THE INFLUENCES OF SCHOOL MANAGEMENT ON THE IMPLEMENTATION OF ICT CURRICULUM IN COMMUNITY SECONDARY SCHOOLS IN KIBAHA DISTRICT, TANZANIA

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION IN ADMINISTRATION, PLANNING AND POLICY STUDIES OF THE OPEN UNIVERSITY OF TANZANIA

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance, by the Open University of Tanzania a dissertation entitled ***"The Influences of School Management to the Implementation of ICT Curriculum In Community Secondary Schools In Kibaha District, Tanzania"*** in partial fulfilment of the requirements for the Masters Degree of Educational Administration, Planning and Policy Studies - M.Ed. (APPS) of the Open University of Tanzania.

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Dr. Cosmas Mnyanyi

(Supervisor)

Date.....

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DECLARATION

I, ***Albert Philemon Mabiki,*** declare that this dissertation is my own original work and that it has not been submitted for a similar degree Master of Education in Administration, Planning and Policy Studies, in any other degree in any other university.

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Signature

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Date

DEDICATION

I dedicate this dissertation to my beloved wife *Linda Mtenga* and my two daughters *Deborah* and *Elgiver* for their patience, encouragement and devotion to allow me to spend little family financial resources for my post graduate studies. They have made me a courageous husband and father respectively, this has made me work hard for my family, and may you work harder and get more success for future.

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ABSTRACT

Introduction of ICT in schools in Tanzania is a recent activity that has elicited a lot of interest in response to the technological needs. This study investigated the influence of school management on the implementation of ICT curriculum in community secondary schools in Kibaha district, Tanzania. The study focused on identifying the challenges of ICT curriculum implementation; assessing the government investment into the subject; exploring strategies employed by school leadership in teaching ICT and establishing factors which can support implementation of ICT curriculum in schools. The study was qualitative in nature. A total of 112 respondents from 5 community secondary schools in Kibaha district participated. The study findings indicated that the government had made effort to introduce ICT curriculum in community secondary schools however, the investment on the subject was not enough and faced challenges related to the lack of subject specialists, inadequate infrastructures especially computer laboratories and electricity, the lack of subject specialists, and dependence and lack of devotion from school leaders. Based on the study findings the introduction of ICT curriculum and its implementation in community secondary schools required adequate public and private investment; increased levels of ICT awareness among the members. The school leadership and management needs to be devoted, self-initiated and devoted to establish ICT subject learning resources and infrastructures in community schools. The community schools boards need to be well involved in the planning and management of ICT programs in schools, and technical issues need to be addressed.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

ICT	Information Communication and Technology
ICTAD	Information Communication and Technology for Acceleration Development
TOE	Technology, Organization and Environments
SME	Science, Mathematics and English
NEPAD	New partnership for Africa development
MOEVT	Ministry of Education and Vocation Training
BEST	Basic Education Statistic in Tanzania
CIPP	Context, Input, Process and Product
DAS	District Administrative Secretary
DEO	District Education Officer
EFA	Education for All
ESDP	Education Sector Development Program
ETP	Education and Training Policy
FED	Faculty of Education
ICT	Information and Communication Technology
M.Ed	Masters of education administration, planning and policy studies
[APPS]	
OUT	Open university of Tanzania
SEDP	Secondary Education Development Programme
RAS	Regional Administrative Secretary

CHAPTER ONE

1.0 INTRODUCTION

This study investigated the implementation of ICT curriculum in Tanzania community secondary schools. The study focused on investigating the implementation of ICT curriculum in teaching and learning in secondary schools, identifies the factors affecting the implementation of ICT curriculum in secondary schools and the challenges faced by teachers in secondary school for teaching and learning process. This sub-section provides the introductory and background of the problem on issues related to introduction of ICT curriculum and its implementation in Tanzanian education, main purpose and specific objectives, the statement of the problem, the research questions, significance of the study, the scope of the study, conceptual frame work for the study interpretation and operational definitions of key terms and organization of the study

1.1 Background to the Problem

The genesis of this study is my experience as a head of school for over 10 years. The pace of students doing National Examinations in ICT has been not encouraging. For example in 2014 only 111 schools out of 5339 sat for information and computer studies in Tanzania (NECTA, 2014) whereas in 2013 schools sat for Information and Computer studies were 89 out of 4355 (NECTA, 2013) and in 2016 there were 132 schools out of 4614. The trend is still not encouraging as we move toward use of science and technology. The question that came up was whether management has something to do with increasing candidates for Information and Computer studies

attempting National Examinations at Form IV level. In Tanzania Form IV is taken as entry qualifications to the job market and to further studies.

As a pace of technological change quickens use of technology is taking part in many avenues and hence education has a duty to provide a way to improve and update skills, including the capability of the work force in areas including use of ICT. However many issues arise when it comes to ICT teaching and learning in schools, including shortages of resources, shortages of expertise to teach, availability of internet services, infrastructures, and shortages of competent personnel to manage ICT laboratories (Mndzebele, 2013; Afshari, Bakar, Su Luan, Samah, & Fooi, 2009; Goktas, Yildirim & Yildirim,2009). These challenges influence the implementation of ICT curriculum for the improvement of efficient and effectiveness in education delivery in developing countries including Tanzania. The introduction of computers in the school environment in many countries came about as a result of government policy pronouncements.

At policy level, the policy statement about use of ICT in Tanzania shows that ICT is important in the development of the country. However, most of these documents are not availed in schools and little efforts is made to find out whether or not such documents are imp0lemented. Since 1990s, computer technology flourished in almost all sectors of education in developed and developing countries. In Tanzania the secondary education ICT curriculum was introduced in 1996 by the Ministry of Education and Vocational Training through the Tanzania Institute of Education (TIE). The Ministry is thus promoting the introduction and integration of ICT in the education sector by having ICT curriculum and ICT training to teachers and students

starting with few selected basic education schools (Aina, 2002) as ICT curriculum introduced by the government to basic education (secondary), consideration of other education stakeholders was considered.

The consideration of stakeholders not only involved their views and thinking but also their perspective on ICT in teaching and learning situation. The major goals of this curriculum as stated in the ICT teaching syllabus of 2010, objectives are as follows (URT, 2010); to enable learners demonstrate skills of data processing and interpretation of information; secondly, to appreciate the role of information technology in socio-economic and cultural development of the society; thirdly, to develop awareness of the place of information technology in the society; fourthly, to apply information and technology knowledge and skills in daily life; fifthly, to develop practical skills in the use of computers and finally outline types of networks and security issues in a networked environment.

As a result, a number of initiatives are currently being implemented to train teachers and administrators (e.g. Education for Empowerment, Rotary Club/UK, Bright Education Trust Fund): to provide refurbished or new computers to schools (e.g. Rotary Club, Barclays Bank), educational information, resources and services (e.g. Tanzania Education Services), pedagogical and subject support to secondary teachers and to pilot the use of mobile phones in training teachers to deliver Mathematics and Science content (Smeets, 2001).

In Tanzania MOEVT with the sponsorship of JICA used to run computer training to teachers from fifty schools in Dodoma in January 2014 and January 2016 in which

from Kibaha district nine (9) teachers in cycle one and five (5) for cycle two from Kilangalanga high school were selected. The training took two weeks in which attended teachers were given certificate of training. These teachers are used to train other teachers in Kibaha district especially in the school they are teaching.

However, with global dynamism, many changes are occurring, including globalization and the advent of knowledge societies, education systems need to ensure that all learners have the key competencies required for forming peaceful and prosperous societies. The use of ICT curriculum in secondary education is the foundation of knowledge to society and enables the country to contribute both to achieving Education for All (EFA) goals and reducing the digital divide (Aina, 2002).

With the introduction of the Community Secondary Schools in Tanzania in 1990s, the ICT programmes could have resulted into many observations and attentions, yet to be addressed effectively. Scientific investigations such as this would have added significant insights on how it has been implemented and what could be done to make it more effective and useful in this era of 21st century. This is why, the current study is useful to examine the implementation of ICT project in Tanzanian context, were a good number of community secondary schools have been established especially in rural and urban areas where challenges could be enormous

1.2 Statement of the Problem

In today's dynamic world, the use of ICT in secondary and primary education is not a strange thing. Certainly, this may be because of the globalization and accessibility

of hundreds of ICT facilities. For the viewers of this modern era, also due to globalized economy which made availability of a bulk of marketing stimuli to the modern learning/teaching process (Aina, 2002). Research have shown that the rapid development of economies in countries like China, Brazil, India, Russia and other developed economies can be attributed to the impacts of ICT.

In Tanzania the Situational Analysis reveals that the government and the MoEVT recognize the potential of ICT to act as a tool for improving education delivery, outcomes and impact, as evidenced through the national plans, policies and strategies. The Tanzania Vision2025, the key national development strategy, recognizes the role of education as a strategic change agent for transformation of the economy to a knowledge economy, and identifies the potential of ICT to address most of the development challenges including those presented by education (Swati & Wachira, 2010). ICT in the secondary education system is mainly used for ICT skills training. Even with very few secondary schools equipped with ICT. However, this ICT as a subject is only taught in a few schools in the urban areas and near the district headquarters where institutions have access to electricity.

Despite the importance of ICT in schools and the strategies developed by the government and other stakeholders, as formulated in secondary education ICT policy of 2007, research has revealed that several schools were not efficiently implementing ICT to support teaching, learning and management in school (Swati and Wachira, 2010) observed that despite the benefits of ICT, the school management had not fully implemented the policies developed by the Ministry of Education. This prompts an investigation of challenges that hinder efficient implementation of ICT in public

secondary schools in Kibaha district. Unfortunately, what specific observations with respect to ICT project introduced in schools and the possible challenges observed in the schools and what role could the school management play to address them in achieving ICT project in community secondary schools in Tanzania especially at this era of decentralised management of education?

1.3 Objectives of the Study

1.3.1 Main Objective of the Study

The main objective of this study was to investigate the influence of school management to the implementation of ICT curriculum in community secondary schools in Kibaha district, Tanzania.

1.3.2 Specific Objectives of the Study

i) To identify the challenges of ICT curriculum implementation in secondary school in the teaching and learning of the subject in secondary schools

ii) To assess the adequacy of government investment into the of ICT curriculum implementation in schools

iii) To establish the influence of school leadership in the implementation of ICT

iv) To establish strategies that could help the government to establish strategies to implement teaching of ICT subject

1.3.3 Research Questions

(i) What could be the potential challenges of ICT curriculum implementation in community secondary schools?

