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## Exploring head teachers' support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

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**THE AGA KHAN UNIVERSITY**

**Institute for Educational Development, East Africa**

**EXPLORING HEAD TEACHERS' SUPPORT FOR ONLINE LEARNING DURING  
THE SCHOOL CLOSURE AS A RESULT OF COVID-19: A CASE OF TWO PRIMARY  
SCHOOLS IN MOMBASA COUNTY, KENYA**

BY

JUMA RASHID HAJI

**A Research Project Submitted to the Institute for Educational Development, East Africa in  
Partial Fulfillment of the Requirements for the Degree of Masters in Education  
Science Education**

**Dar es Salaam, Tanzania**

**2022.**

**APPROVAL**

**THE AGA KHAN UNIVERSITY**  
**Institute for Educational Development East Africa**

**Student name: Juma Rashid Haji**

I hereby give my permission for the research project of the above-named student, for whom I have been acting as supervisor, to proceed to examination.



(Research Project Supervisor)

**Dr. Nipael Mrutu**

Date: 11<sup>th</sup> May, 2023

The members of the Research Project Evaluation Committee appointed to examine the research project of the above-named student find it satisfactory and recommended that it be accepted.



(Internal Examiner)

**Dr. Winston Massam**

Date: 11<sup>th</sup> May, 2023

## **DEDICATION**

This work is dedicated to my daughter Saumu who gave me the strength and hope to further my studies and understood that being away from home was due to the important task of pursuing my education.

## ABSTRACT

The emergence and spread of COVID-19 in the world prompted most governments to close all educational institutions to halt the spread of the virus. Schools in Kenya were closed for nearly 7 months, resulting in a learning loss. The Kenyan government promoted online learning through mass media such as television and radio, while the Kenya Institute of Curriculum Development (KICD) uploaded learning resources to their i-cloud educational portal. However, students and teachers faced several challenges that made it difficult for such headteachers to provide effective support for online learning. The researcher selected two primary schools, two headteachers, two deputy headteachers, two senior teachers, and twelve teachers to conduct the study. Purposive sampling was used to select all the respondents, and semi-structured interviews and focus group discussions were also held with the selected teachers. The study gathered and recorded the lived experiences of 18 participants. Thematic analysis was used in the research to represent the support provided by headteachers to conduct online learning. Parental engagement was evident in the online classes and teachers tried to ensure equity, but this was not adequately addressed. The study noted that although teachers had received training in facilitating online learning, this was not done well. The study highlighted key challenges that hampered the smooth implementation of online learning, divided into three categories: challenges shared by both students and teachers, challenges faced by students, and challenges faced by teachers. Internet fluctuations and interruptions, background noise, and a lack of data bundles were among the difficulties that both students and teachers experienced. Shared devices, lack of parental or guardian supervision, some parents' lack of cooperation, and poverty were obstacles that students had to overcome. The scheduling of the online classes, downloading and installing the applications that supported online learning, and dealing with interruptions from their children at home while teaching online were all challenges experienced by teachers. The study recommended solutions to the identified challenges and suggested the areas that needs further research.

## **AKNOWLEDGEMENT**

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## **DECLARATION OF ORIGINALITY**

I, **Juma Rashid Haji** do hereby declare that this dissertation is my own original work. It represents my efforts and has not been taken entirely or partially without acknowledging the source or who provided the information.

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**Table 1:** Observation schedule for availability and use of digital devices /facilities

## LIST OF ABBREVIATION

<b>BOM</b>	: Board of Management
<b>CEMASTEА</b>	: Centre for Mathematics Science and Technology Education in Africa
<b>CDE</b>	: County Director of Education
<b>COVID-19</b>	: Corona Virus Disease-2019
<b>FGD</b>	: Focus Group Discussion
<b>ICT</b>	: Information Communication Technology
<b>LCP</b>	: Laptop Computer Project
<b>LDDs</b>	: Learners’ Digital Devices
<b>LMS</b>	: Learning Management System
<b>MOE</b>	: Ministry of Education
<b>NACOSTI</b>	: National Council for Science Technology and Innovation
<b>ODeL</b>	: Open Distance e-Learning
<b>SDG:</b>	: Strategic Development Goals
<b>SMASE</b>	: Strengthening Mathematics and Science Education
<b>TDDs</b>	: Teachers’ Digital Devices
<b>TPACK</b>	: Technological Pedagogical and Content Knowledge
<b>TPD</b>	: Teacher Professional Development
<b>UNESCO</b>	: United Nations Educational Scientific and Cultural Organization
<b>UNICEF</b>	: United Nations Children Fund

## CHAPTER ONE: INTRODUCTION

### 1.0 Introduction

Online learning, also known as e-learning has been taking place in universities and colleges under the names of virtual learning and Open Distance e-learning (ODEL) (Ferri et al., 2020). In primary schools, online teaching and learning have been conducted in some parts of the world although in a small number of schools. Countries like Australia and America have been engaging primary school students in online learning even before the school closure because of the novel Corona Virus Disease (COVID-19) (Maher, 2014).

This study aimed to explore head teachers' support for online learning during the school closure because of COVID-19. A case study of two primary schools in Mombasa County, Kenya. As a result, this chapter presented the study's background, problem statement, the purpose of the study, research questions, significance of the study, definition of key terms, and chapter summary.

### 1.1 Background to the Study

Alsaleh (2021) stated that during the school closure in 2020 brought on by the spread of COVID-19, the headteachers' responsibilities included supervising online teaching, training teachers, and keeping parents informed about the development of online teaching and learning. Similarly, in Kuwait, professional learning communities (PLCs) played a significant role in supporting online learning. The headteachers supported online teaching and learning by offering guidance, oversight, support for instruction, empowerment, and delegation of authority (Alsaleh, 2021). The headteachers therefore, had a great role to play to make sure that online learning was a success.

Many countries took a drastic step of shutting down schools in March 2020 when the spread of COVID-19 reached a pandemic level all over the world. As a result, schools tried to rush to change to online teaching and learning in a bid to ensure there was continuity of learning and to avoid learning loss (Kristóf, 2020).

In the USA, a study by Potyrała et al. (2021), noted the efforts of headteachers to promote cooperation with all members of the school community to ensure successful online learning. The study also discovered that team building exercises helped make online learning successful. In addition, teamwork gave teachers psychological support, especially those who had difficulties

when using communication technologies. The heads of various schools also used to call one another and share their best experiences.

According to Moyi (2020), the Kenyan government, in a bid to engage students in learning during the pandemic while at home, rolled down remote educational programs in TVs and radios. Although this was a positive gesture towards the right direction, only few students could access learning as many households in Kenya still grapple with the challenge of not being connected to electricity let alone internet connectivity (Kathula 2020).

Based on this background, this research study was conducted focusing on headteachers' support towards online learning in primary schools. The researcher feels that headteachers are better positioned to mobilize resources through engagement with relevant stakeholders and make online learning a reality in primary schools.

## **1.2 Statement of the Problem**

There should be no interruptions to the learning process in schools. This is so that learners may acquire the knowledge, skills, and attitudes necessary for good development during the learning process (Dangwal, 2017). The main roles of the school headteachers is to ensure that there is effective teaching and learning in the schools. They must also build relationships both inside and outside the schools, improve the conditions for teaching and learning, and evaluate and monitor the teaching and learning process to guarantee the continuity of teaching and learning (Day et al., 2020).

Most countries in the world abruptly closed schools during the COVID-19 epidemic in 2020. Even though remote learning was adapted by countries across the world, at least 463 million children could not access online learning (UNICEF, 2020). The concepts the students acquired before the school closed were forgotten and unlearned.

If learning was allowed to proceed through online learning without interruption, all of these issues could be avoided. Therefore, the purpose of this study was to learn more about the headteachers' support for online learning during school closure in Mombasa County in Kenya due to COVID-19. Given that it was the first time an initiative like this was carried out in primary schools in Mombasa, this will go a long way toward determining how online learning was conducted and how it could be made better. Data was collected and analyzed using a qualitative approach to gain an in-depth understanding of the support systems that primary school headteachers put in place to successfully implement online learning.

### **1.3 Purpose of the Study**

The purpose of this study is to:

- a) To point out support strategies that head teachers can adopt in order to promote online learning.
- b) To share experiences detailing the successes and challenges encountered while conducting online teaching and learning in primary schools.
- c) Inform teachers, parents, educational officers, and other stakeholders on the importance of concentrating their efforts with the aim of ensuring that online learning is implemented.

### **1.4 Research Questions.**

The research was guided by the following questions:

#### **Key Question**

What roles did the head of schools play in shaping online learning in primary schools during the school closure because of COVID-19?

#### **Subsidiary Questions**

1. How did the heads of schools conduct community mobilization to support online learning?
2. What did the head of schools do to ensure equity in online learning?
3. How did headteachers mobilize resources to conduct online learning?
4. What challenges did heads of schools face in promoting online learning in schools?

### **1.5 Rationale and Significance of the Study**

When schools in Kenya were closed in March 2020, many children stayed idle at home and without any form of formal learning. This called for a shift from the conventional face to face learning to virtual or online learning. However, this type of learning was very minimal especially in public primary schools. Although many studies show how to conduct effective online teaching and learning, few teachers engaged the students online during the school closure.

The researcher believes that very few primary schools engaged their students in online learning. He also believes the head teachers had significant roles to play in supporting online learning. It is for these reasons that the researcher intended to explore the headteachers' support of online learning during the COVID-19 era. Arguably, online learning offers opportunities to students as it helps them to continue learning and engage with their teachers after school hours.



Therefore, the findings of this study will help the head teachers to improve their support towards online teaching and learning in their respective schools.

### **1.6 Significance of the Study**

This study will inform the school headteachers on how best they can support online learning. This can be done through studying the challenges captured by the researcher in this study and find ways on how to overcome the mentioned challenges. The study will also guide the teachers in practicing online learning as a regular school activity. This might be achieved through the teachers engaging their students in the evenings after school and during the school recess to guide their student on the assignments they might have been given. In addition, this research can be used by other researchers to develop their studies through checking the suggestions for further studies as pointed out by the researcher. Finally, will enlighten the educational stakeholders and other well-wishers on the need to support online learning especially in primary schools where there have been minimal efforts to engage the students in virtual learning.

### **1.7 Scope of the Study**

The study was limited to two public primary schools in Kenya's Mombasa County. The researcher chose the two schools and the study location mostly because they were convenient to him. He was familiar with the study's location. The findings of this study may contribute to the understanding of how effectively online study can be done and supported in Kenyan primary schools.

### **1.8 Assumption of the Study**

Before commencing the study, the researcher made the following assumptions:

- a) The researcher's selected schools effectively conducted online learning, and the headteachers provided enough support.
- b) The schools encountered a variety of challenges when conducting online learning.
- b) The selected schools had an ICT infrastructure that allowed for learning online.
- d) The respondents would voluntarily participate in the study and give the researcher accurate information.

### **1.9 Definition of key Terms.**

**Blended Learning:** An educational approach that combines traditional face-to-face teaching with electronic and online learning.

**Online learning:** Online learning is a type of education where students are taught in a completely virtual setting.

**Online teaching:** A teaching strategy where a teacher uses online resources while teaching their class in an asynchronous manner.

**Professional Learning Community:** A team of educators who collaborate, share expertise, and meet regularly to enhance teaching techniques and student academic performance.

**Teacher Professional Development:** Activities that improve a person's abilities as a teacher, including their expertise, knowledge, and other qualities.

### **1.10 Dissertation Overview**

This research study is made up of five chapters. The study is introduced in the first chapter. A review of the introductory literature relevant to the current study is presented in Chapter 2. A thorough explanation of the methodological principles used in the study is provided in the third chapter. Data presentation, interpretation, and discussions are covered in Chapter 4. The research findings are presented in Chapter 5 in relation to the research questions addressed by the study. The conclusion and recommendations resulting from the research findings are also presented.

## CHAPTER TWO: LITERATURE REVIEW

### 2.0 Introduction

This chapter presents a literature review on head teachers' support for online learning due to school closure in 2020 due to the spread of COVID-19. It begins by highlighting the characteristics of an effective online class. It also discusses the significance of Teacher Professional Development and Training in online teaching. The concluding section discusses the challenges to online learning in primary schools that teachers and students face.

### 2.1 School Readiness

Although heavily promoted during the COVID-19 pandemic, online teaching and learning have been shown to be a weak alternative to face-to-face learning in a physical classroom. The Corona Virus Disease (COVID-19) outbreak spread anxiety around the world, leading schools to close abruptly (Onyema et al., 2020). Job losses for parents and reduced access to education were among the negative consequences of COVID-19's influence. Many schools and educational stakeholders were unsure of what strategies to adopt to keep teaching and learning going.

