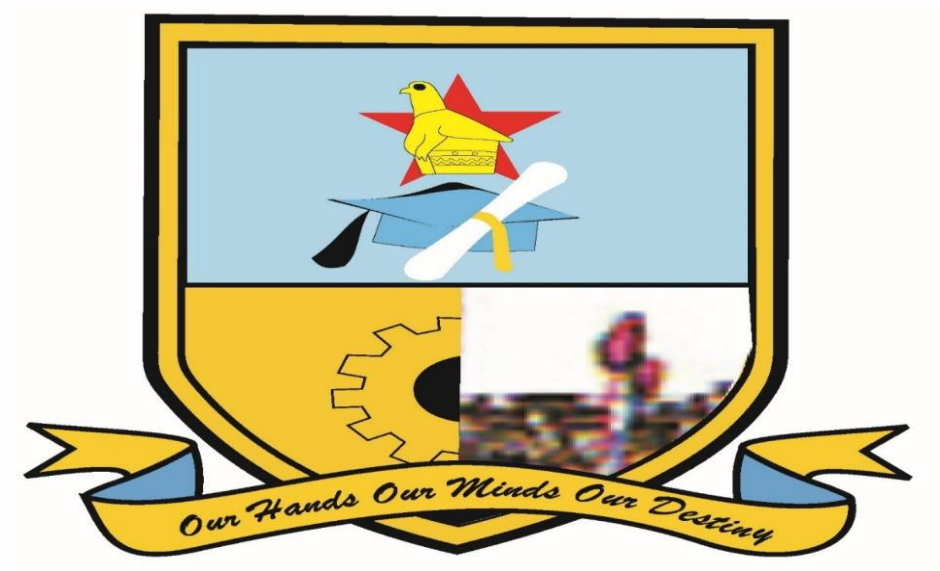

MIDLANDS STATE UNIVERSITY

FACULTY OF EDUCATION

DEPARTMENT OF APPLIED EDUCATION

CHALLENGES FACED BY FIVE PRIMARY SCHOOLS IN CHINHOYI URBAN CLUSTER, MAKONDE DISTRICT IN IMPLEMENTING E-LEARNING DURING THE COVID-19 PANDEMIC.

A DISSERTATION SUBMITTED BY

MASIMBA ANDREW
R1710882G

IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE BACHELOR OF EDUCATION DEGREE IN COMPUTER SCIENCE

GWERU, ZIMBABWE
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This dissertation, CHALLENGES FACED BY FIVE PRIMARY SCHOOLS IN CHINHOYI URBAN CLUSTER, MAKONDE DISTRICT IN MASHONALAND WEST PROVINCE IN IMPLEMENTING E-LEARNING DURING THE COVID-19 PANDEMIC, was prepared under the direction of the candidate's Dissertation Supervisor. It is accepted by the department in partial fulfilment of the requirements for the degree of Bachelor of Education in the Faculty of Education, Midlands State University.

The Dissertation Supervisor and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all the standards of scholarship as determined by the Faculty of Education concurs.

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Chairperson, Faculty of Education

DECLARATION

I, Masimba, Andrew, hereby declare that the contents of this dissertation entitled, "CHALLENGES FACED BY FIVE PRIMARY SCHOOLS IN CHINHOYI URBAN CLUSTER, MAKONDE DISTRICT IN MASHONALAND WEST PROVINCE IN IMPLEMENTING E-LEARNING DURING THE COVID-19 PANDEMIC" is my original work. All the citations, references and borrowed ideas have been duly acknowledged. This dissertation has not been submitted to any other institution for the purpose of awarding a degree or any other qualification.

Signature: …… Date: ……

Masimba Andrew

DEDICATION

This work is dedicated to the following; my late parents (my first mentors), Reji Masimba and Rosalia Masimba for their exemplary upbringing and inspiration, my loving wife Esther and my children Ernest, Rosalia and Emmanuel Masimba for their encouragement.

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AUTHOR'S STATEMENT

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ABSTRACT

The study sought to explore the challenges faced by five primary schools in Chinhoyi Urban Cluster, Makonde District in implementing e-learning during the covid-19 pandemic. The study adopted a descriptive survey design. The sample included twenty-five teachers and five school heads from the five primary schools in the cluster. This was because these are the ones who are at the frontline when it comes to e-learning and they have knowledge on the challenges faced in the implementation of it. Random sampling procedures were used to sample out teachers from the study area as the respondents in the study. The cluster has a total of ten primary schools and twenty-five teachers and five school heads from the five selected schools were selected using random sampling technique. The study adopted a survey design in which questionnaires were distributed to teachers and interviews were done with heads of the five primary schools in Chinhoyi Urban Cluster. Twenty-five questionnaires were distributed to the teachers in five primary schools of Chinhoyi Urban Cluster. The researcher also conducted interviews with five heads of schools in the cluster. Both secondary and primary data sources were used to gather data. The research findings revealed that the major challenge of e-learning in schools is the shortage of resources. The study recommended that the parents should support their children in e-learning, the schools should avail enough resources for e-learning, teachers should have a positive attitude towards the implementation of e-learning and the learners should be motivated to learn using e-learning platforms. Further study should be conducted on designing user-friendly e-learning platforms.

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CHAPTER ONE

THE RESEARCH PROBLEM

1.0 Introduction

In this chapter, the background of the study, the statement of the problem, research questions, delimitations, the significance of the study and limitations were outlined in detail. Definitions of key terms were defined in order to facilitate effective communication in the study.

The study aims at investigating the challenges faced by five primary schools in Chinhoyi urban in implementing e-learning during the Covid-19 pandemic. Technological advancement has demonstrated its transformative impact on the way we speak, learn and socialize in cultural, social and economic spheres in many developed countries in particular and developing countries in general. Surprisingly, such robust use of technologies has yet to be integrated effectively into the formal learning sector in most primary schools so as to bring about the transformative changes that many educationalists have envisaged. The purpose of this study is to investigate the challenges most teachers and administrators face in trying to implement e-learning in Chinhoyi's five urban primary schools. Lately, the importance of e-learning has been largely emphasized by the Zimbabwe government. Currently, most schools now have access to the internet as Wi-Fi has been installed in different schools around the country but rural schools are being left behind. The researcher will investigate challenges which schools face in trying to implement e-learning especially during the Covid-19 pandemic. Qualitative research method is being used to produce comprehensive data from the research area.

1.1 Background of the study

In 2019 the Covid-19 pandemic caused havoc in many developed countries and spread to other countries including developing ones like Zimbabwe. In January 2020, Zimbabwe recorded the first Covid-19 case and this caused a great shock to the entire nation. Recommendations were made to close all public places including schools. The authorities thought that it was just for a very short time but things went out of hand. The President of Zimbabwe, His Excellency Emmerson Dambudzo Mnangagwa declared a lockdown which commenced on 30 March 2020. Schools were closed earlier than the normal time; all Zimbabwean schools were directed to close on 24 March 2020.

The pandemic that was expected to end early continued to cause havoc in the world hence the introduction of e-learning to cover the syllabi in preparation for the final examinations. The Zimbabwe Schools Examination Council and the Ministry of Primary and Secondary Education encouraged schools to implement e-learning using a variety of platforms like WhatsApp, Zoom or Google Classroom.

The discussion of the importance of e-learning is everywhere. Teachers are now being told to emphasize technology to their students so our society will one day have the type of workforce needed. The Internet has become one of the vital ways to make available resources for research and learning for both teachers and students to share and acquire information (Richard and Haya, 2009).

E-learning has developed quite well in the global world especially in countries like Britain, United States of America, China and India. The main reason for the successful of e-learning in these developed countries is the availability of required resources like computers and smart

phones. Developed countries have established reliable networks which enable teachers and learners to communicate without network problems. The economic situation in developed countries also enables most households to have wireless internet services. In April 1997, the Singapore Ministry of Education launched a 'Master plan' for IT in education to equip every school with hardware and expertise for e-learning over six years (Chua, 2001). In most of these countries there are free internet services which cater for the e-learning of learners especially during the pandemics like the Covid-19 pandemic. Most of these countries have never stopped learning during this pandemic. The other issue is that in these developed countries their class sizes are manageable as most of them have a teacher-pupil ratio of 1:20.

In Southern Africa e-learning has not been fully implemented because most teachers and learners are not fully technologically conversant, mostly in the field of computers and technology. Most Southern African Development Community (SADC) countries face the same problem in implementing e-learning except South Africa which is economically stable and has made huge strides in implementing e-learning in its education system. Most Southern African countries are affected by limited networks; most rural areas are not connected to the internet, hence, learners cannot do online studies in those areas. The cost of internet services is hindering the implementation of e-learning in most Southern African countries. Bandwidth in Africa is always strained; costs on average fifty times more than a typical US university pays per Kbps/month; and is of a low quality without firm commitments of policy from the internet providers of guaranteed uptimes (Hawkins, 2007). Most parents and teachers prefer traditional ways of learning that is face to face delivery of lessons. Now they are faced with pandemics like Covid-19 which is now forcing the implementation of e-learning. It is now a challenge to change the mindset of parents and teachers in the Southern African region.

As the world becomes more technologically dependent, our country is becoming heavily reliant on the skilled workers in ICT fields. These workers need to be proficient and knowledgeable in their careers to help our country thrive. The fate of our nation depends on the use of technology and also most of the work is now being done online (Hossain & Robinson, 2012). A nation that is technology-driven and has a skilled workforce has major advantages to become more innovative.

"Despite of a glorious record of literacy rate and some of achievement in technology, Zimbabwe lags behind in the use of e-learning education. As Zimbabwe invests more money and efforts to promote e-learning, the number of foreign students and workers in these fields is increasing significantly" (Hossain & Robinson, 2012).

This research considers the role of teachers in integration of ICT in distance teaching and learning. Information and Communication Technology (ICT) is proven to be influential in everyday activities of different organizations (UNESCO, 2015). Zimbabwe as one of developing countries in Africa like many others has adopted the online system into its education systems. The country has developed its will to develop citizens through the integration of ICT in all levels of its education system so as to suit well in the global village. The integration of Information and Communication Technology (ICT) Policy in all levels of education including primary school level in Zimbabwe is helping in the implementation of e-learning especially in times of national disasters like the Covid-19 period where face to face tutorials have been stopped to curb the spread of the virus.

As schools are expected to enhance online learning, there are a number of challenges in implementing this especially in the Covid-19 era. There are a number of factors that prevent the use of technology in education, such as shortage of training, time, equipment and

materials (Zindi and Ruparaganda, 2011). The Ministry of Primary and Secondary Education together with the former president R.G. Mugabe distributed many computers to the public primary schools. Despite, the government's will of promoting ICT use; the implementation of ICT programmes in primary schools of Zimbabwe requires the intervention of different factors attached to learners, teachers, parents, teaching environment and the effective school leadership (UNESCO, 2015).

Zimbabwe boasts of a hugely successful education system that has been anchored on a deliberate Education for All Policy that was adopted at independence. The issue of e-learning needs to be emphasised in order to achieve the country's goals and targets as we are now in the world of technology. The issue of diseases like Covid-19 is also forcing the education sector to find ways of imparting knowledge to learners at the same time maintaining social distance to curb the spread of this dangerous disease.

1.2 Statement of the problem

Several schools countrywide are at various levels in adopting e-learning in teaching and learning. Schools and teachers appeared to be facing challenges in implementing e-learning and most of them did not worry because face to face lessons were there to hide their incompetency. While the ICT policy had already been adopted as a national policy, its successful practical implementation was heavily depended on how teachers adopted it. The most blame has been shifted to teachers on their inability to use ICT for teaching and learning. This study seeks to investigate the real challenges faced by primary schools in implementing e-learning especially during the Covid-19 pandemic where face to face tutorials have been suspended.

Many teachers were just teaching the new competency-based curriculum in Zimbabwe without proper orientation and knowledge on different aspects of it. The researcher thinks that proper orientation and workshops on implementation of the competency based curriculum were supposed to be done thoroughly before its implementation. Most facilitators just delivered lessons without the integration of ICT in their teaching. Most of the lower grades teachers ignored the teaching of ICT as a subject mainly because they were not trained on how to teach this subject. In most schools, teachers had problems trying to catch up with ICT syllabus after the announcement by the ZIMSEC that ICT was going to be examined. Now with the confusion brought by the Covid-19 pandemic, it is now very difficult for most teachers to find ways of teaching learners. The researcher will solicit for real challenges being faced by teachers in implementing e-learning in teaching learners at home.