(ii) How adequate is the government investment into the of ICT curriculum implementation in schools?

(iii) What role could the school leadership play in influencing the implementation of ICT curriculum in Tanzania secondary schools?

(iv) What strategies that could help the government to establish strategies to implement teaching of ICT subject?

1.4 Significance of the study

The study is expected to contribute significantly to theoretical knowledge base on and practice related to ICT curriculum in Tanzania. It is specifically expected to raise awareness among educators and school management and government levels with issues related to implementation of ICT curriculum in Tanzanian schools. Thus, the study is expected to have both academic and practical usefulness. The findings will make the education sector in Tanzania to be aware about the challenges of the implementation of ICT curriculum in secondary school and how to improve the implementation of the curriculum. . The study will also contribute relevant knowledge on ICT to the society. It is also expected to shed light on ICT issues to other stakeholders other than secondary school in Tanzania on how to do and improve education standards in their organizations especially under this era of decentralised education management. Briefly, the study is expected to indicate how practices on ICT infrastructures and educators and management' perceptions.

1.5 Delimitation of the Study

The study was conducted to investigate the influence of school management to the implementation of ICT curriculum in community secondary schools in Kibaha

district, Tanzania. It is rather a small study area with small sample that could not be generalised its findings to other districts in other regions. The study did not include observations from private secondary schools although discussions were made with private schools from the literature review. The aspects of school management and government dominated the influencing variables. It is unfortunately however, that parents and donors and other stakeholders were not part of the investigation to provide their views.

1.6 Limitation of the Study

A number of limitations were anticipated during the study. Firstly, various educational levels and orientations of the people in Kibaha district favoured mostly illiterate population with respect to the ICT curriculum. They could have made little proper utilization of the ICT infrastructures. Teachers had less technical skills and knowledge on ICT curriculum such as the use of internet for the search of materials and information (or documents such as policy documents). School management had little self-initiated when it comes to the use of ICT curriculum and facilities. It was therefore different views of the community secondary school management that resources were limited to accomplish the program. School management and leadership feared (to be fired) to report that they no government support on ICT curriculum implementation at school levels.

1.7 Definition of Key Terms

In order to provide common understanding across the study the following terms will feature the study:

(i) **Information and Communication Technology (ICT)** is a diverse set of technological tools and resources used to communicate, to create, to disseminate, store and manage information (Albirini, 2006).

(ii) **Curriculum** can mean anything from the "bundle" of programs an institution offers to the individual experience of a particular student. Second, systematic description, that is, an orderly, technical terminology that enhances insights on practice and links ideas to application, has not developed (William 1993).

(iii) **Curriculum implementation** entails putting into practice the officially prescribed course of the study, syllabuses and subjects. The process involves helping the learner to acquire knowledge (Moosa et al. 1995).

(iv) **Community Secondary School** is the school that is intermediate in level between elementary school and college and that usually offers general, technical, vocational, or college-preparatory curriculum (Samah, 2009). In Tanzania secondary education is an education provided between primary level and college level, which have two levels, ordinary level which takes four years and advanced level which takes two years.

1.8 Organization of the Study

The study consists of five chapters. Chapter one presents background information, statement of the problem, the purpose and specific objectives of the study. It further elaborates the research tasks and questions, significance of the study, limitations of the study, delimitations of the study, as well as detailing the conceptual framework of the study and ending up with definitions of terms. Chapter two reviews related

literature. Chapter three presents the methodological procedures for the study. Chapter four is about data presentation, analysis and discussion while lastly, chapter five presents the summary of the study, conclusion and recommendations.

CHAPTER TWO

2.0 LITERATURE REVIEW

This chapter presents the theoretical, and an empirical literature review related to the problem concern. It also presents the conceptual framework of the study, the part also go far to find the literature which talks about the ICT curriculum implementation, policy of the ICT curriculum and its objective in secondary education**..** The concept of ICT based on global and domestic practices and policies have been highlighted and described. This chapter presents as well the theoretical framework of the study, empirical studies and the review of related literature about teacher views on ICT curriculum with challenges and practices reviewed from various countries. Also the chapter shows the Conceptual Framework which guides the study, synthesis and knowledge gap.

2.1 Theoretical Framework of the Study

2.1.1 The Theory of Planned Behaviours

The *Theory of Planned Behaviour* guided this study in order to explain and predict individual's acceptance of or resistance to implement ICT curriculum in secondary schools (Mathieson 1991). The theory is relating to school stakeholders including teachers and staff reaction to the introduction of new technologies in the existing teaching practices. Most of the teachers find use of ICT when in working places. Not many staff in schools had ICT training skills and knowledge before. As such ICT is seen as a new thing to both staff and students. This study is expected to find out school staff reaction to the introduction of new technologies in the existing teaching practices.

The Theory of Planned Behaviour (TPB) was established by Ajzen is an extension of his previous theory- the Theory of Reasoned Action (Ajzen 1985). The Theory states that when individuals have full volitional control over their behaviour, intention which is jointly affected by attitude towards the behaviour and subjective norm can be used to explain and predict the desired behaviour (Ajzen 1985; Ajzen & Madden 1986). However, human behaviour is usually under limited volitional control, and this confines the prediction and application of such Theory in practice (Ajzen 1985). Identifying the limitations in the Theory of Reasoned Action, Ajzen (1985) developed the Theory of Planned Behaviour by adding 'perceived behavioural control (PBC)' to the original intention–behaviour link in the Theory of Reasoned Action.

PBC is not considered in the Theory of Reasoned Action, but regarded as one of the crucial factors influencing intention, or even behaviour, in the Theory of Planned Behaviour. That is, the Theory of Planned Behaviour assumes that: The more favourable the attitude and subjective norm with respect to behaviour, and the greater the perceived behavioural control, the stronger should be an individual's intention to perform the behaviour under consideration (Ajzen 1991). Based on Ajzen's theory, there is a strong link between intention and the given behaviour. This makes the theory to be helpful to understand the relationships between individuals' intention of ICT adoption and their actual responses to implementation of ICT curriculum in secondary schools. Since the present research is concerned with identifying challenges school managers face in implementing ICT curriculum in secondary schools, the potential factors making the target schools continue or discontinue ICT

development may be detected by comprehending stakeholders intention involving the use of new technologies. Thus, the theory is relevant and applicable to the study of the influence of school management to the implementation of ICT curriculum in community secondary schools**.** This is because, in the Theory of Planned Behaviour, behaviour assumes that the more favourable the attitude and subjective norm with respect to behaviour, and the greater the perceived behavioural control, the stronger should be an individual's intention to perform the behaviour under consideration.

2.2.2 Technology, Organization and Environment (TOE) model

This study adopted the Technology, Organization and Environment (TOE) model developed by Oliveira & Martins (2011). The model emphasizes internal and external characteristics of organization as drivers for organizations adoption of technology. It includes environment context that presents both constraints and opportunities to organizations in implementation of technology. The model suggests those organization factors such as; formal and informal linking structures and communication processes within the organization determine readiness to adopt technology. Environment factors like technology support infrastructures and government regulations will determines the speed of technology uptake by organization. Further, technology availability and cost have effects on the way technology is implemented by organizations as shown by ***Figure 2.1***

Figure 2.1 Technology, Organization and Environment model (TOE)

Source: Oliveira & Martins, (2011)

The model shows relationship between the independent variables and dependent variable. The environment factors, technology support infrastructure and government regulations relate to cost of ICT infrastructure and availability of electricity. Organization factors, formal and informal linking structures and communication processes relates to school leadership and teachers skill available in school. These factors when put in place determine the school readiness to implement ICT.

2.3 ICT curriculum on Global context: policies and practices

ICT education is ready made compulsory in education. Besides the ministry of education is also providing online services for education related issue and implementing issues and implementing its actions of imparting broad use of ICT in classroom teaching. As a result it has brought about significant changes in the field of education (Ministry of Education, Bangladesh, 2003).

In Australia, for example, the commonwealth Government has set goals for schools in relation to ICT development. The Government wants students to leave schools as confident, creative and productive users of new technologies on society. Schools are expected to integrate ICT into their operations. Today most countries include ICT curriculum in teaching and learning process, either in national policies or lower classes or in inclusive classes(Ashman & Elkins 2009; Shaddock et al, 2007; Dempsey & Conway, 2005). The Philippines department of education formulated policies for ICT use. The same trend has been in Indonesia, Malaysia, Uzbekistan, Vietnam and others where the national government set goals for ICTs in education.

In Asia and Pacific including emerging countries, teachers in primary, secondary and tertiary levels are being trained in the use of ICTs in education varying degree of scope. Oust of the training programs carry general objectives aimed at developing awareness, knowledge and skills in either the use of computer or the integration of computers into teaching and learning (IPS, 2003).In 2000, the Parliament of Mongolia adopted the ICT Vision 2010 as a blueprint for ICT development in the country .it recognizes ICT as an important pivotal tool for development in Mongolia.

ICT Vision2010 has three major components: government legislation, framework, business, economy framework and people society framework.

Within this concept, following activities related to ICT in education are to be implemented: Create structure to provide education on ICT for all citizens; Set up knowledge and education based high-tech centers in Ulaanbaatar and in the centers of the socioeconomic development regions; Create a set of opportunities to access IT at mobile sights running sustainable common services, libraries, images and sound schools; Create info structure for education; Resolve in detail human resource development issue of the national info structure(user trainer and specialist) introduce electronic version of library system such as ordering, searching and other; Develop lifelong learning through open and distance learning; introduce electronic services such as leisure and entertainment (virtual, Libraries, museums) (Government of Mongolia,2000).

2.4 ICT curriculum in African context: Policies and Practices

The NEPAD e-school initiative is designed to accomplish this goal through public-private partnership approach. As with so many other educations – ICT initiatives in Africa, its focus remains primary on the importance of giving pupils and teachers ICT skills, rather than on using ICT to enhance their wider learning experience. A review of experience with ICTs in education project by IEC (2001) finds that in Africa, projects tend to follow a pattern of high levels of take-up.

In Africa, pre-service teacher training institutions in even the poorest Africa are slowly being equipped with computers, and increasingly, teachers are being exposed to this 24 technology, through various schools networking initiatives a well as the

presence of telecasters, multipurpose community centers and internet cafes. Among the most ambitious African initiatives is the NEPAD e-school program. The program is on a multi-collaborative partnership strategy between the NEPAD, the major ICT companies and ministries/departments of education in different participating African countries.