According to Auma and Achieng (2020), schools must be ready to embrace Information Communication Technology to perform online learning (ICT). To undertake online learning, it is critical to have a good and functional ICT infrastructure. This confirms the fact that it is impossible to conduct online lessons without having access to digital devices that have internet access capabilities and the presence of internet connection such as Wi-Fi or data bundles. This argument is also supported by Ferri et al. (2020), when they pointed out that challenges in technology, methodology for conducting online learning, and social connection between teachers and students were all hurdles to successful online teaching and learning. As a result, many students lacked the personal digital devices necessary to participate in online classes. Teachers and students both lacked digital literacy abilities, which hampered the smooth implementation of online teaching and learning.

In Kenya, some primary schools had successfully transitioned from face-to-face to virtual teaching, with students learning remotely. This was much easier for private schools because they already had digital devices that they used during school closure (Barasa, 2021). Public schools, on the other hand, did not provide adequate learning virtually. And only a few students could participate in online learning because most of them did not have access to digital devices at home. This made it difficult for the school heads to provide the necessary support as they had limited

resources. The researchers therefore had interest in public primary schools because of the inadequate nature of most public schools lacking adequate resources.

## **2.2 Features of Effective Online Learning.**

Effective online learning requires enough student-teacher contact, just as it does in a conventional face-to-face classroom. Although the interaction takes place online, it should be frequent. Learning should be collaborative and, to the greatest extent, student-centered. Learners should be actively involved rather than passive listeners. Ideally, teachers should use a variety of approaches to offer learning in which they involve students in real-time activities and allow them adequate time to complete the assigned tasks (Cheung & Cable, 2017). Although this is supposed to be the ideal situation, it needs to be realized with adequate ICT devices. For this to be viable, the researcher feels that the public primary schools in Mombasa needs a lot of support from relevant stakeholders.

James et al. (2022) agree to this when they argue that since its start, online education has grown significantly, and this tendency is expected to continue post-pandemic. Successful online teachers use active learning, communicate well with students, and use universal design and reverse design concepts in lesson delivery. Furthermore, teachers who teach online require institutional support in the form of professional development opportunities to nurture their continuing growth and course improvement; student support for online learning via training modules and technology assistance; and facilities such as testing centers.

Regardless of the success of online teaching and learning, there are several prerequisite requirements that must be in place for it to take place effectively, needs include; teacher professional development training on approach in conducting online teaching, strong or stable internet connectivity, availability of ICT devices that are accessible to both teachers and students, parental involvement, and finally effective administration that will conduct a follow up on the outcomes.

## **2.3 Teacher Professional Development Training (TPDT) on Online Teaching**

Teachers must complete professional training and obtain a certificate to be certified to teach students. Similarly, teachers attend refresher courses in form of TPD anytime the curriculum or instructional methods change. As a result, the teachers' abilities are upgraded, further developed, and brought up to date. According to a Swedish study, educators do not utilize digital technologies primarily for instructional goals. As a result, teachers require substantial pedagogical training in

developing digital instruction (Amhag et al., 2019). Furthermore, teachers must find the pedagogical surplus value in their own teaching and learning contexts using digital resources to improve motivation for real, practical, and subject-specific successful examples offered by experienced trainers. The study further recommended that teachers need to be trained following the Technological Pedagogical and Content Knowledge (TPACK) model for them to be competent in teaching online.

Research conducted in China by Zhang et al. (2017) asserted that, teachers need training on how to conduct online teaching. However, this advocated for peer support. Teachers may use an online professional learning community (PLC) to exchange materials, solve problems, build working practices, and enhance their performance. According to this study's findings, developing teachers' pedagogical, content, and technical knowledge (TPACK) may increase the effect of peer coaching, as may conducting training for teachers prior to the peer coaching process. This study however could not put it clearly on how the peer training should be conducted effectively.

Although digital technologies are available in the school environment, worldwide research shows that they are ineffective in terms of students' educational attainment. Teachers must recognize and utilize the possibilities of digital technology in their daily duties. However, to enhance their skill in using technology for teaching and learning, teachers require training and guidance. If this is not done, students may lack the requisite coping abilities for their future prosperity in the information era.

Teachers, on the other hand, found it challenging to consistently adjust to new online technologies, even when earlier classes without the use of technology proved to be successful (Spiteri & Rundgren, 2020). The training of teachers on online teaching and learning could take three forms; Training initiated by the government, by the headteachers of schools and through mentorship by fellow teachers.

### **2.3.1 Government Initiated Teacher Professional Development Training**

In developed countries, the government took the initiative to train the teachers on pedagogical strategies to handle online learning. According to Morgan (2020), while students stayed at home during the school closure, teachers went to school to be trained on how to conduct remote learning. This shows the government's commitment to act fast to ensure there was continuity of learning. This study was informed by the literature, but it could not be contextually applied in Kenya. Given that the Kenyan government prefers the cascade model of training over

training teachers in their own schools, conducting trainings in schools is a very expensive endeavor.

In Kenya, the government did not train teachers during the school closure. Instead, when the schools reopened, the teachers were trained. The training was conducted by the Centre for Mathematics, Science, and Technology Education in Africa (CEMASTEА). These trainings took place in 2021 and 2022. It was designed for primary school teachers who were trained in online teaching and learning with a focus on Competency Based Curriculum (CBC) (CEMASTEА, 2022) Although this was a wise decision, only a few teachers were trained. This means that most schools that conducted online teaching and learning did so alone, with the support of the schools' headteachers and Board of Management.

### **2.3.2 Schools Initiated Teacher Professional Development Training**

Apart from relying on the government through the Ministry of Education to train teachers in Kenya on remote teaching and learning, some headteachers organized school-based teacher professional development by bringing in an expert to train the teachers at the school level. According to Abaci et al. (2021), school-based professional development produced highly effective teachers who improved student performance. The findings from the study revealed that teachers valued and found the school-based professional development program very useful.

Heap et al. (2021) agree that it is critical to provide TPD for teachers by developing and designing objectives that will assist teachers in becoming more effective in online teaching. The two findings reveal a high level of trainers participating in TPD and good pay for the trainers from the individual institutions. Kenyan public primary schools, however, are unable to afford to engage individual trainers to perform TPD in a classroom setting. This triggered an interest in the researcher to find out how TPD was conducted and funded at the school level.

### **2.3.3 Peer Mentorship by Teachers**

Teacher peer mentoring can help with a variety of aspects of professionalism. It can be used to induct new teachers into the classroom, foster collaboration, and share teaching strategies (Wilcoxon et al., 2019). According to Shanks et al. (2022), for mentoring to be effective, more time should be focused on developing relationships between mentors and mentees. Teachers can build a dedicated team that can work together to meet their expectations through mentorship.

Teachers were forced to go virtually to teach students online after the school closed in 2020. This method of teaching was unfamiliar to many teachers, particularly those who taught in primary schools, and it proved difficult for many (Sepulveda-Escobar & Morrison, 2020). Teachers were therefore trained in some schools, but no virtual teaching and learning training was provided. Peer teaching and support came in handy at this point.

Those teachers who did not understand how to conduct online instruction were guided by those who did (Spiteri & Chang Rundgren, 2020). This resulted in an effective collaboration strategy, giving teachers the confidence to manage students virtually. Teachers also had to join classes in pairs to support one another. This was critical because if one teacher was disconnected from the class due to internet failure or fluctuation, the other colleague had to take over and ensure that the lesson continued uninterrupted.

## **2.4 ICT Infrastructure**

Online teaching and learning need advanced technology and reliable internet access. Most teachers use their own digital devices and acquired their own internet subscriptions, such as data bundles at the peak of COVID-19 in 2020. The internet's strength and speed vary based on internet service providers, regions, and nations. As a result of these infrastructure shortcomings, most teachers find it difficult to undertake successful online instruction. Therefore, they should adopt Learning Management Systems (LMS) that allow them to provide asynchronous activities that demand less internet speed (Shagiakhmetova et al., 2022).

According to Chris (2015) Kenya's ICT policy paper stresses the importance of digital technology. TV and video equipment, radio lessons, computers, and ICT infrastructure are among the items mentioned. The ICT policy supports the use of the technology to improve educational quality and accessibility. The shortage of ICT equipment in learning institutions, particularly secondary and primary schools, has been identified as a drawback.

The study also noted that this divide is crucial due to elevated levels of poverty, sluggish rural electrification, and frequent power outages. Furthermore, the study found that, while stable energy is available in urban areas, the barrier to using ICT equipment is the inflated cost of internet service, high-priced digital gadgets, and inadequate infrastructure. Finally, efforts to properly establish ICT infrastructure in primary schools are limited.

Under the Laptop Computer Project (LCP), the Kenyan government provided tablets, laptops, and projectors to all public primary schools (Sitienei, 2015). The tablets are known as

Learners' Digital Devices (LDDs), while the two laptops are known as Teachers' Digital Devices (TDDs). Even though these devices were provided prior to the emergence of COVID-19, schools were supposed to use them during the school closure to continue teaching students remotely.

This was not the case, however, because primary schools were not prepared to go fully virtual. The devices were insufficient, there was no internet connectivity in the schools, and many lacked computer labs, while others were not connected to the power grid. The devices could not benefit students much as they were at home. The headteachers, therefore, found it hard to reach all the students and involve them in online learning. Ferri et al. (2020) conducted a study based on the COVID-19's experiences to examine the benefits and challenges of emergency remote teaching. According to the study's findings, distant learning is still being affected by a lack of digital device accessibility and poor internet connectivity.

## **2.5 Parental Engagement**

Parental support is required for online learning to be successful. This is because, in most situations, especially in houses without computers, the parents' phones are utilized to attend online lessons. According to research conducted in Indonesia by Novianti and Garzia (2020), parents play the role of being the children's learning partners during online classes, particularly for primary school students. The study analyzed data using both qualitative and quantitative methodologies, and the findings revealed that 81.7 % of parents' time was spent supervising their children. 64% of parents provided learning facilities for their children. It was therefore established that most parents are engaged in their children's learning when performed online, despite a significant percentage of parents facing problems.

Such difficulties include combining parental obligations, overseeing learning, and simplifying teachings for their children if they do not grasp. Similar research done in Nairobi; Kenya revealed that Kenyan parents may embrace remote learning (Emmanuel & Ondiek, 2021). A descriptive survey design was used in the study. The study's primary data was gathered through online questionnaires. 39.8 percent of parents said they would advocate remote or online learning, while 24.8 percent said they would not.

This implies that parental engagement in online learning is difficult but important at the same time. Notably, many parents struggled to provide digital tools for their children, internet access in the form of data bundles, and understanding their duties in monitoring online learning.



It is also worth noting that most parents were not at home during the school closure, and their children attended unsupervised online classes. As a result, the students visited other websites on the internet that were unrelated to them (Dontre, 2021). This worsened because the students were not required to turn on their cameras while attending the online classes. Some of them entered the classroom, turned off their video cameras, and went about their business without paying attention to the lesson.

According to Al-Jarf (2022), Parental participation in primary school online classes, as seen from the perspective of Saudi Arabian parents and educators, is stated in. more parents (54%) than teachers (46%) support parents being present for their children's online lessons, especially if they are in the lower grades. However, more teachers (54%) than parents (46%) oppose parents being present for their children's online classes. Teachers and parents agreed that parents play a variety of academic tasks in primary school students' online classes, including planning, coordinating, observing students' attentiveness in class, inspiring, nurturing, and supporting online learning.

Those who do not like parental presence said historically, Parents do not attend face-to-face classes, so the regulations for parent attendance in online classrooms should be the same as those for parent participation in face-to-face classes. Al-Jarf (2022) adds that children must have the chance to become accustomed to online learning, overcome obstacles, and gain self-discipline, a sense of responsibility, and autonomy. Teachers and parents agreed that parents should step in if a child has a learning challenge, internet access issues, platform issues, or trouble submitting an assignment.

In yet another study, the findings showed that throughout the epidemic, parents reported being quite involved in their children's online learning. However, there are still some issues with how to help students and the availability of learning resources at home (Novianti & Garzia, 2020) This is due to the lack of training that parents received regarding online education. A small number of parents knew how to use applications like Zoom, Google Meet, and Microsoft Teams. Additionally, there was little effort put into educating the parents on how to use the mentioned online learning tools.

