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PROBLEMS ASSOCIATED WITH THE USE OF ICT AS MEDIA IN TEACHING OF PRINCIPLES OF ACCOUNTS AT ORDINARY LEVEL IN BUHERA CENTRAL IN MUDANDA CLUSTER

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DEDICATION

This research project is dedicated to my husband, my son Brendon and my daughter Belindah.

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ABSTRACT

This study focused on the problems associated with the use of ICT as teaching media in Principles of Accounts at Ordinary Level in Buhera Central Mudanda Cluster. The study was motivated by the need to improve the need to improve use of ICT as media. The problem was that Principles of Accounts teachers' were not fully integrating technology as media in teaching at Ordinary Level. The study therefore looked at the uses of technology and challenges faced by teachers in using technology as media. There is a great need for using ICTs as media such as computers, internet and overhead projector in teaching of Principles of Accounts. Despite the importance of computers, few teachers' are using as ICT media. A critical literature review was done which revealed that Principles of Accounts teachers' are facing challenges such as lack of training shortage of time, lack of school support and lack of equipment. The accessible population comprises of ten schools and a sample of three schools was chosen purposively. Respondents' names were chosen by random sampling technique which gave each teacher an equal chance of being chosen. Six Principles of Accounts teachers responded to questionnaires while 3 heads of schools were interviewed. The research study employed descriptive research design because it enabled the researcher to go into the field and collect data using questionnaires and school heads interviews. The research findings revealed that Principles of Accounts teachers are faced with various challenges such as lack of ICT training, insufficient computer equipment, insufficient time, lack of support from the administration and lack of confidence. The Principles of Accounts teachers are expected to benefit from this research through realization of their need for staff training and development. To collect data questionnaires and interviews were used. The study concluded that with adequate training, technologies and time, there is a greater probability that more teachers will use ICTs as media for teaching Principles of Accounts. It is also recommended that the Ministry of Education should make ICT compulsory and reduce the number of loads for Principles of Accounts to increase planning time. Additionally there is also need to give support such as staff development training as a way to increase the use of ICT in teaching Principles of Accounts.

ABBREVIATIONS

ICT : Information Communication and Technology

UNESCO : United Nations Educational, Scientific and Cultural Organization

BECTA : British Educational Communications and Technology Agency

MG : Millennium Goals

'O' Level. : Ordinary level

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CHAPTER 1

THE RESEACH PROBLEM

1.0 INTRODUCTION

The 21st Century is the era of information and communication technology. The use of ICT changes teacher centered education system to learner centered education. Globally there is a trend to use ICTs in the teaching and learning process. Teacher and learners must have access to ICTs for improving teaching and learning outcomes. Successful integration of technology in education is the key to success. Although Principles of Accounts teachers had a strong desire to use ICTs in their teaching they encounter some barriers which block them to fully integrate ICT in classroom. This study aim to explore the obstacles militating against the use of ICT as teaching media in Principles of Accounts at Ordinary Level in secondary school in Buhera Central Mudanda Cluster in Manicaland Province. This chapter looks into the background of the study, statement of the problem, research questions, significance of the study, limitations, delimitations, assumptions, definition of terms and then summary.

1.1 BACKGROUND OF THE STUDY

Chisi et al. (2004) found that the background of the study places the research into some intelligible context, touching broadly on some of the issues related to it. Accounting is the process of recording, classifying and analyzing, reporting and interpreting the financial information of an organization to management for decision making. It is important to use ICT as

media in the teaching of Principles of Accounts in secondary schools to prepare students for real world of work. The researcher's motivation for this topic originates from her experiences as an Accounts teacher. Although there is an improvement in the availability of ICTs such as computers and projectors, the researcher noted that teachers were facing difficulty in using ICT as media in the teaching and learning of Principles of Accounts at Ordinary level. As a result most teachers still rely on chalk and talk when teaching principles of accounts. Furthermore during Accounts departmental meetings held at the researchers' school, cluster seminar and district accounts seminars, some teachers expressed fear of using overhead projectors in the teaching of Principles of Accounts. Beggs (2000) found out that encountering new technology brings in mixed feeling of anxiety, fear as well as frustration which sometimes leads to not using new technology. The more confident and competent a teacher is with technology, the more they will use it in their educational practices (Roden, 2013).

The use of technology such as computers enables accounting information to be displayed through spreadsheets (excel) and calculations to be made using accounting package software such as pastel which enable the learner to perform the routine accounting functions such as creating, processing and keeping of general ledger, journals, invoices and so on. Thus enables the development of 21st Century skills such as critical thinking, ICT competence, decision making, team working, effective communicator and many more. Learners understand what they are taught better and faster than when taught using accounting textbooks and chalkboard.

1.2 STATEMENT OF THE PROBLEM

The aim of this study was to expose difficulties faced by facilitators and learners when using ICT in the teaching and learning of Ordinary Level Principles of Accounts in the case of schools in Mudanda Cluster Buhera Central of Manicaland Province. Zimbabwe's' curriculum encouraged the use of teaching and learning using ICT as a media in Principles of Accounts just like any other academic subjects.

1.3 RESEARCH QUESTIONS

1.3.1 MAIN RESEARCH QUESTION

What are the challenges associated with the use of ICT in the teaching and learning Principles of Accounts at Ordinary Level in Buhera Central in Mudanda cluster?

1.3.2SUB QUESTIONS

1.3.2.1 How often do Principles of Accounts teachers use technology as a media in the teaching and learning?

1.3.2.2 What are problems that secondary school teachers face in using technology as a media in teaching of Principles of Accounts?

1.3.2.3 What are the possible ways of solving these challenges faced in using technology as media in teaching and learning of Accounts?

1.4 ASSUMPTIONS

Chikoko and Mhloyi (1995) postulate that an assumption is a condition which is taken for granted without which the research effort woud be impossible. Chisi et, al. (2004) supported by indicating that assumption are statements of what the researcher believes to be facts but these cannot be verified.

1.4.1 It is assumed that three school selected in the research study shall be a true and fair representation of all schools in Buhera Central.

1.4.2 It is assumed that Principles of Accounts teachers were not fully integrating technology in the teaching of Principles of Accounts.

1.4.3 The assumption is that Principles of Accounts teacher use ICT frequently as a teaching media.

1.4.4 Furthermore it is assumed that there are problems in using or purchasing ICT as media in Principles of Accounts.

1.4.5 That respondents know enough about issues under investigation.

1.4.6 it is also assumed that views and perception of Principles of Accounts teachers and heads schools are important for the study.

1.5 SIGNIFICANCE OF THE STUDY

This study deals with problems to using ICT as a media in the teaching and learning of Ordinary Level Principles of Accounts. Therefore it was deemed necessary to carry out this study and examine factors that determine barriers of using ICT in teaching and learning of Principles of Accounts. Results of the study are very necessary to both teachers and learners when they reveal effects of use of technology as a teaching media especially in rural areas. Also the results will help policy planners in solving problems associated with the use of technology in the teaching of accounts by improving the teacher training curriculum by revising their syllabi content, teaching strategies and teaching resources. In addition, Principles of Accounts teachers at the researcher's school together with those from surrounding schools will benefit knowledge on the problems faced when using ICT as media and recommendation to encounter them.

1.6 LIMITATIONS

Chisi et al. (2004) assert that, limitations are those conditions beyond the control of the researcher that place restrictions on the conduct of a study and in the application of the findings to other situations. These are the challenges and hindrances faced by the researcher and those inherent in the research methods. A major limitation in this study was that the research topic on the use of technology as a teaching and learning media was very broad such that the researcher could not cover it in one study. Hence this study focused on computers, internet and overhead projectors as accounting media commonly used in the Zimbabwean context. In addition the reliability of data might be affected because the time for data collection was very short. The three schools studied might not give the true picture of what is taking place in all school in Buhera

Central Constituency. Furthermore the study was time consuming since the researcher carried out interviews and administering questionnaires as she moves from one school to another in the sample. Financial constraints also prevented the researcher to cover a wide area.

1.7 DELIMITATIONS

Chikoko and Muloyi (1995) state that the delimitations of your research problem are the precise limits of the issues you are to cover. Research delimitation was confined to factors that prohibit effective use of ICT as a media in the teaching and learning of Principles of Accounts at Ordinary Level at three schools. Because of costs and limited time, these schools were considered accessible. This reduces travelling and accommodation expenses. These schools are in rural of Buhera Central in Mudanda Cluster. Principles of Accounting teachers, accounting students and heads of sampled schools were the targeted population. This study was limited to only three schools in Buhera Central Mudanda Cluster and junior level students were not part of the study sample. In addition no private school , satellite school or boarding schools are included in the study. The project covers the period September 2016 to October 2017.

1.8 DEFINITION OF TERMS

Principles of Accounts is the process of recording, classifying, selecting measuring, interpreting summarizing and reporting financial data on an organization to the user for objectives assessment and decision making(Makore, (2012). In this study accounting is a systematic way of recording financial transactions of a business.

Information communication technologies refers to a diverse set of technological tools and resources used to communicate, and create, disseminate, store and manage information (Lucey (2002)

Media are channels or material by which messages are sent to the learner. In this research study the media mean the same thing as teaching and learning aids. Gange (1983) in Curzon (2004) defined media as whatever combination of things or systems of this used to deliver communication or other instructional stimuli to the learner.

Learning: Lefrancois (1994) defined learning as a highly general term for the relatively enduring change, in response to a task demand that is induced directly by experience, or the process or processes whereby such change is brought about. In teaching and learning situation this is acknowledged that learning has taken place when learners are able to demonstrate the concepts, skills and knowledge as given in syllabus content.

Teaching: Rwambwa (2001) teaching is the provision of an environment for effective learning. According to the researcher effective leaning is when lesson objectives are achieved. For example when accounts students are taught on how to prepare a trading account, at the end of the session they should be able to construct it.

'O' Level students are learners who have just finished juniour level (zjc)and are in either in form three or form four.

1.9 SUMMARY

The chapter gave an overview of the problems associated with the use of ICT as media in Principles of Accounts. The background of the study has considered the information gathered by the researcher. This chapter has again given meanings of unique and confusing words outlined the limitations and delimitations of the research study. Significance of the research study has been given trying to explaining the need to implement a particular solution to the problem. Assumptions of the study were also given. The next chapter is going to focus on review of related literature.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides a review of literature related to challenges associated with the use of technology as media in the teaching and learning of accounts. Chikoko and Mhloyi (1995) postulated that the purpose of literature is to assist you, the researcher, in attacking your problem. In supporting Chisi et al (2004) stated that literature must be employed to support the research question, the design and procedures of research. It starts by describing constructivism theory then went on to the benefit or use of technology as media, challenges faced and possible solutions. To accomplish the aims of this study Bruner's constructivism theory was examined as it emphasized that once Principles of Accounts learners master basic skill of the subject, later learners must actively construct their own knowledge not just memorize right answers. It promotes learning by doing . Constructivists postulates that learners should actively involved in the learning process unlike previous education which view teachers as more active and students played a passive role. The teacher must act as a facilitator. Constructivists gave three models of subject matter representation which are an active mode whereby Principles of Accounts teachers are encouraged to engage learners in actions that is learning by doing or touching, iconic mode which emphasis subject content to be presented as diagrams pictures and so on and lastly symbolic mode where by Principles of Accounts learners can now use verbal statements Adibin (2011) supported this by saying constructivism is a theory of knowledge which argues that

humans generate knowledge and meaning from interaction between their experiences and ideas. Therefore in accounts ICT can be used as teaching aid for accounting learners to create complex knowledge basis. Constructivism enables Principles of Accounts students to get information on internet, prepare financial statement and share knowledge through networked computers. Therefore it allows high participation of learners during Accounts session.