Due to high costs and shrinking educational resources in Africa and the increasing demand for secondary education in the regions, technology intervention is seen to be one of the most feasible choices for education transformation. Without disregarding the basic needs of secondary education in Africa, such a building more classrooms, there is growing evidence that ICTs may be the only feasible and economically sound means of expanding access to and improving the quality of secondary education in Africa (Isaacs,2002).

In Ghana the government of Ghana is committed to a comprehensive programmer of rapid deployment, utilization and exploitation of ICTs within educational sector and other sectors in the country, a National ICT Policy and Plan. Development Committee was set up in 2002 to formulated ICT policy referred to as information and Communication technology for Accelerated Development (ICT4AD) (Ministry of Education,2003) which was approved and adopted in 2004. This policy takes into consideration the provision of key socio-economic development framework documents such as Vision 2020. ICT4AD provided the basis for Ghana's vision for the information age. The ICT4AD document identified 14 priority focus areas and one of the areas was promoting ICT sin education by the deployment and exploitation of ICTs in education. The ICT4AD focused on the development and

implementation of ICTs in education by prioritizing training, research and generation of resources for expansion of ICTs. The objective of this policy is to improve human technical expertise and the training facilitators and experts in the applications of ICTs in education.

2.5 ICT curriculum on Tanzanian Context: Policies and Practices

The ICT Policy for Basic Education (United Republic of Tanzania, 2007) recognized the use of ICT devices in education (such as personal computers, digital cameras, scanners, projectors, telecommunications equipment, Internet resources, radio and TV) as potential for improving quality and effectiveness of teaching and learning. However, few teachers use ICTs in classrooms irrespective to the investments made in the ICT supportive infrastructures in teachers training colleges and few secondary schools (Andersson, Nfuka, Sumra, Uimonen & Pain, 2014 p. 28).

The ICT initiatives in Tanzania primarily ensured that schools had access to sufficient hardware, through specified computer-to-school laboratory target ratios, and be networks. The schools forum in 2005 proposed approach with Phase I (2006 to 2006) projected to have more than 2000 schools with ICT tools by 2015 (Hooker, Mwiyeria & Verma, 2011; Nyirenda, 2013).The National Programmed for ICT for Secondary Schools' Teachers initiative 2005 to 2008 targeted to eradicate.

ICT illiteracy among teachers and enhance its use in teaching (Hooker et al., 2011). To its completion, the project supported 50 secondary schools and all 34 government teachers' colleges with blended learning in fractures and digital learning contents (Anderson et al., 2014,p. 6). The SME (Science, Mathematics and English)-ICT

project offered digital materials for teaching Science, Mathematics and English subjects on DVDs and CDs were selected schools were supplied with LCD projectors and laptops and also teachers trained on the use of ICTs (GESCI, 2011a). The SME-ICT project had twofold objectives: first, to train teachers on how to use ICTs as pedagogical tools and, second, to create access and availabilities of blended curriculum contents for teaching science, basic mathematics, and English, However, in the teacher training colleges there is much good practice in teaching ICT as a subject but less pedagogical ICTs practices and effective teaching strategies using ICTs. Both external and internal limitation may exist, the only challenges reported to have limited tutors (Teachers training college trainers) ICT use are insufficient availability of ICT resources and lack of sustainable internet connection and power supply. The ICT knowledge and skills teacher trainees receive from tutors have impact on their transitive future use of pedagogical ICTs when they job markets as qualified teachers.

However, recently Ndibalema (2014) reported low usage of ICTs among secondary school teachers in Tanzania that were attributed to the ease of use, teachers' background in formal training and teachers' attitudes towards technology. In most cases, the use of ICTs among teachers in secondary schools in Tanzania has been perceived as general practices. In teacher training practices, ICTS have often being assumed to mean only internet and computers, while there are many teacher training needs that ICTs could offer as a solutions to deliver e-learning models to pre-service teachers (Baker, Bliss, Chung & Reynolds, 2013).

The availability of hardware and software has been given more priorities when compared to the accessibility of localized curriculum relevant e-contents. The notion of previous investments on educational ICTs being relied much on ICTs as infrastructures and less on pedagogical ICTs application still exists in most Sub-Saharan Africa (Dumont &Istance,2010; Farrell, Isaacs, & Trucano, 2007).Few years ago, private schools were more advantaged when compared to public schools which suffered from ICT resources unavailability and teachers' ICT use incompetence's (Swartz & Wachira, 2010).

Although public school and private school receive teachers graduated from the same colleges and universities, studies do not tell why internal barriers should exist when both are given equal chances to practice technological and contents Knowledge's comprehensively. By gathering evidence about the education environment and the desired interactions for the classroom and analyzing and evaluating them one may determine the level of technology and training strengths as well as the areas in which improvements should be made (Patnoudes, 2014).

However, ICT use in secondary education initiatives in Tanzania focused on ICTs as a general term without specifying the model of ICT integration, there should be a model and an education objective to achieve. In a study by Olson et al(2011), it was reported that blended approach can provide the highest learning outcomes in African countries where secondary teachers have little prior experience with computers or similar technologies because of its ability to support mixing face-to-face classroom methods with technology mediated activities.

There are few literature pieces on how teachers can be shaped to use and deliver education using ICTs as pedagogical tools compared to how teachers can and should be trained in the use of ICTs. However, they are both important. Without a defined ICT use and teachers training models with ICT pedagogical application relevance, teachers will lack important skills, competencies and the understanding of the ICT as a solution and hence becomes ineffective (Baker et al., 2013, p.18). Thus, this study focused on assessing teachers' ICT curriculum implementation challenges in Kibaha district.

2.5.1 National ICT policy of 2007 and the Education Objectives

As recognized in Tanzania's National ICT Policy of 2003, information and communication technology (ICT) offers new opportunities to enhance education and to improve the quality of delivery of education in all areas. The Ministry of Education and Vocational Training (MoEVT) believe that the use of ICT in teaching and learning as well as administration and management represents a powerful tool with which to achieve educational and national development objectives. The Ministry has therefore formulated this policy to guide the integration of ICT in basic education.

In 2001, the education sector development programme (ESDP) was launched, to realize the objectives of education policies by addressing critical issues, including ICT. the main objectives of this programme include: to decentralize management of educational institutions; to improve the quality of education, both formal and no-formal; to promote access and equity to basic education; and to promote science and technology, Special mention is made of the need to improve and expand girls'

education, to ensure access to education by special social and cultural groups, to give appropriate education to children with disabilities, and to provide education facilities to disadvantaged areas.

2.5.2 ICT implementation and expected outcomes in Tanzania

The strategic integration of ICT is expected to improve access and equity to, and quality and relevance of basic education. ICT will be used to increase the number and quality of teachers, through improved pre-service and in –service training and better provision of teaching and learning materials. The use of ICT is also expected to enhance the acquisition and use of knowledge and skills for all learners, including those with special needs. ICT use will improve the efficiency and effectiveness of the management and administration of education, at all levels. This policy is also expected to broaden the basis of education financing, while optimizing the use of education resources, through partnerships and stakeholder participation. In light of the scarcity of resources for education, and the complexity of ICT implementation, this policy will be implemented in phases, so as to optimize the impact of ICT through strategic and synergistic interventions. Teachers' education will be given first priority pre-service and in-service training).

The next priority is secondary education, to be implemented in phases followed by primary education. At the same time, ICT will be implanted in adult education and vocational training, as well as libraries. Concomitantly with the phased roll-out in education, ICT will be gradually integrated in administration and management. Through the implementation process, pilot projects will be developed to explore

suitable venues for ICT integration, while ongoing efforts will be closely monitored and evaluated.

The Ministry is cognizant of the risk of ICT widening existing gaps between educational institutions, within and between urban and rural areas. At the same TIE, the Ministry recognizes the potential benefits of ICT, especially for under-resourced educational institutions, and for teachers and learners with special needs. During implementation, efforts will therefore be made to use ICT to address and reduce existing discrepancies, while striving to achieve all education objectives in an equitable manner.

Given the very real constraints of lack of physical infrastructure and electrification, low levels of skill and experience, and lack of localized content, all implementation plans will seek to identify innovative, alternative approaches. Smart and sustainable solutions will be sought to deal with challenges such as rural electrification, last-mile access, software licensing and applications, and content development and delivery. An effort will be made to identify technical solutions that optimize the use and expansion of existing facilities, while building local skills and content, to ensure the sustainability of ICT in terms of financial as well as human resources

2.5.3 ICT Philosophy for Basic Education-Vision and Mission

The vision of ICT policy is to get a well-educated and learning knowledge so as to Integrate ICT to enhance access, equity, quality and relevance of basic education, while stimulating and improving teaching and lifelong learning. The MoEVT recognizes that:

- Accessibility to and utilization of knowledge is fundamental to the development of the country's citizens.
- In light of the growing impact of advanced ICT on the economy of the country, students should be provided with access to ICT-based tools so as to make a valid contribution into society;
- ICT must be exploited to allow students greater control over their learning and thus develop skills at their own level and speed;
- The integration of ICT in the education system will eventually boost the economic engine of the country by preparing its citizens for the knowledge based economy.
- The potential of all individuals (including the mentally and physically challenged) can be enhanced by the use of multimedia packages and other electronic learning tools;
- The implementation and sustenance of ICT in the education system will be via a
- Partnership approach involving the community, private and public organizations, and funding agencies;
- The utilization of ICT management tools within education institutions could
- Enhance the effectiveness and efficiency of the education sector; and
- The active participation of teachers and learners in the development of their own teaching and learning materials using ICT will have positive impact on the teaching – learning process.

2.5.4 Objectives of ICT Policy for Basic Education

The objectives of this policy are to:

- Integrate the use of ICT to achieve educational policy objectives;
- Promote the harmonization of activities, approaches and standards in the educational uses of ICT;
- Ensure that there exists equitable access to ICT resources by students, teachers and administrators; in all regions and types of educational institutions and offices;
- Ensure the organized provision of ICT training to students, teachers and educational administrators;
- Facilitate the implantation of communication and information systems for the effective management of the Education Sector;
- Facilitate the use of ICT as a toll for assessment and evaluation of education, as well as administration and management;
- Encourage partnerships between the various stakeholders in the Education Sector;
- Facilitate the use f ICT resources in school and colleges by the neighboring community;
- Facilitate the development and use of ICT as a pedagogical tool for teaching and learning, and for the professional development of teachers, administration and managers; and Promote development of local content for basic education and other stakeholders

2.6 Empirical studies

Sweeney (2012) outlined the qualities of a successful school leader as the capability to lead change with clear vision and ICT skills. A vision that focuses in the implementation of ICT in school creates interest within the school that it cares about students learning. A vision for implementation of ICT in school should focus on: Planning, organizing and funding; staff development and ICT infrastructure; implementation, improving access and equity; maintenance and sustainability of ICT infrastructure in schools; legal and moral issues of ICT in school; education theory, pedagogy and curriculum improvement; general school administration; the essential aspect of being the school leader is about dedication to set visions, to work and cooperate with others in bringing these visions to realization. Schools try to implement ICT into their operations to improve students' learning by presenting flexible learning opportunities and improving school activities. Not only ICT improves student's learning but the whole school community requires being ICT competent. ICT in schools is emerging as an essential factor for schools to operate effectively and efficiently as organizations and as a teaching and learning tool within the school community. Further, school leader could use ICT as tool for monitoring the situation in his/her school. Thus, ICT could be used as a tool of management in school.