Throughout the lockdown Covid-19 period, parents helped their children utilize mobile phones for learning by using WhatsApp to contact teachers. Teachers also contacted parents through WhatsApp with inquiries. (Abdurakhmanova, 2020). This study concludes that there is a

secondary or two-way communication pattern between education teachers and parents. Successful learning for both teachers and students depends on effective communication between them. As a result, the communication must be intense, ongoing, and involve other school personnel such as school principals, primary school teachers,

## **2.6 Equity, Equality, and Inclusion in Online Learning**

Students should have equal access to education, according to UNESCO (2017). This should apply to online learning as well as face-to-face classes. However, the school closure in 2020 due to COVID-19 impacted educational equality (Ydo, 2020). Learners from low-income families, girls, and those with disabilities were the most affected. COVID-19 caused numerous other crises, including job loss for parents of affected students. This had an impact on education, resulting in a significant disparity between students from wealthy families and those from low-income families. The gap was primarily in access to digital devices and internet connections.

Similarly, COVID-19 had a negative impact on the education sector in Kenya (Mbogo, 2020). The effects were felt negatively by marginalized households who struggled to make ends meet. With children at home because of the government's directive to close all learning institutions, remote learning was introduced via the internet, television, and radio. Although the goal was to reach all students, students from low-income families could not afford to access electronic devices and the internet in the form of data bundles (Ngwacho, 2020).

A study by Tate and Warschauer (2022) on evidence from research in primary schools indicates equitable difficulties with student attendance and achievement, access to online courses, and, most recently, the pandemic's effects. Equity issues have been noted in particularly three areas including the sudden influx of millions of people into online learning environments without the necessary access to modern computers and broadband internet access, the abilities required to succeed in less structured online classes, or teachers qualified to teach online.

## **2.7 Challenges Experienced While Conducting Online Learning**

Running an online learning program has its share of difficulties, just like other school programs do. Such challenges differed in different schools and families. This is because of the different dynamics such as economic status, geographical location, and accessibility to ICT devices to mention but a few.

### **2.7.1 Insufficient ICT Devices**

Aliyyah et al. (2020) emphasized that some of the challenges teachers faced were technical ones. These included the lack of laptops and cell phones by the parents. As a result, teachers were unable to teach students in the online courses because students could not log in. In addition, unreliable internet connections, limited or unavailable internet access, data charges, buying new devices, new programs, or apps, a lack of ICT skills, and inappropriate learning environments were issues that student encountered. The results of this study can assist students to learn better and have better access to resources during these trying times. This research provided both theoretical and practical recommendations to assist advance online learning in the future. (Rahiem, 2020)

Furthermore, the COVID-19 crisis widened social gaps in classrooms. Parents with greater financial resources send their children to schools with better digital infrastructure and teachers who may be more proficient in using digital technology. Some schools may be well-stocked with digital resources and teaching aids. Students from disadvantaged backgrounds attended institutions with inadequate ICT infrastructure and educational resources. (Tadesse & Muluye, 2020)

Karani and Waiganjo (2022) claim that changes in educational institutions prompted the introduction of online learning. Their investigation identified a few issues, including the digital divide, the substantial reduction in teacher-student contact hours, and the insufficient availability of essential competency demonstrations. On the positive side, they pointed out that teachers had the ability to design virtual labs and tutorials that let students access e-platforms whenever it was convenient for them. This study did not effectively represent what was happening in primary schools since it used a desktop form of data collecting and was focused on TVETS. This led the researcher to go out into the field to discover more about the dynamics and challenges that primary schools were facing.

### **2.7.2 Lack of and Inadequate Skills and Knowledge on using ICT Devices**

One of the challenges to using ICT among distance learners, according to research findings, is a lack of skills and understanding in using and functioning with ICT devices. Their negative opinions of learning with ICT tools are influenced by this. The results indicated that some online learners were given theoretical computer lessons, which made such lessons challenging and uninteresting for them, meaning they learned nothing. The research also revealed that students who were unable to use laptops, iPads, or other mobile devices would take their assignments to

commercial stationers, where a stationery attendant would type and arrange them. (Reginard, 2018)

Similarly, according to Andarwulan et al., (2021), some challenges that primary school teachers had in ensuring successful online learning included the readiness of the teachers to conduct online teaching and learning. He went further and explained that one of the indicators to measure readiness is teacher proficiency to apply technology in teaching. This means that without technological knowledge, it would be difficult for teachers to conduct online teaching which supports online learning.

### **2.7.3 Students get Distracted by Visiting Irrelevant Sites.**

Although there are benefits to online learning, one drawback is that students can be easily distracted by other online contents. Yunus et al., 2019 as cited in Lukas and Yunus (2021). The choice to visit websites not related to what the teachers are teaching is up to the students. Although they may appear to be logged into the class, they may be browsing other websites, and the teacher may not be aware of it because most students turn off their cameras during the online class sessions.

This claim also is supported by the observation made by Singh and Samah (2018) who noted that when students use internet-enabled digital devices like laptops and smartphones, they are more likely to visit social media sites like Facebook and disrupt their focus in class. When primary school students are involved, this may even be worse. Furthermore, Academic distractions are common in online classes. Students enjoy multitasking online by visiting irrelevant websites (Dontre, 2021). The most popular student distractions include Facebook and WhatsApp, both of which are social media platforms. In a virtual classroom, students might not be able to focus on all if they are not kept in check.

### **2.7.4 Lack of Infrastructure**

The absence of electricity was another issue that complicated online learning. This is because most devices, according to Kathula (2020), require electricity to operate. Students could not even charge their devices without electricity, making it impossible for them to access online classes. He continues by claiming that students would not be able to access resources online or even make copies of the assignments that were sent to them by the teachers if there was no electricity.

Additionally, some students were compelled to attend lessons on smartphones because they lacked the proper digital devices and were unable to access optimized digital content. (Ferri et al.,

2020) Although ubiquitous computing may be possible with mobile learning, there are many technological restrictions due to the lower level of functionality compared to desktop computers. The issue of optimizing the learning of digital content for mobile devices must also be addressed. By making content more effective, more time can be spent away from smartphones, which is crucial for students' levels of focus and attention.

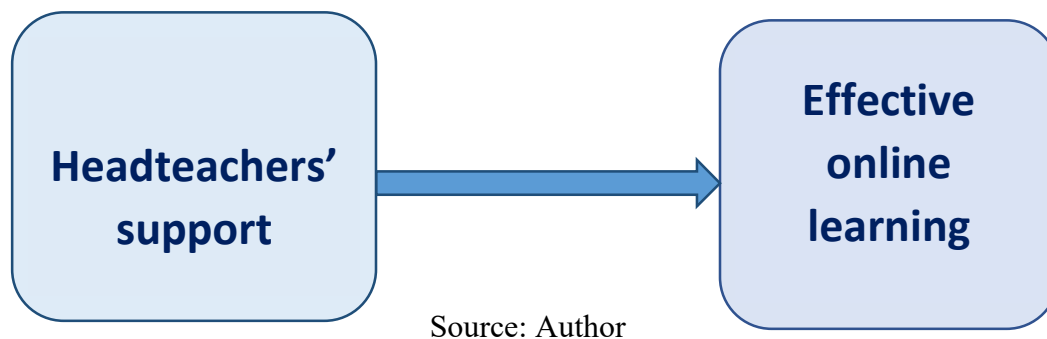
### **2.7.5 Lack of Monitoring and Supervision**

Xie et al. (2020) assert that, in an online classroom, it might be challenging to monitor or oversee students' learning. Students enrolled in online classes must exercise extreme self-control because they are susceptible to being easily distracted by social media, the news, or gaming. Some students could lack the drive to finish their assignments, or there may not be a teacher around to motivate or remind them to do their work. The situation and expectations in their home must also be considered because students may be in a challenging circumstance as they need to care for family members, must work to support their families, or live in a setting that is not favorable to learning.

Without any adult supervision or oversight of their online activity, students were attending online classes on their own. According to Efriana (2021), most parents were working throughout the day in 2020 when schools closed due to the spread of COVID-19. They were not at home with their children. As a result, they were unable to keep an eye on their children, mentor them, or help them with the problems the pupils were having. Similarly, Jena (2020) made the point that as students in online classes are dispersed across many locations, it is challenging for the teachers to monitor their activities in real time. Therefore, it is challenging to sustain their attention during the online class.

Moreover, students are exposed to the vulnerability of personal data exploitation in the online environment. This is aggravated in children more than in adults. Most children are not equipped to understand online privacy threats, and they are more likely to visit other social sites while taking online classes (Zhao et al., 2019). This may result in students interacting with strangers online who may exploit them. Although children's independence is important, so is their protection and safety. It is therefore critical that parents receive training on how to best support their children's safety while engaging in online learning. This can be done physically or by using applications that monitor children's online activities.

### 2.7.6 Conceptual Framework



For online learning to take place, headteachers need to support it fully just like they do in any other school programs. The headteacher can support online learning through involving various stakeholders. These can be the Board of Management, parents, local leaders, and the community. In addition, they can pull resources together by ensuring that there are sufficient devices, supporting teachers with internet bundles, installing Wi-fi in schools, and take an active role in ensuring that teachers get the required training that will provide skills to conduct online teaching and therefore support online learning. Finally, headteachers need to find out about the challenges that hinder online learning and offer mitigations to the best of their abilities. Once all these conditions are met, then there will be effective online learning.

### 2.7.7 Summary of Literature Review

The chapter reviewed previous studies that emphasized the themes of the current study. The chapter has demonstrated the importance of headteachers' support for online learning. Due to the spread of COVID-19, online learning was implemented in primary schools, particularly in Kenya, for the first time during the 2020 school closure. The literature has also shown how crucial it is to include other stakeholders to guarantee the success of online learning. However, there is still a lack of enough literature on studies that are contextual in the location where the study was carried out. Finally, the study showed a few of the challenges that online learning presented for students and teachers.

The next chapter presents the methodology of the study.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.0 Introduction**

In this chapter, the researcher concentrated on the methodology used to conduct the study, the study's design and rationale, and the research process. Furthermore, the chapter examined the research population, sample of the study and the sampling procedure, data collection process, and data collection tools. Data analysis and trustworthiness are also included and finally, the chapter concludes with ethical considerations and study limitations.

### **3.1 Research Approach**

The researcher used a qualitative research approach. This is so that a social or human issue can be explored in its own context using a qualitative approach to research, which has qualities that make this possible (Sutton & Austin, 2015). The researcher used this approach because it brings out the professional, social process and interactions that show the support of head teachers towards online learning in a school setup and the role the head teachers play in mobilizing the community, resources and ensuring equity of learners during the implementation of online learning.

### **3.2 Research Design**

Since a case study is an empirical investigation into a current issue occurring in a real-life setting, the researcher applied this approach (Yazan, 2015). The case study gave the researcher the opportunity to interact with the respondents in the real-life context of the sample schools explore the head teachership support for online learning during the school closure because of COVID-19

### **3.3 Research Site**

The research was carried out in Mombasa County, Kenya, in the Mvita sub-county. North Star Primary School (School X) and Baraka Primary School (School Y) were chosen as public schools. Baraka Primary School is a mixed-gender school, whereas North Star Primary School is a girls-only school. The researcher chose the two schools because the school are in an urban setting and the researcher had a feeling that the schools were at good positions to conduct online learning. The researcher also learnt that the two schools offered online learning during the school closure in 2020 due to the spread of COVID-19. This intrigued the researcher's interest, and he sought to

learn how the headteachers of these schools supported teachers and students in continuing to learn despite the school's closure because of the spread of COVID-19 in 2020.

### **3.4 Target Population**

In this study, the population was made of 16 participants. This was comprised of 2 headteachers, 2 deputy headteachers, 2 senior teachers and finally 5 teachers, from each school.

### **3.5 Sample and Sampling Procedure.**

The researcher used convenience sampling to select the schools to be studied and purposive sampling to select the administrators of such schools. This is so because each administrative position in a primary school, which includes the headteacher, deputy headteacher, and senior teacher, is held by a single individual. The administrators of a specific school, led by the headteacher, do not change.

Purposive sampling was also used to single out the teachers. These were those teachers who took part in the online teaching. This helped the researcher to gain rich data on the phenomenon under study (Etikan et al., 2016). As in this case, the support of headteachers towards online learning.

### **3.6 Data Collection Method and Instruments**

The data was gathered using two main methods: an observation schedule and oral responses, which included face-to-face interviews and focus group discussions. This was done to gain a better understanding of the headteachers' support for online learning. According to Campbell et al. (2020), the use of various data-collection procedures aided in triangulating the collected data. This aided the researcher in producing a more accurate and credible report. This is because the data is gathered from individuals with diverse perspectives to answer the same research questions.

#### **3.6.1 Observation**

This method was used to collect information about the ICT devices and facilities available in schools that offered online learning. This method of data collection was accurate because the researcher participated actively in the actual observation (Moser & Korstjens, 2018). It entailed physically checking the availability and functionality of the relevant devices. This was done in contrast to the checklist that the researcher had prepared in advance (see appendix XIII). This data collection method allowed the researcher to observe the availability of ICT devices in the schools and whether they are functioning and how they were utilized.



