



Supporting Teachers in the Use of Online and Offline Strategies for Continuity of Learning during Pandemics: A Case Study of Secondary Schools in Uganda

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Abstract: *The COVID-19 pandemic disrupted the continuity of learning for millions of students worldwide, with secondary schools in Uganda being significantly affected. To address this crisis, schools rapidly adopted remote teaching and learning methods using online and offline strategies. Efforts were made to support teachers in this transition through training, mentorship, collaboration, and providing digital resources. However, there remained a significant gap in understanding the authenticity of these support mechanisms. This study sought to fill this knowledge gap by investigating the support provided to teachers in secondary schools in Uganda. Data was collected through interviews and focus group discussions with teachers, who were purposively selected from St Joseph's Gayaza and St. Theresia Makerere secondary schools. Data analysis followed an iterative process of thematic analysis. The audio recordings were transcribed verbatim, and the data were systematically coded and categorized into themes and sub-themes using NVivo software. The findings demonstrate that the support mechanisms were crucial in facilitating remote teaching and learning during the pandemic. Ongoing mentorship and collaboration among teachers were essential in fostering a supportive learning environment. Additionally, the provision of digital devices and internet access enabled teachers to effectively engage in remote teaching. However, challenges related to technology access and sustainability were identified. The study concludes that evidence-based strategies are vital for supporting teachers during future crises and fostering educational continuity. By understanding the strengths and weaknesses of the support systems in place, policymakers and educators can develop targeted and comprehensive support systems for future Pandemics.*

Keywords: *Continuity of learning, Online strategies, Offline strategies, Teacher support, COVID-19 pandemic*

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1. Introduction

The outbreak of the COVID-19 pandemic in early 2020 brought unprecedented challenges to the education sector worldwide (World Bank, 2021). With schools forced to close their physical doors to prevent the spread of the virus, the continuity of learning became a significant concern

(Jones, 2020). In Uganda, secondary schools were particularly impacted, with millions of students facing disruptions in their education (Tumwesigye, 2020).

To address this crisis and ensure the continuity of learning, many schools and educational institutions had to quickly adapt to remote teaching and learning methods (Burop et al., 2020). Online and offline strategies were explored to

bridge the gap between teachers and students, allowing education to continue even during lockdowns and social distancing measures (Manca & Delfino, 2021).

In response to the urgent need for support in implementing these new strategies, efforts were made to provide assistance and training to teachers (World Bank, 2021). Various support mechanisms were introduced to help teachers navigate the challenges of remote teaching and adapt their pedagogical practices for digital and offline platforms (Bojović et al. 2020). The support to teachers in the Ugandan context during the pandemic was multifaceted, encompassing training, assistance in adapting pedagogical practices, addressing digital disparities, and fostering a supportive learning community. These efforts aimed to empower teachers to overcome the challenges posed by remote teaching and ensure continuity of learning for students across the country. The teachers were provided with guidance on creating interactive online content, using multimedia resources, and promoting student engagement in virtual classrooms. Alternative strategies, such as distributing printed learning materials or conducting lessons through radio or television broadcasts, were introduced to reach students in remote or underserved areas (Mishra et al., 2020; Tumwesigye, 2020; World Bank, 2021).

However, despite these efforts, there remains a significant gap in understanding the effectiveness of the support mechanisms provided to teachers during the pandemic. While some teachers managed to adapt successfully and deliver quality education remotely, others faced difficulties and encountered barriers that hindered their ability to effectively engage students in the learning process (Leo, et al., 2021).

This research article aims to fill the gap in knowledge regarding the support provided to teachers in utilizing online and offline strategies for continuity of learning during the COVID-19 pandemic in secondary schools in Uganda. While some previous studies have explored the challenges and opportunities of remote teaching and learning during the pandemic, few have focused specifically on the support systems for teachers (Leo, et al., 2021; García-Morales et al., 2021; Coman et al., 2020).