Tella, Toyobo, Adika & Adeyinka (2007) examined Nigerian secondary school teachers' uses of ICTs and implications for further development of ICT use in schools using a census of 700 teachers. The findings showed that most teachers perceived ICT as very useful and as making teaching and learning easier. It was

recommended that professional development policies should support ICT-related teaching models, in particular those that encourage both students and teachers to play an active role in teaching activities. Additionally, emphasis should be placed on the pedagogy underlying the use of ICTs for teaching and learning.

Leach and Moon (2002) that, it is suggested, contribute significantly to the success of school programmes: vision and sustained commitment on the part of government, educational leaders and policy-makers, to professional development, including ensuring effective technological infrastructures that can support ICT components. clearly identified outcomes for teachers, linked closely to their individual, as well as school's ongoing professional needs; a curriculum of school-based professional activities, adaptable to local context, progressively structured and providing a common framework and discourse within and across school. (This forms the basis for the work of the DEEP project.); access to high-quality multimedia resources that utilise ICT, use teachers' own language(s) and which integrate exemplars that reflect local culture, education and practices; clarity of roles, responsibilities and modes of communication between different actors whether at school, regional or national level; strong support that is rooted in local contexts; and existing structures and closely monitored to ensure its effectiveness for teachers in differing settings.

2.6 Conceptual Framework

The conceptual frame work of the study indicates how dependent variables and independent variable and their relationships regarding specific objectives. To explain the researcher uses the two variables to see the implementation of ICT curriculum in secondary schools. These are variables that researchers measure in order to establish

the effect of change or effect created on them. Dependent variables wait for the effect of independent variable which creates on it, (Adam and Kamuzora, 2008). The dependent variable in this study is ICT curriculum implementation. The researcher's goal is to grasp and explain the dependent variable or to describe the variability or predict it.

An independent variable is the variable whose effect we would like to establish in a study (Adam and Kamuzora, 2008). It is the one that influences the dependent variable in either a positive or a negative way; that is, with each unit of increase in the independent variable, there is an increase or decrease in the dependent variable. In other words, the variations in the dependent variable are accounted for by the variation in independent variable (Chimbovu and Gumbo, 2001). In this study the independent variable is lack of enough government investment in the ICT curriculum , lack of good infrastructures, poor school leadership support, electricity problems, lack of teaching and learning materials, low distribution of ICT periods per week per class, lack of enough computer laboratories and devaluation of the subject by the government. Importance of Conceptual Frameworks according to Schneider, (2005) is to provide an overview of the phenomenon (elements and relations) this gives the direction of the whole research; help to bridge the gap between theory and empirical research and do direct analysis (e.g. what causalities to look at, what's of interest).

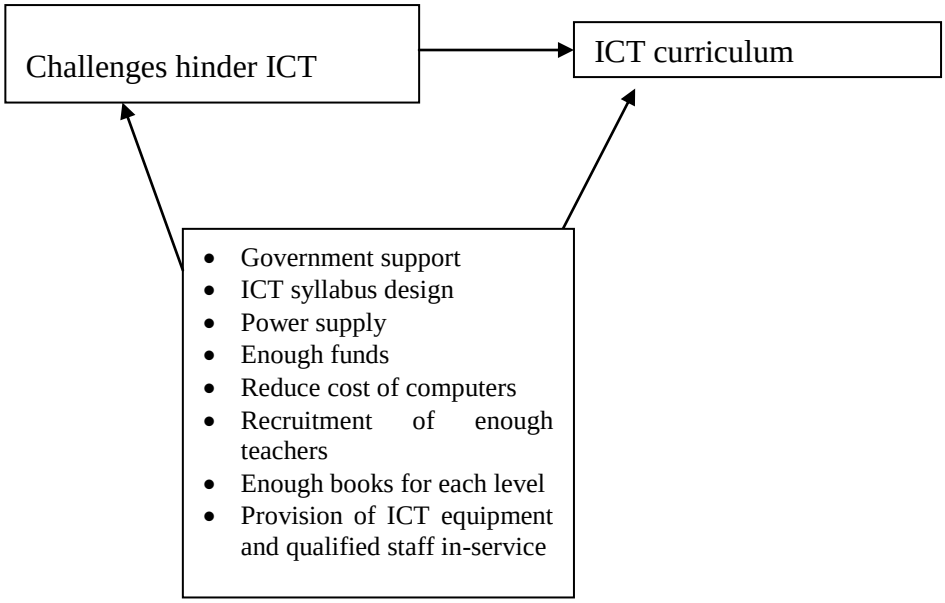

Figure 2.2 Challenges in implementation of ICT in schools

Source: conceptualized by the researcher (2016)

This conceptual framework was adopted for this research study because of its importance and relevance in identifying the factors that were behind implementation of ICT in schools. In which challenges are independent variables, which determine the success of ICT implementation in secondary education, and external and internal environment as intervening variables as shown in Figure 2.2.

2.7 Knowledge Gap

From literature it can be viewed that many factors affect the use of ICT in secondary school education and other institutions of learning. Such factors may include unspecified model of ICT to be used in the teaching and learning environments, external and internal environments, teachers and students preparation to integrate and use ICT in education, level of integration of ICT in secondary schools curriculum in secondary schools. The previous studies which have been done on use of ICT have

each unique difference as compared to the present study. One of the factors that differentiate them is time and place of the study. As pointed out earlier ICT changes very fast and repeating similar study in the same area after a period of time like 3 years might present totally different status. The study by Kihoza, Zlotnikova, and Kizito (2016) was about the assessment of teachers' abilities to support the implementation of blended learning implementation in Tanzania, also Kihoza, Zlotnikova, and Kizito and Kaegele (2016) did a research on classroom ICT integration in Tanzania: Opportunities and Challenges from the Perspectives of TPAK and SAMR models. These studies were about the Implementation of ICT but did not focus on the investigation the challenges of ICT facing Kibaha district secondary schools. This study intends to make an empirical investigation on the influence of the school management to the implementation of ICT curriculum in secondary schools in Kibaha district at the time when the government of Tanzania established decentralised educational management.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

This chapter presents research methodology employed in the study, in order to respond to research objectives and questions. The chapter described the following methodological elements including research design, research approach, study area, study population, sample and sampling techniques, instrument for data collection, validity and reliability of the instrument for data collection. The chapter captured the validity and reliability of research instruments and ethical considerations. A description of the study location and the reasons for choosing the area of the study followed. It then provided the sampling process of the schools and the respondents. This is followed by description of data collection methods, instruments of data collection and methods of data analysis. The methodology was designed to assess the challenges facing ICT curriculum implementation in Kibaha district in Tanzania.

3.1 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure." It is the conceptual structure within which research is conducted (Kothari, 2004). For the purpose of this study, a descriptive survey design was employed. The design was both flexible and comprehensive when studying social group, processes and practices in community or institution with wide range of respondents across such social units or variables (Swami, 1984).

One of the advantages of a descriptive survey is also flexible and less expensive in conducting it (Burgess, 1984). Basing on those factors the researcher selected the Kibaha district to be his case study area the study was conducted in natural setting and came up with a wide range of insights into human life that could not be gained through a general survey. The research design was also suitable for this study because the study demands opinions from various segments of population such as the parents, primary school teachers and school committee members on matters concerning the influence of school management o the implementation of ICT curriculum in community secondary schools. The community secondary schools are well scattered all over the rural and urban schools to involve various stakeholders. The design can accommodate combination of qualitative and quantitative data in case the researcher was interested to capture.

3.3 Research approach

This study employed largely qualitative approach which is concerned with subjective assessment of attitudes, opinions, and behaviours of the respondents towards implementing ICT curriculum in secondary schools. Research in such a situation is a function of respondents' insights and impressions. Such an approach to research generates results either in non-quantitative form or in the form which are not subjected to rigorous quantitative analysis. Based on such reason, the research instruments and techniques required those with ability to capture qualitative data in the forms of attitudes. The focus group discussions and in-depth interviews were suitably used (Kothari, 2004). The research used this approach due to the fact that the research is concerned with specific issues, which is implementation of ICT

curriculum in secondary education with specific people including parents, students, educators and administrators. Bryman (2004) and Lund (2005) stress that the research triangulation or multiple sources of data. It was believed that the combination of both qualitative and quantitative approach would capitalize the strengths and offset the weaknesses of each approach. For the purpose of minimizing the weaknesses of this approach, the researcher employed different data collection methods so as to ascertain the quality of the findings. The methods included the interviews, focus group discussion and documentary review.

3.4 Study area

This study was conducted in Kibaha district coast region that was randomly selected among the districts in the coast region. The districts almost share almost the same characteristics which researcher had interest (urbanised characteristics where parents are involved in different socio-economic activities and professions). Thus, simple random sampling technique, was used to identify the names of the three municipals were obtained for the regional authorities and were listed in a piece of paper before a child was requested to randomly pick one paper.

3.5 The Target Population

The study population included secondary school teachers, head of schools, school management and leadership (committees' chairpersons and including head of schools) from five selected public secondary schools in Kibaha district. Public secondary schools in the district counted for more than 78% of all the public schools thus, representing the majority of schools in the region. This also suggests that researcher could obtain additional and relevant information for the study purpose.

3.6 Sample size and Sampling Techniques

3.6.1 Sample size

A sample, according to Best and Khan (1998) is a small portion of a population selected for observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn. Best and Khan (1998) argue that a small size sample characterizes qualitative studies. It is a sample sufficient to provide maximum insight and understanding of the problem under study. The study comprised of a sample unity of 112 respondents, which are indicated in the Table 3.1

Table 3.1: Sample Distribution of the Respondents of the Study

Types of Respondents	**Size**
Secondary school students	100
Secondary school Teachers	07
Academic teachers	03
DEOs	02
Total	**112**

Source; Field Data (2016)

3.6 Sampling and Sampling Techniques

Sampling is the procedure a researcher uses to select people, places or things to study. It is a process of selecting a number of individuals or objects from a population such that the selected group contains elements are representative of the characteristics found in the entire group (Orodho & Kombo, 2002).

