

Managing Distance Learning for Secondary School Students in Tanzania during the COVID-19 Outbreak: Challenges and Opportunities Implicating Educational Inequality

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ABSTRACT

This study explored the lived experiences of secondary school students in Moshi Municipality with distance learning amid the COVID-19 outbreak in Tanzania. Specifically, it explored the challenges and opportunities of learning amid the COVID-19 pandemic, and the roles assumed by parents and teachers to support secondary school students' distance learning. A qualitative approach, framed within the phenomenography research design, guided the present study. Nineteen secondary school students were purposively selected from four secondary schools in Moshi Municipality. Data were collected through in-depth interviews and focus group discussions. The collected data underwent a systematic inductive content analysis to identify emerging themes from the data. The findings indicate that different approaches or methods were utilised by students for distance learning, including printed materials for self-study, TV and radio programmes, online resources, and online interactive classes. However, challenges such as limited internet access and limited device availability emerged as significant hurdles. Additionally, emotional struggles, including loneliness and motivational issues, were evident, while the absence of peer interaction and concentration difficulties were notable concerns. On the positive side, flexible learning environments allowed for self-paced learning, skill development, and the exploration of personal interests. Students capitalised on the autonomy of distance learning to discover new abilities and passions. The present study recommends that teachers continue to explore innovative teaching methods, like recorded audio lessons and supplementary resources to enhance students' learning experiences. The study suggests provisional of professional development opportunities to equip educators with the necessary skills for effective distance teaching.

Keywords: COVID-19, Distance Learning, Phenomenography, Lived-Experiences, COVID-19 Pandemic

INTRODUCTION

Pedagogically, Tanzania's basic education system prior to the abrupt shift to distance learning amid the COVID-19 outbreak had its share of strengths and challenges (Nyamizi, 2022). In Tanzania, traditional pedagogical approaches dominate, relying heavily on face-to-face interactions between teachers and students in conventional classroom settings. While this allows for direct engagement, it often faces hurdles such as large class sizes, varying teacher quality, and limited resources (Kitosi, 2021). Pedagogical methods lean towards rote memorization, and there are discussions about the need for a more student-centered and interactive approach to enhance critical thinking skills (Bisanda, 2022). The effectiveness of the curriculum is a topic of debate, with some advocating for its modernization to align with contemporary educational theories and workforce demands (Oseni, 2017). The sudden shift to distance education caused by the COVID-19 pandemic prompts a reevaluation of pedagogical strategies, necessitating the incorporation of technology and innovative methods to maintain educational continuity in the face of unprecedented challenges.

COVID-19, caused by the novel coronavirus SARS-CoV-2, emerged in late 2019 and swiftly spread across the globe, becoming a formidable global health crisis (World Health Organization [WHO], 2020). With its rapid transmission and severe health implications, COVID-19 profoundly impacted all aspects of society, including education (UNESCO, 2021). The COVID-19 pandemic quickly escalated into a global pandemic, affecting virtually every country and region. Its impact has been unprecedented, resulting in significant loss of life, strained healthcare systems, and widespread socio-economic disruption (WHO, 2020a). African nations, including Tanzania, faced the daunting task of addressing the health crisis while grappling with the socio-economic repercussions (UNESCO, 2021). In response to the rapid spread of COVID-19, the Tanzanian government implemented various measures to mitigate its impact (Manyengo, 2021). These measures included the closure of educational institutions to safeguard the health and well-being of students, teachers, and the wider community (Msigwa, 2020). The closure of schools and the suspension of face-to-face learning posed significant challenges to the education system, disrupting the learning process and leaving educational stakeholders searching for alternative solutions (Matete et al., 2023; Seni,

2022). In this context, distance learning emerged as a viable strategy to ensure educational continuity amidst the pandemic (Bisanda, 2022). Distance learning, also known as remote learning or learning from home, involves the use of technology-mediated platforms and resources to facilitate teaching and learning outside of traditional classroom settings (Bisanda, 2016). This immediate alternative approach to learning offered an opportunity for students to continue their education remotely, albeit with unique challenges and opportunities (Ibrahim et al., 2020; Matete et al., 2023; Seni, 2022). Msigwa (2020) reports that various approaches or methods to facilitate distance learning for primary and secondary school students in Tanzania were adopted, and parents were requested to assist students with their learning. These approaches included: radio and television broadcasting, online classes, smartphone applications, private tutoring, and social media platforms. Manyengo (2021) reports that the Tanzania Institute of Education (TIE) collaborated with the private sector to prepare lessons that aired on television and radio programs. Stations like Azam TV, TBC, Upendo TV, Zuku TV, Clouds Plus and Azam TV are dedicated to providing distance learning for students to learn at home (Manyengo, 2021).