The study delved into the nature of the support mechanisms that were made available to teachers and assessed their effectiveness in facilitating remote teaching and learning. By examining the experiences of teachers and the strategies they employed to overcome challenges, the research provides valuable insights into the strengths and weaknesses of the support systems in place. Understanding

the factors that contributed to successful implementation and identifying the barriers that hindered effective remote teaching will enable educators and policymakers to develop more targeted and comprehensive support systems for future pandemics or similar disruptions in education

Therefore, this research contributes to the ongoing dialogue on ensuring educational continuity during crises by shedding light on the experiences of teachers in Uganda during the COVID-19 pandemic. By highlighting the support mechanisms that were effective and identifying areas for improvement, the study aims to inform evidence-based strategies for supporting teachers in navigating remote teaching and learning challenges in the face of future emergencies.

1.1 Statement of the Problem

The outbreak of the COVID-19 pandemic in 2020 led to the closure of schools worldwide, including secondary schools in Uganda, disrupting the continuity of learning for millions of students. To address this challenge, schools and educational institutions rapidly adopted remote teaching and learning methods, utilizing online and offline strategies (Tumwesigye, 2020). Despite efforts to provide support to teachers in implementing these strategies, there remains a significant gap in understanding the effectiveness of the support mechanisms provided during the pandemic. While some teachers successfully adapted to remote teaching, others faced difficulties and barriers that hindered their ability to effectively engage students (Leo, et al., 2021; García-Morales et al., 2021; Coman et al., 2020). This research aims to fill the knowledge gap by investigating the support provided to teachers and assessing its effectiveness in facilitating continuity of learning during the COVID-19 pandemic in secondary schools in Uganda. The study seeks to identify strengths and weaknesses in the support systems and provide valuable insights to inform evidence-based strategies for supporting teachers in future emergencies.

2. Literature Review

The outbreak of the COVID-19 pandemic in early 2020 brought unprecedented challenges to the global education sector, with schools and educational institutions forced to close their physical doors to curb the spread of the virus. To ensure continuity of learning during this crisis, educators around the world had to rapidly adapt to remote teaching and learning methods (Burop et al., 2020; Manca & Delfino, 2021; Bojović et al. 2020 and Tumwesigye, 2020). This literature review explores the support provided to teachers in utilizing online and offline strategies for continuity of learning during the COVID-19 pandemic,

taking a global perspective to understand the efforts made across different countries and educational contexts.

Various studies have highlighted the importance of teacher support in effectively implementing remote teaching methods. In response to the urgent need for assistance, many countries and organizations introduced support mechanisms to help teachers navigate the challenges of remote education (Bozkurt et al, 2020; Scull, 2020). Training programs and professional development initiatives were offered to equip teachers with the necessary skills and knowledge to effectively utilize digital tools and online platforms for remote instruction in India and Canada (Mishra et al., 2020; Ali, 2020). These training programs covered topics such as creating online content, conducting virtual classes, and engaging students in digital learning environments.

Furthermore, governments and educational institutions collaborated to address digital disparities and ensure equitable access to education. In many regions, efforts were made to provide devices and internet connectivity to students and teachers who lacked access to technology (UNESCO, 2020). Some countries like Belgrade implemented strategies like distributing printed learning materials or utilizing radio and television broadcasts to reach students without internet access or in remote areas (Bojović et al. 2020).

Additionally, educators and school administrators played a vital role in fostering a supportive learning community during the pandemic. In Italy, Regular communication and feedback sessions were organized to address the challenges faced by teachers and provide continuous support and guidance (Carraro et al., 2022). Collaborative online platforms and virtual staff rooms were established to facilitate knowledge-sharing and peer support among teachers (UNESCO, 2020; World Bank, 2020). African nations faced unique challenges in transitioning to remote teaching during the pandemic. Limited access to technology, particularly in rural areas, posed a significant obstacle (UNESCO, 2020). Governments and NGOs across the continent initiated efforts to provide teachers with training in digital pedagogy and access to necessary tools (Vincent-Lancrin, 2022).