2.2 Use of technology as teaching and learning media in Principle of Accounts

ICT is emphasized in Zimbabwean new curriculum and around the world. Therefore Principles of Accounts teachers are required to use ICTs in their classrooms effectively. The main purpose of ICT is to assist in the development of human mental resources, which allow people to both successfully apply the existing knowledge and produce new knowledge (Shavinina, 2001).The use of computers reach students' mind in a variety of ways as it activates three senses that are sense of sight, hearing and touching. Therefore Principles of Accounts students must be able to develop, design and create their own learning experience. In support Thomas (1987) asserts that nowadays computers perform more functions in the teaching and learning of Principles of Accounts as it adds computer literacy, reading and writing as skills students will need for succeeding in a technology developed world. In education institution ICTs can be used for demonstration purpose, presentations, interaction, collaboration and so on. Thus it help students participate in the world of affairs. Information transfer using ICT in Principles of Accounts education is minimal or does not exist in secondary schools in Nigeria (Anao, 2003). Becker et al. (2008) postulated that the use of computers by teachers is limited. Christensen (2002) suggested that ICTs enhances educational efficiency by improving the teaching and learning of

accounts. Teachers who learn to integrate ICT into existing curricula teach differently than teachers who do not have support from a school. Gbgenga (2006) supported the above by saying ICTs give the teacher an opportunity to increase the interest and learner engagement by one to one relationship provided by the student and computer.therefore ICTs enhances the quality of education by increasing student motivation and engagement by facilitating the acquisition of ICT basic skill. ICTs transfers present teacher centered and book centered learning environment into a learner centered environment where the teacher will no longer dispensers of knowledge but facilitators. Because of individual differences, ICT can be used for individualized learning in teaching Principles of Accounts in secondary schools. In support Adawu and Iyanu (2005) postulated that due to large and difference in individual learning style and pace, micro computers will enable Principles of Accounts learner to progress at his or her own pace and receive continual evaluation feedback and correction of errors made.

The use of technology as media in accounts changes current didactic practices. Therefore the role the teacher changes from information dispenser to that of information manager, from authoritative source of information to a guider of self propelled exploration (Smith, 1989). Thus the use of technology as media overrides traditional methods of chalk and duster approach.

2.3 CHALLENGES THAT ARE BEING FACED BY SECONDARY SCHOOL TEACHERS IN USING TECHNOLOGY AS MEDIA

Principles of Accounts teachers' face difficulties in integrating ICT into teaching and learning. These difficulties are referred to as barriers. Shoepp (2005) define a barrier as a condition that makes it difficult to make progress or to achieve an aim or a goal. The aim being a successful use

ICT as media in Principles of Accounts education. There are several barriers that hinder secondary school teachers and their student in the use of technology as media in the teaching and learning of accounts. One of the main obstacles to effective use of ICT as media in the teaching and learning of accounts at ordinary level is the lack of teachers' knowledge and skill in the use of ICT. According to Ali and Akabu (1988), when teachers need to use technology like the computers, they need to learn to operate hardware and software. Teachers' lack of knowledge and skills is the main obstacle in the use of ICT as media account education (Ihmeideh, 2009). Rogers (1999) categorize barriers that hinder the use of technology in teaching and learning into two sectors which are external and internal. External barriers were classified into availability accessibility, stakeholder development and technical and institutional support. Ertmer (1999) supported by branching the barriers into two categories, external and internal, the first order include lack of equipment, unreliability of equipment and lack of technical support while internal barriers include school level factors such as organizational culture and teacher level factors such as lack of knowledge and skills. That means lacks of access to ICT equipment, shortage of time, lack of resources; teacher attitude, belief and resistance to change hinder the use of ICT in. In most secondary schools, teachers lack skills to fully integrate technology in instruction hence they rely on traditional methods of chalk and duster approach.

Other researchers categorize the barriers into teacher level and school level barriers. Becta (2004) classified the barrier based on whether they refer to individual (teacher – level), such as lack of confidence, shortage of time, and resistance to change or to the institution (school- level barriers) , such as lack of effective training in solving technical problems and lack of access to resources.

Teacher- level barriers.

Lack of teacher confidence

Lack of Principles of Accounts teacher confidence is one of the barriers that prevent them from using ICT as media in their teaching and learning. According to Becta (2004) much of the research studies found this as a major obstacle to the uptake of ICT by teachers in the classroom as in his survey of practitioners the issue of lack of confidence was the area that attracted most of responses from the respondents. This shows that teachers are not confident enough or they fear failing to use ICT in front of learners. Beggs (2000) supported by postulating that teachers fear of failure caused by a lack of confidence. Similarly Becta (2004) asserts that many teachers who do not consider themselves to be well skilled in using ICT feel anxious about using it in front of a class of children whom they think they know better than them. In addition his surveys results on lack of confidence, teachers reported that they are afraid of entering the classroom with limited knowledge in ICT. Cox et, al. (1999) indicated that teachers who have confidence in using ICT identify that technologies are helpful in their teaching and personal work and they need to extend their use further in future.

Teacher incompetence

Newhouse (2002) asserts that many teachers lacked the knowledge and skills to use computers and were not enthusiastic about the changes and integration of supplementary learning associated with bringing computers into their teaching practices. Albirini (2006) found that Syria's teachers' lack of technology competence has been cited as the main barrier. Empirica (2006) produced a detailed report on the use of ICT in European schools from heads of schools and teachers and found out that teachers who do not use computers in the classroom claim that lack of skills are a constraining factor preventing teacher from using ICT as media for teaching.

Another survey carried out on 26 countries by Pelgrum (2001) found that teachers' lack of knowledge and skills is a serious obstacle to using ICT in both primary and secondary schools. Hence, teacher lack of technological competences may be one of the strong barriers to the use of ICT into education. It might also lead in resistance to change.

Resistance to change and negative attitude.

Older Principles of Accounts teachers might fear ICT usage and stick to traditional method of chalk and talk. Gomes (2005) found that Principles of Accounts teachers' resistance to change concerning the use of new strategies is a block to ICT usage in teaching. In support Becta (200) indicated that resistance to change is an important barrier to teachers' use of ICT in teaching and learning. Therefore resistance to change can be seen as an obstacle to teachers to fully integrate ICT as media in teaching. Watson (1999) argued that integrating the new technology into education requires change and different teachers will perceived and the change differently. This means Principles of Accounts teachers beliefs and attitude to change influences what they do in classroom. Becta (2004) found that teachers' attitudes towards the use of ICT is their understanding of how these technologies will benefit their teaching and learning. Empirica (2006) found that teachers who are not using new technologies such as computers projectors during the lessons are still of the opinion that the use of ICT has no benefits.

School- level barriers

Lack of time

Majority of Principles of Accounts teachers' have competences and confidence in using ICT as media in their teaching and learning but because of time shortage they cannot integrate it fully. Lack of class time can be seen as a barrier to ICT usage in classroom. Beggs (2000) asserts that

time limitations and the difficulty in scheduling enough computer time for classes as barrier to teachers' use of ICT in their teaching. Therefore, lack of time to use computers in class and internet prevent teachers to use ICT. Becta (2004) found that the problem of lack of time to locate internet advise, prepare lessons, explore and practice using technology and deal with technical problem, exists for teachers in many aspects of their work as it affects their ability to complete tasks. This means lack of time contribute to Principles of Accounts teachers for not using ICT in the classroom to accomplish objectives. The researcher found out that many studies concluded that lack of time affect the integration on new ICTs in Principles of Accounts.

Lack of effective training

Principles of Accounts teachers lack ICT training for them to use it in classrooms as media. Pelgrum (2001) found out that there was not enough training opportunity for teachers in the use of ICTs in a classroom environment. In support Beggs (2000) postulates that one of the top three barriers to teachers' use of ICT in teaching learners was the lack of ICT training. Majority of Principles of Accounts teachers' did not receive ICT training during their in- service training courses but they are required to integrate it in teaching and learning as media. Gomes (2005) concluded that lack of training digital literacy, lack of pedagogic and didactic training in how to use ICT in the classroom and lack of training concerning the use of technology in Principles of Accounts specific areas were obstacles to using ICTs in the classroom. Schoepp (2005) claims that when new ICTs need to be integrated in the classroom, teachers have to be trained in the use of these particular ICTs. This means Accounts teachers must be taught on how to use ICT in the classroom as media not just to run a computer and set up printers. Teachers are only taught on basic ICT skills, they should be focused on how to develop the pedagogical aspects of ICT.

Lack of accessibility

Lack of Principles of Accounts teachers' access to ICTs prevents them from using them during their lessons. In the study carried out by Sicilia (2005) found out that teachers complained about how difficult it was to always have access to computers. Becta (2004) asserts that the inaccessibility of ICT resources with the school was not due to non availability of them but of poor organization of resources, poor quality hardware, inappropriate software or lack of personal access teachers. Some studies have shown that lack of access was caused by lack of computers and lack of adequate material. Pelgrum (2001) found out that 4 out of top ten barriers reports from 26 countries practitioners to the implementation of ICT in schools were insufficient numbers of computers, lack of peripherals, insufficient numbers of copies of software and insufficient simultaneous internet access. Poprakei (2006) supported by saying low numbers of computers, oldness or slowness of ICT system and scarcity of educational software in the school were barriers to the successful implementation of ICT into Principles of Accounts in schools. This shows that insufficient ICT resources prevent Accounts teachers' in integrating technology in the classroom.

Lack of technical supports

Lewis (2003) asserts that without good technical support in the classroom and whole school resources, Principles of Accounts cannot be expected to overcome the barriers preventing them from using ICT as media. Pelgrum (2001) postulates that one of the top barriers to ICT use in Principles of Accounts education was lack of technical assistance. This means if Principles of Accounts are not assisted and supported technically they face challenges in using ICTs as media. Sicilia (2005) found that these technical problems include waiting for websites to open, failing to

connect to the internet, printers not printing, malfunctioning computers and teachers having to work on old computers. The author went on to say these barriers prevent the smooth delivery of the lesson or the natural flow of the classroom activity. Thus ICT support assists Principles of Accounts teachers' to use technology without losing more time trying to fixing the breakdowns on computer equipments. Becta (2004) indicated that technical faults discourage t conclusions.