The shift to distance learning challenged educational stakeholders in unprecedented ways because teachers and schools had to rapidly adapt to new instructional methods, harness technology, and create engaging virtual learning environments (Manyengo, 2021; Msigwa, 2020). Presumably, students may have faced new hurdles, including limited access to technology, internet connectivity issues, and the need for self-directed learning (Seni, 2022). Parents and caregivers were thrust into the role of facilitators, supporting their children's education from home (Nyamizi, 2022). While the implementation of distance learning allowed educational systems to navigate the educational challenges presented by COVID-19, there remains a critical gap in understanding the variation in the lived experiences of students during this transformative period (Msigwa, 2020). Students' experiences, perceptions and the impacts of distance learning on their academic and socio-emotional well-being have yet to be fully explored. Understanding these lived experiences is vital for designing effective educational strategies and support systems that address students' unique needs and challenges. Against this backdrop, this study sought to delve into the subjective lived experiences of

secondary school students during the period of distance learning, providing insights into their challenges, opportunities, coping mechanisms, and lessons learned. Anchored in the Phenomenography research design, this paper discerns the variations in lived experiences within the overarching context of the COVID-19 pandemic for secondary school students in Tanzania. The structured categorization of student perceptions enabled a nuanced exploration, unravelling the tapestry of challenges encountered and prospects discovered. This study explored the lived experiences of secondary school students in Moshi municipality with distance learning during the COVID-19 outbreak in Tanzania. To attain this general objective, the study was guided by two specific objectives: (1) To identify the challenges and opportunities of learning amid the COVID-19 outbreak for secondary school students in Moshi municipality. (2) To explore the perceptions of secondary school students in Moshi municipality about the role played by teachers and parents in supporting their learning amid the COVID-19 outbreak. The following two research questions helped gathering of relevant data:

- 1) How challenging and privileging was it for secondary school students in Moshi municipality to learn during the COVID-19 outbreak?
- 2) How did parents and teachers support secondary school students in Moshi municipality with their learning during the COVID-19 outbreak?

Challenges and Opportunities of Distance Learning Amid COVID-19

With the onset of the COVID-19 pandemic, the global education landscape experienced unprecedented disruptions, leading to a prolonged closure of educational institutions (Flewelling, 2022). As a result, when distance learning emerged as the new normal, it presented both challenges and opportunities (Schleicher, 2020). A study conducted in Brazil by Sari and Nayır (2020) interviewed 65 primary school students who experienced distance learning during the COVID-19 pandemic. The study aimed to investigate the challenges students encountered and the strategies they employed to transform these challenges into opportunities. Content analysis indicated difficulties ranging from issues with internet access and limitations in infrastructure to managing virtual classrooms. Concerns were also raised regarding teachers' proficiency in ICT skills. To counter these challenges, students expressed a resolute intent to boost their 21st-century ICT skills and

enhance their ICT infrastructure. Although the study provides important insights regarding the challenges faced by primary school students in Brazil, it does not cover the perceived opportunities associated with distance learning during the COVID-19 outbreak. Therefore, the present study contributes knowledge on both the perceived challenges and opportunities of distance learning for secondary school students in Tanzania.

Likewise, in the Philippines, Gula (2022) investigated the obstacles faced by speech students adjusting to distance learning during the COVID-19 pandemic. Through a descriptive analysis, findings revealed low student motivation, the struggle to maintain interest in subjects, and delayed assignment submissions due to the decentralized nature of their learning environments. Notably, internet connectivity issues mirrored those identified in the Brazilian study by Niemczyk et al. (2021). In response, teachers assumed an active role in rekindling student motivation, engaging in consistent follow-ups with parents, and simplifying learning materials to boost engagement. Moreover, a meta-synthesis conducted by Shagiakhmetova, Bystritskaya, Demir, Stepanov, Grishnova and Kryukova (2022) examined 23 pertinent studies in Russia, focusing on the challenges faced by secondary school students during the transition to distance learning caused by the sudden COVID-19 outbreak. Findings indicated that limited internet access and insufficient technological resources in various regions across Russia impeded students' ability to fully engage in effective distance learning, leading to feelings of inadequacy. The findings also highlighted teachers' efforts in motivating their students, with evident disparities among students with special needs and those in under-resourced areas. Findings further pinpointed the relative lack of attention given to younger students in Russia, accentuating the pressing need for professional development training for teachers in these contexts. The findings of this study inspire curiosity and contemplation among educational stakeholders in Tanzania, particularly in the context of distance learning amid the COVID-19 pandemic for primary, secondary and tertiary education students, as in how different student groups manage distance learning amid COVID-19. The present study explored the perceptions and experiences of secondary school students in Tanzania with distance learning during the COVID-19 pandemic, however, more studies are needed to explore other groups of learners, such as those with special

educational needs. Ionescu, Paschia, Nicolau, Stanescu, Stancescu, Coman, and Uzla (2020), conducted an analysis of the sustainability of the e-learning system implemented in Romania in response to the havoc induced by the COVID-19 outbreak. The study involved teachers, students, and parents to respond to questionnaires. The findings indicated that students viewed distance learning as a practical and sustainable learning solution. However, it was also found that this approach to learning required robust collaboration between parents and teachers and a watchful eye on students' behaviour to address potential effects stemming from the ever-evolving learning and social realities. The present study is designed to further explore the role played by parents and teachers to support learning for secondary school students in Tanzania.