In Uganda, the transition to remote teaching was marked by concerted efforts from the government and educational institutions. The Ministry of Education and Sports, in collaboration with partners, launched initiatives to train teachers in the use of digital platforms (Okello, 2023). Despite these efforts, teachers in Uganda encountered several challenges. The digital divide remained a

significant issue, with many teachers lacking access to reliable internet and necessary devices (Okello, 2023; Twinamasiko et al., 2021; Tumwesigye, 2020). Moreover, teachers had to adapt quickly to new technologies, often with limited training and resources. Several effective strategies emerged from Uganda's experience (Twinamasiko et al., 2021). Peer learning communities, facilitated by organizations and schools, provided a platform for teachers to share experiences and learn from one another (Master Card Foundation & Leap Africa, 2023). Additionally, mentorship programs and ongoing professional development proved crucial in building teachers' confidence and competence in remote instruction (Bukirwa & Musisi, 2022).

However, despite the extensive efforts to support teachers during the pandemic, challenges and limitations persisted. Studies have identified various barriers that hindered effective implementation of remote teaching strategies. Technical issues, such as internet connectivity problems and lack of access to suitable devices, posed challenges for both teachers and students (Hamdan et al., 2020; Al-Maskari et al, 2022; Khatoony & Nezhadmehr, 2020). Teachers also faced challenges in engaging students and maintaining their attention in the virtual classroom (Hakim, 2020; Iswati, 2021). Moreover, adapting pedagogical practices from traditional to digital environments required significant adjustments, and some educators experienced difficulties in effectively utilizing digital tools for teaching (Giri & Dutta, 2021; Khan et al., 2021).

In conclusion, the COVID-19 pandemic necessitated rapid transformations in the education sector, with teachers at the forefront of implementing remote teaching and learning strategies. Globally, efforts were made to provide support and training to teachers in utilizing online and offline methods for continuity of learning. Training programs, addressing digital disparities, and fostering a supportive learning community were crucial in empowering teachers during this challenging time. However, challenges persisted, and understanding these barriers is essential for improving support systems in the future. As the pandemic has reshaped education, the lessons learned from these experiences can inform more effective strategies for supporting teachers in navigating remote teaching and learning challenges in future emergencies. Despite efforts to provide support to teachers in implementing these strategies, there remains a significant gap in understanding the effectiveness of the support mechanisms provided during the pandemic. While some teachers successfully adapted to remote teaching, others faced difficulties and barriers that hindered their ability to effectively engage students. This research article aims to fill the knowledge

gap by investigating the support provided to teachers and assessing its effectiveness in facilitating continuity of learning during the COVID-19 pandemic in secondary schools in Uganda

3. Methodology

In this study, an interpretivist research philosophy was adopted to explore the experiences of teachers in utilizing online and offline strategies for continuity of learning during the COVID-19 pandemic in secondary schools in Uganda. The interpretivist approach allows for an in-depth examination of the social and cultural context surrounding teachers' experiences, acknowledging that individuals construct their own understanding of reality based on their unique perspectives and interactions (Saunders et al., 2019).

To gather data, a qualitative research design was employed, using semi-structured interviews and focus group discussions. Qualitative methods are well-suited for capturing rich and nuanced insights into the challenges and opportunities faced by teachers during the pandemic (Amin, 2005). Semi-structured interviews provided the flexibility to delve deeper into participants' experiences and perceptions, while focus group discussions facilitated the exploration of shared experiences and interactions among teachers (Collis & Hussey, 2014).

The purposive sampling technique was used to select participants for the study. Secondary school teachers from St. Joseph Gayaza School and St. Theresa-Makerere, who had experience in delivering remote teaching during the pandemic were identified as the target population. Through purposive sampling, a diverse group of teachers representing different subjects, teaching levels, and geographical locations were selected from St. Joseph Gayaza School and St. Theresa-Makerere to ensure a comprehensive understanding of the topic (Amin, 2005).

Data collection took place over a period of six weeks. Unstructured interviews were conducted with individual teachers, and focus group discussions were organized with groups of teachers from the same schools. The interviews and Focused group discussions were audio-recorded with participants' consent to ensure accurate capture of their responses (Sekaran & Bougie, 2016).

Data quality was ensured through member checking and peer debriefing. Member checking involved sharing the preliminary findings with participants to validate the accuracy and relevance of the data. Peer debriefing involved seeking feedback from other researchers to

confirm the credibility and rigor of the study (Cresswell & Cresswell, 2018; Cresswell & Poth, 2018).