### **3.6.2 One-on-one Interview**

The researcher conducted one-on-one interviews with the school heads, deputy headteachers, and senior teachers of the two primary schools under investigation. A semi-structured interview guide was used as the instrument. The interviews assisted the researcher in gathering information about the headteachers' support for online learning. The researcher's cell phone was used to record the audio data. According to DeJonckheere and Vaughn (2019). This method enables the researcher to investigate the respondents' feelings, thoughts, and beliefs about a specific topic. The use of interviews also allows the researcher to collect detailed data while also allowing the researcher to probe further if more information is needed that may have been left out.

### **3.6.3 Focus Group Discussion**

This method was used to interview teachers who taught online during the 2020 school closure due to the spread of COVID-19. The Focus Group Discussion included five teachers each from the chosen school. This was done to get teachers' perspectives on how headteachers supported the online learning program in their respective schools. The FGD was conducted according to the researcher's Focus Group Discussion guide. O. Nyumba et al. (2018) asserted that FGDs are used to gain a comprehensive understanding of social issues. They go on to say that this method of data collection aims to generate data from a carefully selected group of participants.

### **3.7 Data Analysis**

The analysis of data should be an ongoing process (Creswell & Creswell, 2018). This prevents the researcher from becoming overwhelmed by the process if it is left until the end of data collection. As a result, progressive data analysis began during data collection to determine the need for additional probes. Most of the analysis was completed after the data collection was completed. The researcher transcribed the data from the one-on-one interviews and Focus Group Discussions based on the research questions and literature review. These were then organized alongside the data from the observation guides. The data were then categorized and grouped to form patterns and themes. The researcher continued to listen to the audio data to ensure its accuracy and consistency.

To assign specific responses to specific respondents, he made important comments and observations at the margins of the transcribed data. Using a color-coding technique, the data was later classified into different categories. After triangulating the data, the researcher was able to

identify distinct sub-themes and themes. The entire data analysis process resulted in a detailed description and subsequent conclusion on what entailed headteachers' support for online learning during the 2020 school closure because of COVID-19.

### **3.9 Ethical Considerations**

To collect and produce useful and reliable data, the researcher considered ethical principles of what is good and bad, right and wrong, or what is intended to be done and what is not supposed to be done (Cohen et al., 2017). The researcher sought ethical clearance from the Aga Khan University before proceeding to conduct the research. An introductory letter was obtained from the Aga Khan university to identify the researcher. In addition, the researcher applied for research permit from the National Council for Science Technology and Innovation (NACOSTI), in Nairobi-Kenya. Thereafter the research permit was sought at the County Commissioner's office in Mombasa, County Director of Education (CDE) in Mombasa County and finally permission to conduct research was sought from the school headteachers in the schools where the study was conducted.

The informants were respected, and no coercion was used to gain responses. The researcher practiced justice by treating the respondents equally and without any bias. Informants were given consent forms and told of their right to quit the study at any time without repercussions. The researcher made sure that the information gathered was not changed or fabricated to uphold integrity. Finally, the confidentiality of the participants was guaranteed by pseudonyms and the data collected was secured through password in the researcher's laptop where he is the only one who accessed it.

In reciprocity, the researcher held workshop on online teaching and learning in one of the schools under the study. The researcher could not do the same in the remaining school due to time constraint. However, the researcher intends to share the study's findings with the selected schools that took part in the study.

### **3.10 Trustworthiness, Rigor, and Credibility**

To verify the data sources, The researcher used a variety of data collection methods (Cai & Zhu, 2015). The rigor of the research is improved using multiple sources. In addition, he repeatedly and creatively posed questions in subsequent interviews to assess the honesty of the data to ensure its reliability. Participants may be using selective recall in this case, which increases the likelihood that events will be remembered in a particular way. To capture everything for data

analysis and to avoid any biases brought on by taking notes, the researcher also used audio-recorder app in his cell phone to record the interviews from each interviewee (Pandey, 2019).

The data collected from interviewing the informants and from the observation checklists with reference to digital devices and ICT facilities was analyzed by the researcher and compared for reliability. In addition, the researcher created an audit trail (Lester et al., 2020). This required him to keep track of every aspect of the research, including interview transcripts, data from observation checklist, notes from casual conversations, and other field records. The data is kept hidden away as proof of the research. Having interacted with some of the participants before the study, the researcher continuously reflected on the research process to enable him to reduce barriers of participant vulnerability for reflexivity.

Moreover, the researcher tried to be objective by basing his interpretations on the data gathered because all interpretations of data collections are subjective (Flick, 2018). To prevent any biases on the researcher's part, sharing the information with a critical friend from the cohort facilitated his frequent questioning and critical analyses of his work. To ensure its accuracy, the researcher also showed the participants the recorded data (Belotto, 2018).

### **3.11 Limitation of the Study**

Given that this study used a case study model, it was limited to two public primary schools in an urban setting in Mombasa County on Kenya's coast. The sample size was limited to 16 participants. As a result, the findings may not be generalizable to other areas or contexts, particularly schools in remote areas. Strom and Viesca (2021) observe that a variety of contextual dynamics and realities have a greater influence on school interactions. It is important to note that both schools in this study are in urban areas but had very different experiences. As a result, even in similar contexts, one case cannot reflect the experiences of another.

The researcher had more to do, but there was a limited amount of time. It was difficult to schedule interviews with the school's head teachers because of their busy schedules. However, the researcher overcame this by being persistent. The researcher believes he would have the chance to gather much richer data if he had more time.

Furthermore, the price of the research was a little expensive. This is because the study was carried out in an urban area where moving around required paying for transportation. This was a

little expensive. At one point, the researcher learned that a headteacher who was scheduled to be a part of his study had been transferred. The researcher had to follow this headteacher to his new work location to collect accurate data.

### **3.12 Conclusion**

This chapter discussed the research approach used by the researcher, the research design, the research site, the sample and sampling procedure, data collection methods and instruments, ethical issues, trustworthiness and rigor and credibility, and finally the conclusion of the methodology. The findings of the study are discussed in detail in the subsequent chapters.

## **CHAPTER FOUR: PRESENTATION, ANALYSIS, AND DISCUSSION OF RESEARCH FINDINGS**

### **4.0 Introduction**

This chapter focuses on the research findings analysis and discussion. The findings and analysis have been generated from interviews, focus group discussions and observation schedule. The data analyzed was collected from two public primary schools. The chapter is divided into the following themes: community mobilization for online learning, ensuring equity in online learning, mobilization of resources for online learning, and challenges that school headteachers faced when promoting online learning in schools. The challenges were categorized into those faced by the teachers, those that affected students only and those experienced by them and the students.

### **4.1 Community Mobilization to Conduct Online Learning**

Schools are an important part of the communities in which they are located. For a school to run smoothly, different stakeholders should work together to pool resources with the goal of positively impacting the school (Stubbs & Warnaby, 2015).

#### **4.1. Parental Involvement**

Schools were required to involve the community to teach students online during the 2020 school closure caused by COVID-19. The most significant community members were the parents. This is because the students were at home and their parents or guardians were the only people who could get in touch with them. Therefore, to either allow students to join an online class or to receive learning resources from the teachers via the parents' phones, the teachers had to get in touch with the parents via social media, such as WhatsApp. To back up this claim, headteacher X was quoted to have said:

“We used the smartphone, uh, um, so we communicated with our parents through WhatsApp walls and, uh, informed them that we shall continue with normal teaching and learning using the WhatsApp and our parents were ready to cooperate” (Headteacher interview school X 11<sup>th</sup> October 2022).

Also, when the headteacher from school Y was asked about how parents were involved in online learning during the school closure, he had the following to say:

“So, we used the phone communication, and this was done by the class teachers who sensitized the parents on the importance of enrolling their children for online learning and

they also explained to the parents the tools which will be required and mostly were the smartphones of the parents and a few of those who had laptops at home..." (Headteacher interview school Y 11<sup>th</sup> October 2022).

In addition to engaging only the parents, the headteacher of school X met with the school's Board of Management (BOM) to inform them about the online learning and to seek support in the form of data bundles for the teachers who would be conducting the remote classes.

One of the ways the parents were involved was through discussions with the BOM. The discussions focused on the use of social media by teachers for online learning, including WhatsApp. But challenges like a lack of data bundles emerged, prompting the BOM to decide to support the teachers.

Interestingly, the deputy headteacher from school X during the interview explained that, to get parents involved and support online learning, they first had to teach them how to use tools like Zoom so that they could help their children at home while they were enrolled in online classes. She had this to say:

"We sensitized the parents and we also had to teach them. First, we had to guide the parents to make sure that they were good parental guidance because the learners sometimes, you know... they can go astray and go to other portals which were irrelevant, so we had to sensitize them about the etiquette of using the gadgets." (Deputy headteacher school X 30<sup>th</sup> September 2022)

To support the above claim, Sallis (2019) conducted research concerning about the importance of parental involvement in schools' affairs. The findings discovered that, The Board of Management is the link between the school and the parents' interests. This study aligns with another research of Lawrence and Fakuade (2021) whose results demonstrated that parental involvement and learning participation significantly and favorably influenced students' commitment to online learning during the COVID-19 school closure.

This means that, there is importance of community involvement in online learning, particularly in engaging parents and guardians. Because the schools were closed, they were the only link between the teachers and the students. Involving the BOM was a wise decision because the board represents the interests of the parents and would help to ensure that most, if not all, students attend the classes. Parental training on the use of the learning platform like zoom as in the case of school X, was

critical because parents and guardians would assist learners in navigating the platform and in the monitoring process.

## **4.2 Equity in Online Learning**

To support students without bias or discrimination during the teaching and learning process, fairness and inclusion must be promoted. By doing this, it is made sure that every student has access to the learning resources, teachers, and interventions they require to succeed. In this study, the aspect of equity in online learning is discussed under two sub-themes namely equity in joining the online class and equity in accessing learning materials.

### **4.2.1 Equity in Joining the Online Class**

Students enrolled in online classes, like those enrolled in face-to-face classes, must have equal access to education. This was not the case in the two schools that were involved in this study. Furthermore, not all the students were reached because many of them lacked digital devices such as laptops, computers, and smartphones, as well as reliable internet. According to (Goudeau et al., 2021), many students were disadvantaged by equal access to digital resources. Even those with computer and internet access had to print the learning resources sent by the teachers, and access to printers was difficult.

When headteacher from school X was interviewed, she claimed that they only targeted classes 8 and seven and later dropped the class 7 to concentrate with the class eight students as they were approaching their national examination to transit to secondary schools.

“We started off with our candidates, that was the Class eight, and we brought a few from class seven. But the class that had majority of students was class eight...so we left class seven aside.” (Headteacher interview school X 11<sup>th</sup> October 2022).

However, in school Y, the researcher noted that all the classes were included in online classes but not all the students could participate in the lessons. The headteacher from school Y narrated that:

“We focused on the entire school, from PP1 (pre-primary one) to class 8. No class was overlooked...they are our students. And if we continue to say that we are aiming for the examination class, it means that learning will always begin in that setting. Because of this, we felt that it was crucial to establish a solid foundation from the start.” (Headteacher interview school Y 11<sup>th</sup> October 2022)

In clarifying further, when the senior teacher from school X was asked whether equity in joining the online class was realized, her response was contrary to the previous respondent. she narrated that:

“Allow me to confess that there was no equity because it just depended on the ability of the family to be able to sustain the lessons. Some of our parents do not even have smartphones with internet access so that their children could attend class. You will notice that only students whose parents could afford things like laptops and smartphones, and the internet were able to enrol, while students whose parents could not afford such things were excluded from their classes.” (Senior teacher interview school X).

According to the above respondents, it shows that while there was an opportunity to participate in online classes, not all learners were able to join. This argument is supported by the study of Mukuna and Aloka (2020) whose findings show that students failed to join the online learning during school closure in 2020 due to the socioeconomic status of different families, as most parents could not afford the gadgets and internet. This immense divide must be addressed for effective online classes in which all learners are included equally. At this point the only effort the headteachers in the two schools tried to ensure that all students attend the online classes, was to communicate with the parents to encourage them to support the students at home. There was nothing much the headteachers could do to ensure one hundred percent equity.