On a different note, Rasmitadila et al. (2020) ventured into exploring the perceptions of primary school students in Indonesia who participated in the "School from Home" program during the COVID-19 pandemic. Their study, comprising surveys and semi-structured interviews involving 67 students, identified four primary themes: technical obstacles, student conditioning, student participation, and the online teaching experience. The crux of the matter lay in the scarcity of digital devices among parents, coupled with unreliable internet connectivity, especially in peripheral areas. These challenges cast a significant shadow on the nature of instructional activities that could be conducted effectively. Conversely, in Kenya, Mabeya (2020) embraced a mixed-method approach, surveying 30 primary and secondary school students in the Rungwe Sub-County. The study exposed the stark limitations in supportive infrastructure, notably the dearth of electricity and internet connectivity in the region. Students, in large part, were without the essential digital devices needed for effective distance learning. Moreover, the need for students to adapt to a non-school environment was a challenging transition. The synthesis of the reviewed literature uncovers several critical insights into the learning experiences of students worldwide during the COVID-19 pandemic. Common themes include the challenges of adapting to distance learning, the significance of digital infrastructure, and the role of educators in supporting students' transition to distance education (Sari & Nayır, 2020; Gula, 2022; Shagiakhmetova, 2022; Ionescu, 2020). From the review, it was evident that the existing literature has made significant

contributions to understanding the implications of COVID-19 pandemic-induced distance learning, but it leaves a notable knowledge gap. The body of literature predominantly documents the experiences in developed countries, and there is a lack of in-depth investigation into the challenges faced in low-income regions, including Tanzania. In addition, the literature contains a majority of studies conducted during the onset of the pandemic, leaving a dearth of evidence-based knowledge in the post-pandemic era. Therefore, the present study seeks to address this gap by providing a detailed examination of the experiences and challenges faced by secondary school students in Moshi municipality during the COVID-19 pandemic. By doing so, the current study aims to contribute to the broader understanding of distance learning in Tanzania's basic education and uncover the strategies to enhance equitable access to education. The research objectives and questions of the present study were directed toward filling this critical knowledge gap and ultimately improving educational planning and practices in similar circumstances in the future. The present study is significant because it extends the current understanding of distance learning in Tanzania, particularly at the basic education level, offering insights into the lived experiences of students in challenging circumstances. Ultimately, it may inform policies and practices to better support students in accessing quality education during unforeseen educational emergencies.

Methodology

This study adopted a qualitative research approach. The qualitative approach was deemed the most suitable method for probing into the complex phenomena of distance learning during the COVID-19 pandemic (Flewelling, 2022) as it allowed for an in-depth exploration of the lived experiences and perceptions of the participants. In Tanzania, the COVID-19 outbreak forced secondary school students to learn remotely due to nationwide school closure, henceforth, presenting both challenges and opportunities (Manyengo, 2021). A research design, rooted in phenomenography was chosen (Basil, 2021). This framework was particularly suitable for exploring the variation in the lived experiences of students while learning amid the COVID-19 pandemic. The study was situated in Moshi, a municipality in Tanzania. The researcher's insider status within this community allowed for a nuanced understanding of cultural and contextual factors, although steps were taken to address potential

biases associated with this position. The study's population encompassed all secondary school students in Tanzania, a group profoundly affected by the sudden shift to distance learning. The purposive sampling technique ensured a diverse and representative sample of nineteen informants who were obtained based on the principle of saturation in qualitative research. The inclusion criterion was that they had to be in either Form IV or Form V, given that they must have experienced distance learning during the 2020 COVID-19 outbreak, which occurred when they were in form one or form two, respectively. Therefore, the exclusion criterion was for all students below Form IV in the year 2023. To ensure that the chosen schools accurately represented the population of interest, this study employed purposive sampling techniques based on several inclusion criteria, such as regional diversity, public and private schools, and resource availability.

Data collection methods included in-depth interviews (IDIs) and focus group discussions (FGDs), providing rich insights into students' experiences. IDIs were conducted with a total of nine secondary school students from four secondary schools in Moshi municipality. To structure the interviews, the researcher thoughtfully developed a semi-structured interview guide that comprised open-ended and probing questions. This guide was designed to explore the participants' firsthand experiences with distance learning during the COVID-19 outbreak in 2020. The interviews were conducted face-to-face, providing an intimate and comfortable setting for the participants. These interview sessions took place in private offices allocated by the school heads or, in some instances, by the school's academic coordinator. Notably, the researcher maintained a detailed record of the interviews, capturing not only verbal responses but also valuable nonverbal cues and contextual information. FGDs were held to engage participants in an in-depth discussion regarding their lived experiences surrounding distance learning amid the COVID-19 outbreak in Tanzania. To create a conducive and confidential environment, the FGDs were held in private, quiet rooms within the school premises. Participants were assured of the confidentiality of their responses, both during and after the discussions. The FGDs were guided by a semi-structured questionnaire featuring open-ended and probing questions. The medium of communication during these discussions was Swahili, the national language of Tanzania. This choice was made to facilitate participants' comfort and ease

of expression. Detailed notes from the FGDs were prepared and systematically analyzed to identify recurring themes and patterns in participants' responses. The qualitative data analysis in phenomenography, as described by Hajar (2021), follows a systematic process aimed at revealing variations in individuals' experiences or conceptions of a phenomenon. In this study, the phenomenon was distance learning amid the COVID-19 pandemic, and data were meticulously analyzed to uncover the diverse learning experiences of secondary school students in the context of learning during the COVID-19 outbreak. The initial phase of the analysis involved a comprehensive process of data familiarization.

