by access to resources, school communication, and parental capacity to adapt (Van der Linde 2023). However, the level and nature of parental involvement varied significantly across socio-economic contexts. In rural areas such as Capricorn South District, many parents faced barriers including low literacy levels, limited access to learning materials, and competing livelihood demands (Mphahlele and Jikpamu 2021). These constraints often resulted in minimal engagement with learners' academic activities, placing additional pressure on educators to bridge the gap through alternative strategies.

Research underscores that effective parental involvement in early education requires more than intent, it demands capacity, including access to learning resources, familiarity with curriculum expectations, and supportive relationships between schools and families. Haffejee, Simelane, and Mwanda (2024) found that during COVID-19 school closures in South Africa, many parents struggled to support learning due to limited digital access and unclear instructional guidance. Similarly, van der Linde (2023) highlights that meaningful engagement was often hindered by socioeconomic constraints and the absence of structured communication channels between educators and caregivers. This study contributes to the discourse by documenting how FP educators navigated these challenges, often assuming dual roles as teachers and community liaisons. Their experiences highlight the need for more inclusive and sustainable models of parental engagement, especially in times of crisis.

Digital Divide

To frame this study analytically, the concept of the digital divide offers a critical lens for understanding the disparities in educational access and participation during the COVID-19 lockdown. The digital divide refers to the unequal distribution of technological resources, digital literacy, and connectivity across socio-economic and geographic contexts (Van Dijk 2006). In South Africa, these inequalities are deeply rooted in historical and structural factors, disproportionately affecting rural communities such as those in Capricorn South District (Du Preez and Le Grange 2020). Warschauer (2004) and Selwyn (2010) argue that the digital divide extends beyond access to devices, it encompasses the capacity to use technology meaningfully for learning. During the lockdown, FP educators in under-resourced schools faced compounded challenges: limited infrastructure, low parental digital literacy, and minimal institutional support. This framework enables a nuanced analysis of how educators navigated these constraints, revealing both systemic gaps and adaptive strategies.

The literature reviewed in this section underscores the multifaceted impact of COVID-19 on teaching and learning, particularly in early childhood education. Global and national responses reveal stark contrasts in digital readiness and policy support, while local experiences highlight the resilience and ingenuity of educators working in constrained environments. By grounding the study in the digital divide framework, this research foregrounds the lived realities of FP educators in Capricorn South District, offering insights into the urgent need for inclusive, context-sensitive educational reform.

Research Design

This study employed a qualitative case study design to explore the coping strategies of FP educators during the COVID-19 lockdown in Capricorn South District, Limpopo Province. A case study approach was chosen for its strength in capturing context-specific experiences and generating rich, descriptive insights into complex social phenomena (Yin 2014). This design aligns with the study's aim to foreground educator voices and examine how systemic constraints shaped

their pedagogical responses. The qualitative design was appropriate given the exploratory nature of the research and the need to understand lived experiences in depth. By focusing on a bounded group of educators within a specific district, the study was able to uncover nuanced coping mechanisms that may be overlooked in broader quantitative surveys. The design also allowed for flexibility in data collection and interpretation, which was essential given the unpredictable and evolving nature of the pandemic context.

Sampling and Participants

Purposive sampling was employed to select three FP educators from Moonlight Primary School, a public, no-fee school located in Capricorn South District, Limpopo Province. This sampling method was appropriate for capturing context-specific experiences of teaching and learning during the COVID-19 lockdown. Moonlight Primary School was selected as a representative case of the systemic challenges confronting under-resourced rural schools during the COVID-19 pandemic. Serving learners from households predominantly dependent on government social grants, the school lacked the technological infrastructure necessary to support online learning. Unlike urban counterparts equipped with smartboards, stable internet connectivity, and digital literacy initiatives, Moonlight Primary had limited access to educational devices and faced ongoing connectivity issues, further hindering its ability to maintain instructional continuity.

Participants were chosen based on their direct involvement in FP teaching during the period of school closures, ensuring alignment with the study's objectives. All three participants were full-time educators at Moonlight Primary School, representing different grades in the FP and years of teaching experience. Their diverse professional backgrounds provided rich, contextually grounded insights into the coping strategies adopted under resource-constrained conditions. Ethical clearance was obtained prior to data collection, and all participants provided informed consent. Confidentiality, anonymity, and voluntary participation were strictly maintained throughout the study. This sampling strategy enabled the study to foreground the lived experiences of educators in an under-resourced rural school,

offering a nuanced understanding of how systemic inequalities shaped pedagogical responses during the pandemic.