Data analysis followed an iterative process of thematic analysis (Saunders et al., 2019). The audio recordings were transcribed verbatim, and the data were systematically coded and categorized into themes and sub-themes using NVivo software. Themes emerged from the participants' narratives and experiences, allowing for an in-depth exploration of their perspectives (Collis & Hussey, 2014).

4. Results and Discussion

The study shows that the support provided to teachers during the COVID-19 pandemic in the Ugandan context was crucial in facilitating remote teaching and learning. The various support mechanisms, adaptation of pedagogical practices, addressing the digital divide, and fostering a supportive learning community contributed to ensuring continuity of learning for students across the country. The findings further indicate that support provided to teachers during the COVID-19 pandemic in the Ugandan context went beyond training and assistance in adapting to remote teaching. The provision of digital devices, internet access, improved compensation, and professional development opportunities contributed to empowering teachers in ensuring continuity of learning for their students. Collaborative learning communities also played a crucial role in creating a supportive environment for teachers to navigate the challenges of remote teaching. These support measures were instrumental in facilitating effective remote teaching and learning during the pandemic and can serve as valuable insights for future educational crises.

4.1 Support Mechanisms for Remote Teaching

The study found that various support mechanisms were introduced to assist teachers in adapting to remote teaching and learning methods. Workshops, training sessions, and professional development programs conducted by educational experts and specialists were implemented to equip teachers with the necessary skills and knowledge. One teacher from St. Joseph's, Gayaza, mentioned, *"The training sessions were helpful in learning how to use digital tools effectively in our teaching."* Another Teacher from St. Theresa noted, *"The school arranged webinars and online training sessions to help us improve our online teaching methods."*

The findings of the study suggest that the introduction of various support mechanisms, such as workshops, training

sessions, and professional development programs, played a crucial role in assisting teachers in adapting to remote teaching and learning during the COVID-19 pandemic. The testimonial from a teacher at St. Joseph's, Gayaza, affirming that the training sessions were helpful in learning how to use digital tools effectively, provides evidence of the positive impact of these support initiatives. However, the limitations of access to technology and internet connectivity, particularly in remote or underserved areas. While the training sessions and workshops were helpful to some teachers, those with limited access to digital resources faced greater difficulties in effectively utilizing remote teaching methods.

4.2 Adapting Pedagogical Practices to suit the remote learning environment

The findings revealed that teachers were encouraged to adapt their pedagogical practices to suit the new online and offline learning environments. They explored innovative teaching methods that could be implemented through digital resources and printed materials. A teacher from St. Theresa, Makerere, shared, *"We had to find creative ways to engage our students through online platforms and also prepare printed materials for those without internet access."*

One of the major strengths of this approach is its flexibility and responsiveness to the unique challenges posed by remote teaching during the pandemic. By encouraging teachers to explore innovative methods, educational institutions demonstrated a recognition of the diverse needs and circumstances of both students and educators. This flexibility allowed teachers to tailor their teaching strategies to suit the different learning environments, ensuring that students could access educational content despite varying degrees of digital connectivity.

Additionally, the emphasis on both digital and printed resources reflects a balanced approach to remote teaching. While digital tools enable interactive and dynamic learning experiences, the provision of printed materials ensured that students without internet access were not left behind. This approach acknowledges the digital divide and takes proactive steps to address it, enhancing the inclusivity of education during times of crisis.

Moreover, empowering teachers to explore creative teaching methods fostered a sense of ownership and innovation in the teaching process. Teachers became active agents in designing their instructional approaches, leading to a more engaging and student-centered learning experience. This sense of agency is likely to have a positive

impact on teacher motivation and commitment to remote teaching.

One potential weakness of this approach is the varying levels of proficiency and familiarity with digital tools among teachers. While some educators may have readily adapted to using technology in their teaching, others may have faced challenges in navigating the digital landscape. This discrepancy in digital literacy led to unequal learning experiences for students, depending on their teachers' level of technological expertise.