The researcher engaged in multiple readings to immerse themselves in the Participants' responses. The second step involved open coding of the data. Subsequently, the coded units were grouped into broader units. This meant a meticulous examination of commonalities and disparities within the data. Then, we allowed for themes to emerge from the data, uncovering the different approaches adopted by secondary school students to facilitate their learning during the COVID-19 pandemic. We reviewed the emerging themes several times to see if they required any more development or refinement. In the final step, we attempted to assign meaning to the themes that emerged from the data. In the present study, ethical considerations played a paramount role, adhering to established procedures to ensure the rights and well-being of participants were upheld. Informed consent was diligently obtained through ethical clearance, research permits, and permissions from relevant authorities. All participants received comprehensive briefings about the study, their rights, and the option to withdraw at any point. Confidentiality and anonymity were strictly maintained, with pseudonyms assigned to protect participants' identities. To minimize harm, interactions occurred within secure and familiar school environments. Robust data storage and security measures, including password protection, were employed. The study demonstrated a deep respect for the diverse cultural and religious practices in Moshi, Tanzania. Finally, in the dissemination of findings, privacy and dignity were rigorously preserved to maintain the ethical integrity of the study, with the potential to inform educational planning, policies and practices related to distance education provision in Tanzania basic education.

Findings

In this study, the data coding process followed a systematic approach informed by the phenomenography design (Hajer, 2021) to identify and categorize meaningful units of information from the interview notes and focus group discussions. The goal was to capture the essence of participants' experiences and perceptions regarding three specific objectives, namely: [1] To identify the challenges and opportunities of learning amid the COVID-19 outbreak for secondary school students in Moshi municipality [2] To explore the perceptions of secondary school students in Moshi municipality about the role played by teachers and parents in supporting their learning during the COVID-19 outbreak.

Challenges and Opportunities of Distance Learning Amid COVID-19

Objective one of the present study focused on exploring the challenges and opportunities secondary school students experienced in their learning experiences during the COVID-19 outbreak. In exploring this theme, prominent categories or sub-themes that emerged from the data were challenges in accessing technology, social isolation and motivational challenges, while opportunities included flexible learning.

Challenges in Accessing the Internet and Technology

Participants' responses concerning challenges in accessing technology and the internet were coded when students discussed difficulties related to online resources, virtual classes, networks, and signal challenges. These responses were grouped under "Challenges in Accessing the Internet and Technology." This finding encompasses a range of difficulties that students encountered while adapting to distance learning during the pandemic. For instance, Participant 1, a student from School M, shed light on a notable challenge related to radio classes. They candidly pointed out that while radio classes were undoubtedly a valuable resource, external noise and disruptions, particularly due to adverse weather conditions, posed significant obstacles to their effectiveness. In their own words,

The radio classes were helpful, but sometimes it was hard to hear the teachers clearly because of the noise outside. And

when it rained, the signal would get disrupted (*Participant 1, Interview, Form IV, School M, 23rd July 2023*)

When asked about potential improvements to their distance learning experience, Participant 1 expressed a genuine desire for better radio reception and the availability of someone to address their questions and concerns.

Having a radio with better reception, I guess. And maybe someone to answer my questions when I didn't understand something (*Participant 1, Interview, Form IV, School M, 23rd July 2023*)

This underscores the practical and immediate measures that could have been taken to mitigate such environmental challenges and foster more effective learning experiences for students engaged in radio-based distance learning initiatives (Matete, et al., 2023). In another interview, Participant 2, also from school M, revealed another challenge related to the online class timetable. They mentioned that online classes were sometimes scheduled at inconvenient hours due to time zone differences from the online teachers whose classes are made available across different countries. In their own words, they stated that

There were times when the online classes were scheduled at unsuitable hours because of the time difference with the online teachers. It disrupted my daily routine, and I couldn't plan my day properly (Participant 2, Interview, Form IV, School M, 23rd July 2023)

In the above statement, it is highlighted that this backdrop disrupted their daily routines and made it challenging to plan their days effectively. This finding uncovers the need for flexibility in planning distance learning programs to accommodate all students. Furthermore, when the same participant was prompted to share any learning experience with other approaches to learning, they had this to say,

They sent some materials through WhatsApp, but it wasn't the same as having textbooks. I missed having physical books to study from (*Participant 2, Interview, Form IV, School M, 23rd July 2023*)

When the same Participant was probed to share what could have improved their learning experience, Participant 2 emphasized the importance of having a reliable internet connection and a fixed class schedule.

I think having a reliable internet connection, and a fixed class schedule would have made a big difference (*Participant 2, Interview, Form IV, School M, 23rd July 2023*)

This reiterates the significance of addressing internet connectivity issues and providing structured learning environments for students., as another significant challenge faced by students was the lack of access to digital devices. Participant 3 from school M highlighted this issue, mentioning that they couldn't join online classes due to the lack of a computer or smartphone.

I didn't have a computer or a smartphone, so I couldn't join online classes like some of my classmates (*Participant 3, Interview, Form IV, School M, 24th July 2023*)

This points to the digital divide and underscores the need for initiatives to provide students with access to essential technology for distance learning and self-study (UNESCO, 2021). It also addresses the digital divide and the disparities in access to technology among students in Tanzania (Msigwa, 2020), as similar experiences were recollected by Participant 5 from School M, emphasizing the absence of gadgets like tablets and a stable internet connection.

We didn't have gadgets like tablets or a stable internet connection. So, we used books and notes from before (*Participant 5, Interview, School M, 25th July 2023*)

This finding underscores the resourcefulness of students in adapting to challenging circumstances. However, it also highlights the disparities in access to technology and the need for equitable solutions to bridge the digital divide. Similar experiences were also recalled during a focus group discussion with participants. For example, participant 3 from School X shared that,

I struggled with access to the internet. Sometimes, I couldn't join online classes because of poor connectivity (*Participant 3, FGD, Form IV, School X, 1ST August 2023*)

These challenges collectively demonstrate the multifaceted nature of the difficulties in learning secondary school students experienced amid the COVID-19 outbreak. They emphasize the importance of addressing issues related to technology access, scheduling, and environmental factors to enhance the quality of distance learning experiences. This adaptability reflects their determination to learn and highlights the opportunities for innovative learning approaches.