Data Collection Methods

To explore the lockdown's impact on teaching and learning, the study employed multiple qualitative methods for triangulated analysis. In-depth interviews were central, capturing educators' experiences, challenges, coping strategies, and emotional strain (DiCicco-Bloom and Crabtree 2006). Each interview lasted approximately 30 minutes and was scheduled after school hours to accommodate the educators' availability. Document analysis of official circulars from the Limpopo Department of Education and DBE provided policy context, revealing gaps between formal guidance and rural realities (Bowen 2009). Field notes were maintained throughout the data collection process, capturing my observations, reflections, and contextual details of the interviews and school environments. These notes were particularly useful for documenting 62 non-verbal cues, situational nuances, and logistical considerations during data collection, ensuring a holistic understanding of the research setting (Emerson et al. 2011).

Data Analysis Approach

A thematic analysis framework guided the interpretation of qualitative data, enabling systematic identification of patterns across interview transcripts and documentary sources (Braun and Clarke 2006). Transcripts were reviewed and coded to extract themes related to teaching challenges, institutional support, parental involvement, and coping strategies, offering a context-sensitive lens on crisis adaptation in FP education. Credibility was enhanced through triangulation, aligning insights from interviews, policy documents, and field observations to ensure consistency and depth (Lincoln and Guba 1985). Member checking further supported trustworthiness, allowing participants to verify transcript accuracy and validate thematic interpretations.

Ethical Considerations

The study adhered to established ethical protocols, with approval granted by the University of Johannesburg Ethics Committee and the Limpopo

Provincial Research Ethics Committee. Informed consent was obtained from all participants, who were briefed on the study's aims, their voluntary involvement, and their right to withdraw. Anonymity was ensured by using pseudonyms for both individuals and the school. Data were securely stored on password-protected devices, maintaining confidentiality throughout the research process.

Limitations of the Study

This case study provides context-specific insights into FP education during the COVID-19 lockdown, limiting generalisability beyond Moonlight Primary. Researcher bias was addressed through reflexivity, triangulation, and peer debriefing, though subjectivity remains inherent to qualitative research. The design revealed educational inequalities, educators' adaptations, and systemic constraints. Tackling digital exclusion, improving institutional support, and enhancing community engagement are vital for future educational resilience.

Findings from Moonlight Primary School

Moonlight Primary School, a Quintile 1 rural school in the Capricorn South District of Limpopo Province, faced substantial challenges during the COVID-19 lockdown. Unlike well-resourced schools, Moonlight lacked access to technological infrastructure, stable internet connectivity, and structured institutional guidance. Educators at the school demonstrated resilience and creativity, employing low-tech strategies to sustain learning. This section presents the findings on the barriers educators encountered, the coping strategies implemented, and the effectiveness of support structures, offering insights into the broader systemic challenges faced by FP educators in underprivileged schools.

Challenges of Online Learning Transition

Moonlight Primary lacked essential digital tools, limiting educators' ability to facilitate online learning. The school had only five laptops shared among all educators. Most students did not own smartphones or tablets, preventing them from engaging in online learning activities.

One educator shared her frustration with the absence of technological resources:

Many children come from families that struggled to afford basic things, so they had

no computers, smartphones, or internet that they can use for learning (Mrs Phuti).

Moonlight Primary's challenges reflect broader issues in the digital divide. Only 11.7% of South African schools offered online learning due to limited access (Stats SA 2021). In Ethiopia, printed materials were used to offset digital gaps (Belay 2020), which was similar to Moonlight's approach. Yet, Ford et al. (2021) stress that FP learners need interactive, hands-on methods, making digital exclusion a major barrier. This highlights the need for equitable investment in infrastructure such as preloaded tablets, broadband expansion, and low-tech options like community radio to prevent learning disruptions in rural schools.

Lack of Alternative Learning Resources

In addition to digital barriers, Moonlight Primary struggled with access to radio lessons and television-based learning, further limiting educational continuity. The Limpopo Department of Education encouraged broadcasting curriculum-aligned content on radio and TV, but many students could not access these materials due to the lack of devices in their homes.

One educator expressed concern about the limited availability of alternative resources:

I also found out that some learners were not able to listen to the radio or watch TV programmes because their families were busy or did not have a radio or TV (Mrs Phuti).

Research shows that low-income families struggled with radio and TV-based learning during COVID-19, deepening educational inequalities (UNESCO 2020). In Rwanda, radio lessons helped some learners, but inconsistent access limited impact (Uwizeyimana 2022). In Brazil, lack of printed materials led to reduced engagement (Lichand et al. 2022). These findings highlight the need for multi-modal crisis planning governments should invest in printed learning kits, expand radio instruction, and create community hubs to support learners beyond digital platforms.