#### **4.2.2 Equity in Accessing Learning Materials**

The findings from this study showed that, teachers did their best in the schools where online teaching and learning took place to treat the students equally by sending the link to join the classes on time, sending the assignments and revision materials, marking the students' work, and providing timely feedback to the students however, equity was not ensured. This is because of network issues that hindered some of the students. The students had to wait until their parents returned from work before they could access the previously sent learning materials. When deputy headteacher from school Y was interviewed, she responded by saying that:

“Yeah, it was impossible because we were not looking for these learners personally. It is only that we were engaging them through online. So, the learners whom their parents had no mobile phones they were disadvantaged. I can say they were left out” (Deputy headteacher school Y 29<sup>th</sup> September 2022)



A senior teacher from school Y agreed with the previous participant that there was no equity in learners accessing the learning materials sent by the teacher. He was quoted saying:

“Using WhatsApp, the materials were sent to students via their parents' phones. Because some parents, but not all of them, had smartphones, they were not treated equally as such. Some of them had analog phones. You then realize that although you sent some assignment to the students, those without smartphones cannot access it.” (Senior teacher interview school Y 28<sup>th</sup> September 2022)

These findings are supported by a study conducted by (Yulianti & Mukminin, 2021) which discovered that not all parents could provide their children with access to the internet, computers, and smartphones. As a result, such students had to wait until their parents or guardians returned home from work before using their parents' phones to access the learning resources or homework sent by teachers via WhatsApp.

As stated in the Strategic Development Goal (SDG) policy on education for all, education must provide equal opportunities to all students (Madani, 2019). This should have been the case during the online classes offered by the schools under the study during the 2020 school closure due to COVID-19. This, on the other hand, was not accomplished. In fact, the gap was very wide, especially for students who are affected by poverty. Ezra et al. (2021) contended that poverty was among the major factors that impeded online learning during COVID-19 era. Moreover, the study of Andriyono and Herman (2021) found out that, internet access, insufficient ICT tools and lack of data bundles were among the challenges that prevented students from accessing online learning. Therefore, the obstacles must be overcome to achieve effective online learning where equality is guaranteed. The teachers will be completely equipped to manage students online. As a result of the abrupt school closure, the government won't have to spend a lot of money on teacher training.

#### **4.3 Mobilization of Resources to Conduct Online Learning**

For online learning to be effective, there must be resources available. Online teaching and learning, in contrast to face-to-face instruction, require the use of the internet, mobile devices, and computers. To fully comprehend online learning, teachers should also receive training on remote learning methodologies.

#### 4.3.1 Provision of Data Bundles

The head teachers of the two primary schools under the study provided data bundles to teachers so that they could log in to the lesson they had prepared without interruption. This was done in collaboration with the BOM. Headteacher from school X in one-on one interview claimed:

“But I soon came to the realization that the teachers need the school's help to carry out this online learning because it involves using the internet, which is, of course, somewhat expensive. Since the teachers weren't doing this for their own gain, the school stepped in to pay for the internet costs to make sure the teachers are well supported. Therefore, in my role as headteacher, I collaborated with the teachers to make sure that the school had a steady supply of internet.” (Head teacher interview school X 11<sup>th</sup> October 2022)

This response was almost like the headteacher of school Y who when interviewed responded thus:

“We had a meeting we discussed with the board on how we can ensure our learners continue with normal teaching and learning, and we came up with the idea of making sure that the school WhatsApp walls, the class walls are active, and we continued with normal teaching and learning. And the board was ready to facilitate uh, our team, uh, that is, our teaching staff with the bundles.” (Headteacher interview school Y 11<sup>th</sup> October 2022)

It is clear from the responses above that teachers were supported with data bundles to ensure that they had access to the internet. In school X, for example, the headteacher claims that she ensured that there was constant internet access throughout the school. This means that the school installed Wi-Fi and that the head teacher made sure that it was paid for. This enabled teachers who were experiencing difficulties with data bundles to conduct online classes within the school premises, where there was a constant supply of uninterrupted internet.

This is supported by Dewi and Wajdi (2021) who pointed out in their study that although there was little online learning in primary school, it did highlight a few factors that aided teachers in the process, including the availability of mobile phones, quotas, and a reliable internet connection.

Teachers at School Y, on the other hand, conducted online lessons from the comfort of their own homes. Their school's head teacher, in collaboration with BOM, provided internet bundles for them to ensure that the lessons went ahead as planned, without the excuse of a lack of

internet access. With this in mind, head teachers played a critical role in supporting online classes by ensuring internet accessibility.

#### **4.3.2 Training of Teachers on how to Conduct Online Learning.**

Since the schools were abruptly closed due to the novel COVID-19. The primary school teachers of the two schools under the study had little idea how to conduct online learning with students at home. This is because remote learning had never been used in Kenyan public primary schools. It was mostly conducted in institutions of higher learning like universities. The teachers from the two primary schools that participated in the study, therefore, attempted to use WhatsApp as their primary communication platform with students. Even with the use of WhatsApp, there was the need for teachers to be trained on how to interact with students online, as well as how to send, receive, mark students' work, and provide timely feedback.

When asked if the teachers had received training on how to conduct online learning, the deputy head teacher at school X responded as follows:

“.... They responded and then they organized one day. To come and, uh, get a training and get the gadgets and any material that they needed. They were provided by the school head teacher who decided to call an expert to come and take them through for 2, 3, 4 days. Whereby the teachers now were able to start the teaching.....they used the school hall where they practiced good spacing and the masks that they were putting on, the school provided all that. And with the initiative of the school head teacher and the motivation, the teachers took it positively and they took it off. (Deputy headteacher school X 30<sup>th</sup> September 2022).

The deputy head teacher from school Y also responded that the head teacher took the initiative of training the teachers on online learning.

“I can say this was a, a little bit, um, difficult, but the training, I can say since the introduction of the digital learning in school, teachers, we were taken for their training by the school. In fact, it was, um, happening in our school labs. That's the computer rooms whereby sometimes our headteacher was very supportive. He used to call somebody who is informed in digital and, uh, we were taken through on how to administer, uh, tests on, uh, using the gadgets which were given out by the government. And we used the knowledge, afterwards to do the online learning. The initiative was, um sometimes through our headteacher, he used to pay some of the money. I don't know whether from the school

or from his pocket, but he was very supportive.” (Deputy headteacher school Y 29<sup>th</sup> September,2022)

However, a respondent from the same school's f had a slightly different response to the training aspect of online learning.

“But, uh, a training based on how to conduct the online learning class was not done because the covid, uh, took people by surprise. So, there was no formal preparation towards that.” (Teacher 1 FDG school Y 28<sup>th</sup> September,2022).

Although the teacher stated that there was no training for online learning, he used the phrase "no formal training." This means that there was training, but it was not formal, according to the teacher. Based on the findings, I can conclude that for teachers to conduct online learning, they must be trained on how to teach students online.

Because they lacked the necessary skills to host an effective e-learning lesson, most teachers were unable to conduct online learning. As a result, it is critical that teachers receive ICT training and have the necessary knowledge to conduct online learning, as stated by (Auma & Achieng, 2020)

#### **4.4 ICT Facilities Available in Schools that Support Online Learning.**

During the 2020 school closure due to the spread of COVID-19, some teachers returned to school to conduct online classes. This is because they wanted to use the school's gadgets and connect to the Wi-Fi that had been installed. As a result, it was critical that the schools have facilities to support online teaching of students. The table below depicts the ICT facilities and their state at schools X and Y.

ICT device	Availability		Number		Condition	
	School X	School Y	School X	School Y	School X	School Y
Laptops	√	√	2	1	1 working	Faulty
Desktop computers	√	√	16	1	9 working	Faulty
Tablets	√	√	95	46	40 working	20 working
Wi-Fi/Internet	√	√	2	2	Both functional	1 functional
Projector	√	√	1	1	Good	Good
ICT/computer lab	√	√	1	1	Operational	Operational
Radio	X	X	0	0	-	-
Television	X	X	0	0	-	-
Flash drive	X	X	0	0	-	-
Printer	√	√	2	1	Working	Faulty
Digital camera	X	X	0	0	-	-
Photocopy machine	√	√	1	1	Working	Faulty
Scanner	X	X	0	0	-	-
External disk/drive	√	X	1	0	Good	-
Electricity	√	√			Good	Good

**KEY:** √ (available) X (not available)

*Table 1: Observation schedule for availability and use of digital devices /facilities*

According to the table above, ICT facilities that support online learning are available in schools but are insufficient. For example, the number of functional tablets in each school is lower than the number of functional ones. School Y only has one desktop computer, which is faulty. School X has two Wi-Fi routers that are both operational, whereas School Y has two routers, but only one is operational.

Both schools have fully functional ICT/computer labs. This explains why some teachers were required to visit schools in order to conduct online teaching and learning. They most likely used the computer lab to gain access to the available devices and Wi-Fi. Both schools lacked gadgets such as radios, televisions, flash drives, and scanners. This means that these devices were never used. Notably, both schools are connected to the power grid and in good working condition. Electricity is vital for operating and charging the ICT devices used to conduct online learning.

#### **4.5 Challenges Encountered During Online Teaching and Learning**

Because online learning was introduced abruptly in the two public primary schools, preparation was inadequate, resulting in numerous challenges. This section categorizes the

challenges into three categories: challenges shared by both students and teachers, challenges faced solely by students, and finally challenges faced solely by teachers.

#### **4.5.1 Challenges Shared by Both Students and Teachers**

This section presents data that demonstrates the common challenges that students and teachers encountered while participating in online learning. This is because some challenges affect everyone, regardless of their status.

#### **4.5.2 Internet Fluctuation and Disruption**

Both students and teachers experienced disruptions because of fluctuating internet connectivity, data bundle exhaustion, or distraction. A response from one headteacher pointed out the challenge of unstable internet connection.

“So, there was a lot of challenges, especially for joining the class and setting the lesson. And this one, sometimes we find it was even delaying the lessons to start, so, you teach for, um, less minutes as, as scheduled before and in between internet interruption was also a big problem. Once there is no network, you get lost again, even network from the places where our children were, sometimes the bundles are finished on the way, so they remain behind. So, there was a lot of disconnection....very few followed the lessons from the beginning to the end of the lesson. So, network challenge. Joining was a challenge, and even us teachers setting the lesson, preparing the lesson once, it was something which we were venturing in for the first time.” (Headteacher interview school X 11<sup>th</sup> October 2022)

The senior teacher from the same school reported interruptions due to children bothering the teacher at home and sudden power blackout.

“Then we had the other interruptions of, uh, whereby we had, uh, like maybe for example, you're using Wi-Fi and then suddenly, there is no electricity. You see, you're not able to reach out to the learners initially getting to start an online lesson.” (Senior teacher interview school X 30<sup>th</sup> September 2022)

Another respondent cited incoming calls interfering with the online lesson especially if you use smartphone to teach.

“So, for it to be successful, because even the, the connectivity, if it's not very efficient, like the teams (Microsoft Teams), my colleagues have talked about, you realize sometimes

always disrupted. So, for it to be very conducive as such, there should be strong network. It should be free from interference. And remember if we are using maybe mobile phones, sometimes you are in class, online learning, somebody calls, people are attending to their phones. So, there's a lot of disruption. So, the best one is where maybe people are using, uh, laptops, tablets, where now we are not interfered with by those who are making phone calls.” (Teacher 1 FDG school Y 28<sup>th</sup> September 2022)

According to the data above, online classes were disrupted by factors such as disconnection from the internet as a result of data bundle exhaustion or fluctuation, teachers were bothered by their children at home in the middle of the lessons, no power blackout that resulted in being disconnected from the class, especially for those who were using Wi-Fi where the router relied entirely on electricity as the source of power. Incoming calls completely disrupted the online classes for teachers who were using their mobile phones to teach using platforms like Zoom and Google Meet. A teacher who is sharing his or her screen with the students when an incoming call or text message arrives causing the teacher to be caught between receiving the call and continuing with the lesson. This was reduced for those who took online classes on laptop computers.

#### **4.5.3 Noisy Background**

Background noise from students joining classes without muting their microphones has an impact on online learning or classes. This causes distractions and makes the teacher and other students uncomfortable. (Nthenya et al., 2021)

This study has reported background noise as one of the challenges that affected both the students and the teachers.

“The environment was not good. It was not conducive for everyone was at home. So, the environment was noisy. Some were making noise, you know, and therefore, the learning could take some time for the learner to follow.” (Deputy head teacher interview school X 30<sup>th</sup>, September 2022)

Similarly, this was also reported by another respondent from the same school.

“Then we would just have noise from the neighbourhood. Uh, we had, uh, noise of people continuing with their normal life, you know, you cannot go and tell your neighbour to switch off the generator because I am having an online class because they still need power from the generator to be able to operate their businesses. So, we had such

interruptions that we couldn't really control.” (Senior teacher interview school X 30<sup>th</sup> September 2022)

Background noise was mentioned as a challenge in the data. This was only reported from School X. This is because the school hosted the online classes using the Zoom and Google Meet platforms. As a result, the noise could be heard because the devices' microphones could pick up on it. Teachers could not even control it because the microphones on their devices cannot be muted since they were the ones hosting the lessons. School Y reported no background noise because the teachers used WhatsApp to teach the students by simply sending assignments and graded work. If a student required remediation or explanation, teachers would conduct such sessions via WhatsApp video calls.