Social Isolation and Motivational Challenges

This theme uncovers secondary school students' conceptions of the emotional toll of social isolation, loneliness, focus, and motivational challenges during their distance learning experiences amid the COVID-19 outbreak. These responses were categorized under "Social Isolation and Motivational Challenges," providing insight into the varied ways in which students perceived and navigated these challenges. Participants in FGD shared their experiences regarding the emotional challenges they faced during distance learning. For example, Participant 1 from School X described the difficulty of staying motivated without the presence of their friends, highlighting loneliness as a significant issue.

I found it challenging to stay motivated without my friends around. Loneliness was a big issue (*Participant 1, FGD, Form IV, School X, 1st August 2023*)

This sentiment was echoed by Participant 2 from the same group, who emphasized the impact of loneliness on their motivation and focus.

Indeed... loneliness was tough. But for me, managing my time and staying focused was the biggest challenge (*Participant 2, FGD, Form IV, School X, 1st August 2023*)

These responses illustrate how secondary school students experienced loneliness differently and how it influenced their motivation and concentration, aligning with the principles of phenomenography that

recognize the variation in experiences surrounding a common phenomenon (Marton, 1986; Basil, 2021). When prompted to describe other challenging aspects of learning from home during the COVID-19 outbreak, participants raised concerns about the lack of interaction with teachers. Participant 1 from School Z expressed the difficulty of getting immediate assistance.

The biggest challenge for me was the lack of interaction with my teachers. It was hard to get immediate assistance
(Participant 1, FGD, Form V, School Z, 2nd August 2023)

Participant 3 from the same group shared their struggle with self-motivation and the ease of distraction while studying at home.

I struggled with self-motivation. It was easy to get distracted at home
(Participant 3, FGD, Form V, School Z, 2nd August 2023)

Interestingly, Participant 4 from the same group had a different perspective, emphasizing the increased workload and numerous assignments as their primary challenge.

For me, the workload increased. It felt like we had more assignments to complete
(Participant 4, FGD, School Z, 2nd August 2023)

Despite these challenges, it's worth noting the determination and resilience displayed by students like Participant 6 from School Y, who, despite feelings of loneliness, continued their studies with perseverance.

The TV programmes didn't cover everything... and it got a bit lonely studying alone... But I knew I had to keep going
(Participant 6, Interview, School Y, 27 July 2023)

This resilience showcases the students' commitment to their education even in challenging circumstances.

Opportunity for Flexible Learning

In line with the phenomenographic framework that underpins this study, Objective Four delves into secondary school students' perspectives on the

positive aspects of distance learning, particularly during the COVID-19 outbreak. Data reflecting the newfound flexibility in students' learning routines or the ability to explore subjects of personal interest were categorized as "Opportunities for Flexible Learning" revealing the various ways in which students harnessed flexibility in their learning experiences. For example, participants in focus group discussions shared insights into the positive experiences they encountered during distance learning. Participant 4 from School X expressed their enjoyment of self-paced learning, allowing them to delve deeper into topics of personal interest.

Well, I discovered that I enjoy self-paced learning. I could dig deeper into topics I liked (*Participant 4, FGD, Form IV, School X, 1st August 2023*)

Participant 5 from the same group highlighted how the flexibility of distance learning enabled them to acquire new skills, such as video editing, which they might not have explored in a traditional school setting.

I agree. I picked up new skills, like video editing, which I wouldn't have done in regular school (*Participant 5, FGD, Form IV, School X, 1st August 2023*)

These responses underscore the value of flexibility in allowing students to pursue their interests and develop skills beyond the traditional curriculum. Participant 1 from School X mentioned how distance learning brought them closer to their family, providing an opportunity for family members to study together and offer academic support.

I got closer to my family. We studied together, and my parents helped me with my subjects (*Participant 1, FGD, Form IV, School X, 1st August 2023*)

This finding highlights the potential for distance learning to foster family engagement and support in education. Participant 9 from School Y discussed how the flexibility of distance learning allowed them to explore their interests further, such as joining a virtual coding club.

One thing that stands out is that I had more time to explore my interests. I joined a virtual coding club organized by a nonprofit. I've always been curious about coding, and this was a fantastic chance (*Participant 9, Interview, Form IV, School Y, 28th August, 2023*)

Others, like Participant 1 from School Z, noted improvements in time management and independence in their studies.

I got better at managing my time and being independent in my studies (*Participant 1, FGD, School Z, 2nd August 2023*)

Participant 2 from the same group emphasized how distance learning enhanced their computer skills, demonstrating the positive impact of flexible learning on digital literacy.

I improved my computer skills. Before, I hardly knew how to use online platforms (*Participant 2, FGD, School Z, 2nd August 2023*)

Additionally, Participant 3 shared their experience of discovering effective study strategies like creating a study schedule.

I found new ways to study effectively, like creating a study schedule (*Participant 3, FGD, School Z, 2nd August 2023*)

These findings highlight the positive aspects of flexibility in the context of distance learning during the COVID-19 outbreak, aligning with the phenomenographic framework that acknowledges the diversity of experiences within a phenomenon. These findings also highlight the importance of nurturing students' independence in learning.