Parental Challenges and Limited Engagement

Parental involvement was crucial in maintaining learning, yet many parents lacked the skills, time, or resources to support their children effectively. Some parents were digitally illiterate, unable to

assist with learning platforms, while others had work commitments that prevented them from dedicating time to structured lessons.

One educator shared her experience with parental constraints:

Some parents couldn't help their children because they didn't know how to use the technology or didn't have data bundles to access online learning (Mrs Nape).

Parental involvement strongly influences learning outcomes (Treviño et al. 2021), yet low-income families face barriers like financial strain and limited education, hindering engagement (Sayed & Singh, 2020). In Indonesia, low-tech strategies were used to address low parental digital literacy (Fitria and Pangesti 2023). These findings highlight the need for structured parental training, schools should offer community workshops, share learner support guidelines, and ensure regular teacher-parent check-ins to strengthen engagement during crises.

Coping Strategies Employed by Educators

Use of Phone Calls for Parental Guidance

To compensate for the lack of online platforms, educators relied on phone calls and SMS messages to communicate with parents and guide them through lesson plans.

One educator explained how she encouraged parental involvement through direct communication:

I made many phone calls to parents to assist their children. I also encouraged them to use radios and TVs, which helped with educational programmes (Mrs Tobi).

This strategy aligns with findings by Paudel (2021), who noted that low-tech methods such as phone calls were effective in maintaining engagement during school closures. However, limited mobile network coverage in rural areas hindered the reach of such methods (Rehman and Fatima 2021). This finding highlights the need for government-sponsored mobile learning initiatives, where pre-recorded phone lessons and interactive SMS tutoring can supplement traditional classroom instruction in low-resource schools.

Distribution of Physical Learning Materials

Educators at Moonlight Primary also distributed printed learning materials to maintain instructional

continuity during the COVID-19 lockdown. With the absence of digital tools and internet access, educators prepared printed material that parents collected from the school, ensuring students had some structured activities to engage with at home. Despite logistical challenges, educators found this method useful in reinforcing lessons and providing students with tangible resources to continue learning outside the classroom.

One educator described the approach used to distribute learning materials:

I tried to provide learning materials by having parents come to collect them from school (Mrs Nape).

Printed learning materials are vital in low-resource settings. UNESCO (2020) notes they help maintain engagement without internet access, as seen in Ethiopia's take-home material initiative (Belay 2020). However, Spaul and Van der Berg (2020) caution that without teacher interaction, their impact is limited, especially for FP learners needing structured guidance. Moonlight Primary's reliance on printed resources underscores the need for multi-modal strategies that pair physical materials with teacher feedback, small-group tutoring, and community-led sessions. Future policies must blend low-tech and traditional methods to ensure inclusive, effective learning.

Sharing Strategies among Educators

Peer collaboration was a critical coping mechanism for educators at Moonlight Primary, allowing them to exchange ideas, teaching strategies, and emotional support. Without formal guidance from the Department of Education, educators formed WhatsApp-based peer networks where they shared lesson plans, discussed challenges, and helped each other navigate the complexities of online learning. This informal support system proved invaluable in bridging the knowledge gap and adapting teaching practices under restrictive conditions.

One educator elaborated on the significance of peer support:

Teachers talked to each other to share ideas on how to help children learn at home ... we had phone calls and WhatsApp groups to discuss what worked and what didn't work (Mrs Phuti).

Peer collaboration is crucial in crisis adaptation. Ferreira et al. (2023) show that learning communities boost educator resilience and creativity. Vale and Graven (2023) found that educators relied on informal networks like *WhatsApp* for problem-solving. Yet, Mhlanga and Mloi (2020) caution that such networks can't replace structured guidance needed for long-term strategies. At Moonlight Primary, peer support was vital, but must be formalized into professional development. Schools should establish educator communities, led by curriculum advisors, to turn informal collaboration into sustainable learning platforms.

Lack of Formal Support from Authorities

Educators at Moonlight Primary expressed frustration over the lack of substantial support from the Department of Education during the lockdown. Unlike urban schools that had access to digital resources, rural educators were left to navigate online learning with minimal training or formal guidance. The absence of structured support left many educators feeling isolated and underprepared to manage the transition.

One educator described the difficulties caused by the lack of assistance:

I felt like I was on my own, trying to manage learners remotely with no real support from the department (Mrs Tobi).

Institutional support is vital for successful online learning transitions. Mhlanga and Mloi (2020) found that lack of teacher training and digital literacy programs worsened disruptions, especially in rural schools. Spaul and Van der Berg (2020) noted that government efforts focused on urban areas, neglecting resource-poor institutions. Jung et al. (2024) observed that schools with prior training adapted more effectively. To ensure future readiness, policymakers must provide inclusive support, blended learning training, decentralised resources, and school-level interventions alongside regional task forces to guide and equip educators.