#### 4.5.4 Other responsibilities

The study also established that teachers had other responsibilities to attend to which affected their teaching of online classes.

“I can say that sometimes even teachers, they had their own, um, activities to attend to. Sometimes teacher even, it was not to be reminded. It takes that a teacher is out of place, maybe out of the network and, um, some of them, they were not able to send this work to the learners. The learner might be somewhere waiting for a certain, um, work as allocated at the timetable because the timetable was shared and unfortunately the teacher misses to send the worker. It is like, uh, it was demoralizing to the learners.” (Deputy head teacher interview school Y 29<sup>th</sup> September 2022)

The same challenge was faced by students when they are given other responsibilities by their parents as reported by another respondent.

“Then the other issues we had just, uh, in their homes, you would find that they were also given other responsibilities, maybe taking care of their young ones, their baby brothers and baby sisters, who would that once in a while become a nuisance during the lesson.” (Senior teacher interview school X 30<sup>th</sup> September 2022)

It goes without saying that because online learning took place mostly when teachers and students were at home, being involved in other responsibilities was inevitable. The teachers could leave the house to run an important errand, while the students would help with household



chores or even take care of their siblings as directed by their parents. This could have happened because online learning was not taken seriously enough.

#### **4.5.5 Lack of Data Bundles**

Notably, the lack of data bundles was identified as a challenge that affected both teachers and students. Teachers relied on data bundles provided by school heads as well as paid for out of their own pockets. Students, on the other hand, had to rely entirely on their parents to purchase data bundles. Therefore, lack of data bundles or premature exhaustion led to interference of online learning. Response from senior teacher in school X pointed out that students in her school had a challenge of accessing internet among other challenges due to lack of funds.

“We had parents who could not afford money to pay for internet just to ensure that the learners were able to join the lesson. So, you find that only the learners, only the learners whose parents were able to afford maybe the laptops, the good phones and the internet were able to join.” (Senior teacher interview school X 30<sup>th</sup> September 2022)

The same sentiments were echoed by the senior teacher from school Y who in addition reported that teachers too had challenges of internet bundles.

“So, some of them, the children come to do, the work two or three days later. So, there is that delay. And some of these things also need bundles...bundles are bought. So financial challenges are also there in that. If the teacher is not able to get enough bundles, then he or she might not be able to send the work in good time because as I said and I am still repeating we are still using mobile phones. So, we need bundles.” (Senior teacher school Y 28<sup>th</sup> September 2022)

A teacher in school X reported in a focus group discussion that students had a challenge of data bundles.

“Yeah, challenges with the bundles. You know, most of them were using bundles. They didn't have Wi-Fi” (Teacher 1 FDG school X 12<sup>th</sup> September 2022)

From the data above, it is evident that both the teachers and the students had challenges in accessing the internet because of lack of data bundles. However, this was more profound in students than teachers. This is because as previously reported, teachers had the support of the headteacher and BOM who bought data bundles for them. They could also purchase their own data bundles unlike the students who only depended on their parents for data bundles.

## **4.6 Challenges Experienced by Students**

Online learning presents the greatest challenges for students. As previously stated, most of them were unable to attend online classes, and even when the school offered to teach all classes, attendance was never one hundred percent. This is what the respondents had to say about the difficulties the students faced.

### **4.6.1 Shared Devices**

“So many challenges. Uh, almost common in all classes. One is the ICT devices at home. You know, parents use smartphones so during the daytime they go out to their workplaces. So, we were unable to reach some learners and when they come back at home, it is very late. Some learners were missing classes.” (Head teacher interview school Y 11<sup>th</sup> October 2022)

Another respondent from the same school expressed similar sentiments.

“Some of the parents are not there at home when these materials are available, they are busy out there doing their various jobs. So, some of them, the children come to do, the work two or three days later. So, there's that delay..... Children don't have their own mobile phones, so they depend on the parents' mobile phones. These parents are busy out there. They they're not sitting at home to wait for the teachers to send materials. So, these were some of the few uh challenges were facing.” (Senior teacher interview school Y 28<sup>th</sup> September 2022).

This demonstrates that many students did not have their own devices and relied solely on their parents' phones to receive revision materials or assignments. Such students were disadvantaged because they had to wait for their parents to return from work before submitting their assignments. Students whose parents were at home during the day benefited from receiving homework and submitting their work on time.

### **4.6.2 Lack of Supervision by Parents/Guardians**

According to the findings, most parents were working or engaged in other economic activities to support their families. This forced the students to stay at home without supervision or monitoring, forcing them to either skip online classes or become distracted by visiting sites that were irrelevant to them. This was mentioned by several respondents as one of the challenges that the students faced.

“Yes. Mm-hmm... then there, in most cases, there was supposed to be. Supervision from the parents because over the same period, I remember there is a parent who came, yes, they provided the guidance, but then the girls were using them for their own purpose. So, by the time the mother is discovering going through the phone, then she discovers there's a lot that was going on apart from learning.” (Teacher 1 FGD school X 12<sup>th</sup> September 2022)

Likewise in the interview with teacher 3 FGD school Y reported that.

“I can say, uh, when the on classes are on, it's advisable the parents will be monitor. You know, our kids, they're digitalized. You might think that the kid is, is on online classes maybe he or she is on YouTube. So, the best thing to do is the parents to monitor their kids when they're doing these online classes. And, he can be, he can be part and parcel of the online classes, not just the learner, but the parent too.” (Teacher 3 FGD school Y 28<sup>th</sup> September 2022)

In addition, a colleague from the same focus group discussion reported that.

“I think, uh, the parent must be there to guide the learner because some, especially if you think, uh, if teachers are using the WhatsApp, then there are some kids because the teachers not seeing the learner there. So, the kid, you might assume that the kid is attending your work, yet the kid is very busy with some other sites. So, the parent must be there to monitor that work.” (Teacher 2 FGD school Y 28<sup>th</sup> September 2022)

The data shows that all the respondents' comments agree that one of the challenges that students face in online learning is that they tend to visit other sites on the internet and stop attending online classes or sessions. This is due to the students' lack of supervision and the opportunity to misuse the smartphones provided to them to assist them in attending online classes. This means that for an online class to be effective, an adult must guide and monitor the activities of the children participating in online learning.

#### **4.6.3 Lack of Cooperation by Some Parents**

According to the headteacher of School Y, some parents were adamant about allowing their children to participate in online learning.

“And another reason it is about the laxity you know; the learners are not with the teacher. The parents are not with the teacher. So, you keep on calling, you keep on reminding, you keep on making follow up. But some parents did. They decided to stay away from the

program, and it was a bit hectic and challenging.” (Headteacher interview school Y 11<sup>th</sup> October 2022).

According to the data, some parents were uncooperative and did not want their children to participate in online learning. They were unreachable, even ignoring the efforts of teachers attempting to contact them by phone. This trend resulted in a low turnout for students who participated in online learning in school Y, forcing teachers to teach only a portion of the class while leaving others out.

#### **4.6.4 Poverty**

The data revealed that some parents could not afford smartphones due to the negative impact of poverty. Some of them used 'analogue' phones that could not connect to the internet, so their children were not able to participate in online classes or download any materials sent by teachers.

“Other parents are in, uh, very dire need of, uh, money they can't use, uh, whatever little they get to buy bundles. So, poverty. It also, uh, affected the online, uh, learning. So, they unable to buy bundles.” (Headteacher interview school Y 11<sup>th</sup> October 2022).

Another respondent in a FGD in the same school confirmed this as well.

“It was a challenge to some of the learners because some parents could not, uh, afford having, uh, these, uh, smartphones. So, some of the parents, they were to inform, maybe if their neighbours.... what is the assignment given in the WhatsApp group to help the learners. But it was not, uh, catering for all learners. It was a challenge. Some were left, uh, unattended due to the devices. You know, most of the community around our school, they are.... we can say they are less fortunate. They're vulnerable, so they cannot afford, they only had, uh, this, uh, other phones which cannot, uh, hold the internet. They were not smart phones. So, some majority, I can say majority of the learners did not participate in the online classes.” (Teacher 5 FGD school Y 28<sup>th</sup> September,2022)

Both respondents agree that poverty is a significant impediment to effective online learning. As a result, most students were left out because their parents could not afford data bundles or devices such as smartphones. On the contrary, the second respondent, Teacher 5 FGD school Y, made a slightly contradictory statement when she stated that due to the parents' inability to purchase smartphones, the neighbors were informed about the assignments that were sent by the

teachers. It is unclear how the parents learned about the assignments despite the fact that they did not have smartphones.

#### **4.7 Challenges Experienced by Teachers**

The study discovered some challenges that were unique to teachers.

##### **4.7.1 Downloading and Installing Application that Support Online Learning**

One respondent pointed out that teachers found it difficult to download the mobile applications that supported online learning.

“Uh, it was really something new. Uh, even for us teachers to download the apps was a challenge for us and especially to set, to prepare, to set the lessons. Sometimes you set the lesson, you find that you have set the wrong time and, uh, the time you are wondering why children are not joining. So, you sent them the wrong message.” (Headteacher interview school X 11<sup>th</sup> 10/2022)

Teachers had a tough time with simple activities like downloading supportive applications for online learning. Scheduling the lesson was also challenging and teachers would send the wrong time for the lessons. This was due to inadequate training. This would also be mitigated through collaboration and peer mentorship.

##### **4.7.2 Scheduling the Online Classes**

Some teachers had difficulty in scheduling of the virtual classes. This was due to lack of adequate training and the fact that teachers also did not crosscheck the exact details before sending it to the students.

“Sometimes you set up the lesson and send the students the link for them to join the class. You wait for the students, and you wonder why they are not joining your class only to realize that you sent them the wrong message containing different time.”

(Headteacher interview school X 11<sup>th</sup> 10/2022)

According to the above respondent, teachers correctly scheduled the online classes but sent wrong timings for the same. This led to confusion for both the teachers and the students.

##### **4.7.3 Attending to More Pressing Responsibilities**

Since in most cases the online classes were conducted from home, some teachers had errands to run which interfered with their attendance of the virtual classes as reported by one interviewee:

“While at home, teachers had some duties to attend to. These duties were outside their houses and were more pressing that they could not be ignored or postponed. While some teachers decided with their colleagues to teach on their behalf, others did not attend to the online classes and no alternatives were provided either. This forced the students to miss the online classes.  
(Deputy head teacher interview school Y 29<sup>th</sup> September 2022)

From the above data, the online learning was not conducted in a smooth manner, teachers had to abandon teaching and rushed to take care of their needs. This would be entirely different in a face-to-face teaching and learning.

#### **4.7.4 Interruptions from Children**

While at home, teachers had family responsibilities to take care of. This included children. The teachers who had young children had to endure a lot of interference from them.

“At times, there would be disruptions. Kids would be coming to bother you around, especially when you do not have a house help. The young children keep on coming to seek attention frequently. This interferes with the running of online learning.”

(Senior teacher interview school X 30<sup>th</sup> September 2022)

#### **4.8 Conclusion**

According to the findings, headteachers engaged in community mobilization that included BOM and parents. This was done to make them aware of the importance of continuing students' learning through online learning. The head teachers, in collaboration with the teachers, did their best to promote equity during online learning, but it was not entirely successful. Additionally, the headteachers mobilized resources to support online learning. This was in the form of providing digital devices to teachers, paying for Wi-Fi, and purchasing data bundles for teachers. Finally, the study discovered challenges affected teachers and students that hampered the effective implementation of online learning.

## **CHAPTER 5: RECOMMENDATION, SUMMARY AND CONCLUSION**

### **5.0 Introduction**

This chapter contains a summary of the findings, conclusions, and recommendations. It also highlights the suggestions for further research aimed at exploring headteachers' support for online learning: A case study of two Kenyan primary schools in Mombasa. The study looked at parental involvement, equity in online learning, mobilization of resources for online learning, Furthermore, the study also highlighted Teacher Professional Development for online learning, ICT facilities in schools that support online learning, and finally the challenges encountered while conducting online learning.

### **5.1 Summary of the Findings**

Schools are an integral part of the community since they educate children in the community in which they are located (Bwana & Orodho, 2014). Apart from the usual provision of educational services, schools provide room for a variety of functions and activities. Schools, provide meeting space for women's self-help organizations, youth groups, and classes are also used as churches on weekends in Kenya. This demonstrates that the community is aware of whatever occurs within a specific school. Similarly, when the schools closed in 2020 because of COVID-19, many parents in the two schools under the study wanted to know what preparations the schools had to keep students engaged while they were at home.