1.3 Research questions

(i) Main research question

- What are the challenges faced by Chinhoyi urban cluster primary schools in implementing e-learning during the Covid-19 pandemic?

(ii) Sub research questions

- How often do teachers and learners use e-learning in the delivery of lessons?
- Why are teachers failing to fully implement e-learning?
- Which problems are encountered in the implementation of e-learning by schools and teachers?
- How can the school, ministry and other stakeholders help in solving some of the challenges faced in implementing e-learning?

1.4. Significance of the study (rationale)

The study intends to provide important information to the policy makers in the Ministry of Primary and Secondary Education, schools' administrators as well as to all education stakeholders in regard to the nature of the contribution of e-learning to the teaching and learning process. Since the stakeholders' perceptions and attitude are critical to how effectively an innovation is implemented, it is important to examine how teachers view this innovation and its efficiency as a tool for enhanced teaching and learning. It is also believed that this research will contribute to the growing knowledge regarding the use of e-learning during the Covid-19 pandemic in Zimbabwean education.

The emphasis on the use of e-learning during national disasters like Covid-19 pandemic is important for teachers, learners and other stakeholders in education. It is also important that the implementation of online education in the curriculum is a way that can be used to close the gap between schools and homes as learners will acquire essential knowledge in the comfort of their homes. The research is going to find ways in which primary school learners are going to benefit from e-learning and find measures to try and address challenges faced in the implementation of e-learning.

1.5. Delimitations of the study

The study is concerned with investigations of challenges faced by schools in Chinhoyi Cluster (Makonde District) in Mashonaland West Province. The research is being done at five primary schools in one of the districts in Mashonaland West Province which is Makonde District. Amongst these schools, two of them have parents who are financially stable and most of them have stable jobs. The other two schools have parents who are mixed some are financially stable and some struggle to earn a living. These two schools are from newly

established locations. The fifth school is the oldest school in the cluster situated in an old location where most learners are orphans and underprivileged. The researcher opted for these schools as they are near the researcher's place of residence and there is a greater understanding of the history of the schools. It is also due to financial constraints and time. The main thrust of the study is to investigate the challenges faced by the school heads and teachers towards the introduction of e-learning at primary school level. The main focus of the study is to investigate the attitudes of the school heads and teachers towards e- learning at primary school level only. Post primary school level education is not the concern of this study.

1.6 Limitations

Data collection seemed to be a challenge due to the lack of confidence from participants who were afraid and felt uneasy to participate. Some thought the research will be used to fire them from their current jobs but the researcher boosted their confidence and followed ethics in protecting their contributions. The researcher ensured confidentiality and informed participants about the purpose of the study. The researcher faced some problems throughout the collection of data. Due to the Covid-19 pandemic, the researcher faced problems in moving around schools as there were lockdown measures put by the government. Most respondents were not at their respective schools because of the Covid-19 pandemic. The researcher countered the problem by visiting the respondents at their homes as all of them stay in different Chinhoyi locations. Covid-19 regulations were observed that is, the wearing of face masks, social distance and sanitisation of hands before and after handling questionnaires and pens. Some respondents wanted to hide information and felt uneasiness to participate in the study. A letter from Midlands State University helped respondents to

understand and gave them assurance that the information needed was for academic purposes only. Some of the limitations to the research were financial constraints, time and pressure of work.

The researcher faced a lot of transport problems as respondents were not gathered at schools due to the Covid-19 pandemic. The researcher made a budget for the transport costs and other expenses like photocopying and typing. On the issue of time, the researcher had to carry out research at the same time studying for the other modules. The researcher prepared a time-table to cater for the collection data and studying time for other modules. It was also difficult for the researcher in interviewing school heads as most of them were reluctant due to the Covid-19 pandemic. It was difficult for them to welcome visitors. The researcher followed the World Health Organisation regulations like the wearing of face mask, sanitising hands and maintaining social distance. That gave the interviewees assurance that they were safe so they responded quite well. The sample size for the study was also limited due to financial and time constraints. The study focussed on exclusively urban schools, hence it may not be easy to generalise results to rural school situations where resources and conditions of learning are totally different from an urban set-up. However, the researcher did everything possible to minimise the effects of these limitations in order to produce a valuable and quality research.

1.7 Operational Definition of Terms

Information and Communication Technology (ICT): These are defined as computers and Internet connections used to spread and transfer Information for learning purposes.

E-learning: It is the teaching and delivery of lesson through different electronic devices like cellphones, television, radios and computers.

Primary schools: These are schools running from ECD A to grade 7.

Abbreviations

MOPSE- Ministry of Primary and Secondary Education

1.8 Summary

This chapter looked at the background of the study and discussed and highlighted on the statement of the problem, research questions, delimitations, the significance of the study and limitations. Definitions of key terms were defined in order to facilitate effective communication in the study. All these will give a focused direction in the research to be done.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter focuses on quite a number of factors in related literature on the challenges of e-learning in primary schools. The purpose of this section is to review selected literature relevant to challenges faced by schools in implementing e-learning in five selected schools in Chinhoyi urban cluster in Makonde District in Mashonaland West Province. Some important ideas and opinions from experts are used to explain the challenges of e-learning in schools especially during national disasters or pandemics like the recently Covid-19 pandemic. The researcher looks at published and unpublished research findings from experts and considers them in this chapter. Topics addressed include the definition of e-learning, advantages and benefits of e-learning, disadvantages of e-learning and barriers to the successful implementation of e-learning. The barriers are classified into teacher level, learner level and school level barriers.

2.1 What is e-learning?

Richard and Haya (2009) assert that the Internet has become one of the vital ways to make available resources and learning for both teachers and students to share and acquire information. E-learning actually refers to an on-line learning process for learners at a distance. It enables learners to interact with their teachers through different Information and Communication Technology devices like laptops, mobile phones or desktops. Oblinger and Hawkins (2005) note that e-learning has transformed from a fully- online course to using technology to deliver part or all of a course independent of permanent time and place.

E-learning enables collaborative communication where learners and users take control over the way they are learning. E-learning makes learners feel flexible, convenient and effective as compared to face to face tutorials where in some cases facilitators tend to be strict and avoid learners to explore new ideas. E-learning is an inclusive term that describes educational technology that electronically or technologically supports learning and teaching (Roblyer and Doering, 2012). In this era most people are taking advantage of technological tools to advance in different educational endeavors.

E-learning also includes computers, tablets, television, radio, mobile devices, video conferencing, management information systems, and transactional applications of many kinds, network connections, satellite communications and other platforms or tools that transmit or receive information electronically in a digital form. E-learning in education includes a wide variety of special purpose devices and applications that support and enhance teaching and learning processes. Such devices and applications include but are not limited to the following: computers, e-tablets, projectors, smart boards, digital textbooks, e-libraries, network access, virtual digital laboratories, video gaming learning systems, adaptive technologies to meet the needs of students with special needs and digitally-based distance learning systems.

E-learning can also be seen as a learning program which uses information network like the internet, an intranet (Local Area Network) or extranet (Wide Area Network) whether fully or partially for lesson delivery, discussions or interactions (Tinio, 2002). Some advanced ways of e-learning include audio-conferencing, video-conferencing, web-based conferencing and open and distance learning. These ways are vital in e-learning and they make teachers and learners actively involved in their discussions. They really increase participation and there is a greater interaction. It helps to acquire quality education through learning by doing, direct

instructions, logical thinking, discovery learning, hands-on approach, self-learning and information-seeking.

There are quite a number of problems and challenges Zimbabwe is facing in trying to implement e-learning. Shafika (2007) says that there are factors affecting e-learning adoption in Zimbabwe. These are; Zimbabwe does not have a dedicated specific national policy on e-learning in education, Zimbabwe has limited human resource capacity, limited if any fiscal resources are committed by government to support e-learning access and use and lastly there is little digital education content based on the local curriculum framework available in Zimbabwe educational institutions. Therefore, this study will suggest ways of overcoming some of these challenges affecting e-learning in schools.

2.2 Advantages or benefits of e-learning

The main advantage of e-learning is that it offers all the needs for an individual learner to explore on his or her own pace and time. It enables learners to be independent and self-reliant thus lessen the burden of troubling facilitators in every aspect. According to Smedley (2010), the adoption of e-learning provides the institutions as well as their students or learners the much flexibility of time and place of delivery or receipt according to learning information. E-learning provides platforms to acquire huge amount of information which enables learners to progress in many aspects. The use of e-learning has enabled learners to fully participate and discuss issues independently without fear of talking directly to other learners or the teacher. Wagner, Hassanein and Head (2008) argue that e-learning makes available extra prospects for interactivity between students and teachers during content delivery. E-learning has also proved to be cost effective in the sense that learners do not need to travel to schools. It also

accommodates many learners on one platform where there is no need for buildings and furniture.

E-learning closes the gap in situations where there are few facilitators for face to face tutorials; one facilitator can take hundreds of learners through e-learning. It encourages self-pacing where some learners are fast while others are slow, so through e-learning each learner is catered for. Through e-learning, according to Rabah (2005), objectives can be accomplished in the shortest time with least amount of effort. During e-learning sessions different ideas come from different learners and this makes both learners and teachers to accomplish and keep up with development. E-learning prepares learners for future dialogues using different platforms. Learners are enlightened and encouraged to think independently with minimum supervision. Disabled learners find it easy to learn through e-learning as they feel comfortable learning from home. Brown, Cromby and Standen (2001) support that the adoption and implementation of e-learning provides disabled people with the chance to further their education from any location.

2.3 Disadvantages of e-learning

The most noticeable disadvantage of e-learning is the lack of important interaction between facilitators and learners. Dowling, Godfrey and Gyles (2003) state that making learning materials available online results in improved learning results only for specific forms of collective assessment. E-learning makes learners lack interaction skills and some undergo remoteness. A lot of inspiration is needed to overcome these problems. When it comes to explanations and clarifications, e-learning faces many problems than face to face interactions. E-learning affects communication skills in learners as they lack that interaction directly with others. When it comes to online examinations, cheating is most probably going to take place thus hindering progress in the learning process. Newhouse (2002) says the role of

socialization is affected by e-learning, most primary school children learn through imitating and following their role models. E-learning is not applicable to all fields of learning; areas which need practical will suffer a lot as they need face to face tutorials. It may also lead to congestion of networks and end up incurring costs. In some cases cyber-crime can be caused by the use of e-learning if leaners are not monitored. Some learners might end up viewing pornographic sites which might hinder their learning progress.

Barriers to the successful implementation of e-learning

2.4 Teacher-level barriers

The most barrier or challenge teachers face in implementing e-learning is lack of confidence. According to Beggs (2000), teachers' fear of failure causes a lack of confidence. The teachers' limitations in e-learning knowledge hinder their confidence and therefore affect the way they take e-learning. Some learners know more than teachers so they feel anxious to use this e-learning technology. Teachers also lack competence in using e-learning. In some developing countries teachers do not have the skills of using e-learning. One of the problems to teachers' use of ICT in teaching is the lack of training (Beggs, 2000). Most senior teachers who were trained long back lack these skills and they need in-service workshops. Habibu, Mamum and Clement (2012) assert that most teachers lack the skill to use ICT in teaching and learning process because they did not get enough training opportunities. It is also noted that teachers' attitudes and resistance to change are other challenges in the implementation of e-learning. Earle (2002) says that the change from a present level to a desired level of performance is facilitated by driving forces such as the power of new developments, rapid availability, creativity, internet access, or ease of communication, while it is delayed by resisting forces such as lack of technical support, teacher expertise or time for planning. It is also noted that most teachers do not get e-learning gadgets like laptops or mobile phones

from schools to use when delivering online lessons. Most of them if they try to use their personal gadgets some face problems because some of these gadgets are not compatible with required software for different e-learning platforms. Teachers are affected by the unavailability of time; most of the time like in Zimbabwe teachers will be doing extra jobs to earn extra income due to the country's economic situation.