Irrelevant software acts as another stumbling block to the use of ICT in secondary schools as media. Salomon(1989) says there are clear indications from many countries that the supply of relevant and appropriate software is a major bottleneck obstructing under application of the computer as teaching media in accounts. For example accounting software needs to be available when teaching accounts but most of secondary schools could not afford buying and updating the software package like pastel. Although application software like word processors and excel are easily accessible, accounting software are difficult to get in terms of maintaining it.

Furthermore, Lack of computer equipment is yet another barrier to technology usage in teaching and learning of accounts. In a study in the US, Smerdon, et al. (2000) reported that the most important barriers to high school teachers' use of ICT were insufficient number of computers. Computers are expensive to purchase, install and maintain. Lack of infrastructure such as classrooms is also another obstacle. Computer peripherals such as printers, scanners, modems and projectors are not available in most of secondary schools because of high purchase price and maintenance costs. This is in line with Josh and Chugh (2009) who noted that ICT has an immense potential to motivate and engage students in learning.

Lewis and Smith (2002) summarized the challenges as lack of equipment, inadequate skills, lack of support, and teacher's lack of skill and knowledge on how to use the computer. In addition,

Kwacha (2007) postulated that the following are barriers associated the use of technology, lack of ICT training, lack of qualified teachers, high cost of equipment, lack of power supply, poor telephone lines, especially in rural areas.

2.4 POSSIBLE SOLUTIONS TO PROBLEMS FACED BY ACCOUNTS TEACHERS IN TEACHING AND LEARNING OF ACCOUNTS IN SECONDARY SCHOOL

Literature consulted unpacked the challenges faced when using technology as media in accounts education. When these factors are examined, teachers are more likely to use technology in accounts. The heads of schools should be supportive in the use of ICT as media in accounts by making sure that accounting software is available, projectors and computers are working properly. Creighton(2003) suggested that by simply adding hardware or software to the classroom will not guarantee meaningful learning to the learners. Therefore school administration should support the use of technology by proving generating set that can empower the computer laboratory in areas where there is no electricity or heavy power cuts. Teachers again require enough technical support to help them in using different computer technologies such as projectors, printers and many more. Cuban (2001) postulated that lack of support can be solved by using learner technology helpers.

There are a number of methods that could be employed to encounter the use of media technology in the teaching and learning of accounts. Kahn (1998) noted that without resources, schools could opt for a one computer classroom. Only one computer and an overhead projector could be

found in that room for all learners to see, follow instruction, demonstration and pupils could either work in groups doing accounts exercises. To overcome the problem of lack of computer equipment, Sandholtz and Reilly (2004) assert that the schools can venture into hybrid technology setup in classroom that involved cheaper computer systems. Tearle (2004) suggested that there is need to introduce ICT in one or two subject areas at a time to ensure that teachers and learners in those areas have enough technology and access to technology. The researcher support by suggesting that secondary school should buy laptops which are cheaper in term of cost and maintenance.

ICT in service training and retraining of teachers on how to use technology as media in accounts is needed. Teachers would acquire relevant skills to use technology in accounts classroom. The training must be more of hands on than theory for teachers to be able to use the gadgets to reduce fear of technology usage. Peralta and Costa (2007) support this by saying teachers with greater capability in computer operations tend to be more confident in using any other available ICT gadgets.

UNESCO (2008) stated that teachers should possess specific skills such as using hardware and software to reach a specific level of knowledge in ICT usage. Pan (2000) recommends that teachers must do introduction to computers course where they learn different application, creation of web pages and creation of multimedia presentations. Lau and Sim (2008) suggests that teachers needed an on- going training rather than a one off basis to upgrade their ICT knowledge. ICT give the teacher an opportunity to increase the learner engagement. Students will be able to work on their own pace. Gbenga (2006) asserted that ICT can be used to train in skills and give knowledge to learners which they will need in further educational and as an ongoing learning process throughout the rest of their lives and for future jobs. Introduction to

computers makes teachers to be ICT knowledgeable hence their fear reduces, and their attitudes towards technology improve, for, instance with hands on computer literacy courses. In addition adequate time is needed by accounts teachers to be more familiar with computer technologies.

Barron and Goldman (1994) suggested that enough time allows accounts teachers to experiment with new technologies, to share these experiences with other teachers, to prepare accounts lessons using technology, and to attend technology training courses. Therefore adequate time is needed for accounts teachers to gain confidence in using technology as media. Accounts teachers should be given more time on the school timetabling. Anderson and Dexter (2000) postulated that teachers collaborate to create technology integrated lesson plan and teaching materials. In support Snoeyink and Ertmer (2001-2002) suggested that schools can reduce class loads for accounts teachers to free up school time. Again, Bowman (2001) supported by postulating that schools should change their time- tabling schedule to increase class time to dual periods lessons. Furthermore, there was also need for having ICT plan.(Fishman and Pinkard, 2001). An ICT plan should centre on teaching and learning, not merely on technology issues (Rogers, 2000) According to Woodrow (1992), to have an educational practice successful using technology, users need to develop a positive attitude towards innovation. Therefore accounts teachers should be granted access to computer laboratories as this enables them to use ICT in teaching and learning.

2.5 SUMMARY

The chapter has reviewed the literature from both primary and secondary sources. The researcher has collected the information which is relevant to the problems associated with the use of ICT as

teaching and learning media in accounts in secondary school. The findings revealed that Principles of Accounts teachers had a strong desire to use ICT as media in the classroom, they were encountered with the use barriers which include insufficient technical supports at schools and little access to internet, shortage of class time, lack of teachers' confidence, lack of teacher training and lack of competence as major barriers prevents Accounts teachers' to use ICT as media. In this chapter relevant information which was needed for the study to be successful was collected and dealt with. Having collected relevant information, the methodology of carrying out the project will be discussed in the next chapter.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

The chapter encompasses the study design, population, study sample, sampling procedures, research instruments and methods of data collection and data analysis. The research design is a detailed outline of how an investigation will happen. Generally it includes how data is to be gathered, what research instruments will be used and employed and how the researcher will analyze the data that has been collected. According to the researcher, to analyze is to inspect, change and model data with the aim of finding useful information and summarizing it. The data would have been collected by research instruments such as questionnaires, survey, interviews and so on.

The research population is just a large collection of individuals. Due to large sizes of populations, researchers rely on sampling techniques.

3.2 RESEARCH DESIGN

The research design refers to a plan, structure and strategy of investigation conceived so as to obtain answers to research question and to control variance (Kerlinger,2003:38).The research employed the descriptive survey design. Sidhu (2003) notes that descriptive survey is used to

obtain information concerning current status of phenomena, to describe what exists with respect to variables or conditions in a situation. It assists the researcher to be able to use representative sample to generalize to whole population. Besides beings descriptive it was also quantitative in design. As Kombo (2006) postulates, descriptive or qualitative studies are not only restricted to fact finding but may often result in the formulation of important principles of knowledge and solutions to significant problems. It was descriptive in that it brought out subjective experiences views of accounts teachers, school heads ministry of Education and learners. A descriptive research design was used because it describes in detail the existing situation and the characteristics of a population in details. Therefore descriptive survey was best for this study as it enabled the researcher to go to the field and collect the data in a very short period of time. It was quantitative in nature because of the use of computations which were done to quantify some data collected in the field. This was because some responses and objective responses were quantified in the form of percentages and this enabled data to be analyzed and interpreted.

3.3 POPULATION AND SAMPLE

3.3.1POPULATION

Chiromo (2009) defined population all individuals, units, objects or events that will be considered in a research project. In the study, the researcher gathered data from a total of 6 Principles of Accounts teachers and 3 heads of schools. All these secondary schools are in rural area of the district. Due to large sizes of population, the researcher relied on sampling techniques. In Buhera Central there are ten schools offering Principles of Accounts. Therefore

the total population for the study is 35 which comprised of 10 school heads and 25 Principles of Accounts teachers.

3.3.2SAMPLE

According to Chiromo(2009) a sample is a smaller group or subset of the population selected from the population. Therefore sampling is the process of selecting individuals from a population for the study. Saunders (2008) postulates that sampling is the process of selecting units from a population of interest so that by studying the sample the researcher may fairly generalize the findings back to the population from which they were selected. The sample provided reliable and detailed information to infer to the whole population to save time and other expenses. Because of the inability of the researcher to examine all the individuals in a given population, the concept of sampling arose. Thus sampling is a technique of selecting a sub group from whole population to participate in the research study. The sample population of this study was made up of , 3 heads of schools and 6 Principles of accounts teachers.

3.3.3SAMPLING PROCEDURES

The study used a combination of purposive sampling and random sampling. Johnson and Christenerises (2000) assert that in purposive sampling, the researcher specifies the characteristics of a population of interest and then tries to locate individuals who have those characteristics. Chiromo (2009) says that purposive sampling involves the researcher handpicking the cases to be involved in the sample. Therefore three schools were purposively chosen because they were accessible to the researcher. The names were handpicked at random.

As pointed out by Chiromo (2009), simple random sampling allows each member of the population an equal chance of being selected, the selection of one individual does not affect in any way the selection of the other members. Stratified random sampling was used to ensure gender balance. The names of the teachers were arranged in homogeneous groups that are male and female. Then the names were selected from those groups randomly.

3.4 DATA COLLECTION INSTRUMENTS

The researcher used questionnaires and interviews guides for this study. These research instruments were examined. Chisi et al. (2004) postulate that research instruments should be clearly described so as to bring out their strength and weaknesses as a way of justifying their selection and suitability to the research. These tools enabled the researcher to collect data.

3.4.1 Questionnaire

A questionnaire in this research study was an instrument with questions meant to provide answers to the main research topic. In this study questionnaires were used as a data collection instrument. Gwimbi (2003) defined a questionnaire as a list of questions that a researcher intends to ask each respondent. In this study questionnaires guaranteed confidentiality as the respondents were not allowed to write their names anywhere on it. In addition self administration of questionnaires has many benefits that is of getting high response rate and elicit more truthful responses. Kothari (2004), adds an advantage of the questionnaire which is freedom from the interviewer's bias as answers are in subjects own words and that it gives respondents enough time to give well thought answers. A pilot testing was done at one of the schools (school A)

before administering the instruments to test the validity, reliability and suitability of the instruments. The instruments were discussed with other teachers to examine the items used so that amendments could be done. Tuckman (1994) argues that a pilot study is run to test a question and revise it if necessary.

3.4.2 INTERVIEWS

The researcher conducted interviews in addition to questionnaires. According to Chiromo (2009),an interview involves the collection of data through direct verbal interaction between the interview and the interviewee. The researcher used interview technique because it helps her find more information on the use of technology as media. Interview allows face to face interaction which reduces bias. Semi interview schedule was administered to heads of schools. Heads were given structured questions. All the questions were based on problems which are associated with the use of ICT as a media in the teaching of accounts at ordinary level. Chiromo (2009) postulates that in a structured interview, the interviewer may encourage the interviewee to clarify vague statements or to further elaborate on brief comments. However interviews have their own disadvantages which are they are time consuming as the researcher had to move from one school to another. In addition reliability of responses can be affected due to interviewer's biases.