Both probability and non-probability sampling methods were employed at each appropriate stage. A researcher used the following sampling methods; simple random sampling and purposive. Purposive sampling was a decision made by researcher to include or exclude an element in the sample, sometimes known as judgmental sampling (Adam, 2008). Purposively the researcher selected five schools from the district which used ICT curriculum; these schools are Gili secondary school, Kilangalanga high school, Acacia secondary school, East coast secondary school and Visiga seminary. Moreover the purposive sampling was used to select academic teachers.

Simple random sampling is a probability sampling where all members in the population have equal chance of being selected to form a sample. Randomly a sample of 20 students was selected in each selected schools depending on the use of ICT curriculum. Of all the ways mentioned before, researcher used simple random sampling. Simple random sampling is the process of selecting from the population that provides every sample of a given size an equal probability of being selected. This involves several techniques, but I used only two of them in which one deal with large sample (students) and another for the small sample (teachers).

In order to obtain large sample of students the researcher made a list in each class, of all members of the target population from form one to four students in each school intended, and then each pupil will be assigned numbers from number one to the last one. And because I need only twenty students in each school, the researcher randomly selected one number assigned in one class member only and take three of them in each class. As more sample were needed the researcher randomly added a

new assigned number. For small sample of teachers the researcher can obtain the sample by placing a slip of paper with the name of each teacher in the population in the container, and then the slips will be mixed thoroughly and at last drawing the required number of names.

3.7 Instrument for Data Collection

In order to obtain wide range of information for the purpose of the study, three methods of data collection were used namely interviews, focused group discussions and documentary review. The researcher used both primary data collection and secondary data which were collected through the following instruments.

3.7.1 Interviews

Interview can be defined as method of collecting data involves presentation of oral verbal stimuli and reply in terms of oral verbal- responses. (Kothari: 2004). Interviews were also purposely used to get perception of five (5) respondents from school academic teachers. The main advantage of using interview method is that the interviewer by his own skill can overcome the resistance , if any, of the respondents; the interview method can be made to yield an almost perfect sample of the general population and also the interviewer can collect supplementary information about the respondents ‘s personal characteristics and environment which is often of great value in interpreting skills.

However this method was flexible and resourceful to the researcher in terms of securing clearing on specific issues pertaining the problem of women in income generating projects, the type of support they get information on how the government

and teachers perceive ICT curriculum implementation was obtained through structured to selected interviews. Furthermore, the technique had the advantages of enabling the researcher to observe overt and corresponding body language and behaviour of the interviewees. Interviews were conducted as a supplement to questionnaires. This was done to the selected schools academic teachers.

Interview method although deployed by the researcher it has its own disadvantage such as: It is a very expensive method, especially when large and widely spread geographical sample is taken. Two secondary schools in Kibaha district council and three schools in Kibaha town council, which made him to travel for a long distance. However Certain types of respondents such as important officials, students or executives or people in high income groups may not be easily approachable under this method and to that extent the data may prove inadequate for example in this case researcher was not able to interview students due to high population.

Furthermore the presence of the interviewer on the spot may over-stimulate the respondent, sometimes even to the extent that he may give imaginary information just to make the interview. Interesting as the case the researcher faced difficulties in interviewing some of the respondents due to fairness and due to most academic teachers was very slowly to respond.

3.7.2 Questionnaires

A questionnaire consists of a number of questions printed or typed in a definite order on a form or set of forms. Questionnaires involve open form and closed form. Thus the researcher employed both of them. This instrument was administered to the

selected sample of students and teachers from each of the five schools identified in which they was provided with questions and spaces for them to give answers in the way they want (open-form questionnaires). Likewise in closed form questionnaires the questions were presented and a choice of possible answers was provided so that the respondent has to give his/her answer in a predetermined style. Questionnaire for teachers is on appendix II and appendix III for students.

3.7.3 Documentary reviews

These are data extracted through reviewing various documents e.g. textbooks, journals and other published information that are expected to be available within school' libraries and documents reserved. They also include literature such as text books, magazines, manuals, newspapers relating to the topic. The document which was used are; ICT curriculum policy, education policy, students results on ICT subject, heads of schools reports on the implementation of ICT curriculum

3.8 Data Analysis Procedures

Data collected was summarized, coded and analyzed both qualitatively and quantitatively. Then, these data were processed by Ms Word tables, frequency distribution and percentages to describe major variables. Quantitative data was analyzed for descriptive purposes. Qualitative data from interviews and observations was analyzed using content analysis by analyzing texts regarding authenticity, or meaning from respondents' responses.

According to Holsti (1969) content analysis is used into three basic categories: make inferences about the antecedents of a communication, describe and make inferences

about characteristics of a communication. Data was presented in the text and tables. Any of these is appropriate to give information to the reader or viewer is supposed to be able to assimilate "from cold" while reading or listening. Data collected from interviews and documentary review was subjected to content analysis where themes and patterns were developed for qualitative data. For quantitative data from questionnaires were analyzed through simple descriptive statistics after tabulation and conversion into frequencies and percentages for descriptive purposes. Finally, the data were coded and analyzed and presented through tables and figures for simple statistics. For content analysis, data was presented in forms of narrative forms including active voices of the respondents to capture significant ideas.

3.9 Validity and Reliability of Research Instruments

Reliability implies stability or dependability of an instruments or procedure in order to obtain information. Validity refers to the quality that a procedure or instruments used in research is accurate, correct, true, and meaningful and right (Kerlinger, 1993). Validity and reliability are two factors which any qualitative researcher should be concerned about while designing a study, analyzing results and judging the quality of the study (Patton 2001). In order to measure the validity and reliability of research instrument the following methods were used

(i) The instruments were pre-tested in some secondary schools in Bagamoyo district where the questionnaires and interviews were pilot tested. After the pilot study, corrections of the questionnaire were made and finally it was sent to the supervisor who read them and finally agreed with the researcher.

(ii) The researcher had opportunity to discuss with the respondents especially on difficult vocabularies or if there are grammatical errors or rather with ambiguity statements in order to rephrase or delete them. In addition, the researcher sought for expert advice from her supervisor who helped to improve the clarity on the items from the questionnaires.

(iii) Pilot study was used to test validity of the instruments through discussion with the members of the Open University of Tanzania and research supervisor. Thus all inconsistencies and ambiguities were corrected in order to establish the face, content and construct validity.

(iv) The researcher used communicative arguments in the form of active voices from the respondents through discussion and different instruments for data collection (triangulation) aims at ensuring reliability of collection of data. For example data from questionnaires was cross checked with data from interviews and focused group methods. Since, reliability has to do with getting valid information, thus the researcher was obliged to establish good rapport with the respondents before data collection to ensure that information given is valid and therefore not given under any influence or rather biased to any reasons.

3.10 Ethical Consideration

Any researcher who involves human sample subjects in the research has certain responsibilities towards them. Since the activities of the sample subjects are often

closely associated with data collection process, it is appropriate to consider ethical considerations (Singh, 2006). The researcher employed several methods to observe relevant research ethical considerations. In the first place, the researcher sought clearance from the Directorate of Research at the open university of Tanzania, which granted him research permit on behalf of the Commission of Science and Technology (COSTECH). Permission was also sought from Regional Administrative Secretary (RAS) and District Administrative Secretary (DAS), District Education Officer (DEO) and from relevant authorities in the coast region.

Secondly, the researcher asked informed consent from the participants and explained to them clearly about the objectives of the study before they could take part. Respondents were informed that their participation was voluntary and that the information they give would be treated confidentially and used for the intended purpose only. Finally, the researcher made sure that the information collected was kept in a safe manner so it could not be accessed by unauthorized persons. Personal identity was not disclosed without their consent. According to Katherine fritz (2008) social science researchers are responsible to make sure that their participant are well informed about the purpose of the study they are being asked to participate in. according to this the researcher informed the participant well about the study. Truthfulness is also central to obtaining informed consent; this without this participant cannot exert their right to be informed consent, justice or fairness. The researcher is truthful to the participants by telling them the truth and recorded their real responses.

Finally, the researcher must guard against violation or invasion of privacy (Singh, 2006) as long as the researcher is has been working with most of the sample subjects not only that but also living with them as neighbors and village mates there was no any violation or invasion of their privacy .no personal identity of the respondents were disclosed in any way.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION

This chapter presents and discussed the findings that were divided into sub-sections where demographic characteristics were presented, analyzed and discussed. The purpose of the study was to examine the influence of school management to the implementation of ICT curriculum in secondary schools in Kibaha district, Tanzania.

The data were analyzed around key objectives of the study; to identify the challenges of ICT curriculum implementation in secondary schools; to assess the adequacy of government investment into the subject; to establish the role of school leadership in influencing the implementation of ICT in schools; and finally, to establish factors which can help the government to establish stable policies on ICT subject.

4.1 Challenges on implementing ICT curriculum in secondary schools

Research objective one was intended to identify and discuss the challenges of ICT curriculum implementation in secondary schools in the teaching and learning of the subject. The main research question was what could be the challenges of ICT curriculum implementation in secondary schools in the teaching and learning of the subject. In response to the question, the respondents mentioned the following possible challenges to ICT curriculum implementation in the sampled community secondary schools as were summarised and presented in Table 4.1.

Table 4.1 The challenges to ICT curriculum implementation

Categories of challenges	Responses (%)
Unavailability of enough teaching and learning materials	(87.5%)
Providing direct support to pupils in the forms of finance and materials	(63.0%)
Small rooms which are not big enough to accommodate	(24.0%)

students as other subjects	
Teachers as government officials took loan to buy computers by using their own salaries.	(34.8%)
Parental visits to school to discuss with teachers on children academic matters	(30.4%)
Inability of teachers to teach ICT subject due to lack of government investment on teachers training colleges.	(68.75%)

Source; Field Data, 2016

Data presented on Table 4.1 indicates a number of challenges facing implementation of ICT curriculum in secondary schools. The respondents mentioned that due to high cost in the implementation of ICT there is unavailability of enough teaching and learning materials (87.5%); there is a problem of small rooms which are not big enough to accommodate students as other subjects (24%), there were few computers enough for teachers and students in which in government schools in Kibaha District. As a result, it was observed the out of eight surveyed schools, only one community secondary school which was implementing ICT curriculum. Moreover despite the school is using ICT teachers, for the effective implementation teachers were supposed by government officials to take loan to buy computers by using their own salaries. Lack of teachers qualifications (skills and knowledge on ICT) fail them to teach the ICT subject because the government did not invest enough in the subject from the primary schools, secondary schools and teachers training colleges 77(68.75%) of the respondents.