4.3 Addressing the Digital Divide

The study highlighted efforts to address the digital divide and ensure equitable access to education. Teachers were supported in identifying students who may not have access to technology or internet connectivity. Alternative strategies, such as distributing printed learning materials or encouraging students to study through radio or television broadcasts, were introduced. A teacher from St. Joseph's, Gayaza, said, *"We made sure to reach out to students in rural areas and provided them with printed materials and encouraged them to listen to the national radio broadcasts."*

The findings of the study emphasize the significant efforts made to address the digital divide and promote equitable access to education during the COVID-19 pandemic. Teachers were supported in identifying students who lacked access to technology or the internet, particularly those in rural areas. To bridge the gap, alternative strategies were introduced, such as distributing printed learning materials and encouraging students to study through radio or television broadcasts.

One of the notable strengths of this approach is its inclusivity. By recognizing the digital disparities among students and proactively identifying those without access to technology or the internet, the support provided aimed to ensure that no student was left behind in their education. The distribution of printed materials and the use of radio and television broadcasts allowed students without internet connectivity to continue their learning remotely.

Moreover, the approach demonstrated adaptability in the face of challenges. Since not all students had access to digital devices or the internet, the introduction of alternative strategies provided flexible options for learning. This adaptability allowed teachers and students to continue their educational journey despite varying circumstances.

Furthermore, the testimonial from a teacher at St. Joseph's, Gayaza, indicates that the efforts were practical and

effective. By reaching out to students in rural areas and providing them with printed materials, the approach demonstrated a commitment to ensuring that every student had access to educational resources.

While the approach was commendable in addressing the digital divide, it may have faced limitations in terms of interactive and real-time learning experiences. Printed materials and radio or television broadcasts might not fully replicate the interactive nature of classroom settings and digital platforms. As a result, students may have missed out on some aspects of collaborative learning and immediate feedback from teachers.

Additionally, the approach's effectiveness could have been impacted by factors such as access to radios or televisions, the availability of learning materials, and parental support in facilitating remote learning. For some students, the lack of access to radios or televisions, especially in disadvantaged households, hindered their participation in distance learning.

4.4 Ongoing Mentorship and Collaboration

The findings revealed that teachers received ongoing mentorship and coaching to troubleshoot challenges and refine their remote teaching techniques. Collaboration and peer-to-peer learning networks were encouraged to enable teachers to share best practices and learn from each other's experiences. A teacher from St. Theresa, Makerere, mentioned, "*The mentorship and collaboration with colleagues helped us adapt and improve our teaching methods in this new environment.*"

A teacher from St. Theresa, Makerere, shared, "*We had regular virtual meetings where we discussed challenges and shared strategies for effective online teaching.*"

The findings suggest that during the period of remote teaching, teachers were provided with ongoing mentorship and coaching to address difficulties they encountered while adapting to the new teaching environment. This support aimed to help them refine their remote teaching techniques and enhance their effectiveness in delivering lessons online.

Additionally, the promotion of collaboration and peer-to-peer learning networks was seen as beneficial. By encouraging teachers to share their best practices and learn from one another's experiences, it fostered a sense of community and professional development within the teaching staff. This collective learning approach likely

contributed to the continuous improvement of remote teaching methods.

The testimonial from the teacher at St. Theresa, Makerere, illustrates the positive impact of the mentorship and collaboration. They acknowledged that the guidance and support from mentors and colleagues played a crucial role in their ability to adapt to the new teaching environment successfully. It implies that the implementation of such supportive measures was well-received and effective in enhancing teachers' capabilities to deliver quality education remotely.

While the strategy of providing ongoing mentorship, coaching, and encouraging collaboration among teachers to enhance remote teaching has many strengths, it may also have some weaknesses. Effective remote teaching often relies on robust technology infrastructure. However, not all schools or teachers had access to the necessary devices, internet connectivity, or technical support, hindering their ability to fully participate in remote teaching programs and collaborative networks. Implementing such a strategy requires resources, including funding, time, and personnel. Schools were already facing financial constraints, providing adequate mentorship and coaching to all teachers was challenging. Addressing these weaknesses and gaps can help strengthen the overall strategy and ensure its success in supporting teachers and improving remote teaching outcomes. It may involve investing in adequate resources, addressing technology limitations, providing targeted support to underserved areas, and actively involving teachers and students in the decision-making process.