3.5 DATA COLLECTION PROCEDURES

Before going to the field to gather any data, the researcher acquired a stamped letter from the Faculty of Applied Education at Midlands State University requesting for permission to carry out a study. Having obtained the letter, the researcher got permission from Ministry of primary and

Secondary Head office to conduct her study. After that, the researcher obtained permission from Manicaland Province Education Director then passed the permission to Buhera District Office. Thereafter the researcher visited the sampled school to seek permission from the school heads. Questionnaires and interview guides were used to gather data.

The design used in this study was both qualitative and quantitative in nature. The study aimed at gathering data from on the problems associated with the use if ICT as teaching and learning media in accounts from three selected schools in Buhera Central District. Both primary and secondary data was obtained. Questionnaires and structured interviews were used to collect primary data while library, internet and journals were used for gathering secondary data.

3.6 DATA PRESENTATION AND ANALYSIS

The researcher used the following to summarize and present data: graphs, histograms, tables and figures. This enabled the researcher to combine information from different respondents. Questionnaires were used to collect quantitative data and its analysis was done through tables, graphs and percentages to help summarize and present the information professionally. Data gathered from the interview schedules for heads was categorized and analyzed descriptively. After analyzing data descriptively, the researcher reported and discusses what has been found using tables to avoid long descriptions. Charts were used during data analysis phase as they enable the researcher to present a lot of data in short space.

3.7. ETHICAL CONSIDERATIONS

The researcher considers ethical issues to protect the respondents in this study. The data was collected without causing any damage or harm to the participants. According to Makore-Rukuni (2001) most of the researcher's ethics are descriptive ethics which give us guideline on how to carry a research study, which policies influence how we should research and explaining procedures and behaviors to be followed when conducting a study. The researcher was guided by ethics to protect the right of the respondents during the process. Some of the participants' rights are the right of not disclosing their names on questionnaires and the right of having their answers treated as confidential and many more.

3.8. VALIDITY AND RELIABILITY OF THE INSTRUMENTS

Jaunder et, al. (2000) postulates that validity is important because it ensures that conclusions effectively represent empiric reality or whether constructs devised by researches accurately represent or measure categories of human experience. Validity can be easily obtained by choosing the right instruments that measure what is supposed to be measured. In this study, validity was ensured through construction of questionnaires for each question gave content validity. The validity was also ensured by constant liaison with the research supervisor. However as mentioned by Saunders et, al. (2000) said there are several threats to validity and these include bias. Reliable is the degree to which an instrument consistently measure whatever it is supposed to measure. According to Stuart et, al. (2001) reliable pertains to the representative of the results

of the specific sample of the entire population from which it is drawn. This entails that reliability indicates how probable is that similar relations between variables would be found if other sample were drawn from the population

3.9 SUMMARY

The chapter dealt with the research design that was followed in this research study, giving the population, sampling techniques, research instruments and data collection procedures. This chapter gave clear reasons why the researcher has chosen a particular procedure of technique. Collected data will be presented, analyzed and interpreted in the next chapter.

CHAPTER 4

DATA PRESENTATION, ANALYSIS, DISCUSSION AND INTERPRETTION

4.1 INTRODUCTION

This chapter presents the results from all respondents who participated in the research study. The findings were obtained as result of an investigation carried out using questionnaires to accounts teacher and learners and interview schedules for school heads. The researcher presented the data using quantitative tables, figures and qualitative verbatim means to help readers summarize the results obtained. Therefore this chapter examined in detail the results on the problems associated with the use of ICT as teaching and learning media at ordinary level in Buhera district. The presentation is based on the research questions mentioned in chapter one.

4.2 DATA PRESENTATION AND ANALYSIS

4.2.1 DEMOGRAPHY: GENERAL FINDINGS

One of the items on the accounts teachers' questionnaires was to know their gender and below Fig 1 shows detail of how many female accounts teachers and male accounts who participated in this study.

GENDER RESPONSE

Fig 1 (n=6)

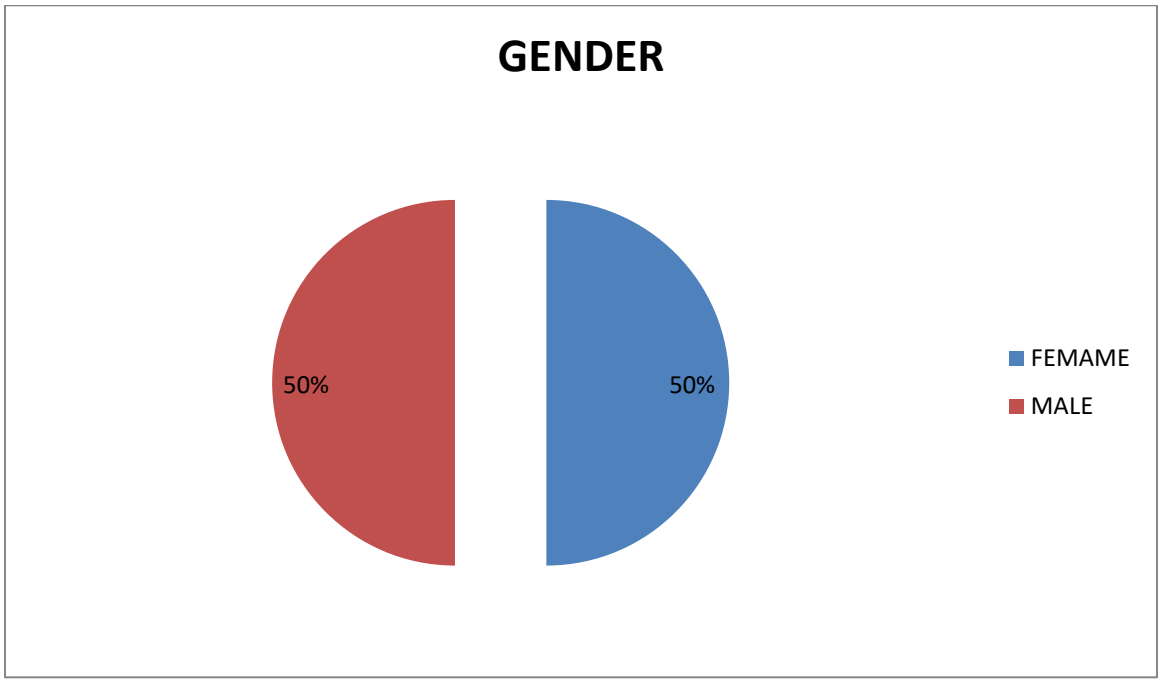


Fig 4.2.1. Analysis indicates that 3 were females and also 3 were male teachers. Thus 50 percent of respondents were females whereas 50% were male teachers. From the above table one can see that there is balance between accounts male teachers and female teachers so there is no gender bias in this research study. Therefore, there is fair representation in the study of the problems of using technology in accounts at ordinary level.

4.2.2**Principles of Accounts teachers' professional qualifications**

The researcher wanted to find out the professional qualifications of Principles of Accounts teachers. Zimbabwe curriculum's quality education system depends on the quality of its implementers. Therefore the successes and higher pass rate in Principles of accounts at Ordinary Level depends on the quality and effectiveness of Principles of Accounts teachers in accounting. Qualified Principles of Accounts teachers have the ability; they are committed and resourceful teachers.

Table 4.1.2 Respondents' professional qualification (n=6)

Teachers professional qualification	**Frequency**	**%**
Diploma in education	1	17 percent
Bachelor in education	3	50 percent
Masters in education	1	17 percent
Other	1	17 percent
Total	6	100 percent

Source respondents' raw data

Table 4.1.2 shows information on Principles of Accounts teachers' professional qualifications who participated in the study. It shows that there are more Bachelors of education degree holders of 50% of the 6 respondents. 17% of the respondents hold Diploma in education, another 17% holds Masters in education whilst 17% are holders of non-teaching diplomas and degrees. The findings above show that Principles of Accounts teachers have different professional

qualification. From schools studied it was revealed that at school A, the Principles of Accounts subject was taught by Bachelor of Education Degree holders' teachers. At secondary B, one female hold Masters of Education Degree and the other holds diploma. But at school C secondary the subject was handled by one who holds a Bachelor of education and the other one who holds a non-teaching diploma. The results from these three schools studied shows that Principles of Accounts was being taught at some schools by teachers who were not trained to teach accounts. This is because of the shortage of accounts trained teachers as teachers fear it as a difficult subject with more calculations like mathematics. This could be one of the contributing factors for teachers not using technological equipment as media by secondary school teachers. Therefore as shown from this study Principles of Accounts require well trained implementers for the effective use of ICT as media.

4.2.4 Teaching experience

This was another item which was addressed in the question to find out the Principles of Accounts teachers teaching experience. The detailed results are recorded on table below

Table 4.1.3 Principles of Accounts teachers teaching experience (n=6)

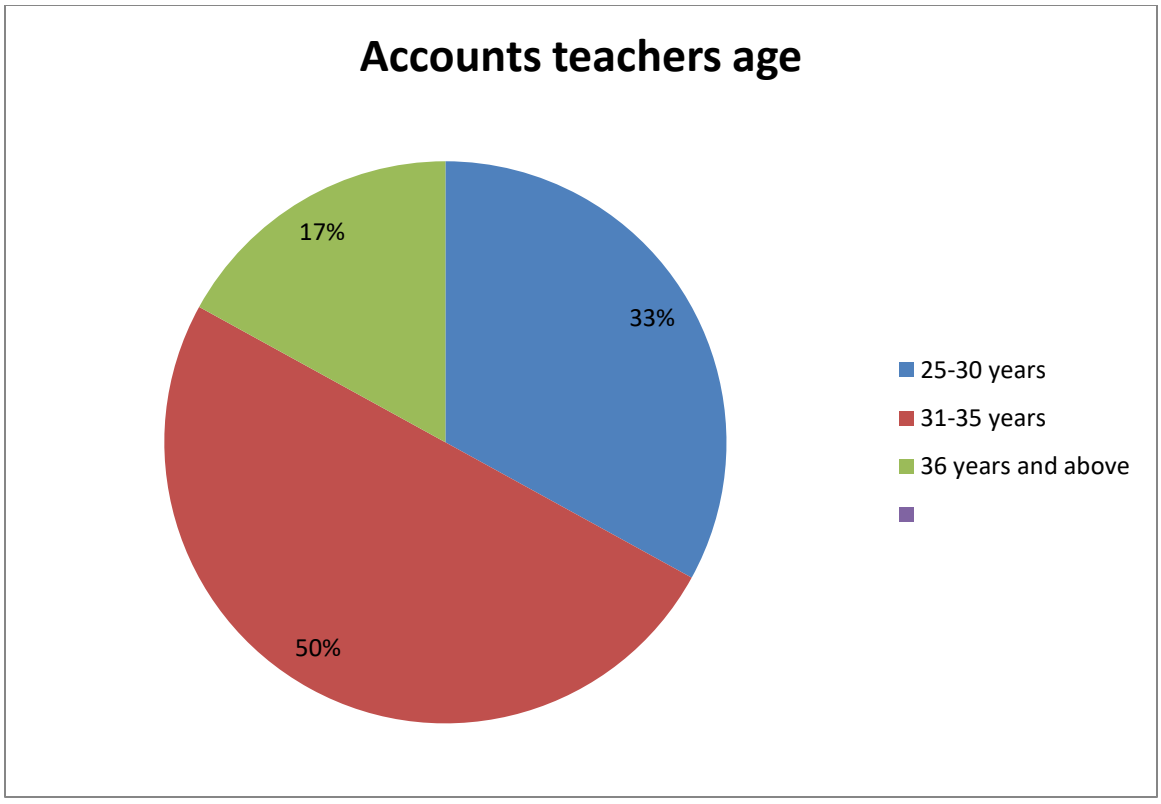
Response	**Frequency**	**%**
1-5 years	1	17 percent
6-10 years	4	66 percent
11years and more	1	17 percent
Total	6	100percent

Source: raw data from respondents

Results of experience of Principles of Accounts teachers sampled in secondary school are shown on the table 4. Principles of Accounts teachers must possess necessary experience for successful use of technology in teaching and learning. The results show that 4 of 6 respondents have teaching experience between 6-10 years. Again it was noted that 17% of 6 respondents are between 1-5 years' experience. The table above also shows that 17% of 6 respondents are above 11 years of experience. Those teachers with less than 10 years of experience shows that they are just coming from colleges and university which could be an advantage in using ICT as teaching media.