2.5 School-level barriers

In most schools teachers have skills and competence in the use of e-learning but most schools do not offer them enough time to explore what they know. Lack of time is a major barrier because of busy schedules lined up for the teachers. Some teachers blame time factor as one of the difficulties in scheduling enough computer time for classes (Habibu et al, 2012). Most teachers are not effectively trained to do e-learning. Schools have a task to ensure that all teachers are able to use e-learning in teaching different subjects. There are no in-service training courses for teachers as most senior teachers can hardly turn on a computer and they have problems in exploring many functions on mobile phones. Most senior teachers did not get ICT lessons at colleges when they got their training so it is up to schools to train them. Newhouse (2002) argues that some initial training is needed for teachers to develop appropriate skills, knowledge and attitudes regarding the effective use of computers to support learning by their students.

Teachers need not just be computer literate but they also need to be able to use computers in teaching and learning processes. Another barrier is lack of e-learning resources like computers and mobile phones for learners. In Zimbabwe most schools do not have e-learning gadgets to give teachers so that they teach learners in time of need like during the recent Covid-19 pandemic. Schools should provide laptops or mobile phones together with data bundles for teachers to implement e-learning.

During this Covid-19 pandemic most schools are not receiving fees from parents so it is difficult for administrators to run their institutions smoothly. It might be a night mare to expect schools that do not have viable projects to provide data bundles and e-learning gadgets. The Covid-19 pandemic has disrupted both the health and economic systems. Schools, which traditionally rely on user fees to fund their daily operations face a dire time with parents' inability to pay fees because of the economic hardships they are facing, weakening their effort to provide required materials (OCHA, 2020). The unavailability of data bundles to use for e-learning is another challenge to the implementation of e-learning. The country's economic situation also affects the purchase of data bundles. Teachers cannot afford to buy data bundles as well as learners and on another note schools cannot also buy bundles for teachers.

Some school heads lack technological knowledge and skills so they just ignore the implementation of e-learning. The majority of school administrators are above fifty years so to them the implementation of e-learning is not easy. According to Habibu et al (2012) schools should provide genuine software to be used by teachers and learners, provide continued technical support, purchase high bandwidth with high internet speed, provide training in new pedagogical approaches, provide e-learning resources and providing training courses in dealing with the new devices.

2.6 Learner-level barriers

Learners are enthusiastic when it comes to technology that is the use of various gadgets like mobile phones, laptops or desktops. They really feel happy to explore and discover whilst learning. However, there are many challenges faced by learners that hinder them from embarking on e-learning sessions especially in rural areas and also families with poor backgrounds. Most families in both urban and rural areas are facing economic challenges so

it is a mammoth task to afford technological gadgets and data bundles for e-learning sessions. According to Matimaire (2019) students in rural and marginalized communities do not have the capacity in terms of hardware (mobile phones or other devices that facilitate access to the internet), infrastructure and finances to access the e-learning portals. Learners face technical problems such as lack of e-learning literacy and lack of access to e-learning facilities. These are negative aspects that hinder the progress in venturing into e-learning sessions with their teachers (Mwandosya, 2003).

In some families learners are given household chores that prevent them from attending to e-learning sessions. This disadvantages the girl child in most cases. Naturally, boys are innovative and they like to explore different avenues more than girls. Kay (1992) supports that girls are less positive about e-learning implementation than boys but are enthusiastic about exploitation of programmes such as word processing and drawing.

In Zimbabwe, data charges, technological skills and internet coverage needed by learners and teachers to do e-learning and access e-learning platforms remain a setback towards the advancement of the education technology revolution. The other hindrance in e-learning implementation is the limited power in rural areas of Zimbabwe and also persistent power cuts in urban areas. Zhou (2020) argues that currently more than 65% of secondary schools are not electrified, while more than 75% of primary schools are not electrified. The other challenge is the way leaners behave on internet. When learners are given the chance to be on internet, some might start visiting prohibited sites which end up affecting their learning and behavior. According to Simanje (2020) there is need to address challenges to do with e-learning from legal and administrative views taking advantage of Cyber security and Data Protection Bill, with regard to education sector when children resort to internet for their learning , research included, there is need to make sure that online space is safe for them.

2.7 Summary

The purpose of my study is to investigate schools' challenges of technology use and how problems can be tackled to enhance distance teaching in times of natural disasters. The chapter focused mainly on the definition of e-learning, advantages and disadvantages of e-learning and barriers to the successful implementation of e-learning. The barriers were classified into school-level, teacher-level and learner-level. Chapter three focuses on research methodology that was used in the study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter outlines the research design and the methods that were used to collect, present and analyse the data. The population and the sample used in the research are described in this chapter, along with the criteria used for sampling. The chapter also describes the data-collection instruments, namely questionnaires and interviews. Lastly, the procedures followed in the collection and analysis of data will be outlined.

3.1 Research Design

This section focuses on the research paradigm and the research design that was used to achieve the objectives of this study. The paradigm that was employed in this study is the mixed method paradigm. This is because qualitative and quantitative research methods are not mutually exclusive. Research design concerns techniques and procedures which researchers use to collect, process, analyse, and interpret data. It outlines the population, sample size, instruments used, procedures, and techniques for the collection of data, analysis and interpretation. Burns and Groove (2003) define a research design as a blueprint for study conduction looking at maximum control over factors that could hinder with the validity of the outcomes. Methodology and design are both decided by the research design selected. It affects to a very large extent the specific procedures of the study. A research design can be described as a plan and direction of investigation used to get evidence to respond to research questions. According to Gray (2009) a research design is a plan of action which shows certain stages suitable for giving response to questions. Research design incorporates all the steps chosen by the researcher in getting the solutions to a problem under research.

3.1.1 Descriptive survey method

The researcher used a descriptive survey design to collect information because surveys can be used for studies which need explanations and descriptions. This research seeks to find explanations and descriptions of challenges faced in implementing e-learning during Covid-19 era. In this design, the researcher collected same information from all the twenty-five teachers and five school heads and questions were standardised. Descriptive survey method can be used to gather information from a sizeable number of people and the information can be used to make generalised conclusions. Cohen, Manion and Morrison (2007) agree that surveys gather data with the intention of describing the nature of existing conditions or identifying standards against which existing conditions can be compared. Descriptive survey design was used because it has structured surveys that use formal list of questions asked to all respondents in the same way. The researcher opted for descriptive survey method because it can save time and money without affecting efficiency and accuracy.

3.1.2 Advantages of descriptive method

Chiota (2003) states that the advantages of using a descriptive survey methods are:

- It provides a relatively simple and straight forward approach to the study.
- It can be used to collect a variety of information.
- Ensures sufficient information collection through questionnaires.
- This design is quick.
- Low costs are incurred.
- Information got from surveys is flexible and broad as the gathered data can be put to several uses.
- Can be used by researchers and planners who are concerned in planning for future.

The above advantages made the researcher to choose that method because it produced a thorough and well documented research.

3.1.3 Disadvantages of descriptive method

- Surveys do not penetrate deeply into inter-relationships mainly because busy people may be reluctant to take their time.
- Surveys tap respondents who are accessible and co-operative only.
- Most respondents tend to please the researcher by giving biased responses.
- Not suitable to busy people as they may not want to waste their time.
- Some may give pleasant answers only.
- Some do not answer as they lack concentration because they may take it lightly.
- Some only answer to be well informed and smart.
- Relies entirely on wide coverage rather than depth.
- Not appropriate for illiterate or low literacy respondents.

The researcher tried to eradicate the weaknesses of the descriptive survey by designing questionnaires with simple and clear questions. Interview questions were also simplified to clear any element of ambiguity. The questions designed were clear and not biased. The questionnaires were distributed and collected by the researcher in person to enable quick responses within a period of a week. The researcher also used vernacular language in some cases to make the questions clear to respondents.

3.2 Population

Population is referred to as a group of individuals who have one or more characteristics in common that are of interest to the researcher (Gray, 2009). Instead of getting responses from all primary school teachers in Makonde District, the researcher used an accessible population mainly because realistically all individuals could not be included in the sample. In this study,

the target population included 325 teachers and ten school heads in Chinhoyi Urban Cluster. This was mainly because the teachers play a major role in the implementation of e-learning. School heads play a pivotal role in making sure that resources for e-learning are provided to the teachers.

Schools that were close and accessible to the researcher's station were selected to cut costs and save time. This did not affect the results of the study as the same responses could have been gathered if other schools in the district were involved. The five schools selected in Chinhoyi urban cluster represented half of the urban schools in Chinhoyi Urban Cluster

3.2.1 Sample and sampling procedure

According to Gall, Borg and Gall (1996) a sample is a group of individuals drawn by procedure in which all individuals in the defined population had equal and independent chances of being selected as a member. The researcher gathered data from a portion or sample of the population. A sample is a subgroup of a population. Therefore, sampling is taking a small group from a bigger group randomly or non-randomly. Sampling makes the research easier because it saves time and money.

In this research study, twenty-five teachers and five school heads from the five selected primary schools in Chinhoyi urban cluster constituted the sample. The researcher used random sampling method. Gall et al (1996) argue that the purpose of purposeful random sampling in quantitative research is to achieve generalizability in the data. The researcher selected participants by writing their names on pieces of paper then folded them up and put them in a hat. The researcher then mixed the papers together thoroughly and then asked his daughter to pick the number of papers he wanted per school. There were two sets of names per school; one for women and the other one for males to cater for gender balance. The participants whose names were on pieces of paper in the hat were the ones who participated

in the research. This type of sampling ensured that every participant had an equal chance of being selected. This implied that the researcher picked participants randomly despite their differences.The researcher was gender sensitive hence, the number of selected females was twelve almost equivalent to the thirteen males that were selected.

3.3 Research instruments

Research instruments can be referred to as tools that the researcher can use to collect required data from targeted participants. In educational circles, collected data is important because it helps to answer different questions in a study. The researcher opted for a questionnaire that consisted of structured and unstructured questions to broaden the collection of information. Interviews were also conducted to collect data for this study. The use of two instruments made it possible for the researcher to get a clear picture of the questions raised.

3.3.1 Questionnaires

Gall et al (1996) describe questionnaires as documents that ask questions to all individuals in a sample. Questionnaires have a set of questions to be responded to without the pressure of the interviewer. These can be hand delivered to respondents, mailed, can be done online or interviewer can gather respondents in one place and they complete the questionnaires. A questionnaire can be self-administered where respondents complete them without the researcher's assistance.

There are two types of questionnaires which are open ended and close ended. An open ended questionnaire requires respondents to answer in brief sentences or summary whereas a close ended questionnaire requires respondents just to put a tick, write a 'Yes' or 'No' on the given questions. Roopa and Satya (2012) state that in an open ended questionnaire, the respondent is asked to provide his or her own views.

Questionnaires are good and acceptable for descriptive and explanatory research. These can be easily hand delivered, mailed or participants can be gathered in one place and complete the questionnaires at once. Some questionnaires are self-administered and others are interviewer administered. Self-administered questionnaires allow the respondents to complete them without any interference from the researcher. Interviewer administered questionnaires can be administered over the phone whilst the respondent' responses are recorded. The researcher used self-administered questionnaires.

A good questionnaire should scale down the language; it must be simple and straight forward. Researchers must not use ambiguous questions, technical jargon or questions that require calculations. Questionnaires must be short and straight to the point. The researcher made sure to avoid emotional questions and sensitive questions came at the end of the questionnaire. Questions were made to flow allowing respondents to understand them and respond well.

The researcher chose questionnaires mainly because data are easily collected and analyzed. It was also cheaper to use questionnaires as the researcher moved around easily collecting data. Responses were genuine because the respondents were alone. The process permitted anonymity so can result in honest responses. The use of questionnaires eliminated influence from the researcher and the process was fast to complete and more efficient.

However, questionnaires did not allow the researcher to probe the respondents to get more information. The researcher had prepared for that and asked clear questions which gathered all the required information.

3.3.2 Interview

An interview is the other instrument which was used for this study. Interviews can act as questionnaires being asked verbally. Kothari (2004) says an interview is a method of

collecting data that includes presentation of oral-verbal stimuli and instant responses are supplied in form of oral-verbal. It is collecting data by actually talking to the respondents. Interviews can be done face to face or using a phone. Face to face interviews enable the researcher to observe facial expressions and gestures thus, ascertaining whether they are supporting answers of the interviewee.

There are three types of interviews which are structured, semi-structured and unstructured interview guides. The researcher used a structured interview guide because the questions are based on standardized or identical set of questions.