The Roles Played by Teachers and Parents in Supporting Secondary School Students' Learning during the COVID-19 Outbreak

Objective two of the present study aimed to delve deeply into the perceptions of secondary school students in Moshi Municipality concerning the roles played by their teachers and parents in supporting their distance learning surrounding the COVID-19 outbreak. Participants' responses about the

support provided by teachers and parents were coded and categorized into several sub-themes: availability for consultation, guidance, and assistance, as well as motivation and encouragement. Therefore, the following discussion is centred on the identified themes or categories, offering a comprehensive understanding of the participants' lived experiences. Data for this objective were collected from ten form IV students and nine form V students who were recruited from four secondary schools in Moshi municipality.

Availability for Consultation

Participants in this study widely appreciated the accessibility of their teachers during the pandemic. Participant 4 expressed that their teachers were consistently available via phone calls, providing an immediate channel for students to seek guidance and support. This accessibility offered a lifeline for students navigating the challenges of distance learning.

The teachers were great. They were available for extra help when we needed it (*Participant 4, FGD, School X, Form IV, 1st August 2023*)

Supportively, the same ideas were shared by Participant 1 from school Z, who had this to say:

My teachers were always available through phone calls (*Participant 1, FGD, Form V, School Z, 2nd August, 2023*)

The adaptability of teachers in utilizing digital platforms was a recurring theme. Participant 5, from School M, described the efforts made by their teachers to provide learning materials through WhatsApp, a popular messaging application. Additionally, students had the option to seek clarification through phone calls, emphasizing the commitment of teachers to facilitate learning despite the limitations of distance education.

Our teachers tried their best, but it was tough. They sent us materials through WhatsApp, and sometimes we could call them with questions. But it wasn't the same as being in a real class (Participant 5, Interview, Form IV, School M, 26th July, 2023)

These responses highlight the resourcefulness of educators in leveraging digital tools to bridge the physical gap between them and their students (Bisanda, 2021; Matete, et al., 2023). Participant 3, from School Z, noted how some teachers sent audio lessons, which significantly contributed to their understanding of challenging topics.

Some teachers sent us audio lessons, which was helpful for understanding difficult topics (Participant 3, FGD, Form V, School Z, 1st August, 2023)

Similarly, in a different focus group discussion at School X, a participant highlighted how teachers provided students with extra resources, creating opportunities for deeper exploration of subjects.

Our teachers gave us extra resources to explore, which was great (Participant, FGD, School X, Form IV, 1st August, 2023)

The efforts made by teachers to support their students, as exemplified by participants' quotes, can foster positive teacher-student relationships.

Encouragement and Motivation

In the realm of parental support, Participant 2, from School Z, eloquently described how their parents played a pivotal role in maintaining their motivation. By creating a study-friendly atmosphere at home, parents became crucial motivators, fostering an environment conducive to effective learning.

My parents were great at keeping me motivated. They created a study-friendly atmosphere at home (Participant 2, FGD, Form V, School Z, 2nd August, 2023)

Although some parents might not possess advanced technological skills, they played an essential role in encouraging independent learning. Participant 3, from a different focus group discussion at School X, noted that while their parents may not have been tech-literate, they encouraged self-reliance in their studies.

My parents didn't know much about technology, but they encouraged me to learn independently (Participant 3, FGD, Form V, School X, 1st August, 2023)

Moreover, in an interview with Participant 5 from School M, the role assumed by parents to motivate and encourage their children to learn in the wake of the pandemic was expressed.

My parents...they encouraged me to keep going. They knew it wasn't easy (Participant 5, Interview, Form IV, School M, 26th July 2023)

The Participant's statement emphasizes that parents provided vital emotional support and motivation to persist in their studies. The phrase "they encouraged me to keep going" underscores the importance of parental support in maintaining a positive outlook and determination to continue learning under less-than-ideal circumstances.

Guidance and Assistance

Participants in the present study shared their appreciation for the supporting role played by their parents in the wake of distance learning surrounding the COVID-19 outbreak. For example, when Participant 1 attending School M was prompted to share their experience, they had this to say:

My parents tried their best. They would listen to the radio classes with me sometimes and assisted me with the worksheets (Participant 1, Interview, Form IV, School M, 24th July 2023)

The Participant's statement "My parents tried their best" suggests that parents recognized the significance of their child's education and were willing to make efforts to support it. The phrase "tried their best" indicates that parents were dedicated to helping their children adapt to the new learning environment brought about by the pandemic. The statement also mentions that parents would "listen to the radio classes with me sometimes." This act of participating in radio classes with their child demonstrates the parents' engagement in the learning process. It indicates that they were not merely passively supporting but actively involving themselves in their child's

education. This participation likely served multiple purposes, including enhancing the child's understanding of the content, providing companionship, and fostering a sense of shared commitment to learning. On a similar note, during a focus group discussion with Participants attending School Z, Participant 4 emphasized the practical assistance provided by their parents. Parents played an active role in setting up a dedicated study space and holding their children accountable for their studies, reinforcing the importance of structure:

My parents helped me set up a study space and kept me accountable (Participant 4, FGD, Form V, School Z, 2nd August, 2023)

Participant 6 from School Y shared a different perspective. They indicated that their parent's involvement in their schoolwork was limited due to their busy work schedules. This observation underscores the significance of recognizing diverse family dynamics and the need for flexible support structures.