4.2.5 Another item addressed in the account teachers' questionnaires was to find out their age. The response of the findings are shown in the table below

FIG 3 (n=6)



Raw data from the respondents

The researcher wanted to find out whether age had any influence on the use of ICT as media in teaching and learning of Principles of Accounts in secondary schools. Therefore the study showed that the majority 50% of 6 teachers who participated in the research study were fairly young teachers aged between 31-35 years. The lowest frequency 17% was made up of teachers aged above 36 years. 33 % consists of very young Principles of Accounts teachers aged between 25-30 years. In trying to find out whether age could affect the use of ICT as media in Principles of Accounts, it was found that majority of the respondents concluded that it was not a major factor or barrier. Teachers' attitudes and practices affected them in using technology as media.

4.2.0 First theme on the use of ICT

4.2.6 Response from heads interview guides on accessibility of Principles of Accounts to ICTs.

The heads of schools were asked which ICTs do teachers have access to in their school. This was to determine the type of ICTs Principles of Accounts teachers have access to in their various schools.

The following are the results.

Head 1: we do have computers which were donated by the first lady Dr Amai Grace Mugabe here. We only have one overhead projector and internet access is sometimes not available because of shortage of funds to subscribe. These gadgets are open to everyone who wants to use them.(15/09/17)

Head 2: we only have few computers here, and so these computers are being used by teachers who teach ICT as a subject. Sometimes Principles of Accounts teachers might access the laboratory but not always. (18/09/17)

Head 3: the school have less than ten computers, and two overhead projectors for twenty five teachers. Internet is there. They all share these gadgets.(19/09/17)

4.2.7 Teachers were asked to indicate the number of periods per week. The purpose was to know whether time has any effect on the use of ICT as media in Principles of Accounts. The results is presented in the table below

Table 4.1.4Number of lessons per week (N=6)

Respond	frequency	Percent
Four periods	3	50
Six periods	3	50
Eight periods	0	0
Total	6	100

From the above table it was revealed that 50% of the respondents have four periods per week per class while another 50% said they had six sessions per week. From the schools sampled no one had eight periods per week but the syllabus indicated that it should be from six to eight periods per week. This might be a factor that contributes to teachers not using ICT as media because of shortage of time as the one might be rushing to finish the syllabus.

Results from interview guides

Head 1: Principles of Accounts as subject is optional, so we tried to allocate it four periods from form one up to form three then six period at form four to accommodate more time to those required one.(15/09/17).

Head 2: our school's curriculum is wide thus our timetable is very congestion such that we tried to reduce number of period on those subjects that were declared electives by the Ministry of Education. Principles of Accounts is one of those subject so we allocate it four periods per week from form one up to form four. (19/09/17).

Head 3: We allocate number of periods per week as indicated in the subject's syllabus so Principles of Accounts is written six to eight periods and we allocate it six periods from form one to form four which is the minimum required. 19/09/17

4.2.8 Responses to whether the syllabus emphasized the use of ICTs

Teachers were asked to show whether Principles of Accounts syllabus emphasize the use of ICT as media. The purpose was to determine whether teachers were following what the curriculum is emphasizing.

Table 4.1.5 Emphasis on the use of ICT in the syllabus (n=6)

Respond	Frequency	Percentage
Yes	6	100 percent
No	0	0 percent
Total	6	100 percent

The findings showed that 6 (100%) of the Principles of Accounts teachers indicated that their syllabus emphasized the use of ICT as media. Therefore the planners were aware that Principles of Accounts teachers must use ICT as media to help learner understand concepts and apply them practically and to prepare them for real world of life. From this study it has been observed that there is need to understand and interpret the syllabus not to scheme from textbook. Hence Principles of Accounts teachers are supposed to use technology as media as given the syllabus.

4.2.9. Responses on ICT training funds

Teachers were asked to reveal whether she or he has been funded by the school to attend ICT training or they pay for themselves. The question also tries to find out those teachers who are not trained in ICT.

Table 4.1.7 FUNDING OF ICT TRAINING

(n=6)

Respond	Frequency	Percent
Has been funded by the school	2	33.3 percent
Used own funds	2	33.3 percent
Not yet trained	2	33.3 percent
Total	6	100 percent

Source: raw data from respondents

Table above shows that 33.3% of teachers sampled have been funded by schools to attend ICT training, 33.3% of Principles of Accounts teachers funded themselves for ICT training and 33.3% have not yet received any training. May be those who are untrained are failing to get funds for training as their schools are failing to sponsor them. Therefore the researcher is saying as the subject requires the use of ICT in teaching, the teachers must make sure that they are trained even using their own funds if the school fails.

4.2.10. Responses on perceived ease of use ICTs as media

The teachers were asked to rate themselves on the items provided on the perceived ease of the use of ICT as media on a four point scale. The main aim was to find out how easier teachers perceive the use of ICT during their Principles of Accounts lesson.

Table 4.1.8 Principles of accounts teachers' perceived ease of using ICT as teaching media. (n=6)

	Perceived ease of use items	SA	**A**	**D**	SD	TOTAL
1	Using ICT makes it more difficult to control the class to control the class.	1	0	2	3	6
2	The use of ICT makes the lesson more difficult	1	0	3	2	
3	ICT makes lesson preparation more difficult.	1	0	3	2	6
4	Computer hardware and software problems often disrupt my principles of accounts lesson.	1	1	3	2	6
5	The use of ICT in teaching principles of accounts is expensive	1	1	2	2	6

Findings from above table indicated that more Principles of Account teachers strongly disagree (50%), and 33.3% disagree than those who strongly agree (17%) and agree (0%) with the perception that using ICT makes it more difficult to control the class. Therefore, from the table it can be seen that the number of teachers who strongly disagree and disagree on all other three items on perceived ease of using technology is more than the frequency of teachers who strongly agree and agree. Thus it means the reverse of these items is the case. That means Principles of Accounts teachers view ICT as easy to use in teaching their subject during the session.

4.2.11 Perceptions on the usefulness of ICT as media

Principles of Accounts teachers were asked to charge themselves on the perceived usefulness items of ICT as media during their lesson on a four point scale. This is to determine how useful teachers perceived the use of technology during their session.

Table 4.1.9 Principles of accounts teachers perceived usefulness of ICT. (n=6)

	Perceived usefulness items	SA	A	D	SD	TOTAL
1	The use of ICT makes the lesson more interesting	3	2	0	1	6
2	The use of ICT in my teaching of principles of accounts is not enjoyable	1	0	2	3	6
3	The use of ICT improves presentation of materials in principles of accounts.	2	2	1	1	6
4	The use of ICT reduces learners' motivation	1	0	2	3	6
5	The use of ICT makes lesson more difficult.	0	1	2	3	6

Source: raw data from respondents

From the above table it is evident that most of the Accounts teachers (3) and (2) strongly agree and agree that if they use ICT as media, makes lesson more interesting as compared to the one without. This is higher than the frequency of those teachers who strongly disagree (1) and disagree (0). Furthermore, the findings shows that more teachers strongly disagree (50%) and disagree (33.3%) with the view that the use of ICT makes their lesson is not enjoyable than those who strongly agree (17%) and agree (0%) on the same perception. In addition, (34%) and (34%) of the respondents indicate that the use of ICT improves presentation of materials during their Principles of Accounts session. Again this also is greater than (17%) and (17%) of teachers who

strongly agree and agree with the same statement. The findings on the table above revealed that more teachers strongly disagree and disagree that the use of ICT as media in teaching Principles of Accounts makes lesson more difficulty and reduces learners' motivation than the numbers of those strongly agree and agree with the opinions. Generally the results above indicate that principle of Accounts teachers are that the use of ICT as media has been very useful in their teaching and it contributes a lot to higher performances of the learners.

RESULTS from interview guides

Head 1: learners using ICT through internet can access global knowledge and communication with other people from different countries. They can share information thus helping each other. (15/09/17).

Head 2: learners who use ICTs gain greater understanding of harder topics and accounting concepts. They are likely to recall these concepts faster apply them to solve problems than those where teachers used teacher talking methods. (18/09/17)

Head 3: the use of ICT encourage learners to discover for themselves. It promotes discovery methods method. In Principles of Accounts learners will be able to prepare financial statements using a computer that is preparing students for a real world of life. In industries accountancy are require to use computers to prepare these statements so these students will have a sound knowledge. (19/09/17)

4.2.12 Respondents' findings on whether or not technology was used in teaching Principles of Accounts.

The researcher also wanted to find out how often Principles of Accounts teachers use technology in teaching of accounts. The results were recorded on the diagram below. Responses to whether or not teachers have used ICT gadgets in teaching of accounts.

Table 4.1.10 Response on whether or not Principles of Accounts teachers' use ICT in teaching (n=6)

Response	Always		Often		Seldom		Never	
	number	%	number	%	number	%	number	%
Computers	1	17	2	33	2	33	1	17
Videos	0	0	1	17	2	33	3	50
Projectors	1	17	1	17	2	33	2	33
The internet	0	0	2	33	3	50	1	17

Source: raw data from respondents

Results from questionnaires revealed that more Principles of Accounts teachers 33% of 6 teachers' frequently use ICT and 33% of the respondents rarely use computers in the teaching and learning than those who never used it (17%) and those who always use it (17%). This shows that more of the teachers rarely or only occasionally use computers as media. Furthermore, the result shows that 50% of 6 teachers never used videos and 33% rarely use ICT as media in teaching. 17% use videos many times but no one used it all the time. Additionally, 33% and

33% indicate that they never used projectors and rarely used sit respectively while 17% shows that they always use projectors and another 17% agree that they use it more often. On the other hand 17% of 6 teachers indicate never used internet when teaching and no one indicated always on the use internet. Contrarily, 50% of teachers indicated not frequently on the use of the internet and 33% shows that they use internet more frequently. ICT as teaching aid assist Principles of Accounts teachers' to explain concepts clearer and learners can easily understood them. Lack of ICT training to use computers or laptops, videos and projectors was mentioned as barriers for teachers not using ICT as media.