However, for the purpose of this study, interviews were used to get the views of administrators on problems faced in the implementation of e-learning. The questions were created, reviewed and revised to avoid ambiguity. The researcher opted for interviews mainly because ambiguous questions can be explained and corrected on spot (adaptability). Interviews also captured verbal and non-verbal behavior. The response rate was high; all targeted respondents responded well. It was a quick method of getting responses. The researcher got a level of in-depth information gathering. The interviews encouraged trust and rapport between interviewer and interviewee.

However, in some instances responses were affected by the interviewer's presence. Some respondents wanted questions to be explained so it took some time to explain the questions. The responses were subjective. It was also costly as the researcher had to visit respondents.
The researcher discovered that some did not give responses freely because interviews can hardly provide for anonymity.

3.4 Data collection procedures

Prior to the interviews, the researcher held a pilot interview to ensure the interview questions were appropriate. The questionnaires were tried on some teachers in Chinhoyi Urban Cluster. That assisted the researcher to identify weaknesses and contradictions that might have existed in the instruments. An attempt was also made to quantify and analyse the data collected. Respondents in the pilot survey were asked to give feedback. That helped the researcher to improve the validity of the instrument and made a few corrections to make the questions clear and easy to understand.

The school heads to be interviewed were presented with a consent form stating the purpose of the study and were assured of full confidentiality. Teachers who completed questionnaires were also selected from the selected schools. The researcher collected a letter from the university from the Faculty of Education that allowed him to carry out the research. The researcher took the letter to the District Schools Inspector (DSI) of Makonde District, to seek permission to carry out the research. School heads were also asked for permission to get responses from teachers at their schools. The researcher visited the respondents and distributed the questionnaires. Interviews with the school heads were also conducted at their respective schools and on average it took about fifteen minutes per session.

3.5 Data analysis plan

Data analysis focuses on the following processes; classifying data, coding data, data entry and analysis for easy interpretation. Microsoft Excel was used to tabulate code and process quantitative data. Data was presented using tables, graphs and pie-charts. The researcher collected interview notes and an interpretive analysis was made.

3.6 Ethical considerations

There are ethical values to be followed when collecting data. Singleton and Straits (2010) define research ethics as standards of right and wrong; they inform the researchers to behave and act in morally responsible ways. Privacy and confidentiality was assured to entice participants to take part in the research study. The researcher informed the participants about the purpose and importance of the study. Assurance was given to participants about the purpose of the study which is for academic purposes and the procedures to be involved in the study. Unanimity was assured to participants to protect them. Informed consent was sought before any participant took part in the research study. All the information was collected in a period of not more than three weeks.

3.7 Summary

This chapter focused on the research design, population and sample for the research. The data collection instruments namely; questionnaires and interviews were also discussed. Data collection procedures, data analysis plan and ethical considerations were outlined in this chapter. The findings collected by these instruments will be presented in the following chapter using graphs, tables and charts.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter focuses on data presentation, analysis and discussion of the findings of the study. Information gathered on the basis of sub-research questions is summarised and interpreted in this chapter. The presentation is entirely based on findings from respondents and the researcher compared the findings with data reviewed in the literature review section of this study.

4.1 DATA PRESENTATION AND ANALYSIS

Below is the discussion on questionnaire response rate.

4.1.2 Questionnaire response rate

Twenty-five questionnaires were distributed to the teachers of the five primary schools in the cluster. The researcher had to visit these teachers' places of residence as the schools were closed due to Covid-19 scourge. The five schools consist of two council and three government schools. One school is a former group A school where most learners are from middle class backgrounds. One council school is located in a medium density suburb and the other three schools are in high density suburbs.

Table 4.1 Questionnaire response rate

Respondents	Distributed	Returned	Percentage of response rate
Teachers	25	25	100%
Total	25	25	100%

The questionnaire response rate was 100% mainly because the researcher physically visited the five teachers per school at their places of residence as schools were closed because of the Covid-19 pandemic so all participants responded satisfactorily as they all reside in the same area with the researcher.

4.1.3 GENERAL CHARACTERISTICS OF THE RESPONDENTS

The following describes the respondents' gender

Table 4.2 Respondents' gender

Gender	Frequency	Percentage
Male	13	52
Female	12	48
Total	25	100

Table 4.2 shows the gender of respondents who took part in the research. The researcher considered gender balance so that the responses were not biased towards one gender. Fifty-two percent of the respondents were males almost the same number with the 48% women respondents.

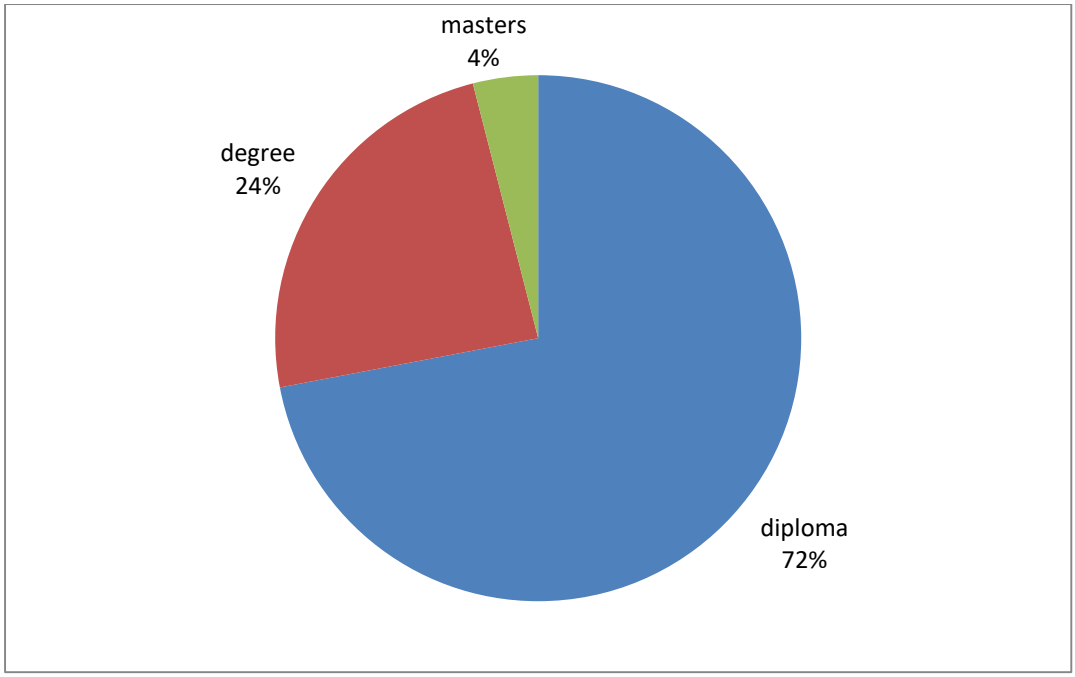

Figure 4.1 Level of education

Figure 4.1 shows the level of education of the respondents. Seventy-two percent of the respondents had diplomas in education, 24% of the respondents held first degrees and 4% had masters' degree. This really showed that the cluster had qualified teachers and 4% of the respondents had acquired first degrees where ICT courses were a part of their studies.

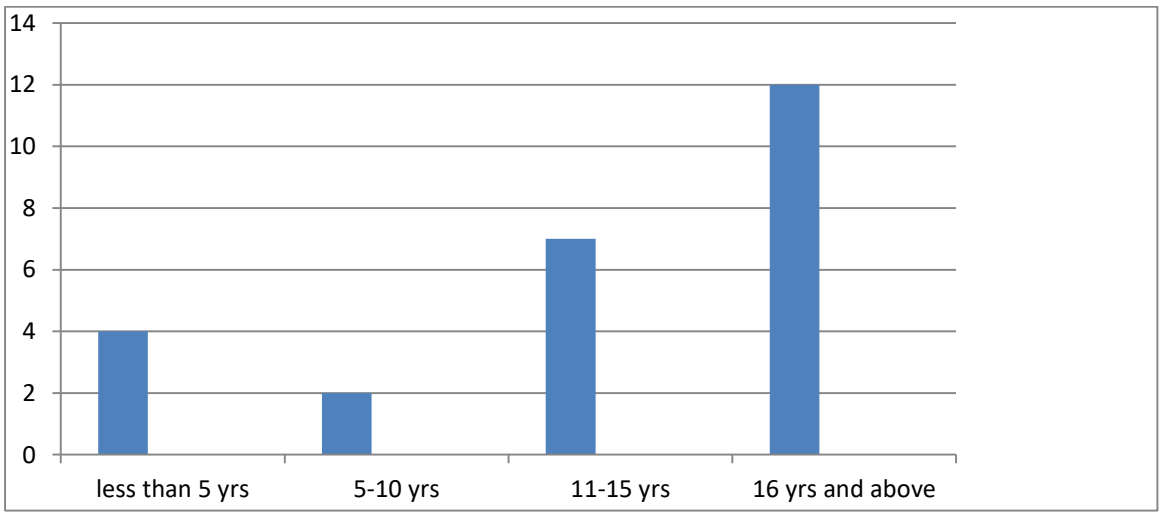

Figure 4.2 work experience

Figure 4.2 shows the level of work experience that the respondents had. Sixteen percent of the respondents stated that they had a work experience of less than 5 years. Only 8% had a work experience of between 5 and 10 years. Twenty-eight percent had been in the service for 11-15 years. Forty-eight percent of the respondents had a work experience of above 16 years. That indicated that most respondents had long work experience.

4.2 SUB RESEARCH QUESTION 1: HOW OFTEN DO TEACHERS AND LEARNERS USE E-LEARNING IN THE DELIVERY OF LESSONS

The pie-chart below shows the number of respondents doing e-learning

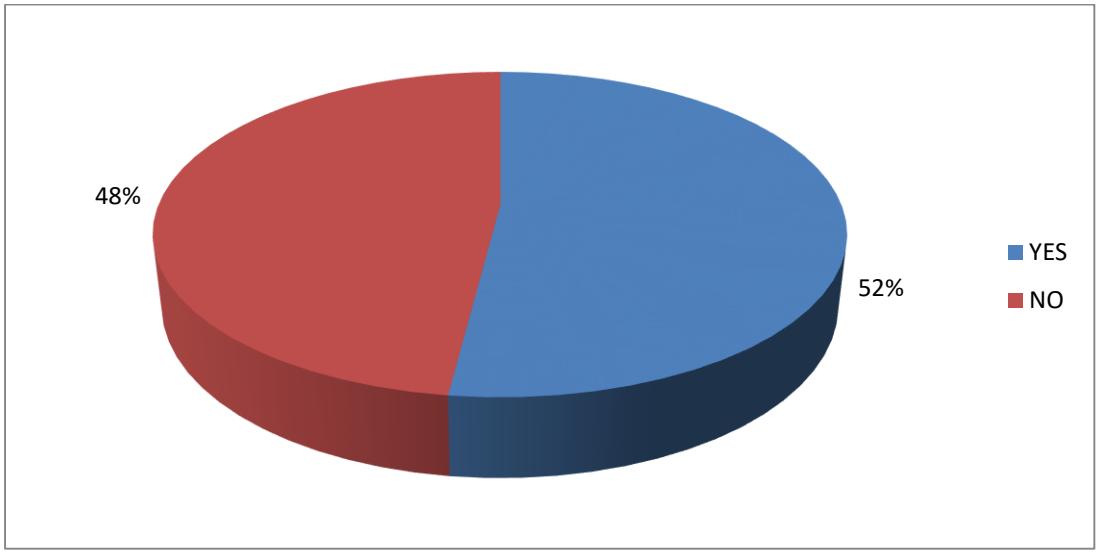

Figure 4.3 Teachers using e-learning to deliver lessons

Figure 4.3 shows the number of teachers using e-learning in the delivery of lessons with learners. Fifty-two percent of the respondents stated that they were indeed conducting lessons through e-learning. The other 48% said that they were not delivering lessons through e-learning. This means that some teachers in the cluster are implementing e-learning. The three interviewees stated that the teachers are delivering lessons through e-learning to a certain level whilst the other two stated that their schools were not

implementing e-learning. One interviewee said," We are not sure whether teachers are doing e-learning but we hear some are being supported by parents to teach their children online."

Table 4.3 Are teachers willing to implement e-learning?

Respondents	Frequency	Percentage
YES	17	68
NO	8	32
Total	25	100

Table 4.3 shows what respondents said about teachers' willingness to conduct e-learning lessons. Sixty-eight percent (17 teachers) stated that teachers are willing to deliver lessons through e-learning. Thirty-two percent (8 teachers) responded by stating that teachers are not prepared to implement e-learning. This shows that some teachers appreciate the importance of e-learning lessons.