4.1.1 Limited public investment on ICT curriculum

The study found that in government community secondary schools, the government is responsible for the purchase of all ICT curriculum equipment including building of computer laboratories, hiring professional ICT teachers, doing computer repair, and electricity connection. In private schools, the school management is responsible to buy all equipment, hiring teachers, and computer maintenance and electricity connection.

The researcher observed that in government schools there was no enough investments in the ICT subject in government schools compared to private schools. The result shows that the government was not well prepared during the introduction of the curriculum. There is no enough teachers, computers and other facilities for the curriculum, such as computer laboratory. The researcher wanted the respondents to mention the types of challenges caused by limited public investment on ICT curriculum implementation in secondary schools as indicated in Table 4.2.

Table 4.2: The government limited investment on the ICT curriculum

Challenges	Frequency	Percentages
There is scarcity of materials for the subject, especially computers and books	98	87.5
There is few qualified teachers to teach the ICT subject	77	68.75
There is no enough periods for the subject	65	58
No internet connection in computer labs	12	10.7
Electricity connections problems	17	15

There is no proper syllabus design	10	8.9
Poor foundation of the students from primary school	6	5.3
There is no enough computer trainings and courses out of the school	5	4.4
Computer lab should be large enough to accommodate a class	27	24

Source: Field data, 2016

Data on Table 4.2 imply that the respondents agreed that the implementation of ICT curriculum in secondary schools faced enormous challenges. The dominant and more frequent challenges mentioned were the scarcity of materials for the subject, especially computers and books 98(87.5%) and small number of qualified teachers to teach the ICT subject 77(68.75%). Other options scored small numbers of respondents which accounted less than (8.9%) these were the least popularly mentioned challenges; no proper syllabus design; poor foundation of the students from primary school; and finally there is no enough computer trainings and courses out of the school. In other words, few respondents supported them.

Moreover, the study observed few qualified teachers who taught the ICT subject because the government did not invest enough in the subject from the primary schools, secondary schools and teachers training colleges. For example one of the respondents who were a student explained:

> There are no enough lessons for computer classes and studies at teachers colleges where we were trained. There is only one teacher who is able to teach computer well, also computer room is not good enough to be a computer laboratory. You can count a limited number of qualified teachers for ICT subject in our schools. I myself was forced to teach ICT despite the

> fact that I was professionally a mathematics teacher (ICT teacher in Kibaha district).

The following answers were obtained from academic teachers;

> Unavailability of computers affect the teaching and learning at our school, which makes the student to learn theoretically more than practically. Sometimes we use laptops owned by teachers, which makes ten students to share one laptop which affect the teaching and learning process.

From literature reviewed, some private school had more than 20 functioning computer according to the number of ICT takers, this simplify computer practice. This may imply that private schools owners had at least adequate investment levels on ICT curriculum implementation compared to public schools. So they were comparatively much better than public schools.

When you compare the quotation of the two teachers you can find that in government school there are no enough investments in the ICT subject in government schools compared to private schools. The result shows that the government was not well prepared during the introduction of the curriculum. There is no enough teachers, computers and other facilities for the curriculum, such as computer laboratory.

4.2.1 Less value accorded to ICT subject by educators and students

According to the study, the respondents mentioned that, there is a tendency of the government to disvalue ICT subject in schools. The following are the response from students

> ICT subject is not considered and given value as other subjects in the school, there is no enough periods for the subject, and we only have two periods per

> week which is not enough for learning, in which the curriculum wants every class to have three periods.

Another student added:

> In our school there is no ICT book that can help us to read and to understand the subject and we are not doing national examination on the subject this makes us to drop the subject when we reach form four

From teachers the following were the response,

> Most students do not know how ICT can benefit them in their academic life and life as a whole, also there is no reliable teachers for the subject, most teachers who are teaching ICT are not ICT teachers but other subject teachers who has short trainings on ICT. The subject has not been given serious attention teaching and learning materials are not enough for the effective teaching.

According to the study the results show that the subject is disvalued this is due to scarcity of teaching and learning materials for 87.5%, also 77 % of the students said that they are studying the subject but they are not doing national examination, which makes them to take a subject as an optional subject, there is no specific syllabus design for the subject, 100% , no stable policy for the subject, there is poor foundation for teachers and students, no enough practical's, also there is no specific books for each level for the students. The distribution of periods is not enough for the students and teachers for the effective implementation. The results were well presented and analyzed in the ***Table 4.2.***

Table 4.2 The value of the ICT subject

Challenges	**Frequency**	**(%)**

There is scarcity of materials for the subject, especially computers and books	98	87.5
Few qualified teachers who are able to teach the subject	77	68.75
There is no enough periods for the subject	65	58
There is no proper syllabus design	10	8.9
Poor foundation of the students from primary school	6	5.3
There is no enough computer trainings and courses out of the school	5	4.4

Source: Research data, 2016

4.2.3 ICT resources availability in schools

In the case of ICT resources the school respondents had different views ranging from availability of electricity and storage for example head of school said that schools did not have many resources, the few we have still face challenges on how to use and to find best ways to store them. There was a number of resources they mentioned to be important for the successful implementation of ICT curriculum. Some respondents particularly teachers and school leaders commented that;

> Although electricity is urgently required, there is low electricity voltage enough to be used by all computers used by students and teachers, not only that the generator used is for the whole school not computer laboratory only, so sometimes when there is no enough petrol for the school, computer classes have to stop until the petrol is bought.

The challenges on electricity especially in schools located in rural areas, students and teachers mentioned electricity as one of the challenges, the result shows that in the five schools selected two schools has an alternative to power supply, which are school Z, this school has national grid, generator and solar power and school Y which is using national grid electricity and standby, generator.

Another infrastructural challenge was mentioned by students and teachers are the computer laboratory, the following are the explanation from students:

> The computer laboratory is not large enough for the class since most of the time we are using physics laboratory which were made to accommodate only one class. In ICT studies two classes are combined together for the study, hence many students use a small class which led to a high population and misunderstanding.

The comment on quotation, suggests that, some schools used physics and geography room's laboratories as computer laboratories. These laboratories were only made to comprise only 45 students per session while it was found that in the five school, only in one school where there is special computer periods division per class. The result has shown that in the remaining schools, most of them use one laboratory for whole classes in the same level, for example; at school X, all form three who are taking computer study it on Thursday, while at school Y, classes were divided into days, for example, on Mondays it was allocated for form one class while on Tuesdays for form three classes etc and on Fridays, the computer laboratory was used by advanced level students and according to the research most classes comprise of 45-50 students, and in a day the periods are only 80 minutes, which means a class can comprise of 80-100 students. The findings were presented in the table 4.3 to show the computer laboratory used at school Y and X and associated resources challenges.

Table 4.3 Challenges on resources availability

Challenges	**Frequency**	**%**
There is few teachers who are able to teach the subject	77	68.75
No internet connection in computer labs	12	10.7

Electricity connections problems	17	15
Computer lab should be large enough to accommodate a class	27	24

Source: Research data

4.2.3 Qualified Teacher with skills and knowledge on ICT

With regards to teachers‟ skills, the study sought to determine the number of staff who was ICT literate. The average number of teachers who were ICT literate in schools which were implementing ICT was 7 per school. In school Y there is 30 ICT teachers, which means in the remaining schools there is 5 teachers an average of 1 teacher per school. The study shows that 77 respondents who were 68.75 of the population sample mentioned lack of enough ICT teachers as problem to the ICT implementation. And this has led to 58% of the population whom were 65 respondents to complain about the lack of enough ICT periods as presented in the Table 4.4.

Table 4.4; qualified teachers with skills on ICT

Challenges	**Frequency**	**percentages**
There were few qualified teachers to teach ICT the subject	77	68.75
There is no enough periods for the subject	65	58

Source: research data, 2016

Data in Table 4.4 indicates that in many community secondary schools, qualified teachers are lacking to teach ICT subject. When the researcher asked the teachers to mention their qualification levels and how they influence the ICT curriculum implementation in their schools, their comments varied. The study observed that more than half 56% of community secondary school teachers who were allocated to teach ICT subject, had no basic skills and training on the subject matter. It was just whoever was picked to teach as leisure as one of mathematics teachers in school y commented;

> I am a mathematics teacher with diploma but our school does not have qualified teachers to teach ICT subject. So, I was assigned to teach it because of my personal interest in ICT. Lt has been a tendency in many schools where there is no specifically trained teachers for ICT subject. There are few schools that have teachers qualified to teach ICT subject, had no basic skills and training on the subject matter. It is not surprising that in some schools, ICT subject is not taught.

The comments of teachers and students imply that there could be no deliberate efforts and steps to improve the teacher training colleges with respect to qualified ICT teachers. If teachers are left to teach ICT subject in some schools for their personal interests instead of professional commitment, it could result into failure in achieving ICT curriculum goals.

4.2.4 The role of School management in ICT implementation in schools

Research objective three was intended to establish what role could school leadership play to influence the implementation of ICT curriculum in schools. The data was collected to address the following questions ‘what could the school management do to influence the effective implementation of ICT curriculum. The question was

administered to teachers, head teachers and the students where their responses were collected and summarized in Figure 4.1.