From interviews held, the following was reported

First head: Accounts teachers prepare their teaching staff or notes using their laptops. Sometime they search their content on Google using internet (interview held on 15-09-17)

Second head: Accounts teachers sometime use internet to get teaching materials.(interview held on the 18-09-17)

Third head: I have never seen an accounts teacher using computer or projector in this school. (Interview held on the 19 -09-17)

Reports from school heads' interviews revealed that some accounts teachers have used internet to download or search teaching materials. One of the heads revealed that she had never seen her accounts teachers using ICT in teaching. Therefore this report shows that only some accounts teachers are able to use ICT in teaching accounts at ordinary level in secondary school.

4.3.0 Second theme

4.2.13. Problems faced by secondary Ordinary Level Principles of Accounts teachers in using ICT as teaching media.

The aim is to explore the Principles of Accounts teachers' perceptions of a list of five factors that prevent them to use ICT in the classroom. The results obtained are shown in table below.

Table 4.1.11 Barriers preventing Principles of Accounts teachers to use ICT as media

		Strongly Agree		Agree		Disagree		Strongly Disagree	
	Statements	No	%	No	%	No	%	No	%
1	Shortage of class time hinders me to use ICT as media in Principles of Accounts.	3	50	2	33	1	17	0	0
2	Little access to ICT prevents me to use ICT as teaching media.	2	33	2	33	1	17	1	17
3	Few ICT technical support at school block me in using ICT in classroom.	4	67	2	33	0	0	0	0
4	Time needed to learn ICT discourage me to use ICT as media in Principles of Accounts.	1	17	1	17	2	33	2	33
5	My work mates' negative view about ICT prevents me in using ICT in the classroom.	0	0	1	17	2	33	3	50

Findings from Table 4.1.11 above shows that more teachers strongly agree (50%) and agree(33%) that shortage of class time is a significant barrier for them to use ICTs as media in teaching than those who strongly disagree and disagree. Therefore it means that shortage of time prevents teachers to use ICTs as media. Furthermore, little access to ICT prevents teachers to use ICT as media as shown in the table above because majority of teachers indicated that they strongly agree (33%) and agree (33%) on the item. Moreover 66% of 6 respondents revealed that they strongly agree with the view that few ICT technical supports at school discourage them from using ICTs in the classroom whilst 33% agreed again that it is a strong factor that contributes to not using ICTs as media. No one disagree with this statement. This therefore means that teachers believed that insufficient technical supports at schools prevent them to use ICTs in the classroom. In addition, time needed to learn using ICT prevents Principles of Accounts teachers to use ICTs as media received 34% of the teachers' agreements and strongly agree. The reverse is true that time to train is not a factor as strongly disagree and disagree received a total of 66%. Lastly, respondents view other people's opinions regarding ICT do not influence Principles of Accounts teachers' perceptions of using ICT application in the classroom as 50% strongly disagree and 33% disagree whilst 17% agree with the statement.

Results from school heads interviews on the main contributing factor.

Head: 1 Teachers lack ICT training. Therefore teachers lack knowledge and skills on how to use the computers or laptops and overhead projectors effectively. (Interview held 15 /09/17)

Head: 2 lack of skills by Principles of Accounts teachers prohibits them from using ICT as media in teaching. They need more and continuous training in ICTs(Interview held 18/09/17)

Head: 3 teachers lack the skills to fully utilize ICTs in their curriculum implementations hence the traditional chalk and duster approach still dominates. Principles of Accounts teachers need to be continuously trained in ICT for effective use of them. (Interview held 19 / 09 /17)

Teachers' lack of skills and knowledge was pointed as a challenge in not using technology. In chapter two review of related problem, it was highlighted as a way of solving the problem that accounts teachers should undergo ICT training

4.2.14 OTHER CHALLENGES WHICH INHIBIT PRINCIPLES OF ACCOUNTS TEACHERS IN USING ICT AS MEDIA.

Various reasons for teacher not using ICT as media were found by the researcher during the study. Their results were shown in table below

Table 4.1.12 Other challenges which prevents Principles of Accounts teachers in using ICT as media.

(N=6)

Response	Frequency	Percentage%	Total
Shortage of infrastructure	6	100	
Lack of electricity	4	64	
Outdated computers	6	100	

Lack of confidence	1	17	
Lack of training	6	100	

The above diagram revealed that 100% of 6 respondents concluded that shortage of infrastructure was the major factor for teachers not using ICT as media. In addition 100% of 6 subjects showed that lack of training was the second major block in the use of technology at ordinary level. Furthermore, lack of electricity 64% and lack of confidence 17% were mentioned as stumbling block towards ICT usage. 100%of 6 respondents noted that outdated computers is barrier. The researcher also gives respondents an allowance to list other barriers that block in using ICT as media. The following results given were as follows, change resistance, lack of administration support and the subject content to be covered being very wide. Therefore this shows that accounts teachers fear using ICT as teaching aid because of shortage of time as they want to cover the syllabus in time. Also as indicated on lack of infrastructure, it shows that there are few ICT gadgets in schools therefore because of teachers' lack of training, they fear using technology in teaching accounts.

From interviews held, the heads noted the following as barriers faced by accounts teachers in using ICT as teaching media in secondary schools.

First head

Ordinary level accounts sessions are done in 35 minutes. They do not have double lessons as other subjects, so lack of time hinder accounts teachers in using ICT equipment as teaching aids. The computers are mostly used in advanced level as teachers have double 35 minutes sessions. In

addition, there is also a problem of computer shortages as compared to the learners' ratio.(interview held on the 15 /09/17)

Second head

Principles of Accounts should be treated as other subject I think starting from the curriculum planners. They should not take as an optional subject so that we can allocate it more time for the teachers to have more time to use ICT in their teaching .As it stands, it only has four periods per week worse part single periods which is not enough to accommodate ICT. Furthermore, the school had few computers for teachers and learners to use as tools. (Interview held on the 18 /09/17)

Third head

Lack of computer equipment prohibits teachers from in using these ICTs effectively. There is an inadequate computer kits such as few laptops, only one projector for 16 teachers to use it. Therefore not all teachers have access to the computer room. (Interview held on the 19 / 09/17)

Results from interviews

School heads pointed out that lack of computer equipments is a major barrier in their schools. In addition it was revealed that shortage of time and lack of teacher training hinders the use of ICT as media in teaching of accounts at ordinary level.

4.4.0 Theme three: Possible solutions to challenges faced by accounts teachers in using ICT as media

4.2.15. Support that teachers get in the use of ICTs in the teaching of Principles of Accounts at Ordinary Level.

Table 4.1.13 Support got by accounts teachers in using ICT as teaching aid.

(n=6)

Response	More support	**%**	Less support	**%**	No support	**%**
Support from admin	2	33	3	50	1	17
Peer to peer support	1	17	3	50	2	33
Accounts workshop or seminars	1	17	4	64	1	17
ICT training	1	17	2	33	3	50

Source: Raw data from responses

Report from the table4.1.12 above shows respondents that received more support from schools administration as 33%, 17% being support from other accounting teachers, 17% from workshops attended and 50% got from technology training. Accounts teachers who got less support from schools management constitutes 50% of 6 teachers, from peers 50%, from workshops 64% and from training 33% of 6 respondents.

Results of those who do not receive any support showed school admin as 17%, peers 33%, from workshops 17% and 17% from ICT training. This led accounts teachers to not using ICT as media because of receiving less support or no support at all. Therefore school managers are encouraged to promote the use of ICT as media by supporting accounts teachers by making them receive ICT training to gain computer knowledge and skills so that they will be able to use or integrate it. Schools again must support teachers by making sure that relevant software is

acquired and updated. Internet connection is also a necessity to all schools. In addition, school should encourage team work by encouraging peer to peer support in accounting. Schools should hold workshops on staff development that integrate ICT training on how to use different packaging such as word for typing, excel for calculations, PowerPoint for lesson presentation and so on. School heads should not hesitate to pay for their teacher to attend ICT training so that teacher would not fear using ICT equipment.

Table 4.1.14 Solutions to ICT usage (n=6)

	S	A	A	D	S	D
If technology is used as media, it help to elaborate difficult concepts	3		3	0	0	
More training would increase my use of computers in the teaching of Principles of Accounts	6		0	0	0	
The use of a video projector motivates learners to learn Principles of Accounts	2		2	1	1	

Source raw data from the field

The results above revealed more teachers strongly agree 3 and agree 3 that ICTs help them to elaborate more difficult concepts than those who strongly disagree 0 and disagree0 to the item. This means that ICT is useful in teaching Principles of Accounts. Additionally, all respondents 6 strongly agreed that more training increases their use of ICT as media in Principles of Accounts. Furthermore 33% of 6 respondents strongly agree and 33% agree that learners are motivated by the use of video projectors while 17% and17% strongly disagree and disagree respectively with the statement. Therefore from the results it can be seen that video overhead projectors motivate students to learn.

4.2.16 OTHER WAYS OF IMPROVING THE USE OF ICT AS MEDIA IN THE TEACHING OF PRINCIPLES OF ACCOUNTS.

	Frequency	Percentage	
Provision of lap tops	6	100	
Recruitment of qualified teachers	4	64	
Provision of generators	6	100	
Provision of electricity in all classes	6	100	

Respondents 100% revealed that schools must buy laptops which are cheaper so that they will have more access to computers. In addition 100% of teachers show that schools should acquire generators which will take over as the electricity cuts off. 64% of the respondents revealed that the ministry of education must recruit qualified Accounts teacher which are eligible in computers usage. They all 100% argued that school should provide electricity in all classes besides the laboratory.

Interview report from school heads on ways to be employed to overcome barriers faced by accounts teachers when they use ICT as media revealed the following:

First school head

Every teacher should receive ICT training so that they would be able to use technology as media in accounts (interview held on the 15 /09/17)

Second school head

ICT training should be made compulsory for teachers to use technology as media. As for accounts teachers, they should be trained in using their special accounting software that is connected to their subject content so that they can prepare their financial statement and for the school. (interview held on the 18/09/17)

Third school head

Schools should purchase enough computer equipments to overcome the problem of computer to learner ratio the use of technology. School must acquire equipments such as projectors so that teachers use when presenting their lessons. Accounts sessions should be increased to double periods so that teachers would get more time to use technology. (interview held on the 19 /09/17)

As can be noted from the above conversation, ICT training for teachers became a major strategy of solving the problems by accounts teachers when using ICT as media. Other factors pointed out to encourage the use of ICT as teaching aid include school timetable adjustment, acquiring relevant software, buying more computers, overhead projector and training of accounts teacher to acquire computer skills and knowledge.