4.3 SUB-RESEARCH QUESTION 2: WHY ARE TEACHERS FAILING TO FULLY IMPLEMENT E-LEARNING?

This section focuses on reasons why teachers are failing to fully implement e-learning.

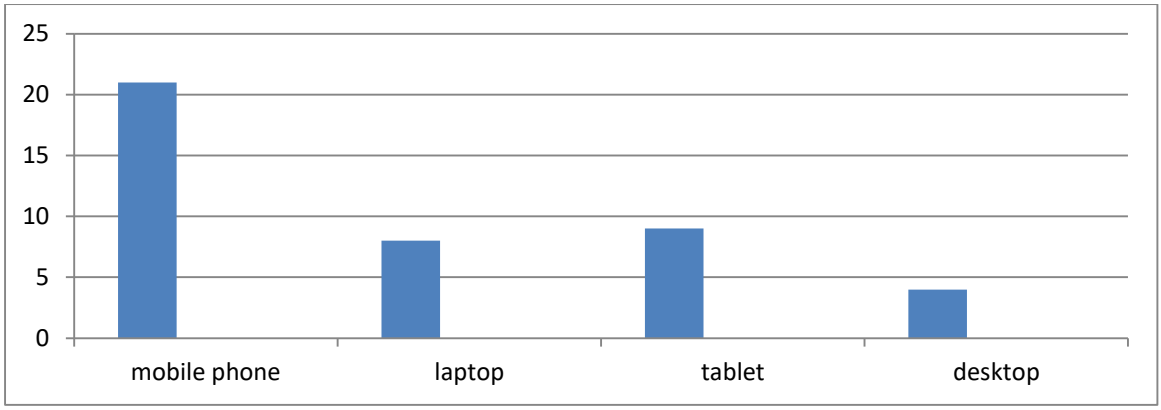

Figure 4.4 ICT devices that can be operated comfortably by teachers

Figure 4.4 shows ICT devices that respondents could operate comfortably. Eighty-four percent of the respondents stated that they were able to operate mobile phones comfortably. Thirty-two percent could operate laptops comfortably. Tablets could be operated comfortably by 36% of the respondents. Only 16% of the respondents were good at operate a desktop comfortably.

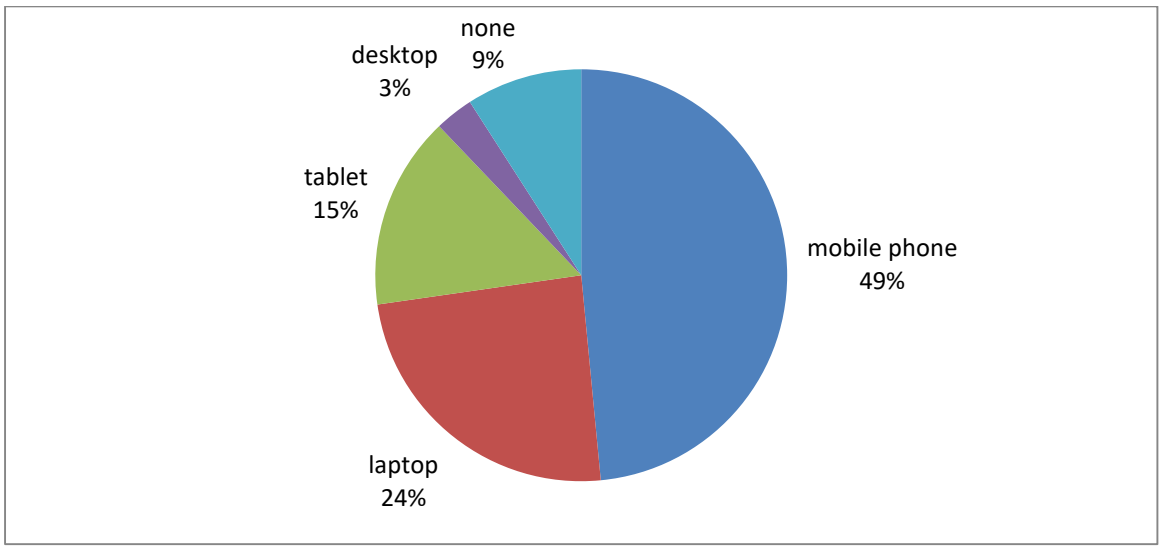

Figure 4.5 ICT devices owned by teachers that can be used for e-learning

Figure 4.5 shows ICT devices that teachers owned that could be used for e-learning. Forty-nine percent of the respondents stated that they owned mobile phones which could

be used for e-learning. Twenty-four percent of the respondents owned laptops which could be used to deliver lessons through e-learning. Fifteen percent of the respondents indicated that they owned tablets that could be used for e-learning. Only 3% owned desktops that could be used for e-learning. Nine percent of the respondents stated that they did not even own any ICT device that could be used for e-learning. This showed that most teachers can use mobile phones for e-learning. However, some teachers had mobile phones which were not compatible with e-learning platforms.

All the interviewees mentioned that schools in Chinhoyi Urban cluster did not have enough ICT devices that can be used by teachers for e-learning.

Table 4.4 Knowledge on the use of ICT devices

Device	No knowledge	Average	Expert
Mobile phone	0	12	13
Tablet	2	14	10
laptop	3	19	3
Desktop	4	19	1

Table 4.4 indicated the knowledge that teachers have in using different ICT devices. Fifty-two percent of the respondents stated that they had expertise in the use of mobile phones, 48% could averagely operate mobile phone and everyone could at least operate a mobile phone. Forty percent of the respondents indicated that they had expertise in operating tablets, 56% could averagely operate tablets and eight percent had no knowledge on how to operate tablets. Twelve percent of the respondents said that they could comfortably operate laptops; 76% indicated that they could operate laptops averagely and 12% had no knowledge on the operation of a laptop. Four percent of the

respondents indicated that they had expertise in the use of desktops, 76% could averagely operate desktops and 16% of the respondents had no knowledge on how to use desktops. It is noted that everyone could at least operate a mobile phone. The highest number of respondents had average knowledge on the use of laptops and desktops in delivering lessons through e-learning.

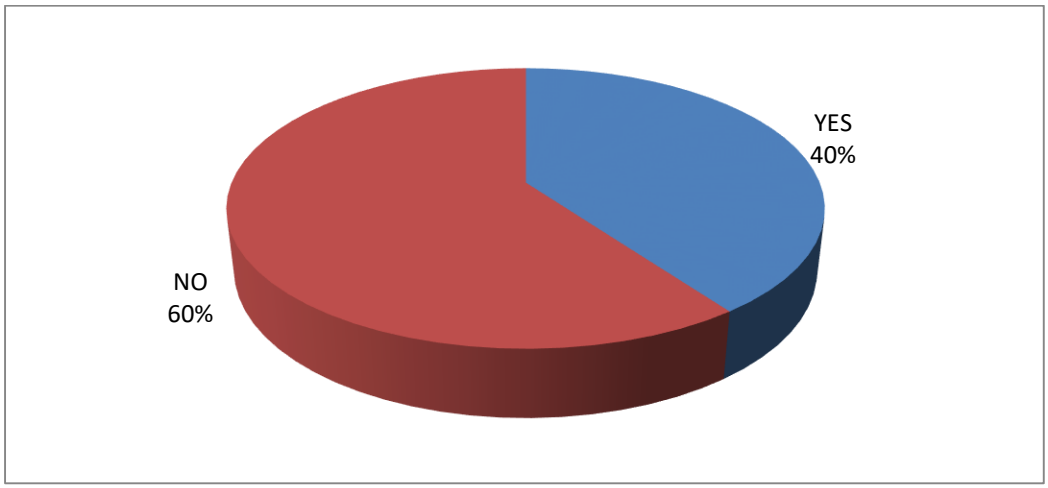

Figure 4.6 ICT in-service training workshop attendances

Figure 4.6 shows the number of respondents who attended ICT in-service training workshops. Forty percent of the respondents indicated that they had attended ICT in-service training workshops held at their stations. Sixty percent of the respondents stated that they did not attend any ICT in-service training workshop.

All the five interviewees said that ICT in-service training workshops were held at their schools but only few teachers attended the workshops. Some got the ICT skills at colleges where they got their teacher training education. One interviewee said, “It is very difficult even to supervise teachers because I also do not have computer skills so it’s

difficult for me to supervise them, actually I rely on some teachers who are computer literate when I want to use a computer."

Table 4.5 Internet services at home

Response	Frequency	Percentage
YES	3	12
NO	22	88
Total	25	100

Table 4.5 shows the number of respondents who had internet services (Wi-Fi) at home. Twelve percent of the respondents stated that they had internet services at their homes. Eighty-eight percent indicated that they did not have internet services at their homes. It showed that most teachers did not afford to have internet services at home.

The three interviewees stated that they had high speed internet services at their schools which can be used by teachers. They stated that the equipment was donated by a Non-Governmental Organisation. One interviewee indicated that the school had internet services provided by one of the network providers. The other interviewee said that their school did not have internet services. However, she indicated that they had applied for one.

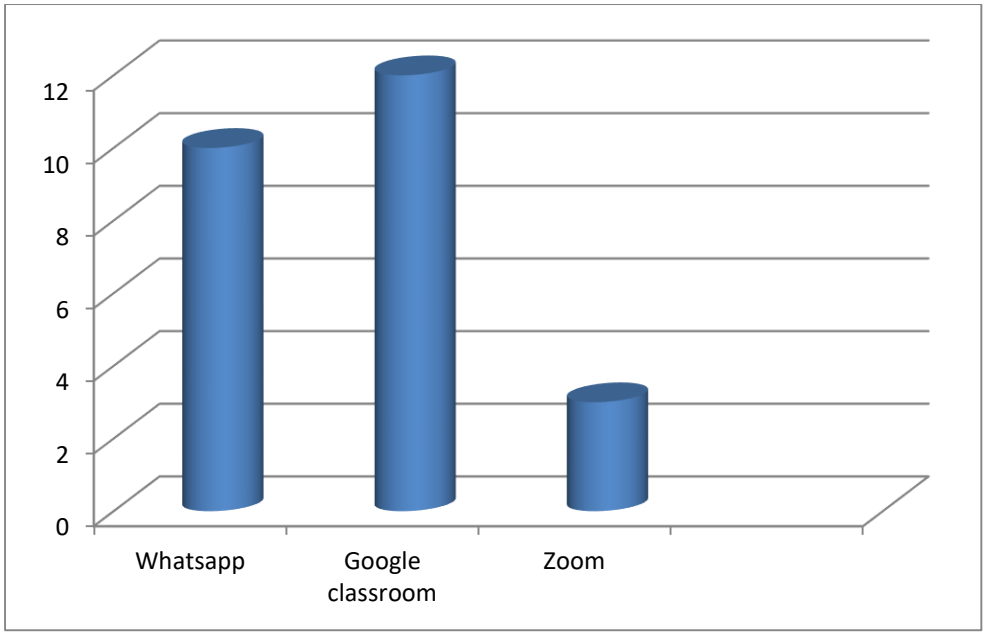

Figure 4.7 Most effective online platforms for e-learning

Figure 4.7 shows the most effective online platform suggested by the respondents. Forty percent of the respondents suggested that Whatsapp was the most effective online platform to deliver e-learning. Forty-eight percent of the respondents stated that Google classroom was the most effective platform for e-learning. Twelve percent indicated that Zoom was the best platform for e-learning.