4.5 Provision of Digital Devices and Internet Access

The study revealed that some schools and educational institutions provided support to teachers by supplying them with digital devices such as computers and smartphones. This enabled teachers to conduct online lessons and interact with students virtually. Additionally, efforts were made to ensure internet access for teachers, especially in remote areas where connectivity was limited. A teacher from St. Joseph's, Gayaza, stated, "*The school provided us with laptops and internet dongles, which helped us in conducting online classes.*" The results of the study indicate that the schools took proactive measures to support teachers in adapting to online teaching and virtual interactions with students. By providing digital devices like computers and smartphones, these schools enable teachers to conduct online lessons, create digital content, and

maintain communication with students through virtual platforms. Additionally, efforts were made to address the issue of limited internet connectivity, by ensuring teachers have access to the internet through dongles and mobile phones.

This strategy, however, had weaknesses. Even if teachers have access to digital devices and internet connectivity, it does not guarantee that all students have the same level of access. Some students may not have their devices, internet access, or a conducive environment for online learning. This can lead to exclusion and limited participation from certain students, affecting their learning outcomes. Providing devices and internet access alone may not be sufficient if teachers lack the necessary digital literacy skills to effectively utilize the technology for teaching. Even with the provision of digital devices and internet dongles, there may still be challenges related to internet connectivity, especially in remote areas. Slow or unreliable internet connections hindered the smooth conduct of online classes, leading to interruptions and frustration for both teachers and students. Providing laptops, smartphones, and internet dongles was costly, and maintaining these resources in the long run strained the budget of these educational institutions.

Overall, the findings highlight the importance of supporting teachers in adopting technology for education and creating an environment where online teaching and virtual interactions can thrive. However, it's essential to continue monitoring and addressing potential challenges and disparities to ensure that the benefits of technology in education reach all teachers and students equally.

4.6 Improved Compensation and Incentives

During the pandemic, some schools implemented improved compensation packages and incentives to support teachers in their remote teaching efforts. This recognition aimed to motivate teachers and acknowledge their dedication in adapting to the new teaching environment. A teacher from St. Theresa, Makerere, mentioned, *"The school administration offered us extra pay as a token of appreciation for the extra efforts we put into remote teaching."* The results indicate that some schools took proactive measures during the pandemic to support their teachers' transition to remote teaching by implementing improved compensation packages and incentives. This move was aimed at recognizing and acknowledging the extra efforts and dedication displayed by teachers in adapting to the new teaching environment.

The positive impact of this approach can be understood in the following ways: Offering improved compensation and incentives served as a strong motivator for teachers. Recognizing their efforts and dedication through financial rewards or other incentives boosted their morale and encouraged them to continue putting in their best efforts in remote teaching. Remote teaching often demands additional time and effort from teachers to create and deliver engaging online lessons, provide individual support to students, and navigate technological challenges. Offering extra pay as a token of appreciation acknowledges this increased workload and effort. While the gesture of providing extra pay was appreciated, it was not a sustainable long-term solution since schools were not earning school fees to capacity. Schools were already facing financial constraints, providing adequate pay to all teachers was challenging.

Discussion

The findings of this study align with previous research on the importance of supporting teachers during pandemics, such as the COVID-19 outbreak, to ensure continuity of learning (Smith et al., 2020; Jones & Brown, 2021). Various support mechanisms, including workshops, training sessions, and professional development programs, have been shown to be crucial in assisting teachers in adapting to remote teaching and learning methods (World Bank, 2021). These initiatives equip teachers with the necessary skills and knowledge to effectively use digital tools in their teaching (Burop et al., 2020).

Adapting pedagogical practices to suit the remote learning environment has been recognized as a key strategy in facilitating continuity of learning during pandemics (Manca & Delfino, 2021). By encouraging teachers to explore innovative methods and utilize digital and printed resources, educational institutions recognize the diverse needs of students and educators (Leo, et al., 2021; García-Morales et al., 2021). Empowering teachers to adopt creative teaching methods fosters a sense of ownership and innovation, resulting in more engaging and student-centered learning experiences (Oh et al., 2020). However, the varying levels of proficiency in digital tools among teachers can create inequalities in learning experiences for students (Czerniewicz, 2020).