4.3. DISCUSSION FINDINGS

4.3.1 First Theme : The use of ICT as media

How often do Principles of Accounts teachers use ICT as media in the teaching and learning?

Data gathered on frequency of using ICT as media in Principles of Accounts shows that teachers 17% never used a computer. It therefore means that teachers are rarely and often use ICT. Thus Principles of Accounts must be ICT trained for them to be able to use ICT. This was also found in chapter two when begs (2000) postulates that one of the top three barriers to teachers' use of ICT in teaching learners was the lack of ICT training. 50% of 6 teachers revealed that they never used videos and 33% never used projectors. 33% used projectors occasionally. 50% of the respondents rarely used internet. To overcome these problems teachers must be competence and have confidence in using ICT as media to integrate it effectively in Principles of Accounts education.

Results from school heads show that some Principles of Accounts teachers' use their laptops and school computers and internet to find teaching materials. One of the heads said he never saw Principles of Accounts teachers using computers. The reason might be that other teachers from qualification results are holders of non-teaching degrees and diplomas. This might cause these teachers not to use ICT as media because they are incompetent in using them. Albirini (2006) supported by saying Syria's teachers' lack of technology competence has been cited as a main barrier. Heads of schools were asked ICTs which Principles of Accounts teachers have access to all of them indicated that they have computers at their schools but they are not enough to accommodate all teachers. Therefore sometimes Principles of Accounts teachers might not access the resources always when they want to use them. One of the heads indicated that out of

twenty five teachers, they have only two overheads projectors. Internet access was also limited as one noted that sometimes they failed to subscribe it and the other one said internet access is very poor. From chapter two, Kwacha (2007) postulated that the following are barriers to use of ICTs, lack of equipment, lack of power supply, poor telephone lines especially in rural areas.

Teachers were asked to indicate the number of periods per week and 50% show that they have four periods per week while 50% had 6 periods per week. No one was allocated 8 periods. Principles of Accounts syllabus is saying 6-8 periods per week on time allocation. From the results one can see that half of 6 respond are operating below the minimum required time period. This was also found in review of related literature by Beggs (2000) when he asserts that time limitation and the difficulty scheduling enough time for classes as barrier to teachers' use of ICT in their teaching. Therefore this mean that Principles of Accounts teacher need more time for effective integration of ICT as media in teaching and learning.

Heads of schools were interviewed on the number of periods and 1 out of 3 allocated 6 periods, another 4 period at form 3 and 6 at form 4 and the last its 4 periods from form 1 to form 4. Shortage of space on timetabling was revealed as a cause. The other said Principles of Accounts is an elective subject therefore they cannot allocate more time to an optional subject.

Teachers were asked on source of ICT training funds. The first 33% indicated that their schools funded them to attend ICT training. The second 33% revealed that they were told school coffers are dry and they fund themselves. The last two are yet to receive training as they failed to use their own pockets. Schoep (2005) in Chapter 2 claims that when new ICT need to be integrated in the classroom teachers' need to be trained in the use of these particular ICTs. Therefore school

must strive to fund Principles of Accounts teachers so that they can equipment learners' with 21st Century skills.

Responses on perceived ease of use of ICTs as media in this research revealed that all factors that were found as making it easier to use ICTs were also observed by Cox et al. (1999) as kicking in to the continuous use of ICT by Accounts teachers in their teaching. These contributing factors are the use of ICT makes the lesson more interesting, enjoyable, motivate the learners more diverse and many more. Therefore this results result in more usage of ICT as media because teachers have seen how easier the use of ICT resulted in.

Principles of Accounts teachers again perceived ICT as being very useful on this research study. This was because teachers perceive ICT as improving student's performance. Gbgenga (2006) support by postulating that ICTs give the teacher an opportunity to increase the interests and learner engagement by one on one relationship provided by the learner and the computer. This means ICTs fade teacher centered learning into a learner centered environment.

Results from heads of schools shows that the use of ICT assists learners in accessing global knowledge through internet, gain greater understanding of harder topics and accounting concepts. One of the heads said the use of ICT encourages learners to discover for themselves. Thus heads showed that they are aware of the importance of ICTs in the 21st Century skills.

4.3.2 Second theme on challenges faced by Accounts teachers in using ICTs as media

Teachers were asked whether shortage of time hinder them in using ICT as media in Principles of Accounts. The researcher found out that 50% of 6 teachers strongly agree and 33% agree on

the statement. Becta (2004) in Chapter 2 also found out that the problem of lack of time to locate internet advise, prepare lessons, practice using technologies and deal with technical problem affects the ability of the teacher to complete tasks during their Principles of Accounts lessons. ICT resources may be available for Principles of Accounts teachers to operate but the time available during the lesson is insufficient as 50% have 4 periods per week.

Furthermore Principles of Accounts teachers were asked whether little access to ICT prevents them to use ICT as teaching media and 2 out of 6 agreed whereas 1 teacher strongly disagree and another 1 disagree. These therefore mean limited accesses to ICT act as one of the main barriers to ICT usage in teaching Ordinary Level Principles of Accounts. Sicilia (2005) found out that teachers complained about how difficult it was to always have access to computers and materials. Principles of Accounts teachers may not be able to access ICT resources unless they have skills in the use of technology and this increases their competencies.

Moreover little ICT technical support at school blocks teachers in using ICTs in the classroom as 66% of 6 teachers strongly agree with the item. 33% also agree on the statement. Lewis (2003) asserts that without good technical support in the classroom and whole school resources, Principles of Accounts teachers cannot be expected to overcome the barriers preventing them from using ICT as media. These barriers affect the smooth flow of lesson delivery and they include unable to find correct websites, unable to connect internet, gadgets like printers, overhead projectors. ICT resources might be available but Principles of Accounts teachers might fail to use it in teaching because they will be not able to operate ICT tools. Thus teachers always need technical assistance in training

The next item was on time needed to learn as discouraging them in using ICT as media in Principles of Accounts. This received 17% on agreement.

And lastly other peoples' view regarding the use of technology found as not influencing Principles of Accounts teachers' perception of using ICT as media in the classroom. It receives 50% on strongly disagree.

Results from school heads showed that Principles of Accounts teachers lack ICT training. This was revealed as a main obstacle to ICT usage in Principle of Accounts. Pelgrum (2001) support that teachers' lack of knowledge and skills is a serious obstacle to using ICT in both primary and secondary schools. Therefore lack of technology competencies prevent Accounts teachers in integrating *in education .Lack of ICT teacher training decreases the integration of technology in Principles of Accounts.* ICTs can be available in schools but Principles of Accounts teachers cannot use ICTs because they lack pedagogical training in how to use them during teaching and learning.

4.3.2.1Other challenges which inhibits Principles of Accounts teachers in using ICT as media.

Shortage of infrastructure was found as other barrier from Principles of Accounts teachers which prevent them from using ICT. Other research revealed that lack of infrastructure such as classroom is also another stumbling block in ICT usage.

Lack of electricity was also pointed out. Teachers said because of load shedding sometimes there will be no electricity to use during the lesson and schools are not providing enough fuel reserve for generators to take over.

Obsolete compute was also another barrier from Principles of Accounts teachers. Most of the computers which were donated are outdated such that technicians are difficult to find spare parts to fix.

Principles of Accounts teachers mentioned lack of training as other barrier to ICT usage. Albirini (2006) postulate that Syria's teachers' lack of technological competences has been cited as the main barrier Empirica (2006) found out that teachers who do not use computers in the classroom claim that lack of skills are a constraining factor preventing teachers using ICT as teaching media.

Lack of confidence was another issue raised by teachers in using ICT to help them in teaching and learning. This might results from inaccessibility to resources and the lack of technological competence. Beggs (2000) supported by postulating that teachers fear of failure is caused by lack of confidence.

4.3.3THEME THREE

Possible solution to challenge faced by Principles of Accounts teachers in using ICT as media

Principles of Accounts teachers revealed that only 33% of 6 respondents are getting more support from the school, 50% receive less support and 17% gets no support at all. It shows that schools are not provided more support to teacher for fully integrate of ICT in teaching. Provision of continued technical support therefore is indicated as a way of increasing the use of ICT as teaching media in Accounts. From the study it shows teachers are relying on themselves to solve technical problems in their ICT usage. Furthermore, teachers revealed that more support from peers, Accounts workshops and ICT training increase their efficiency in using ICT in teaching

effectively. 50%, 66% and 33% are receiving less support from peers, accounts workshops and ICT training respectively. Cuban (2001) asserts that lack of support can be solved by using learner technology helpers.

Teachers 100% also indicated that the more training would increase their use of computers in teaching of Accounts. Pan (2000) recommends that teachers must do introduction to computers course where they learn different application. Lau and Sim (2008) suggest that teachers needed an ongoing training rather than a one off basis to upgrade their ICT knowledge.

4.3.4 Other ways of improving the use of ICT as media

Principles of accounts teachers revealed that schools should improve students' motivation by providing both desktops and laptops for them. They indicated that laptops are cheap in terms of maintenance as compared to desktops.

Unqualified teachers resist change :Principles of Accounts teachers revealed that the Ministry should recruit qualified teachers with relevant Diplomas and degrees as a way of solving the problem because those with non-teaching resist change. Becta (2004) indicated that resistance to change is an important barrier to teachers; use of ICT in teaching and learning.

In addition, they revealed that as schools had problems of lack of electricity due to load shedding, they should provide as well solar generating in case of power cuts to proceed with lessons.

Furthermore, teachers showed that schools should connect all the classes to ICT so that when one has got a laptop he or he can use a projector in any class rather than waiting to get into the laboratory.

Discussion from heads interview revealed that ICT should be made compulsory alongside Accounts teachers training in specific software. They also admit that school should buy enough computer equipment so that all teachers will access all the time. Timetabling adjustment should be done to slot more period for Principle of Accounts teachers they indicated that teachers should share scarce resources. Kahn (1998) noted that without resources, school could opt for a one computer classroom.

4.4 SUMMARY

Chapter four mainly focused with data presentation, interpretation, analysis and discussion of all the research findings. This chapter has answered the main research question which looked on the problems faced by Principles of Accounts at Ordinary Level using ICT as media. The research findings have revealed the factors and the major ones are lack of training, lack of technical support, shortage of time to integrate ICT, shortage of infrastructure and equipment shortage. These factors proved to have hindered the integration of ICT as teaching media in Principles of Accounts at ordinary level. The next chapter looks at the summary, conclusion and recommendations.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter summarizes the research study, gave the main conclusion found from the study and recommendations drawn from the conclusions.

5.2 SUMMARY

This research was investigation on the problems faced by Principles of Accounts teachers in using ICT as media at Ordinary Level in secondary schools. The study's main research question is what are the problems associated with the use of ICT as teaching media in Principles of Accounts at Ordinary level in Buhera Central in Mudanda Cluster. Three sub- questions were also used in this study. Chapter 1 outlined the significance of the study. Limitations and delimitations together with assumptions were explained in detail.