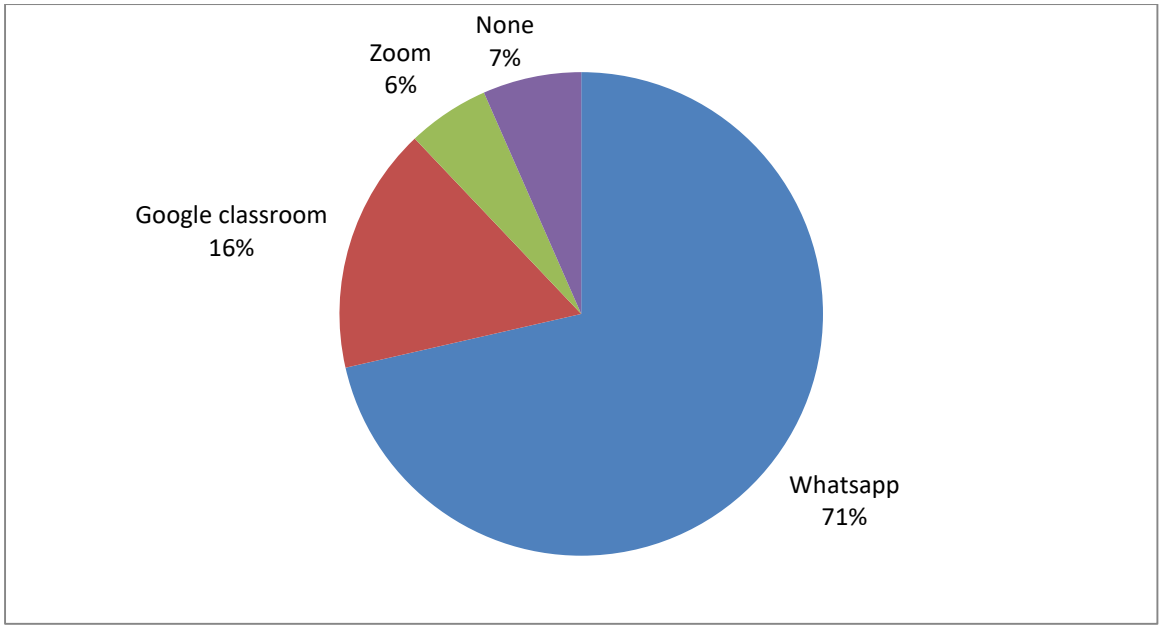

Figure 4.8 Online platforms being used by respondents

Figure 4.8 indicates online platforms that were used by respondents in delivering lessons during the Covid-19 pandemic. Seventy-one percent of the respondents stated that they were using Whatsapp to deliver online lessons. Sixteen percent of them indicated that they were using Google classroom platform for e-learning. Six percent of the respondents said that they were using Zoom platform to deliver lessons. Seven percent of the respondents indicated that they were not using any platform for e-learning. This showed that most teachers preferred Whatsapp platform for e-learning.

4.4 SUB-RESEARCH QUESTION 3: WHICH PROBLEMS ARE ENCOUNTERED BY TEACHERS IN THE IMPLEMENTATION OF E-LEARNING?

The following discussion is on problems that teachers encounter in the implementation of e-learning.

Table 4.6 Do teachers afford to buy data bundles for e-learning?

Responses	Frequency	Percentage
YES	4	16
NO	21	84
Total	25	100

Table 4.6 shows the number of respondents who were affording to buy data bundles for e-learning. Eighty-four percent of the respondents indicated that they did not afford to buy data bundles for e-learning. Sixteen percent of the respondents stated that they were able to buy data bundles for e-learning. This showed that quite a bigger number of teachers did not afford to purchase data bundles for e-learning.

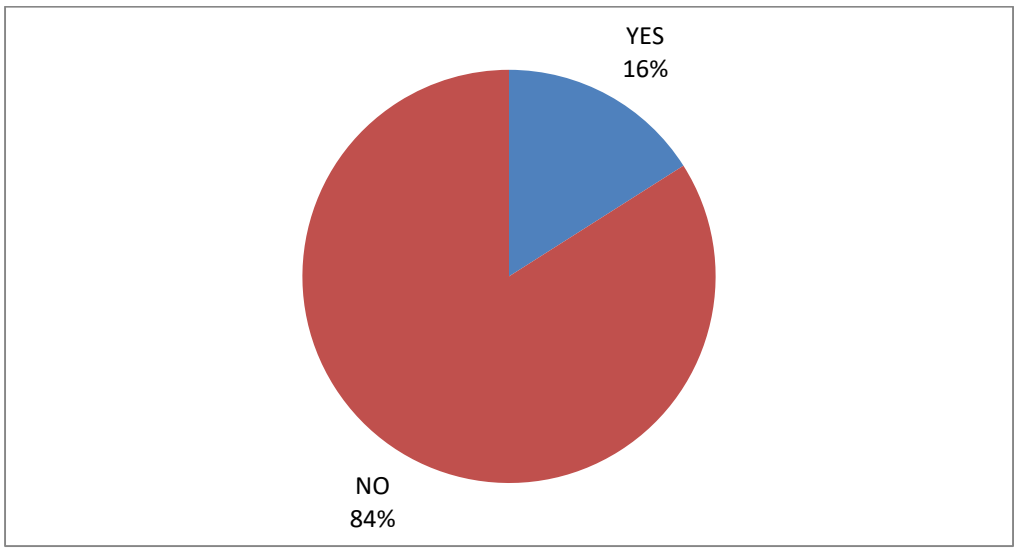

Figure 4.9 Schools providing data bundles for e-learning

Figure 4.9 shows the number of respondents who were supplied with data bundles by their schools for the implementation of e-learning. Eighty-four percent of the respondents indicated that their schools did not afford to provide them with data bundles

for e-learning. Sixteen percent of the respondents stated that their schools provided teachers with data bundles for the implementation of e-learning. This indicated that many schools failed to provide teachers with data bundles for the implementation of e-learning.

Four interviewees stated that their schools failed to supply teachers with data bundles due to dry school coffers. One interviewee suggested that teachers were free to use the internet services at school for delivering their lessons. One administrator actually laughed when the researcher asked her about purchasing data bundles for teachers. She said, “There is nothing like that, our school coffers are dry and parents are not paying fees.” However, one interviewee said that the school was using internet services so teachers were free to use to it but this can only be affected when there are lockdowns when people are not allowed to move around.

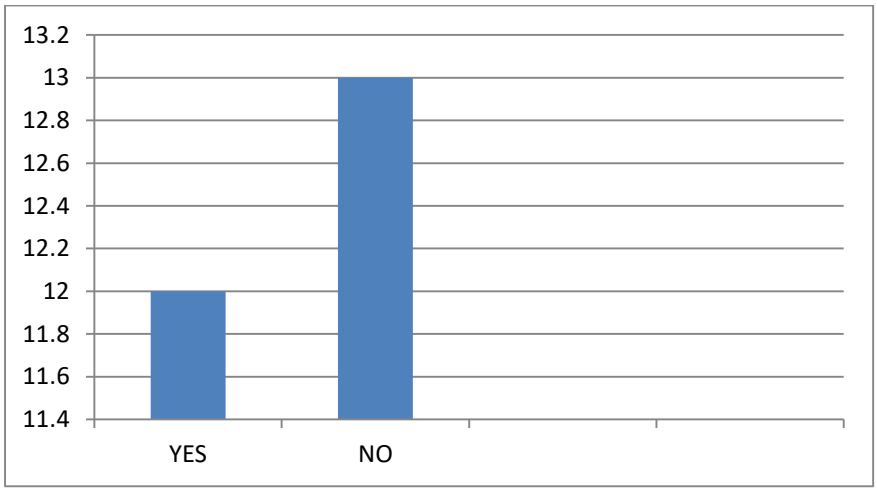

Figure 4.10 Support from parents in the implementation of e-learning

Figure 4.10 shows the support that respondents got from parents in the implementation of e-learning. Fifty-two percent of the respondents stated that parents were not supporting teachers in the implementation of e-learning. Forty-eight percent of the

respondents indicated that parents were supporting teachers in the implementation of e-learning by providing things like ICT devices and giving their children time for e-learning.

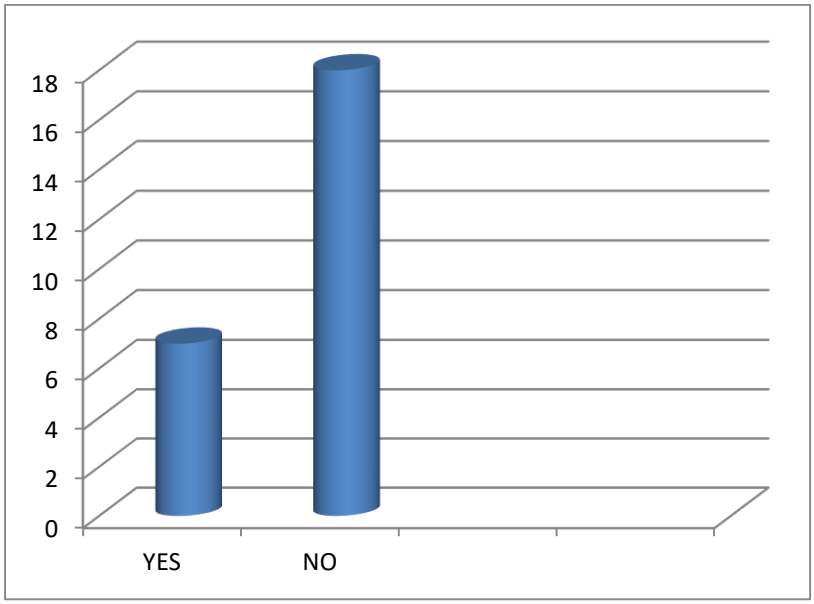

Figure 4.11 Are parents providing data bundles for e-learning?

Figure 4.11 shows the responses that were given on the issue of providing data bundles to teachers by the learners' parents. Seventy-two percent of the respondents indicated that parents failed to provide data bundles to teachers for the implementation of e-learning. Twenty-eight percent of the respondents stated that parents were providing them with data bundles for e-learning. The information above showed that parents failed to provide data bundles for the success of e-learning.

4.5 SUB-RESEARCH QUESTION 4: HOW CAN THE MINISTRY, SCHOOL AND OTHER STAKEHOLDERS HELP IN SOLVING CHALLENGES FACED IN THE IMPLEMENTATION OF E-LEARNING?

4.5.1 Strategies that the ministry, school and other stakeholders can do to enable the effective implementation of e-learning.

The respondents stated that there was need to equip school teachers with ICT devices, data bundles and to have ICT in-service workshops to enable the successful implementation of e-learning. The interviewees indicated that schools were in dire need of qualified ICT teachers and allowances to motivate teachers and learners so that the implementation of e-learning could be a success. One interviewee said that, “E-learning is a noble idea only if challenges of resources are addressed.”

4.6 DISCUSSION OF FINDINGS

The study revealed that more than half of the respondents are conducting lessons through e-learning. About 52% of the respondents agreed that they are actually helping learners by conducting lessons through e-learning to cover the syllabi in time. Richard and Haya (2009) propound that internet has become an important tool in learning for both teachers and learners. E-learning helps learners to acquire information without face to face tutorials.

The interviews also revealed that teachers indeed were implementing e-learning but to a certain level. The school administrators asserted that most teachers who were conducting e-learning were doing so on their own maybe with the support of parents. Teachers showed that they were aware of the importance of e-learning as a way to cover the syllabus. 68% of the respondents stated that they were willing to implement e-learning provided all the necessary resources were availed to them. Wagner et al (2008) argue that e-learning makes extra prospects for interactivity between students and teachers

during content delivery. There is an appreciation that e-learning should certainly be implemented to ensure the smooth flow of teaching throughout the year.

The study revealed that most teachers can operate ICT devices quite well although a bigger number can comfortably operate mobile phones. Eighty-four percent of the respondents indicated that they can safely and confidently operate mobile phones. Very few stated that they were able to operate desktops, which was 16% of the respondents. Thirty-two percent showed that they could operate laptops comfortably. It was observed that most teachers favoured mobile phones over other devices mainly because almost everyone owned a mobile phone.

Most teachers did not own complicated ICT devices which could be used for effective e-learning programmes. The devices in schools were also not enough for the proper implementation of e-learning. All the interviewees revealed that the ICT devices that they had in schools were not enough for the effective implementation of e-learning. The study revealed that most schools in Zimbabwe were not well equipped to embrace e-learning programmes. Shafika (2007) says that Zimbabwe does not have a dedicated specific national policy on e-learning and there is limited human resource capacity.

The study showed that most schools were relying on donated ICT devices. One administrator said that the only tablets they had were donated by one Non-Governmental Organisation. Individual teachers on the other hand had mobile phones which could be used for e-learning. However, 9% stated that they did not have any ICT devices that can be used for e-learning.

Most respondents had expertise in operating different types of devices for e-learning. Fifty-two percent of the respondents said that they had expertise in operating mobile phones. It was observed that very few teachers were able to operate interactive devices like laptops and desktops quite well. These devices could effectively be used for e-learning because they are compatible with interactive applications like Google classroom.