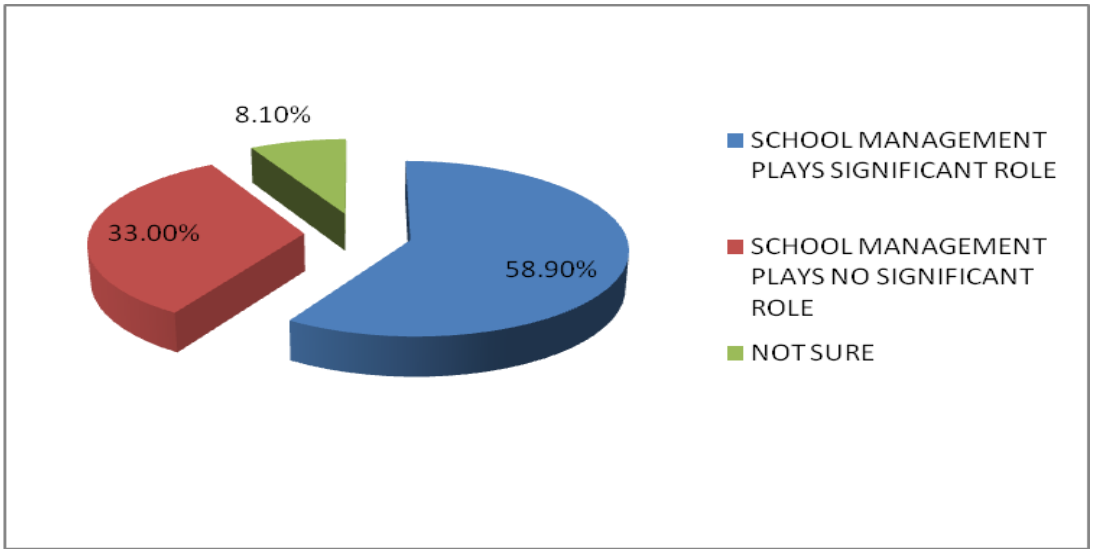

Figure 4.1 School management role on ICT curriculum implementation

Data from figure above indicates varied responses from various respondents who were asked to comment on school management role in facilitating ICT curriculum in community secondary schools. More than half of the respondents (58.9%) agreed that school management had role to play in influencing the ICT curriculum implementation in secondary schools due to their leadership and administrative role as one of the respondents commented.

> Implementation of ICT curriculum in community secondary schools cannot be effective if school management are overlooked and bypassed. Under the decentralized system of education, school management that includes heads of schools, school committees or boards in which the school heads are the secretaries. The school leadership and administrative role include to budgetary allocations and donors who can support the ICT programs.

The quotation above suggests the important role of school management in influencing the ICT curriculum implementation. Effective leadership is important in coordinating and supporting ICT implementation in school. As key leaders of school

transformation, school leaders can facilitate and support the idea of implementing ICT in their school. To achieve this, school leaders need to appreciate that, the idea to implement ICT is not only about ICT use, but also about transformation of learning, teaching and management of their schools.

According to this study, it shows that though the government has introduced the ICT curriculum still there is less support on ICT implementation from the government. To prove this in five schools selected, there is variation of ICT implementation, two schools started the use of ICT in 2014, one school started in 2001, and another school started in 2000. Talking with teachers and academic teachers, it shows that among 10 responses that are 71% of the 14 teachers interrogated, has complained about the lack of syllabus design to the ICT implementation. This shows that leaders were not well committed to the implementation of ICT subject in community secondary schools.

The study findings shows although more than half of teachers were not well trained to ICT subject, there were complain about few trained teachers enough to teach the subject. Moreover due to lack of enough of support from the school leadership, there is no enough funds to buy computers, building of computer laboratories, buying of books, and they cold also local arrangements to influence skilled teachers from neighboring schools.

It was also observed in one of the surveyed schools where the ICT subject is taught but student were not allowed to sit for NECTA examination, as the school leadership think that students will concentrate more in the ICT subject and forget other subject. This was another reason for discouraging the students from the importance of ICT

subject. What challenges do school management face in facilitating the implementation of ICT curriculum in their schools?

Table 4.5 School management influence on the implementation of ICT subject

Challenges to school management	Frequency	%
Few qualified teachers who are able to teach the ICT subject	87	77.7
The scarcity of materials and resources for the ICT subject, especially computers and books	69	60.6
Lack of self-initiative, commitment and devotion	53	47.3
There is no proper syllabus design	42	37.5
Lack of on job training on computer trainings and courses out of the school	34	30.3
Electricity and internet connections problems	17	15.2
Computer lab should be large enough to accommodate a class	11	9.8

Source; Field data, 2016

Data on Table 4.5 indicates that the majority of the respondents said that school management faced the challenges based on teachers' limited qualifications to teach the ICT subject in community schools as the pre dominant challenge (77.7%). This could generally specify the scarcity of materials and resources for the implementation of ICT subject, especially computers and books. However school management role is hindered by other challenges which differed in their influence based on the fact that school leadership was less self-committed and devotion to report the matter to their highest levels of authorities and local community support initiatives for fear to be fired as one of the heads commented;

> I am not courageous enough to raise the matter to my highest hierarchy of authority because if you seem to be reporting the weaknesses on ICT subject, they could remove you from your administrative positions. One of

> our jades was removed his leadership position for the same technical problem.

It was however found that school management was supposed to be self-initiated and devoted to influence and solicit support from local initiatives and organizations especially when the secondary schools lacked resources such as computers and internet services.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study was carried out to investigate the influence of school management to the implementation of ICT curriculum in community secondary schools in com secondary schools in Kibaha District. The specific research objectives for this study were to identify the challenges of ICT curriculum implementation in secondary school include;

(i) To identify the potential challenges in the ICT curriculum implementation in community secondary schools in Kibaha district, Tanzania.

(ii) To assess the adequacy in the government investment in implementing the ICT subject in secondary schools

(iii) To establish the role of school leadership in influencing the implementation of ICT curriculum in community secondary schools.

(iv) To establish strategies that can help the government to establish stable policies on ICT curriculum.

5.1 Summary of the study findings

Firstly, although the government has made deliberate conscious effort to introduce and invest the use of ICT curriculum in community secondary schools, the investment on the subject is not good enough. Despite the introduction of ICT in schools, there has been little investment and school leadership devotion to the program or subject. Many schools had no adequate ICT facilities and therefore this makes it impossible to incorporate ICT in learning and teaching in the schools.

Secondly, there were a number of challenges of ICT curriculum implementation in secondary school in the teaching and learning of the subject in secondary schools including the lack of subject specialists, inadequate infrastructures for the subject, especially computer laboratories and electricity. In schools where ICT Facilities were at least available there was no proper utilization of the facilities partly because of lack of ICT staff, alternative electricity power and school leadership support. A good number of students in community secondary schools seemed too engaged in entertainment whenever they accessed computers as compared to using the computers for academic benefits and this makes the ICT facilities academic benefits to be menial. In many schools where ICT facilities were available, it was indicated that educative programs were not installed on the computers and also the internet facilities were reported to be inadequate if not available. These challenges hindered in the utilization of the facilities by the teachers and students as learning tools

Thirdly, the school management play a significant role of the school leadership in influencing the implementation of ICT programs in schools was limited and minimal in general. Finally**,** several factors were established which could help the government to establish strategies to implement teaching of ICT subject successfully in community schools.

Value of ICT subject in the country shows that ICT subject is not valued by teachers and leaders hence no competition (87.5), this is because though the subject is very important due to science and technology development in the world, the government and other education stakeholders have not invested well in the subject, as we can see,

there is no specific books for each level, electricity and internet connection is also a problem.

There is scarcity of materials for the subject, especially computers and books computer laboratory do not have adequate size to accommodate a class. There is few teachers who are able to teach the subject; there is no enough periods for the subject; there is no enough practical to the students; Electricity connections problems; there is no enough computer trainings and courses out of the school; there is poor foundation of the students from primary school; lack of enough technician, there is no specific books for each level. There must be air-conditioned laboratories, there is no enough maintenance of computers, and there is no proper syllabus design.

5.2 Conclusions

The following conclusions were made from the study:

(i) The study has shown that in most of the schools there are no adequate ICT facilities and therefore this makes it impossible to incorporate ICT in learning and teaching in the schools

(ii) In the schools where ICT Facilities were available there was no proper utilization of the facilities partly because of lack of ICT staff, alternative electricity power and school leadership support.

(iii) Most of the students seemed too engaged in entertainment whenever they accessed computers as compared to using the computers for academic benefits and this makes the ICT facilities academic benefits to be menial.

(iv) In schools where ICT facilities were available some of the students indicated that educative programs were not installed on the computers and also the internet facilities were reported to be inadequate if not available. This therefore acted as a hindrance in the utilization of the facilities by the teachers and students as a learning tool

5.3 Recommendations

5.3.1 Recommendations for administrative action

Based on the study findings, the following were recommended;

(i) The introduction of ICT curriculum and its implementation in community secondary schools required adequate public and private investment; and levels of awareness among the members.

(ii) The technical side and professional consideration s were needed to mindful to address several challenges in the teaching and learning of the subject in secondary schools including the lack of subject specialists, inadequate infrastructures for the subject, especially computer laboratories and electricity. Educative programs should be put in the instituted instead of entertainments programs to dominate.

(iii) The school leadership and management has specific role to play in influencing the implementation of ICT programs in schools was limited and minimal in general. They need to be devoted, self-initiated and deviated to establish strategies to implement teaching of ICT subject successfully in community schools. The community schools boards should be involved in

the planning and management of ICT programs in schools, and technical issues need to be addressed.

(iv) The school curriculum should be flexible to make students more active in ICT subjects in government schools. The government should invest adequately in the training of teachers who are skilled and knowledgeable in carrying out ICT curriculum. Pubic invest should also consider enough teachers who can teach the subject and enough infrastructures for the subject, especially computer laboratories and electricity resources.

(v) ***School leadership support;*** According to the study, though ICT subject have been officially introduced in secondary education in 2007, it was found that, the subject is taken as merely subject which is not important to students and teachers. The ICT subject should be given the same values as other subjects, in the study it shows that in the selected sample schools students are studying the subject but there are more theories than practices, comparing to other secondary education subjects. The government is advised to insist education stakeholders to invest enough on the subject provide a good and well-designed syllabus for the study, prepare books of the subject according to the level of the students; there must be sufficient facilities for the subject especially teaching and learning materials.

(vi) ***ICT Teacher's skills;*** There must be enough foundation to the subject, that students should be taught an ICT subject from primary school so as they can have a good foundation on ICT. This can only be achieved by recruiting more ICT teachers and the result will also lead to more ICT teachers products.

(vii) ***Costs of using ICT as a hindrance in ICT implementation;*** The use of ICT needs the Despite a typical claim that investing in ICT is cost-effective, as well as the continuous decline in ICT prices, the entire cost of possession of ICT including software, hardware, upgrading, maintenance, development and acquiring right skills remains high. Investing in ICT for schools might be perceived as an additional cost, and supporting significant ICT implementation is a problem experienced by many schools in developing countries, mainly those that rely on donor support. So the government and education stakeholders should support financially the ICT curriculum.