Chapter 2 was on reviewing of related literature to the research under study. It starts by describing a learning theory constructivism which is mostly linked to Principles of Accounts. Literature was arranged basing on the research questions. Importance of ICT usage in classroom as media was drawn; find challenges that are being faced by secondary school Principle of Accounts teachers in using technology as teaching media. Lastly, the researcher fetched literature

on possible solutions suggested by others to problems faced by Principles of Accounts teachers in teaching and learning situation in Ordinary Level in secondary schools.

Chapter 3 presented the methodologies used in the research study. In this study, descriptive survey was used that is research questionnaires for Principles of Accounts teachers and interview schedule for school heads were used to gather data from the respondents. On sampling technique, the researcher used purposive technique, simple random sampling and stratified random sampling was also used to ensure gender balance on teachers. The sample was made up of three heads of schools and six Principles of Accounts teachers. The data was quantitatively analyzed. Descriptive design survey was preferred because it allows the researcher to use instruments such as interview guide and questionnaire and get into the field to gather data. Information gathered by the researcher from school heads revealed that teachers' lack of skills and knowledge on how to use computer equipment and there is also a shortage of these gadgets in schools as compared to learner ratio.

In Chapter 4 research findings were presented, analyzed and discussed. The research study showed that majority of Principles of Accounts teachers was rarely using ICT as media in teaching because they were not trained. The following factors were also revealed as contributing to not using ICT, teachers' incompetence, lack of confidence, lack of training, inadequate computer equipment and lack of time. From interviews, heads revealed that to solve the challenges, teachers must be trained and more computers must be acquired to increase teacher access.

5.3 CONCLUSIONS

5.3.1 Question 1 focused on how often do principle of Accounts teachers use technology as media in the teaching of Accounts.

Findings showed that Principles of accounts teachers rarely or never used ICTs in teaching because they lack knowledge and skills on how to use it. It can be conclude that the use of ICTs makes lesson more interesting, enjoyable, increases learners' motivation, improves presentation of materials and it makes the lesson more diverse. The students will grasp concepts easily.

5.2.2. Question 2 focused on the challenges that Ordinary Level Principle of Accounts teachers face in using ICT as media in teaching and learning of Accounts. The main aim of the study was to find the challenges that hinder teachers in using ICTs as media at Ordinary level. Several barriers were found out for not using ICTs. Lack of skills and knowledge by the teacher in ICT could be the main factor contributing to non usage of ICT. Teachers lack training thus they are incompetent in ICT usage.

5.3.3 In Question 3, possible solutions to above barriers that hinder Principles of Accounts teacher in using ICT as media in teaching were found. There are several ways found out to solve the challenges. Principles of Accounts teachers' training on how to use ICT is important as teachers will acquire know-how and skill on technology usage it is also important to increases number of periods per week on those schools offering four periods per week.

5.4 RECOMMENDATIONS

From the research problem and the results, it is recommended that:

5.4.1. Principles of Accounts teachers should be provide with basic computer literacy skills which is relevant to their specific subject. This will help teachers to integrate ICT as media during their teaching and learning. Where training is absent, Principles of Accounts teachers must enroll themselves in private lessons or to train by themselves.

5.4.2. Schools should acquire both desktops and laptops so that the problem of insufficient equipment would be reduced. This will increase Principle of Accounts teachers' access to ICT resources. Teachers are also encouraged to buy their own laptops as it is made compulsory by the Ministry of Education in the new Curriculum.

5.4.3 School administrators must provide their staff with solar generators of fuel generator to curb for the shortage of electricity.

5.4.4. Furthermore, more schools must provide technical support so that time is not wasted trying to fix problems.

5.4.5 Additionally, schools must provide Principles of Accounts teachers with sufficient time with at least period of 35 minutes so that they will have enough time to use ICTs during teaching and learning.

5.4.6 School administrators are encouraged to provide teachers to get required resources like computers, laptops, projectors and internet access for use in the teaching of Principles of Accounts.

5.4.7 Ministry of Education together with schools should fund Principles of Accounts ICT workshops and seminars for teachers. Additionally, training University and Colleges must expose these teachers to various new ICTs that could be used in Principles of Accounts. ICTs promote the use of various teaching strategies.

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APPENDIX 1

INTERVIEW GUIDE FOR SCHOOL HEADS

1Which ICTs do Principles of Accounts teachers have access to in your schools?

2 How long are your Principles of Accounts sessions at 'O' Level?

3 What do you think are the importance of ICT as teaching media in Principles of Accounts?

4 How often do teachers use technology as media in the teaching of Principles of Accounts?

5 What could be the major reason for Principles of Accounts teachers' not integrating ICT fully in Principles of Accounts sessions?

6 What are the other challenges do Principles of Accounts teachers face in using technology as media?.

7 How could the use of ICT as media in Principles of Accounts be improved in your school?

Thank you for your co-operation.

APPENDIX 2
QUESTIONNAIRE FOR ACCOUNTS TEACHERS

My name is Betina Katanganda. I am pursuing a Bachelor of Education Degree in Accounting at Midlands State University. I am carrying out a research on **the problems associated with the use of ICT as teaching media in Principles of Accounts at Ordinary Level**. Please spare time to answer this questionnaire truthfully. There is no wrong answer. Do not write your name anywhere on this questionnaire. The research is purely academic and the information you provide will be strictly confidential.

Please respond by ticking in the appropriate box or writing your information in the spaces provided.

1 Gender: Male ☐ Female ☐

2 Age 25-30 years ☐ 31-35 years ☐ Above 35 years ☐

3 Highest professional qualifications:

Diploma in Education ☐

Bachelor of Education ☐

Masters of Education ☐

Other……

…….

4 Teaching experience: 1-5years ☐ 6-10 ☐ 11 years and above ☐

5 How many lessons do you teach in Principles of Accounts per week?

4 periods ☐ 6 periods ☐ 8 periods ☐

6 Has your school funded you in attending any ICT training?

Used own funds ☐ Used school funds ☐ Untrained ☐

7 Does the Principles of Accounts syllabus emphasize the use of ICT teaching and learning?

Yes ☐ No ☐

8 What is your perception about the perceived ease of using ICT?

Strongly Agree -SA, Agree -A, Disagree - D, Strongly Disagree - SD

	Perceived ease of use items	S A	A	D	S D	T o t a l
1	Using ICT makes it more difficult to control the class					
2	ICT makes the lesson more difficult					
3	ICT makes preparing the lesson more difficult					
4	Hardware and software problems often disrupt the lesson					
5	Using ICT in teaching Principles of Accounts is expensive					

9 What is your perception about the perceive usefulness of ICT?

Strongly Agree –SA, Agree –A, Disagree – D, Strongly Disagree SD

	Perceived usefulness items	S A	A	D	S D	TOTAL

1	The use of ICT makes lesson more interesting					
2	The use of ICT in my teaching is not enjoyable					
3	The use of ICT makes lesson more fun					
4	The use of ICT improves presentation of materials.					
5	The use of ICT reduces learners' motivation.					
6	The use of ICT makes lesson more difficult					

10 Please indicate with a tick how often you use the following technologies in the teaching of Principle of Accounts.

	Always	**Often**	**Seldom**	**Never**
Computers				
Videos				
Overhead projectors				
The internet				

11 Please tick barriers which prevent you from using electronic technologies as teaching media at times.

Strongly Agree –SA, Agree –A, Disagree – D, Strongly Disagree – SD, Undecided –U

	Statements	SA	A	D	SD	U	TOTAL
1	Shortage of class time hinders me to use ICT as an aid.						
2	Little access to ICT prevents me to use ICT as media.						
3	Few ICT technical support at school block me in using ICT in classroom.						
4	School's view about ICT hinders me to use ICT as media.						
5	Time needed to learn ICT discourage me to use ICT as media.						
6	My workmates' views about ICT prevent me in using ICT in the classroom.						

12 State any other challenges which inhibit teachers from using technology in the teaching of Principles of Accounts.

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13 Indicate the level of support that you get from the following groups in the use of technology.

	A lot of support	Not much support	No support

Administration support			
Peer support			
Seminars and workshops			
ICT training			

14 Please tick appropriate box

Strongly agree –SA, disagree- D, agree –A , strongly disagree -SD

	S A	D	A	S D
If technology is used as media, it helps to elaborate difficult concepts				
More training would increase my use of computers in the teaching Principles of Accounts				
The use of an video projector motivates learners to learn Principles of Accounts				

15 Give suggestions that you think could improve the use ICT as media in the teaching of Principles of Accounts

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Thank you for your co-operation.

APPENDIX 3 APPROVAL LETTER

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

TO WHOM IT MAY CONCERN

The bearer.....KATANGANDA.....BETINA.....is a B.Ed/ MED/PGDE student at this University. She / he has to undertake research on the title: PROBLEMS ASSOCIATED WITH THE USE OF ICT AS A MEDIA IN THE TEACHING OF ORDINARY LEVEL ACCOUNTS IN RUNGERA DISTRICT MUDZANDA CLUSTER.

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. M. Chauraya
(Chairperson – Applied Education)

APPENDIX 4LETTER OF PERMISSION

All communications should be addressed to "The Secretary for Primary and Secondary Education
Telephone: 732006
Telegraphic address : "EDUCATION"
Fax:794505

ZIMBABWE

REFERENCE: C/426/3 Manicaland
Ministry of Primary and Secondary Education
P.O Box CY 121
Causeway
HARARE

30 June 2017

Betina Katanganda
Midlands State University
P. Bag 9055
Gweru

Re: **PERMISSION TO CARRY OUT RESEARCH IN MANICALAND PROVINCE: BUHERA DISTRICT: VHIRIRI, BIKA AND MUDANDA SECONDARY SCHOOLS.**

Reference is made to your application to carry out research at the above mentioned schools in Manicaland Province on the research title:

"PROBLEMS ASSOCIATED WITH THE USE OF ICT AS A TEACHING MEDIA IN THE TEACHING OF ACCOUNTS AT ORDINARY LEVEL IN BUHERA DISTRICT MUDANDA CLUSTER"

Permission is hereby granted. However, you are required to liaise with the Provincial Education Director, Manicaland Province, who is responsible for the schools which you want to involve in your research. You should ensure that your research work does not disrupt the normal operations of the school. Where students are involved, parental consent is required.

You are also required to provide a copy of your final report to the Secretary for Primary and Secondary Education by 31 December 2017.

MIN. OF PRY. & SEC. EDUCATION
POLICY PLANNING RESEARCH
AND DEVELOPMENT
30 JUN 2017
P.O. BOX CY 121, CAUSEWAY
ZIMBABWE

E. Chinyowa
Acting Director: Planning, Research and Statistics
For: **SECRETARY FOR PRIMARY AND SECONDARY EDUCATION**
cc: PED – Manicaland Province

MIN. OF PRY. & SEC. EDUCATION
BUHERA DISTRICT
BUHERA EAST SCHOOLS INSPECTO
27 JUL 2017
P.O. BOX 200
TEL:021-2

18/7/17

DSI Buhera
We have no objections, Please assist member.
Permission Granted
DSI
Mushaike C.T.