My parents couldn't help me much with schoolwork. They were busy with their jobs (Participant 6, Interview, Form V, School Y, 27th July, 2023)

Participants' responses highlight the adaptability of teachers in utilizing digital platforms to provide materials and support to their students. This adaptability is crucial in ensuring continuity in education during challenging times and emphasizes the need for ongoing professional development for educators in remote teaching methods.

Discussion

The findings regarding challenges in accessing the internet and quality of technology emphasize the critical need for educational institutions to consider the environmental context when planning and implementing distance learning programmes, as highlighted by previous research (Agyekum, et al., 2021). In this specific case, providing students with better-quality radio receivers or devising mechanisms to minimize external noise disturbances could have significantly enhanced their learning experiences. This underscores the practical and immediate measures that could have been taken to mitigate such

environmental challenges and foster more effective learning experiences for students engaged in radio-based distance learning initiatives (Matete, et al., 2023). Moreover, this points to the digital divide and underscores the need for initiatives to provide students with access to essential technology for distance learning and self-study (UNESCO, 2021).

It also addresses the digital divide and the disparities in access to technology among students in Tanzania (Msigwa, 2020), as similar experiences were recollected by Participant 5 from School M, emphasizing the absence of gadgets like tablets and a stable internet connection. These challenges collectively demonstrate the multifaceted nature of the difficulties in learning secondary school students experienced amid the COVID-19 outbreak. They emphasize the importance of addressing issues related to technology access, scheduling, and environmental factors to enhance the quality of distance learning experiences. Nevertheless, despite these challenges, students showcased their adaptability and resilience in the face of adversity (Seni, 2022). They utilized various resources, including radio and printed materials, to continue their education (Manyengo, 2021). This adaptability reflects their determination to learn and highlights the opportunities for innovative learning approaches. Nevertheless, against this backdrop secondary school students yet showcased their commitment to learning even in challenging circumstances. The diversity in challenges and the coping mechanisms among participants reflect the varied ways in which secondary school students perceived and experienced the impact of distance learning on their motivation and focus (Schleicher, 2020). These findings highlight the emotional and motivational challenges that students faced during the COVID-19 outbreak, shedding light on the multifaceted nature of these issues. These challenges align with the theoretical framework of phenomenography, which emphasizes the diversity of experiences within a phenomenon (Basil, 2021). In addition, the importance of immediate teacher assistance and guidance should not be underestimated. Developing channels for students to seek timely help could alleviate some of the motivational and focus-related challenges surrounding distance learning (Bisanda, 2021). Furthermore, the emotional toll of loneliness and lack of social interaction should also raise awareness of the importance of mental health support within the basic educational context (UNESCO, 2021). Encouraging students to reach out for help when needed

and providing access to counselling services can be crucial in mitigating these challenges in the future.

The findings regarding the opportunity for flexible learning highlight the positive aspects of flexibility in the context of distance learning during the COVID-19 outbreak, aligning with the phenomenographic framework that acknowledges the diversity of experiences within a phenomenon. Educational institutions in Tanzania can draw lessons from these experiences to enhance flexibility in planning for distance learning programs in the future (Msigwa, 2020; Seni, 2022; Matete, et al., 2023). Encouraging self-paced learning, providing opportunities for skill development beyond the curriculum, and promoting effective time management and digital literacy skills can contribute to a more flexible and adaptive learning environment. Moreover, recognizing the potential for family engagement in students' education, institutions can explore ways to involve parents or guardians in the learning process, fostering a supportive home environment (Flewelling, 2022). These findings also highlight the importance of nurturing students' independence in learning. Educational institutions can consider incorporating more independent learning opportunities into their programmes. On the other end, teachers' willingness to utilize audio lessons and provide extra resources reflects their adaptability and innovative teaching approaches (Flewelling, 2022). These strategies can enhance comprehension and engagement, especially in remote learning environments. The provision of extra resources allows students to delve deeper into subjects and explore their interests because it contributes to a more holistic and engaging learning experience (Gula, 2022). The efforts made by teachers to support their students, as exemplified by participants' quotes, can foster positive teacher-student relationships. The findings of the present study also reflect the significant role that parents played in motivating and encouraging students during the challenging period of distance learning amid the COVID-19 pandemic. The Participant's statement emphasizes that parents provided vital emotional support and motivation to persist in their studies. The phrase "they encouraged me to keep going" underscores the importance of parental support in maintaining a positive outlook and determination to continue learning under less-than-ideal circumstances.