Lessons Learned and Future Recommendations

The importance of digital literacy training emerged as a key lesson from the COVID-19 lockdown. Educators recognised the need for early digital exposure to prepare both educators and students for future crises.

One educator reflected on this lesson:

Everyone needs to be familiar with technology and how to use social media for online learning. Learners also need to be educated about technology from a young age (Mrs Nape).

Research supports integrating digital literacy into teacher training to improve online learning management (Jung et al. 2024). Becirovic (2023) warns that such initiatives must match infrastructure and socioeconomic contexts. Moonlight Primary's experience highlights the need for ongoing digital literacy development. Schools should embed tech courses in teacher training, and policymakers must promote early digital education for FP learners.

Summary of Key Findings from Moonlight Primary School

The COVID-19 lockdown significantly impacted teaching and learning at Moonlight Primary School, a Quintile 1 rural school in Capricorn South District, Limpopo Province. The findings reveal systemic barriers, coping strategies, and lessons learned, highlighting the urgent need for equitable resource distribution, structured educator training, and strengthened institutional support.

Challenges of Online Learning Transition

Moonlight Primary faced severe technological limitations, as students lacked computers, smartphones, and stable internet access, making online learning nearly impossible. Educators struggled with limited alternative learning resources, such as printed materials or accessible radio programmes, which further hindered learning continuity. The sudden transition exposed educators' lack of preparedness for online teaching, as their training had primarily focused on face-to-face instruction. Additionally, parents lacked digital literacy, preventing them from effectively supporting their children's learning, which contributed to low student engagement and widened educational disparities.

Coping Strategies Employed by Educators

Despite these barriers, educators at Moonlight Primary demonstrated resilience and adaptability by employing low-tech strategies. Phone calls and SMS messaging became the primary means of communicating with parents and guiding home

learning. Educators distributed printed material, ensuring that students had structured learning activities despite the lack of digital tools. Peer collaboration through *WhatsApp* groups allowed educators to exchange teaching strategies and emotional support, compensating for the absence of formal institutional guidance.

Ineffectiveness of Support Structures

Educators reported minimal governmental support, stating that they received no formal training, resources, or digital literacy guidance to facilitate online learning. While curriculum advisors developed radio-based lessons, these efforts had limited effectiveness, as many families did not own radios. The digital divide at Moonlight Primary exacerbated learning inequalities, leaving educators feeling isolated and overwhelmed due to the lack of direct institutional intervention.

Conclusion

Moonlight Primary School faced significant barriers during the COVID-19 lockdown, including limited technological infrastructure, lack of alternative learning resources, inadequate institutional support, and low parental engagement. Educators adopted low-tech strategies such as phone calls, SMS, printed material, and radio lessons to sustain learning. However, these efforts were constrained by systemic inequalities, highlighting the urgent need for equitable access to education resources.

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students, as technological proficiency is key to effective online learning. Equitable distribution of resources, including tablets and internet access, is essential to bridge learning disparities in underprivileged schools. Strengthening parent-teacher communication and providing parental training workshops can enhance home learning support during future disruptions. Additionally, decentralised educational support frameworks must be implemented to ensure real-time assistance for rural schools, addressing infrastructural gaps and teacher preparedness.

Implications of the Study

The study reinforces the Digital Divide Theory, demonstrating that technology-dependent learning strategies disproportionately exclude students in rural and underprivileged schools. Findings highlight the importance of structured educator training, community-driven learning support, and diverse instructional methods to ensure educational equity. Schools with pre-existing digital literacy training adapted more effectively, revealing the need for institutional preparedness in crisis management.

Recommendations

- **Investment in Digital Infrastructure** – Provide learners from low-income backgrounds with tablets, internet access, and offline digital resources to bridge the divide.
- **Structured educator Training** – Integrate digital pedagogy and crisis adaptation strategies into professional development programs.
- **Parental Engagement Initiatives** – Offer training workshops and accessible resources to empower parents in supporting home learning.
- **Decentralized Educational Support** – Establish regional task forces to provide direct guidance and resources to rural schools.
- **Multi-Modal Learning Approaches** – Expand radio, printed materials, and interactive low-tech solutions to ensure learning continuity beyond digital reliance.

Moonlight Primary's experience highlights deep systemic inequalities in education access. Addressing these disparities requires integrated policy reforms that prioritize inclusive learning models, enhanced educator preparedness, and strengthened institutional support structures to ensure education systems are resilient in future crises.

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