Efforts to address the digital divide and ensure equitable access to education during pandemics are in line with previous research (Oh et al., 2020). Identifying students without access to technology and implementing alternative strategies, such as providing printed learning materials and leveraging radio or television broadcasts, have been

recognized as inclusive approaches (Barron- Rodriguez, 2020; Olanrewaju, 2021). While these strategies bridge the digital gap, they may not fully replicate interactive classroom settings and can result in limitations in collaborative learning and immediate feedback (Barron-Rodriguez, 2020; Olanrewaju, 2021).

The provision of ongoing mentorship and collaboration for teachers during pandemics aligns with research emphasizing the importance of continuous professional development (Shivers et al., 2022). Encouraging collaboration and peer-to-peer learning networks enhances professional development and fosters a sense of community among teachers (Maccabe et al., 2022; Bragg et al., 2021). However, limitations in access to technology and resources can hinder full participation in mentorship programs and collaborative networks, necessitating a comprehensive approach to ensure equal opportunities for all teachers (Morgan, 2020).

The provision of digital devices and internet access to teachers during pandemics is consistent with previous studies highlighting the significance of technology in facilitating remote teaching (Ferri et al., 2020). These resources enable teachers to conduct online classes and interact with students virtually (Coman, 2020). However, the study also identifies challenges related to ensuring all students have equal access to technology. Addressing the digital divide requires a comprehensive approach involving partnerships and funding to sustain the effectiveness of these resources (Liu, 2021).

The provision of improved compensation and incentives to teachers during pandemics has been recognized as a motivating factor for teachers in adapting to remote teaching (Gustani, 2020). Recognizing teachers' efforts through financial rewards or other incentives can boost morale and commitment to delivering quality education (Gustani, 2020). However, long-term sustainability may be a challenge due to financial constraints faced by schools during crises (Donitsa-Schmidt, & Ramot, 2020). Alternative means of appreciation and recognition should be explored (Gustani, 2020).

5. Conclusion and Recommendations

The outbreak of the COVID-19 pandemic posed unprecedented challenges to the education sector globally, including in Uganda. To ensure the continuity of learning during school closures, many institutions rapidly transitioned to remote teaching and learning methods. To support teachers in this new environment, various mechanisms were introduced, including workshops,

training sessions, and professional development programs. These initiatives equipped teachers with essential digital skills and knowledge, enabling them to effectively utilize online and offline resources.

Moreover, encouraging teachers to adapt their pedagogical practices to suit the remote learning environment fostered innovation and creativity in teaching methods. Educational institutions recognized the diverse needs of students and educators and provided printed materials and broadcasts to address the digital divide and ensure equitable access to education. While these strategies bridged the digital gap, they also revealed challenges related to interactive and real-time learning experiences.

Furthermore, ongoing mentorship and collaboration among teachers played a significant role in supporting their adaptation to remote teaching. These networks facilitated knowledge-sharing and peer support, contributing to continuous improvement in teaching methods. However, limited access to technology and resources could hinder full participation in mentorship programs, requiring a comprehensive approach to ensure equal opportunities for all teachers.

The provision of digital devices and internet access was instrumental in enabling teachers to conduct online classes and interact with students virtually. However, ensuring all students have equal access to technology remains a challenge. Sustainable solutions and partnerships are essential to address this digital divide effectively.

Lastly, improved compensation and incentives provided motivation and recognition to teachers, acknowledging their dedication during the pandemic. While these initiatives were appreciated, financial constraints posed sustainability challenges in the long run.

In conclusion, the study highlights the significance of comprehensive support mechanisms for teachers during pandemics. These include training and professional development, adapting pedagogical practices, addressing the digital divide, promoting collaboration, and providing access to digital resources. By considering these findings, policymakers and educational institutions can better support teachers in navigating the challenges of remote teaching and foster a resilient education system during crises. Moreover, ongoing research and evaluation of support systems will contribute to evidence-based strategies in future emergencies, ensuring the continuity of learning for all students.

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