The schools chose to offer online learning had to first inform parents and the Board of Management of their intention to teach children virtually. Furthermore, schools that used online platforms such as Zoom and Google Meet first held an online induction session with parents to guide them on how to navigate the online lesson. The parents were taught how to mute and unmute the microphone, turn on and off the video camera, raise hands virtually, and share the screen. The parents were then expected to teach their children how to do the same.

This study discovered that during the school closure in 2020, schools that offered online learning attempted to reach out to all the targeted students, but this was not possible due to low attendance. Furthermore, while teaching pupils online, teachers attempted to treat everyone equally by providing equal opportunities, but this proved to be a difficult challenge as well. Some students were unable to log in to class due to a lack of digital devices such as computers, tablets, and smartphones. Others could not afford data bundles, and the rest could not connect to the

internet due to the location they were at during online classes. This suggests that equity could not be realized, and it was beyond the headteachers' and teachers' capabilities.

The mobilization of resources is one of the responsibilities of the headteacher in the school. This helps in the support of teaching and learning in the schools (Shiwani et al., 2021). Headteachers made sure teachers took advantage of the facilities at their disposal to conduct online teaching, which promoted online learning. The teachers who were having difficulty teaching online from their homes went to the school to access the computer laboratories where they could use school-owned computers, laptops, and tablets. Additionally, the teachers could now access the internet more easily owing to Wi-Fi that the headteachers had installed within the two schools.

The Wi-Fi was installed through the efforts of the head teachers, BOM, and the local member of parliament (MP). However, to prevent any interruptions in the internet connection, it was the responsibility of the headteachers to pay the monthly Wi-Fi subscription fee. Moreso, the headteachers provided data bundles for the teachers and made government-provided laptops available for them to use. It is also worth noting that the resources were only accessed by the teachers. This is because the students were at home and even if the students were to use the devices, they could not be adequate for all of them.

In 2020, schools abruptly closed due to the COVID-19 outbreak. Teachers, parents, students, and other educational stakeholders were unaware of the sudden school closure. Most teachers began interacting with students online before getting any kind of training on how to manage students online. However, even though the training was informal, the headteachers helped with teacher preparation by bringing in experts in online teaching and learning.

In other instances, the headteachers dispatched a teacher to conduct a benchmarking study with a school that conducted online learning. The teacher would then return and teach other staff members on how to effectively teach students virtually. Through peer mentoring, teachers also learnt from one another. Even though the training was inadequate, it acted as a springboard for online learning. The government on the other hand, set up formal training on how to teach students online when the schools reopened following the subsidizing of COVID-19, and there was certification after the training. Though not every teacher received training, it was done virtually. Teachers trained on effective synchronous and asynchronous student engagement strategies. Even though it came at a time when students had already resumed their studies in physical classrooms, the government training was important.



The study discovered that both schools under investigation had ICT equipment and resources. The tools made it easier to deliver teaching, which supported online learning. However, some of the appliances were working properly while others had issues. Seemingly, it is only the teachers who had access to the devices. This is because during the COVID-19 pandemic, students were unable to access the schools. The headteachers of the two participating schools gave their permission for the teachers to use the quiet, noise-free ICT labs. Teachers could attend the lessons without being distracted by fluctuating internet thanks. The reason for this is that the two schools have reliable Wi-Fi connection.

The headteachers' support of online learning was not without its challenges. Both the teachers and the students were impacted by these challenges. Notably, some challenges only affected students, while others only affected teachers. The study also identified a few challenges that were experienced by both the teachers and students.

Because most students could not afford smartphones, tablets, or computers, the challenges faced by the students only included sharing devices with their parents. Another issue was that students wandered off to other websites that were entirely irrelevant to them due to parents' lack of supervision. Additionally, some parents' lack of cooperation made it challenging for the students to participate in online learning. This was because the parents were not interested in the program.

Another barrier to online learning was poverty. Some parents were unable to purchase computers, tablets, or smartphones. In addition, they were unable to buy data bundles that would have given them access to the internet. They used the meager money they could earn to buy food and other necessities. As a result, students from low-income families were barred from participating in online learning.

The biggest concern teachers had was a lack of adequate training for facilitating online learning. The study found evidence of some kind of training that the headteachers helped to facilitate. This was accomplished by bringing in experts who instructed the teachers on how to conduct virtual lessons. As a result, the teachers were given the skills they required to conduct online classes. On the other hand, teachers were unable to teach students online effectively. Similarly, some teachers encountered issues in installing the mobile applications necessary to carry out online learning. Others encountered difficulties when trying to schedule the lessons and eventually gave the students the incorrect time to join the lessons.

Internet interruptions were among the obstacles that both teachers and students had to deal with. Since the issue originated from the internet service providers, neither the teachers nor the students could prevent it. Moreso, teachers and students were observed to be impacted by the noisy environment. As a result, there were numerous distractions during online learning. Additionally, both the teachers and the students had other commitments that required them to log out of the online class or not show up at all. For instance, students were assigned duties like cleaning the house or looking after younger siblings. The teachers, on the other hand, had to reschedule the online classes because they needed to run some errands outside their homes.

Finally, the lack of data bundles posed a problem that had an adverse effect on both the students and the teachers. The impact was greater on the students than the teachers. This is because the students' sole source of data bundles came from their parents or guardians. Parents and guardians in some cases could not afford it. To provide support, the school heads provided data bundles to the teachers. However, some teachers, because of exhausting the provided data bundles, chose to go to school and accessed the Wi-Fi that was installed in the schools.

## **5.2 Recommendations**

The findings of this study make it clear that, just like other educational initiatives in the school, the headteachers' support of online learning is equally important. According to the study, the headteachers of the schools that participated in this research supported online learning. This was achieved by encouraging parental involvement, supporting teachers to conduct online teaching, mobilizing resources, and promoting equity and inclusion of all students in online learning.

The community should help the schools by funding the purchase of ICT equipment and the construction of facilities like ICT labs. To achieve this, the community leaders can collaborate with Community Based organizations (CBOs), Faith Based Organizations (FBO)s and Non organizations (NGOs) to raise funds. Additionally, by partnering with the local Members of Parliament (MPs), the National Government Constituency Development Fund (NG-CDF) can be directed to assist the schools. Furthermore, individuals who wish to help the schools can do so by contributing money or by buying the necessary equipment.

To ensure that online learning is promoted and supported at all costs, school heads should collaborate closely with the BOM, teachers, and parents. The researcher discovered while conducting the study that since the opening of the schools after the COVID-19 outbreak subsided,

the schools have suspended online learning. This research, therefore, recommends that headteachers should encourage teachers in their respective schools to employ a blended learning strategy in which students are actively engaged in both physical classes and online learning in the evenings or during school holidays. This will go a long way to improve online learning and contribute to the sustainability of the program. Additionally, it will help in preparing the pupils, teachers, and parents in case of an emergency that might force the closure of the schools.

The use of digital devices in the classroom should be promoted by all teachers. With their students, they should practice online learning. On the other hand, the ICT devices in the school need routine maintenance because most of them are faulty. To support this initiative, the government ICT technicians that are deployed in each County in Kenya, can assist with this.

The study also found that teachers felt they had little training on how to conduct online teaching, which is closely related to online learning. Even though the teachers received training on how to conduct online teaching, it was inadequate. The headteachers of the respective schools spearheaded these trainings. Later, following the opening of the school, the Kenyan government conducted mass training which was conducted by the MOE and SMASE.

As a result, this study suggests that the government, through MOE, organize formal training on online learning. These should be in the form of TPD, where all trained teachers are given certificates as proof of their training. The teachers will then have the skills and knowledge necessary to confidently and effectively implement online teaching that results in online learning. To sum it up, the government should ensure that there is monitoring and evaluation of online learning.

### **5.3 Suggestions for Further Studies**

Based on the results of this study, recommendations for additional research are made. Therefore, this study suggests that a comparable study be carried out in primary schools that are situated in a rural area. This is because the two schools under investigation are in an urban area. To get parents' opinions and experiences with online learning, the researcher also suggests that parents participate as respondents. This is because the parents were involved in providing the students with the digital devices that they used to access online learning.

Since this study was conducted in public primary schools, the researcher suggests that a similar study be carried out in private schools to identify any differences in infrastructure, resources, and stakeholder involvement that may exist between public and private primary schools

as well as to determine whether the challenges that public primary schools face are the same as those that private primary schools face. Since only two schools took part in the study, the researcher finally recommends that more schools should take part in a similar study to determine if the findings can be generalized.

#### **5.4 Conclusion**

This study explored the headteachers' support for online learning during the school closure because of COVID-19 in 2020. From the research findings, headteachers made every effort to support online learning by involving parents, BOM, and teachers in the planning and execution stages. The headteachers provided the teachers with support by granting them data bundles so they could access the internet. The headteachers also allowed the teachers to engage the students in online learning from the premises of the schools so that they could utilize the digital devices found at school and use Wi-Fi for a stable internet connection. The study also established that while teachers and headteachers did their best to promote equity and inclusion to connect with all the targeted students within the schools, it was a difficult task. According to the study, there were challenges that made supporting online learning difficult, despite the headteachers' best efforts. Lack of data bundles, internet interruptions, lack of parental supervision, inadequate teacher training, a noisy environment, taking on additional responsibilities, shared devices, and poverty were among the challenges.

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## APPENDICES

### Appendix I: Ethical clearance certificate



#### THE AGA KHAN UNIVERSITY

**Ref;** AKU/2022/0180/fb/08/14

**Date:** 18<sup>th</sup> August, 2022.

Juma Rashid Haji  
Aga Khan University  
P. O Box 125  
Dar es Salaam,  
Tanzania.

Dear Juma Rashid Haji,

#### ETHICAL CLEARANCE CERTIFICATE

This is to acknowledge that your application for ethical clearance for a research study entitled *“Exploring School Leadership Support for Online Learning during the School Closure as a Result of Covid-19: A Case of two Primary Schools in Mombasa County, Kenya.”* was received and reviewed by the Aga Khan University, Ethical Review Committee, East Africa (AKU-ERC, EA).

We would like to inform you that the committee has approved your proposal and advise you to proceed with your research project in line with the Aga Khan University policies, laws and regulations and ethical guidelines.

I wish you all the success in your research.

Yours Sincerely,

Dr. Fortidas Bakuza  
**Assistant Professor**  
**Chair, Ethical Review Committee**

CC: National Institute for Medical Research

## Appendix II: NACOSTI research license

  
**REPUBLIC OF KENYA**

**Ref No: 667112**

**RESEARCH LICENSE**



**This is to Certify that Mr.. Juma Rashid Haji Kisenya of Aga Khan University, has been licensed to conduct research in Mombasa on the topic: Exploring School Leadership Support for Online Learning during the School Closure as a Result of Covid-19: A Case of two Primary Schools in Mombasa County, Kenya. for the period ending : 15/September/2023.**

**License No: NACOSTI/P/22/20347**

**667112**  
**Applicant Identification Number**

  
**Director General**  
**NATIONAL COMMISSION FOR**  
**SCIENCE, TECHNOLOGY &**  
**INNOVATION**

**Verification QR Code**



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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies
5. The License does not give authority to transfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
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Website: [www.nacosti.go.ke](http://www.nacosti.go.ke)

**Appendix III: Permission from County Commissioner**



**OFFICE OF THE PRESIDENT**  
**MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT**

COUNTY COMMISSIONER'S OFFICE  
P.O. BOX 90424-80100  
MOMBASA

Tel. 0715 040444/0780 040445  
Email: [ccmombasa@yahoo.com](mailto:ccmombasa@yahoo.com)

*When Replying please quote:*

Ref. No. MCC/ADM.25 VOL.IV/ (22)

26<sup>th</sup> September, 2022

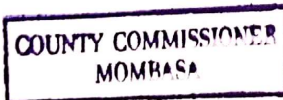
Deputy County Commissioner  
MOMBASA SUB-COUNTY


RE: RESEARCH AUTHORIZATION –MR. JUMA RASHID HAJI NACOSTI  
LICENSE NO. NACOSTI/P/22/20347

This is to authorize the above named student from Aga Khan University to carry out research on “ Exploring School Leadership Support for Online Learning during the School Closure as a Result of Covid-19: A Case of two Primary Schools in Mvita Sub-County” in Mombasa County for the period ending 15<sup>th</sup> September 2023.

Any assistance accorded to him will be highly appreciated.

Thank you.



  
JOHN O. OTIENO, HSC  
COUNTY COMMISSIONER  
MOMBASA COUNTY

c.c:

County Director of Education  
MOMBASA COUNTY



## Appendix IV A: Request to head teacher to conduct research in school X

Juma Rashid Haji  
Aga Khan University,  
P.O Box 125,  
Dar Es Salaam,  
Date: 1<sup>st</sup> August, 2022

The Headteacher,  
██████████ Primary School,  
P.O. Box 82001-80100  
Mombasa.