Beggs (2000) asserts that most teachers in schools lack proper ICT skills. This was also revealed by this research. Sixty percent of the respondents did not attend any in-service ICT training workshops, only 40% attended in-service workshops on ICT. It was also revealed that those who attended these in-service workshops were not fully taught on how to conduct online lessons. They only received training on introduction to ICT, typing skills, basic Microsoft word, excel and PowerPoint skills. Most schools had less than half of the teachers who got the ICT skills through in-service training workshops. Mamum and Clement (2012) assert that most teachers in schools lack ICT skills because they did not get enough training opportunities.

The other reason why teachers were failing to do e-learning programmes was that they did not have internet services at homes. The study revealed that only 12% of the respondents owned private internet services at home (WI-FI). Eighty-eight percent had to rely on data bundles from Zimbabwe's network providers.

According to Simanje (Interview by Matimaire Kenneth on 9 June 2020) the most effective platforms that are interactive during e-learning lessons are Google classroom and Zoom. However, those who were conducting e-learning most relied on Whatsapp

platform which is not quite interactive. Seventy-one percent of the respondents stated that they were using Whatsapp platform as compared to 16% that said they were using Google classroom and 12% were using Zoom. Although teachers were aware that Google classroom was effective most of them lacked the skills to use it and it is not affordable.

All these reasons were hindering teachers to fully implement e-learning for the benefit of learners so that syllabi could be covered especially during the times of pandemics like the Covid-19.

This study revealed that there were quite a number of problems faced by schools, teachers, parents and learners in the implementation of e-learning. It was discovered that 84% of the respondents were not able to purchase data bundles for e-learning mainly because of meagre salaries they were getting from the government. Only 16% of the respondents said that they were able to purchase data bundles for e-learning.

Schools on the other hand were failing to provide data bundles to teachers. OCHA (2020) argues that schools had no funds as parents were failing to pay fees due to lockdowns to curb the spread of Covid-19 virus. Eighty percent of the respondents said that schools were failing to provide data bundles for e-learning. The other problem was that parents were not fully supporting e-learning programmes. Fifty-two percent of the respondents stated that parents were not giving support to teachers in terms of providing their children with ICT devices and data bundles. This was supported by Matimaire (2019) who says that students do not have proper computer hardware and finances to access e-learning portals. Some parents were also reluctant to give learners ICT devices

as they fear that these devices could be abused. Learners can sometimes visit unsafe online sites like pornographic sites and sometimes get into cyber bullying (Simanje, Interview by Kenneth Matimaire on 9 June 2020). Some learners had a negative attitude towards e-learning as they preferred face to face tutorials. Newhouse (2002) says primary school learners study through imitation and following role models and gestures so they prefer face to face lessons.

Although e-learning is an effective way of delivering lessons according to all the interviewees, lack of adequate resources like ICT devices and funds for bundles was hindering progress in the implementation of e-learning. Most administrators stressed that they did not have computer laboratories to cater for large enrolments they had. They also argued that lack of skills was affecting e-learning. Beggs (2000) says that teachers lack skills and confidence to use ICT devices and some develop cold feet when it comes to the use of computers.

On the issue of supervision of e-learning, all interviewees asserted that it was a very difficult task to supervise whether teachers were implementing it or not. The research revealed that even the administrators lacked computers skills in schools.

The study revealed quite a number of strategies which could be used by schools and the whole education sector in general in the implementation of e-learning. Schools were facing financial challenges to come up with strategies that can be used to facilitate the implementation of e-learning in schools.

The study indicated that most teachers lacked ICT skills to deliver lessons through e-learning and those with skills had little knowledge on how to teach through e-learning. Newhouse (2002) states that there is need for initial training to enable teachers to acquire ICT skills. Most teachers advocated for in-service training workshops specifically on internet connectivity and how to deliver lessons through e-learning platforms. Refresher courses must also continue to be offered so that every teacher acquires the basic skills.

Schools need to be equipped with enough ICT devices to enable the smooth running of ICT programmes. Budgets should be done considering the need to improve the provision of computer devices. One interviewee stated that the school had tried to introduce a levy towards e-learning. Although the idea was noble, he cited negative attitude from parents so there is a need to educate parents about the importance of e-learning. There was also a suggestion that teachers must be provided with laptops either by the ministry or schools. During lockdowns teachers need to operate from their homes so they need devices to use at home. Wagner et al (2008) asserts that e-learning makes life easy as teachers and learners interact in the comfort of their homes. However, most schools cannot afford to purchase devices for individual teachers so the government must chip in and provide these computers to teachers. This was supported by Zhou (Interview by Kenneth Matimaire, 28 May 2020) when he says that the government should set aside a budget specifically for ICT programmes in schools.

The study revealed that there was need for infrastructure development in schools to cater for e-learning programmes as most schools did not have proper computer laboratories. Schools must provide genuine software, e-learning resources and training courses to deal with e-learning platforms (Habibu et al, 2012). The Ministry of Primary and Secondary

Education has a duty to make sure teachers have data bundles for e-learning programmes.

Although some parents were chipping in with data bundles, there was need for the government to support teachers. One interviewee suggested that the education ministry should provide teachers with allowances to cater for data bundles. Schools must get free internet services to ensure learners and teachers get the chance to implement e-learning without disturbances. It is actually economical and safer to do e-learning than face to face tutorials especially during the Covid-19 pandemic. Rabah (2005) says that through e-learning objectives are achieved within a very short period of time and the programme accommodates many learners at the same time. It is also beneficial to those with walking difficulties as they do not have to travel to schools for lessons. Adoption and implementation of e-learning provides the disabled the chance to learn in the comfort of their homes (Brown et al, 2001).

The burden should not only be left to the education ministry and schools only but other stakeholders must chip in and help in the implementation of e-learning in schools. Some Non-Governmental Organisations have done quite well in equipping schools with ICT devices and internet services. Interviewees suggested that other stakeholders like the country's network providers must help teachers by providing free platforms for e-learning. Some suggested that they can also introduce subsidised tariffs meant for e-learning programmes.

4.7 CHAPTER SUMMARY

This chapter focused on data presentation and analysis. Data presentation and analysis were done putting into consideration research objectives and research questions. Discussions of findings were given after data presentation and analysis. The following chapter (Chapter 5) focuses on summary, conclusions and recommendations.

CHAPTER 5

5.0 Introduction

This chapter focuses on summary of the research findings, conclusion and recommendations suggested for further research. The study was based on challenges faced in the implementation of e-learning in Chinhoyi Urban Cluster, Makonde District in Mashonaland West Province.

5.1 Summary

The study was on investigating the challenges faced by five primary schools in Chinhoyi Urban Cluster, Makonde District in Mashonaland West Province. The study focused on ways to effectively improve the implementation of e-learning. The research attempted to answer the research questions which are: How often do teachers and learners use e-learning in the delivery of lessons? Why are teachers failing to fully implement e-learning? Which problems are encountered in the implementation of e-learning by schools and teachers? How can the education sector help in solving some of the challenges faced in implementing e-learning?

The study will benefit primary and secondary schools in Zimbabwe and also other educational stakeholders. The teachers, school administrators and learners may benefit from this study in their quest to implement e-learning. The study was limited to schools in Chinhoyi Urban Cluster on challenges faced by schools in implementing e-learning. In chapter two of this study, related literature was discussed to establish the position of the study in the educational fraternity. Literature review provided evidence that e-learning is the only way to go considering the effects of pandemics like the Covid-19. Chapter three of this study focused on research methodologies that were adopted to collect related data for the study.

Questionnaires and interviews were used to gather the required information from respondents. A sample of thirty participants out of a large number was used. A sample of five schools was used out of the ten schools in Chinhoyi Urban Cluster in Makonde District. Chapter four focused on data collection, data presentation and analysis in form of pie charts, graphs and tables.

5.2 Summary of findings

The research findings revealed that the implementation of e-learning should be prioritized from ECD to Secondary level. The participants indicated that they were willing to implement e-learning provided all the challenges were addressed. Teachers were demotivated by the lack of human, material and financial resources.

The study also highlighted some benefits of implementing e-learning. In the implementation of e-learning, pupils are free to make contributions and the programme can accommodate many students at the same time. The main challenge that was cited by participants was lack of ICT skills by many teachers. The in-service training programmes that were offered only focused on basic introduction to computers. Most teachers were comfortable in using Whatsapp platform which is not the best platform as it is not all that interactive. The participants were aware that platforms like Google classroom and Zoom were the best but as teachers they lacked skills to use those platforms. The administrators stated that it was difficult for them to supervise teachers doing e-learning as most of them did not have computer skills. On the other hand most parents were also failing to support teachers in the provision of data bundles mainly because of the economic situation in the country. The other issue that was outlined was the interruption of electricity due to persistent power cuts experienced in the country. It was established that in most cases parents were reluctant to buy

ICT devices for their children because they feared that they might visit unsafe websites that show pornographic material. In most schools the infrastructure was inadequate as stated by one administrator who said that their school had actually converted a corner in one of the classroom to accommodate a few desktops that they had. The study revealed that most teachers did not own laptops and desktops. They relied on mobile phones for e-learning which might not be compatible with appropriate platforms.

Finally, the participants came up with quite a number of strategies to deal with challenges affecting schools in the implementation of e-learning. They suggested that in-service training workshops must be held and they must focus on the use of e-learning platforms to enable all teachers and administrators to fully participate in the implementation of e-learning. The outcry from most participants was that the education ministry should intervene and support schools with ICT resources. Most teachers complained that their meagre salaries were not adequate for them to purchase ICT gadgets and data bundles for the implementation of e-learning so the government should provide teachers with laptops. Other stakeholders were also encouraged to give a hand in terms providing subsidized data tariffs to teachers. One participant stated that the government must give teachers an allowance meant specifically for the implementation of e-learning. The participants indicated that the government should make sure all schools are fully equipped with adequate resources that include ICT devices, internet services, skilled personnel and electricity. Backup generators and solar systems must be put in place to ensure the smooth running of e-learning programmes. The study concludes that e-learning is an effective way of delivering lessons especially during the times of pandemics like the Covid-19 period. Therefore, in the following section recommendations in line with the findings of this study are going to be given. The study revealed quite a number of challenges being faced so various recommendations for the schools in Chinhoyi urban cluster

will be tabled to facilitate the effective implementation of e-learning. The study will also benefit all Zimbabwean schools in the implementation of e-learning in order to expand the accessibility to quality education.

5.3 Conclusion

It is concluded that as far as teachers may want to implement e-learning in the delivery of lessons they face many challenges like the inadequate of ICT resources at schools and home. Schools are not well equipped and teachers on the other hand lack essential ICT skills and knowledge. The Ministry of Primary and Secondary Education is supposed to work extremely hard to support schools and teachers in the implementation of e-learning.

5.4 Recommendations

After all the considerations and conclusions from all the chapters of the study the following recommendations were made

- Teachers should make an effort to take active part in the implementation of e-learning.
- Facilitators and administrators to participate in in-service training workshops to acquire skills in ICT.
- Schools must provide and improve their infrastructure like their computer laboratories.
- Schools should have high speed internet services.
- All schools must have solar systems and generators as source of power to curb the problem of power cuts.
- Government to give all teachers an allowance to cater for e-learning programmes.

- ❖ Government must roll out a programme to provide all teachers with laptops.
- ❖ Government need to have a specific budget provision for ICT programmes in all schools in Zimbabwe.
- ❖ Government in partnership with other stakeholders must provide free platforms for e-learning or subsidised data tariffs for the implementation of e-learning.

5.5 Areas for further study

The study revealed that most teachers and learners favour simple and less complicated e-learning platforms like Whatsapp. Further study can be carried out on designers and programmers of e-learning platform in view of establishing user friendly platforms.

REFERENCES

Beggs, T.A. (2000. April 9-11, 2000). *Influences and barriers to the adoption of instructional technology*. Paper presented at the Proceedings of the Mid-South Instructional Technology Conference, Murfreesboro, TN.

Brown, D., Cromby, J., & Standen, P. (2001). The effective use of virtual environments in the education and rehabilitation of students with intellectual disabilities. *British Journal of Educational Technology, 32(3)* p.289-299.

Burns, K & Groove, D. (2003). Grounded theory: Objectivist and constructivist methods in N.K Denzin & Y.S Lincoln (Eds), *Handbook of qualitative research. (2nd ed) Thousand Oaks*; Sage Publications.