Surrounding the COVID-19 outbreak where students faced various obstacles, including limited access to technology and learning resources (Gula, 2022), the role of parents in offering emotional support becomes particularly crucial (Mabeya, 2020). The statement suggests that parents recognized the difficulties their child was facing and actively supported them by offering words of encouragement. This support likely helped the student overcome feelings of frustration, isolation, and other challenges associated with remote learning. Furthermore, this finding underscores the importance of open communication between parents and students. Parents who were aware of the challenges their children faced in adapting to distance learning were better positioned to provide the necessary encouragement (Msigwa, 2020). These comprehensive findings provide rich insights into the multifaceted roles played by teachers and parents in supporting students' learning during the COVID-19 outbreak (Mabeya, 2020; Rasmitadila, et al., 2020; Flewelling, 2022). Participants' responses highlight the adaptability of teachers in utilizing digital platforms to provide materials and support to their students. This adaptability is crucial in ensuring continuity in education during challenging times and emphasizes the need for ongoing professional development for educators in remote teaching methods. Parents emerge as significant motivators and facilitators of effective learning (Nyamizi, 2022; Msigwa, 2020). The emphasis on study-friendly spaces and accountability underscores the importance of a supportive home environment in a student's educational journey (UNESCO, 2021). Encouraging independent learning and digital literacy skills is essential, especially when parents may not be proficient in technology. This reflects the need for a comprehensive approach to education that considers both in-school and at-home learning environments (Ionescu, et al., 2020). Acknowledging that some parents may have limitations, such as busy work schedules, highlights the need for flexible support structures that accommodate various family dynamics. This recognition underscores the importance of equity and inclusivity in educational support (UNESCO, 2021; Schleicher, 2020; Msigwa, 2020).

Recommendations

Informed by these findings, the present study recommends that teachers continue to explore innovative teaching methods like recorded audio lessons and supplementary resources to enhance students' learning experiences.

Furthermore, the study suggests providing professional development opportunities to equip educators with the necessary skills for effective distance teaching.

Limitations of the Study

It is important to acknowledge some limitations of this study. First, the findings may be context-specific to the selected location of the study, and caution should be exercised when generalizing the results to other settings. Additionally, the qualitative nature of the study limited the ability to establish and quantify the prevalence of the impact of distance learning to secondary school students in the wake of the COVID-19 pandemic. However, the rich and detailed insights obtained through qualitative methods contributed valuable knowledge and understanding of the phenomenon under study. Future research could expand on these findings by conducting comparative studies in different geographical regions and exploring the effectiveness of specific interventions or programs aimed at improving distance learning approaches in Tanzania basic education.

REFERENCES

- Basil, P. T. (2021, March). Parents and teachers' engagement in using cognitive apprenticeship for child's development of authentic problem-solving skills in Tanzania. In *5th International Conference on Early Childhood Education (ICECE 2020)* (pp. 234-239). Atlantis Press. <https://doi.org/10.2991/assehr.k.210322.050>
- Bisanda, E. T. (2016). Empowering learners for effective open and distance learning. In *Third Open and Distance Learning Conference in Namibia* (p. 8).
- Bisanda, E. T. (2022). Open and distance learning: The continental education strategy for Africa and the United Nations sustainable development goal 4 (SDG4) Engagement. *West African Journal of Open & Flexible Learning, 10*(2).
- Gula, L. P. (2022). *Speech classes during covid-19 pandemic: Challenges faced by the classroom teachers, I*, 53–70.
- Ibrahim, G., Luzinge, H., & Kapanda, G. (2020). Teaching and learning experiences in medical education during the covid-19 pandemic: The case of kilimanjaro christian medical university college (kcmuco), Tanzania. *Journal of Learning for Development, 7*(3), 433–446. <https://doi.org/10.56059/jl4d.v7i3.448>
- Kitosi, F. (2021). Assessment of the implementation of internal quality assurance in community secondary schools in tanzania: A case of curriculum implementation in Kahama town council flora. *Frontiers in Neuroscience, 14*(1), 1–13.
- Mabeya, M. T. (2020). Distance learning during COVID-19 crisis: Primary and secondary school parents experiences in Kenya. *East African Journal of Education Studies, 2*(1), 173–186. <https://doi.org/10.37284/eajes.2.1.249>
- Manyengo, P. R. (2021). Digitalization in teaching and education in the context of COVID-19. United Republic of Tanzania. *Background Report*, 1–14.
- Matete, R. E., Kimario, A. E., & Behera, N. P. (2023). Review on the use of eLearning in teacher education during the coronavirus disease (COVID-19) pandemic in Africa. *Heliyon, 9*(2), e13308. <https://doi.org/10.1016/j.heliyon.2023.e13308>
- Msigwa, F. M. (2020). COVID-19 Pandemic and its implications on

- education systems in Tanzania. *International Journal of Science and Research (IJSR)*, 9(August), 1–29. <https://doi.org/10.21275/SR20828103844>
- Nyamizi, L. G. (2022). Teachers' perceptions on the effect of COVID-19 on Mathematics performance in Tanzania. *Journal of Education and Practice*, June. <https://doi.org/10.7176/jep/13-14-04>
- Oseni, E. F. (2017). The relevance of entrepreneurship education to the. *International Journal of Small Business and Entrepreneurship Research*, 5(5), 1–8.
- Sari, T., & Nayir, F. (2020). Challenges in distance education during the (Covid-19) pandemic period. *Qualitative Research in Education*, 9(3), 328–360. <https://doi.org/10.17583/qre.2020.5872>
- Schleicher, A. (2020). The impact of COVID-19 on education: Insights from education at a glance 2020. *OECD Journal: Economic Studies*, 1–31.
- Seni, A. J. (2022). Effects of Covid-19 pandemic and coping mechanisms of ordinary level secondary school finalists in Tanzania. *Uongozi-Journal of Management and Development Dynamics*, 31(2), 1–31.
- UNESCO. (2021). *The impact of the COVID-19 pandemic on education: International evidence from the responses to educational disruption survey (REDS)*. International Association for the Evaluation of Educational Achievement.
- World Health Organization (WHO). (2020). *Timeline of WHO's response to COVID-19*. WHO.