Dear Sir/ Madam,

### **RE: REQUEST TO CONDUCT RESEARCH IN YOUR SCHOOL**

As part of the fulfilment of my M.Ed. degree requirements, I wish to conduct a case study in your school.

The purpose of the research is to explore school leadership support for online learning in primary schools during the school closure as a result of covid-19. Apart from the headteacher, I intend to interview the deputy headteacher, the senior teachers and the teachers who took part in online teaching during the school closure in 2020.

The project is case study that will run for four weeks, during the months September- October 2022.

I intend to work within your schedule and respect the wishes of participants in terms of interview times and venue. I will hold in confidence what is discussed in the interview for use only for my research.

I look forward to working with you,

Thank you,



Juma Rashid Haji.



## Appendix IV B: Request to head teacher to conduct research in school Y

Juma Rashid Haji  
Aga Khan University,  
P.O Box 125,  
Dar Es Salaam,  
Date: 1<sup>st</sup> August, 2022

The Headteacher,  
[REDACTED] Primary School,  
P.O. Box 97491-80100  
Mombasa.

Dear Sir/ Madam,

### RE: REQUEST TO CONDUCT RESEARCH IN YOUR SCHOOL

As part of the fulfilment of my M.Ed. degree requirements, I wish to conduct a case study in your school.

The purpose of the research is to explore school leadership support for online learning in primary schools during the school closure as a result of covid-19. Apart from the headteacher, I intend to interview the deputy headteacher, the senior teachers and the teachers who took part in online teaching during the school closure in 2020.

The project is case study that will run for four weeks, during the months September- October 2022.

I intend to work within your schedule and respect the wishes of participants in terms of interview times and venue. I will hold in confidence what is discussed in the interview for use only for my research.

I look forward to working with you,

Thank you,



Juma Rashid Haji.

HEADTEACHER  
[REDACTED] PRIMARY SCHOOL  
P.O. Box 97491-80100, MOMBASA  
Date: 29/9/22 Sign: [Signature]

Appendix V: Ethical Consent Form for Headteacher

Research Topic: Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

I have been informed of the requirements of the study and fully understand what will be expected of me as a participant.

I therefore, agree to be amongst the participants in this study with the following conditions. Put a tick (✓) as appropriate against each statement;

This study focuses on Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

- The purpose of the study is to point out the strategies headteachers can adopt to promote online learning and to find out how to overcome the challenges faced when conducting online learning.
- My identity as a research participant will remain confidential and my name and my responsibility/role in the school and the name of the school will not be used at any point in the research or in reporting the findings.
- I maintain the right to withdraw from the study at any point in time.
- I will be interviewed as part of the study
- My voice can be recorded during my interview.
- Add any other issue relevant to your data collection as it relates to this category of participants
- I hold the right to refuse to answer any question.
- I will receive the summary of the final report of the study.
- Findings of this study may be used in conference presentations and in academic publications

I express willingness to participate in this study by signing this form.

Name: ..... Designation: .....

Signature: ..... Date: .....

Name of school: .....

Researcher’s Name: Juma Rashid Haji  
Researcher’s Contact: P.O. Box 125 Dar es salaam  
Name of Institution: The Aga Khan University IED, EA

*In the unlikely event of a breach of ethics or any other emerging issues, inform Chairperson Ethical Review Committee of the Aga Khan University Tanzania, Dr. Fortidas Bakuza Salama House Urambo Street – Plot 10, P.O. Box 125, Dar es Salaam.*

*Tel: +255-22-215229/2150051 Fax: +255-22-2150875 E-mail:*

*fortidas.bakuza@aku.edu or iedea@aku.edu*

**Appendix VI: Ethical Consent Form for Deputy headteacher**

Research Topic: Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

I have been informed of the requirements of the study and fully understand what will be expected of me as a participant.

I therefore agree to be amongst the participants in this study with the following conditions. Put a tick (✓ ) as appropriate against each statement;

This study focuses on Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

- The purpose of the study is to point out the strategies headteachers can adopt to promote online learning and to find out how to overcome the challenges faced when conducting online learning.
- My identity as a research participant will remain confidential and my name and my responsibility/role in the school and the name of the school will not be used at any point in the research or in reporting the findings.
- I maintain the right to withdraw from the study at any point in time.
- I will be interviewed as part of the study.
- My voice can be recorded during my interview.
- Add any other issue relevant to your data collection as it relates to this category of participants.
- I hold the right to refuse to answer any question.
- I will receive the summary of the final report of the study.
- Findings of this study may be used in conference presentations and in academic publications.

I express willingness to participate in this study by signing this form.

Name: .....Designation: .....

Signature: ..... Date: .....

Name of school: .....

Researcher’s Name: Juma Rashid Haji  
 Researcher’s Contact: P.O. Box 125 Dar es salaam  
 Name of Institution: The Aga Khan University IED, EA

*In the unlikely event of a breach of ethics or any other emerging issues, inform Chairperson Ethical Review Committee of the Aga Khan University Tanzania, Dr. Fortidas Bakuza Salama House Urambo Street – Plot 10, P.O. Box 125, Dar es Salaam.*

*Tel: +255-22-215229/2150051 Fax: +255-22-2150875 E-mail: fortidas.bakuza@aku.edu or iedea@aku.edu*

**Appendix VII: Ethical Consent Form for Senior teacher**

Research Topic: Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

I have been informed of the requirements of the study and fully understand what will be expected of me as a participant.

I therefore agree to be amongst the participants in this study with the following conditions. Put a tick (✓ ) as appropriate against each statement;

This study focuses on Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

- The purpose of the study is to point out the strategies headteachers can adopt to promote online learning and to find out how to overcome the challenges faced when conducting online learning.
- My identity as a research participant will remain confidential and my name and my responsibility/role in the school and the name of the school will not be used at any point in the research or in reporting the findings.
- I maintain the right to withdraw from the study at any point in time.
- I will be interviewed as part of the study.
- My voice can be recorded during my interview.
- Add any other issue relevant to your data collection as it relates to this category of participants.
- I hold the right to refuse to answer any question.
- I will receive the summary of the final report of the study.
- Findings of this study may be used in conference presentations and in academic publications.

I express willingness to participate in this study by signing this form.

Name: .....Designation: .....

Signature: ..... Date: .....

Name of school: .....

Researcher’s Name: Juma Rashid Haji  
 Researcher’s Contact: P.O. Box 125 Dar es salaam  
 Name of Institution: The Aga Khan University IED, EA

*In the unlikely event of a breach of ethics or any other emerging issues, inform Chairperson Ethical Review Committee of the Aga Khan University Tanzania, Dr. Fortidas Bakuza Salama House Urambo Street – Plot 10, P.O. Box 125, Dar es Salaam.*

*Tel: +255-22-215229/2150051 Fax:+255-22-2150875 E-mail: fortidas.bakuza@aku.edu or iedea@aku.edu*

**Appendix VIII: Ethical Consent Form for teachers**

Research Topic: Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

I have been informed of the requirements of the study and fully understand what will be expected of me as a participant.

I therefore agree to be amongst the participants in this study with the following conditions. Put a tick (✓ ) as appropriate against each statement;

This study focuses on Exploring head teachers’ support for online learning during the school closure as a result of covid-19: a case of two primary schools in Mombasa County, Kenya

- The purpose of the study is to point out the strategies headteachers can adopt to promote online learning and to find out how to overcome the challenges faced when conducting online learning.
- My identity as a research participant will remain confidential and my name and my responsibility/role in the school and the name of the school will not be used at any point in the research or in reporting the findings.
- I maintain the right to withdraw from the study at any point in time.
- I will be interviewed as part of the study.
- My voice can be recorded during my interview.
- Add any other issue relevant to your data collection as it relates to this category of participants.
- I hold the right to refuse to answer any question.
- I will receive the summary of the final report of the study.
- Findings of this study may be used in conference presentations and in academic publications.

I express willingness to participate in this study by signing this form.

Name: .....Designation: .....

Signature: ..... Date: .....

Name of school: .....

Researcher’s Name: Juma Rashid Haji  
 Researcher’s Contact: P.O. Box 125 Dar es salaam  
 Name of Institution: The Aga Khan University IED, EA

*In the unlikely event of a breach of ethics or any other emerging issues, inform Chairperson Ethical Review Committee of the Aga Khan University Tanzania, Dr. Fortidas Bakuza Salama House Urambo Street – Plot 10, P.O. Box 125, Dar es Salaam.*

*Tel: +255-22-215229/2150051 Fax: +255-22-2150875 E-mail: fortidas.bakuza@aku.edu or iedea@aku.edu*

## **Appendix IX: Interview guide for the Headteacher**

### **A brief introduction of the researcher**

My name is Juma Rashid Haji, a student from the Aga Khan University, Tanzania and I am pursuing my masters in leadership and management. This study is towards my M.Ed. course. I am studying the school headteachers' support for online learning in primary schools during the school closure as a result of covid-19.

1. Please tell me about yourself
2. What do you understand by online learning?
3. How did your school engage learners in learning during the school closure in 2020?
4. How did you support your teachers and students to ensure online learning takes place in your school?
5. What level of the students took part in the online learning? Please elaborate on why you picked the selected level if not all the students.
6. Tell me whether all the targeted students managed to attend the online classes?
7. How did you manage to provide the tools and devices for conducting online learning?
8. What form of training for conducting online learning did the teacher receive? (How and where did the training take place?)
9. How did you engage the parents in order to gain their support in online learning?
10. What are the challenges you faced in promoting online learning?

**THANKYOU**

### **Appendix X: Interview guide for the deputy headteacher**

My name is Juma Rashid Haji, a student from the Aga Khan University, Tanzania and I am pursuing my masters in leadership and management. This study is towards my M.Ed. course. I am studying the headteacher's support for online learning in primary schools during the school closure as a result of covid-19.

1. Will you please describe yourself?
2. What are your roles as the deputy headteacher in this school?
3. During the school closure in 2020 as a result of COVID-19, how did your school continue teaching students?
4. How was the online teaching and learning conducted?
5. What input or support did you add to the online teaching and learning exercise?
6. How did you engage the parents and the community in conducting online teaching and learning?
7. How were the teachers trained to conduct online teaching? How did the training take place? Whose initiative was this?
8. In what way were the teachers involved in conducting online teaching selected? How many were they?
9. What are some of the challenges you witnessed that hindered online teaching and learning?

**THANKYOU**



### **Appendix XI: Interview guide for the senior teacher**

My name is Juma Rashid Haji, a student from the Aga Khan University, Tanzania and I am pursuing my masters in leadership and management. This study is towards my M.Ed. course. I am studying the headteachers' support for online learning in primary schools during the school closure as a result of covid-19.

1. Please describe yourself.
2. What were your duties as a senior teacher in online learning during the school closure as a result of COVID-19 in 2020?
3. How did the headteacher support the online learning program in the school?
4. What devices were used to conduct online learning?
5. What is your opinion about teachers continuing teaching remotely?
6. What do you think are the challenges of teaching students online?
7. How was equity ensured when students in this school were taught online?
8. What plans are there to proceed with online teaching?

**THANK YOU**

## **Appendix XII: Focus group discussion guide for teachers**

My name is Juma Rashid Haji, a student from the Aga Khan University, Tanzania and I am pursuing my masters in leadership and management. This study is towards my M.Ed. course. I am studying the headteacher's support for online learning in primary schools during the school closure as a result of covid-19.

1. How was the training (if any) you received for conducting online teaching and learning helpful?
2. What devices did you use to offer online teaching?
3. How were the students engaged in online learning? (How did you manage?)
4. What are some of the ICT devices and facilities present in the school that can support online teaching and learning?
5. What are the challenges you encountered in conducting online teaching and learning?
6. How best do you think learners can be engaged in online teaching and learning?
7. What kind of support do you need to improve your online teaching skills/competencies?
8. How would you explain a conducive online learning infrastructure?
9. If you are to advise the school leadership about online learning and teaching, what advice will you give them?
10. What do you think is the role of the parents regarding online teaching and learning?
11. Kindly explain your experiences with online teaching during the COVID-19 school closure.
12. How did the school leadership support you to ensure that teaching and learning continue during the covid 19 School closure?

**Thank you.**

**Appendix XIII: Observation schedule for availability and use of digital devices/facilities in the school**

Name of the school.....

<b>ICT DEVICE</b>	<b>AVAILABILITY</b>	<b>Number</b>	<b>CONDITION</b>
Laptops			
Desktop computers			
Tablets			
Wi-Fi/internet			
Projector			
ICT/computer lab			
Radio			
Television			
Flash drive			
Printer			
Digital camera			
Photocopy machine			
Scanner			
External disk/drive			
Electricity			