Chiota, C. (2003). *A Study of the Models of Supervision used in three selected secondary schools in Bindura District and their Impact on teacher professional growth*. University of Zimbabwe: Harare.

Chua, J. (2001). *Utilising E-learning to Bridge the Digital Divide: Public/Private Partnership in Education*. Taiwan. APEC.Edu 01-06.

Cohen, L., Manion, L. & Morrison, L. (2007). *Research Methods in Education*, (6th ed). Routledge: London.

Dowling, C., Godfrey, J.M & Gyles, N. (2003). "Do Hybrid Flexible Teaching Methods Improve Accounting Student's Learning Outcomes*," Accounting Education: An International Journal, 12(4),* 373-391.

Earle, R.S. (2002). The Integration of instructional technology into public education: Promises and challenges. *ET Magazine, 42(1),* 5-13.

Gall, M.D., Borg, W.R, & Gall, J.P. (1996). *Educational Research: An introduction (6th ed).* New York: Longman Publishers USA.

Gray, J. (2009). *Basics of qualitative research: Grounded theory procedures and techniques.* California: Sage Publications Inc. Suther.

Habibu, T, Mamun, M.A & Clement, C. (2012). Difficulties Faced by Teachers in Using ICT in Teaching e-learning at Technical and Higher Educational Institution of Uganda: *International Journal of Engineering Research and Technology. Vol.1. Issue 7 September 2012.*

Hawkins, R. (2007). *The persistent bandwidth divide in Africa*. *Findings for the African Tertiary Institution Connectivity study and lessons for developing knowledge, infrastructure and networks in Africa*. In Integrating Science and Technology into Development Policies: An International Perspective (pp. 91-99). OECD Publishing.

Hossain, M.M, & Robinson, M. (2012). *How to motivate US students to pursue STEM* (*science, technology, engineering and mathematics) careers*, 442-451.

Kay, R. (1992). Understanding gender differences in computer attitudes, aptitudes and use: An invitation to build theory. *Journal of Research on Computing in Education, 25(2)* 159-171.

Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*. New Delhi, New Age International (P) Ltd.

Masango, R.B. (1996). *An investigation into the Utilisation of Teachers of Technical subjects in secondary schools in the Harare Region of Zimbabwe.* Harare: University of Zimbabwe.

Matimaire, K (2020) *Digital-shy Zimbabwe's schools feel the brunt of COVOD-19.* Interview with Simanje Nompilo, Legal and ICT policy officer at the Media Institute of Southern Africa Zimbabwe, 9 June 2020.

Matimaire, K (2020) *Digital-shy Zimbabwe's schools feel the brunt of COVOD-19.*Interview with Zhou Takavafira, president of the Progressive Teachers' Union of Zimbabwe, 28 May 2020.

Matimaire, K. (2019). 50% of Zimbabwe Schools Connected to Wi-Fi - Govt. *The Industry and Trade Expert*. https://theindustrytrade.com/2019/09/20/50-of-zim-schools-connected-to-wifi-govt/.

Mwandosya, M. (2003). *Harnessing ICT to enhance business public sector effectiveness*: Speech delivered by the Minister of Communication and Transport at Commonwealth-Tanzania Investment Conference held on 29th May 2003.

Newhouse, P. (2002).*Literature review: The impact of ICT on learning and teaching*, Perth, Western Australia: Department of Education.

Oblinger, D.G & Hawkins, B.L. (2005).*The myth about E-learning*. Educause Review.

OCHA, Zimbabwe Cluster Status: Education, 2020. https://reliefweb.int/country/zwe.

Rabah, M. (2005). *E-learning*, Jordan: Dar Alminahej Publisher.

Richard, H & Haya, A. (2009).Examining student decision to adopt web 2.0 technologies: theory and empirical tests: *Journal of computing in higher education, 21(3)*, 183-198.

Roblyer, M.D & Doering, A.H. (2012).*Integration Education Technology into Teaching* Sixth Edition. Boston. Pearson.

Roopa, S. & Satya, R.M. (2012). Questionnaires Designing for a Survey. *The Journal of Indian Orthodontic Society 46(4):37-4*

Shafika, I. (2007). *ICT in Education in Zimbabwe*: Survey of ICT and education in Africa: Zimbabwe Country Report.

Singleton, R.A & Straits, B.C. (2010). *Experimental Designs in Approaches to Social Research*, 5th edition, New York: Oxford.

Smedley, J.K. (2010). *Modelling the impact of knowledge management using technology*, OR Insight (2010) 23, 233-250.

UNESCO, (2015). *Mobile learning for teachers in Africa and the Middle East: Exploring the potentials of mobile technologies to support teachers and improve practices*. Unesdoc.unesco.org/images/0021/002163/216358e.pdf.

Wagner, N., Hassanein, K & Head, M. (2008). Who is responsible for E-learning in Higher education? A Stakeholders' Analysis. *Education Technology and Society, 11(3),* 26-36

Zindi, F. & Ruparaganda, F. (2011). *Evaluation of barriers to the learning of Science and Mathematics in Zimbabwe's secondary schools*, Zimbabwe Journal of Education Research (ZJER) volume 23, no 3pp 222-236. UZ, Mt Pleasant. Harare.

APPENDIX A

QUESTIONNAIRE FOR TEACHERS

Dear Sir/Madam

My name is Masimba Andrew, Registration number R170882G. I am a BED Computer Science student at Midlands State University (MSU).

I am carrying out a research on the challenges faced by five primary schools in Chinhoyi Urban Cluster, Makonde District in Mashonaland West Province in implementing e-learning during the Covid-19 pandemic. This questionnaire seeks to find out your perceptions. The information you shall give shall remain confidential and shall be used for academic purposes only. No names should be written anywhere on this paper. You are further asked to respond to all questions below by putting a tick in the appropriate box of your chosen response or by writing brief explanations on spaces provided.

Thank you

DEMOGRAPHIC INFORMATION

a) **Gender:** Male ☐ Female ☐

b) **Age:** 20-30 years ☐ 31-40 years ☐ 41-50 years ☐ 51years and above ☐

c) **Level of Education:**

Diploma ☐ Degree ☐ Masters ☐ PhD ☐

d) **Work Experience:**

Less than 5 years ☐ 5 -10 years ☐ 11-15 years ☐ 16 years and above ☐

e) **Job title:** teacher ☐ senior teacher ☐

1. Are you using e-learning in delivering lessons to your learners? YES ☐ NO ☐

2. Which ICT devices can you operate comfortably?

Mobile phone ☐ laptop ☐ tablet ☐ desktop ☐ none ☐

3. Which type of ICT device do you have that can be used for e-learning?

Mobile phone ☐ laptop ☐ tablet ☐ desktop ☐ none ☐

4. How do you rate yourself on the use of each of the following ICT devices? (Put a tick)

Device	**No knowledge**	**average**	**Expert**
Mobile phone			
tablet			
laptop			
desktop			

5. Have you ever attended an ICT in-service training workshop? YES ☐ NO ☐

If yes, what was it all about?.....

…….....

6. Do you have internet services at home?

YES ☐ NO ☐

7a.Which online platform do you think is the most effective in teaching your learners?

Whatsapp ☐ Google classroom ☐ zoom ☐

Any other platform……

b. Which online platform are you using with your learners?

Whatsapp ☐ Google classroom ☐ zoom ☐ none ☐

Any other platform……

8. Are teachers willing to implement e-learning? YES ☐ NO ☐

If no, give a reason…….

…….

9. Do you afford to buy data bundles for e-learning? YES ☐ NO ☐ if no,why?.....

.....

10. Is your school providing data bundles for the implementation of e-learning?

YES ☐ NO ☐

11. Do parents generally support their children in the implementation of e-learning?

YES ☐ NO ☐

12. Are your learners' parents providing data bundles for e-learning?

YES ☐ NO ☐

13. What challenges do you think learners face in the implementation of e-learning?

……

……

……

14. Explain in brief challenges faced by teachers in implementing e-learning?

……

……

……..

15. What do you think your school must do to ensure that the implementation of e-learning is successful?

……..……

…….....

.....……

THANK YOU VERY MUCH

APPENDIX B

Interview guide for school heads

My name is Masimba Andrew, Registration number R170882G. I am a BED Computer Science student at Midlands State University (MSU).

I am carrying out a research on the challenges faced by five primary schools in Chinhoyi Urban Cluster, Makonde District in Mashonaland West Province in implementing e-learning during the Covid-19 pandemic. This interview seeks to find out your perceptions. The information you shall give shall remain confidential and shall be used for academic purposes only.

Experience in the service…….

1. Is your school implementing e-learning?

2. Does your school have computer literate teachers and how did they get these computer skills and knowledge?

3. Does your school have enough e-learning devices that can be used by teachers?

4. Do you have a high speed internet service at your school which can be used by teachers?

5. Is your school assisting teachers with data bundles for the implementation of e-learning during the Covid-19 era?

6. How do you view e-learning as a way of delivering lessons?

7. How do you supervise teachers who are delivering lessons through e-learning?

.8. What challenges do you have as a school in the implementation of e-learning?

9. Are there any strategies that your school has put in place to facilitate e-learning?

10. What do you suggest the ministry, school or other stakeholders should do to enable the effective implementation of e-learning during times of pandemics like the Covid-19 era?

Thank you

APPENDIX C

Turnitin Originality Report

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Final project By Andrew Masimba

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<1% match (publications)

APPENDIX D

All communications should be addressed to
"The Provincial Education Director"
Telephone: 067-23043/25655
Tele Fax: 067-23320
Email edumashwest@gmail.com

ZIMBABWE

Ref :C/246/1/MW

Ministry of Primary & Secondary Education
Mashonaland West Province
P.O Box 328
Chinhoyi

MIN. OF PRI. & SEC. EDUCATION
HUMAN RESOURCES (DISCIPLINE)
MASH. WEST PROVINCE
5 MAR 2021
P.O. BOX 328, CHINHOYI
ZIMBABWE

The District Schools Inspector
MAKONDE

AUTHORITY TO CARRY OUT EDUCATIONAL RESEARCH: SCHOOLS IN MAKONDE **DISTRICT: MR/MRS/MS:** MASIMBA ANDREW
ECNO/IDNO. 09379047K **STATION.** MHANYAME PRIMARY
DISTRICT. MAKONDE **INSTITUITION.** MSU
REG.NO. R171088/24 **PROGRAMME.** B.ED COMPUTER SCIENCE

The above named student has been granted authority by the Provincial Education Director to carry out a research in. MAKONDE District. The student has been advised to visit your office before entering the schools.

Please ensure that the learning and teaching programmes at the targeted schools are not interrupted in any way, the student strictly adheres to the activities and topics specified in his letter of request and the research should be conducted according to the given time frame.

Period of Research.... 5/3/21 — 30/4/21

Research Methodology.... QUESTIONNAIRES

Target School(s).... LOMAGUNDI PRY, MHANYAME, CHIKONOHONO

The District Schools Inspector is requested to liaise with the researcher on the specific schools where the research will be conducted and then advise the Provincial Office of the chosen schools. Furthermore, the District Schools Inspector should ensure that a copy of the research findings is submitted to the Provincial Education Director once the research is completed.

FOR PROVINCIAL EDUCATION DIRECTOR
MASHONALAND WEST PROVINCE

APPENDIX E

APPROVAL LETTER FROM MSU

MIDLANDS STATE UNIVERSITY

P. BAG 9055
Gweru
Zimbabwe

Telephone: (263) 54 60404/60337/60667/60450
Fax: (263) 54 60233/60311

FACULTY OF EDUCATION
DEPARTMENT OF APPLIED EDUCATION

25th February 2021

TO WHOM IT MAY CONCERN

The bearer **Andrew Masimba** is a B.Ed. / ~~MED/PGDE~~ student at this University. ~~She /~~ He has to undertake research on the title:
An investigation into challenges faced by five primary schools in Chinhoyi urban cluster, Makonde District in Mashonaland West province in implementing e-learning during the covid-19 pandemic.
He/~~she~~ is required to present a Research Project in partial fulfilment of the degree programme. In this regard, the University kindly requests both your institution and personnel's assistance in this student's research endeavours.

Your co-operation and assistance is greatly appreciated.

Thank you

.....
Dr G.Tarugarira
(Chairperson –Applied Education)

SSM/em/07-02-14