(viii) ***Availability of ICT resources;*** From the study, it was evident that generally, electricity supply was not a barrier to the implementation of ICT curriculum in schools. However, there were instances where respondents felt that limited supply of power was an impediment to ICT implementation. In such situations there was a likelihood of limited rural electrification or frequent power disruptions and this could slow down the pace of ICT curriculum implementation in schools. In this end it is recommended that such schools should be supplied with electrical power to enable them effectively harness the use of ICT in education and training. Alternative sources of power such as generators, solar technology and batteries should be explored in the absence of the electric power. Moreover the research recommends the government to build computer laboratories according to the needs of the schools, for example the researcher recommends the building of computer laboratories which can carry more than at least 60 students.

5.3.2 Recommendations for further research

Taking into account the limitations of this study, further research studies are recommended in the following areas.

- It is recommended to conduct a study that would cover both private and public schools in order to provide a broader understanding of the problem. It is advisable to include wider geographical area in which two or more regions could be mapped for comparative and generalisation purposes.
- The current study was predominately qualitative in nature, it largely containing qualitative methodology without testing of hypotheses. It is therefore recommended to conduct a quantitative study in order to test if the school management styles have any significant change in educational processes and in students' academic performance and skills acquisition. Testing of hypotheses through quantitative approach could help to facilitate generalization of the findings over larger geographical areas.

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APENDICES

APPENDIX I: Interview Guide for Academic Teachers in Community Secondary Schools

1. How is the situation of the teaching staff as regards to ICT subject in terms of?
   a) The number of teachers teaching ICT subject in your school? ……
   b) Is the number of teachers adequate for the requirement of the ICT subject?
   c) Can you explain the ratio of ICT teachers to students?

2. a) Are all teachers teaching ICT subject been trained to teach ICT subject?
   b) How do you describe the level of teachers' skills in ICT subject?
   c) How is the situation in terms of capacity building of the ICT teachers in the curriculum implementation?
   d) How often are such in-service training carried out?
   e) How do you consider the adequacy of the training?

3. a) How many periods are allocated for ICT periods per class in a week?
   b) Do you consider the number of the allocated periods adequate to realize the objectives of teaching of ICT subject?

4. When did you start to implement ICT curriculum in your school?

5. How is the ICT infrastructure in the school?
   ii) Do you have computer labs to teach with ICT?
   ii) How many computers do you have in your lab?
   iii) Is number of computers enough according to your needs?

iii) How does the number of available computers affect the teaching and learning of your students practice ICT subject?

6. a) What is the academic performance of the ICT subject in your school?

b) What do you think could be the reasons for such performance?

c) If the performance is not good, what do you think should be done to improve?

7. a) Is there any student or teacher has been awarded for the well academic performance on ICT subject in your school?

b) What do you think are the barriers to the awards?

8. a) What are challenges do you face in the ICT curriculum implementation

b) What do you suggest to be done address the challenges in the implementation of ICT curriculum in secondary schools?

9. Suggest the alternatives strategies to improve the implementation of ICT curriculum secondary school.

10. a) What power source is your school connected to?

(National electricity grid, solar power, Generator)

11. How does availability of electricity affect the teaching and learning of ICT subject in your school?

13. How do you maintain the survival of computers in your school lab in following grounds?

a) Connectivity

b) Repair and accessories……..

	QUESTION items	1	2	3	4	5
A	Do you use ICT in your teaching process?					
B	Do you have ICT skills?					
C	Is there any capacity building on the ICT curriculum implementation					
D	Did you attend any training on ICT curriculum implementation?					
E	Capacity building seminars are important in implementing ICT					
F	ICT subject is important in teaching and learning other subjects					
G	There is enough Infrastructures to implement ICT curriculum					
H	There is enough ICT laboratories for the subject					
I	School leadership has A positive attitude on ICT curriculum					
J	Teachers can afford the use of ICT curriculum					
K	There is no challenges in the use of ICT curriculum					

c) General maintenance……..

APPENDIX 2: Questionnaire schedules for secondary school ICT teachers

1) Respond the following questions by ticking the appropriate box below, where 1=strongly Agree, 2=agree, 3=neutral, 4= disagree, 5= strongly disagree
2) What do you consider the challenges in the teaching of ICT subject in your school? List at least four challenges.

   i)……

   ii)……

   iii)……

   iv)……

1. Suggest ways to improve the implementation of ICT curriculum

   i)……

   ii)……

   iii)……

APPENDIX 3: Questionnaire schedule to secondary school students

1) Respond the following questions by ticking the appropriate box below, where 1=strongly agree, 2=agree, 3=neutral, 4= disagree, 5= strongly disagree

	Questions/statements	**1**	**2**	**3**	**4**	**5**
A	I'm taking ICT subject					
B	There is adequate number of ICT teachers in our school					
C	There is enough periods for ICT subjects					
D	Schools have enough computers for ICT subject					
E	I have adequate skills to operate computers					
F	Students can apply the use of computers					
G	ICT curriculum is helpful to me taking ICT subject					
H	Our school have enough books for ICT subject					
I	I like ICT subject					
J	The examination performance of ICT subject in our school is good					
K	There is no challenges in learning ICT subjects					
L	Our school is connected with electricity which help us to learn by using ICT easily					

2) What do you consider are the challenges in the learning of ICT subject in your school? List at least four challenges

(i) ……

(ii) …… …….

(iii)……

(iv)……..……

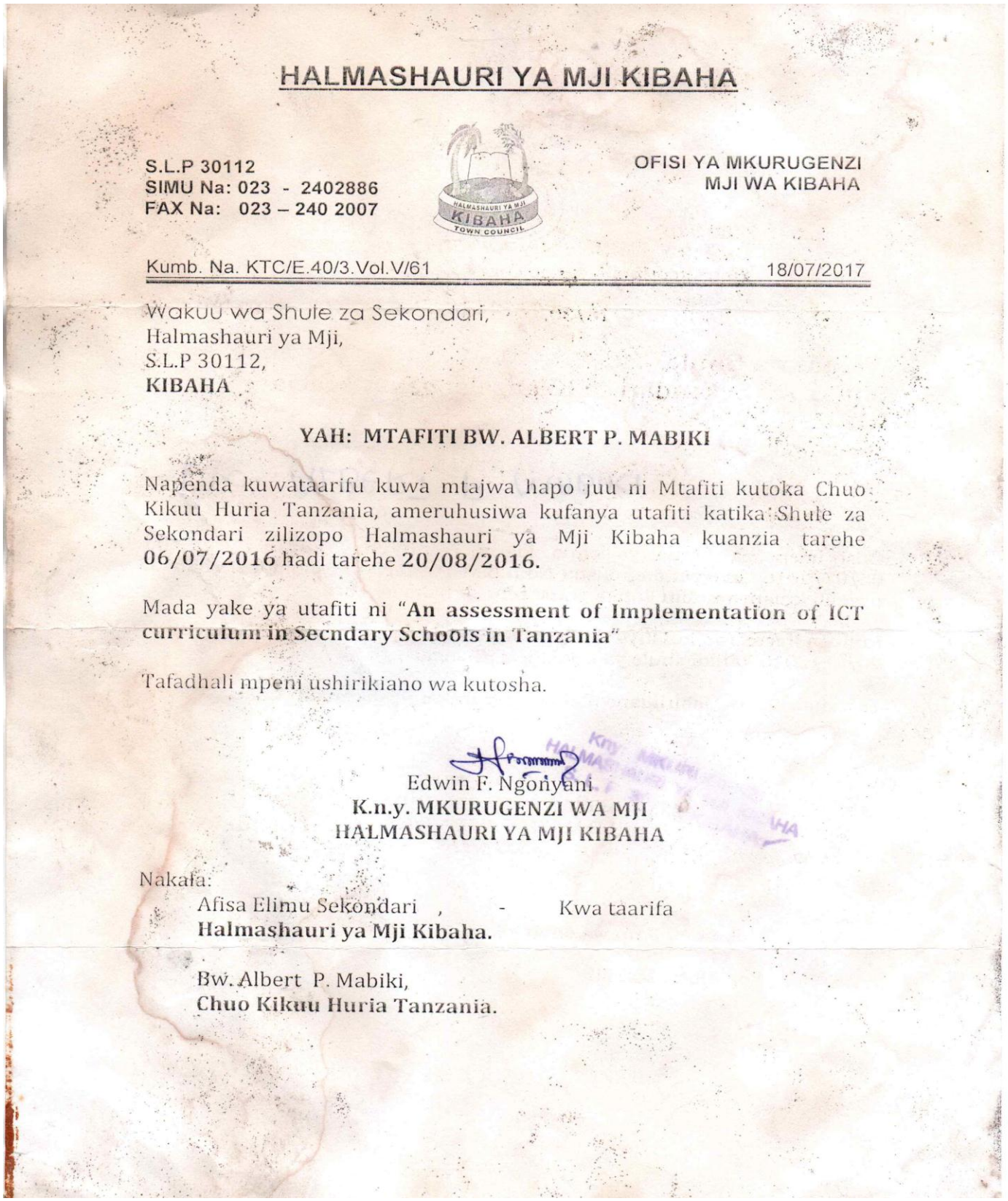
3) Suggest ways to address the challenges of teaching and learning of ICT subject

(i) ……

(ii) …….....……

(iii)……

Appendix 4: Research Clearance Letter



HALMASHAURI YA MJI KIBAHA

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OFISI YA MKURUGENZI
MJI WA KIBAHA

Kumb. Na. KTC/E.40/3.Vol.V/61 18/07/2017

Wakuu wa Shule za Sekondari,
Halmashauri ya Mji,
S.L.P 30112,
KIBAHA

YAH: MTAFITI BW. ALBERT P. MABIKI

Napenda kuwataarifu kuwa mtajwa hapo juu ni Mtafiti kutoka Chuo Kikuu Huria Tanzania, ameruhusiwa kufanya utafiti katika Shule za Sekondari zilizopo Halmashauri ya Mji Kibaha kuanzia tarehe **06/07/2016** hadi tarehe **20/08/2016.**

Mada yake ya utafiti ni "**An assessment of Implementation of ICT curriculum in Secndary Schools in Tanzania**"

Tafadhali mpeni ushirikiano wa kutosha.

Edwin F. Ngonyani
K.n.y. MKURUGENZI WA MJI
HALMASHAURI YA MJI KIBAHA

Nakala:
Afisa Elimu Sekondari , - Kwa taarifa
Halmashauri ya Mji Kibaha.

Bw. Albert P. Mabiki,
Chuo Kikuu Huria Tanzania.

APPENDIX 5: Research Clearance Letter

HALMASHAURI YA WILAYA KIBAHA

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05.07.2016.

Wakuu wa Shule,
Shule za Sekondari za Kilangalanga na Acacia
KIBAHA-PWANI.

YAH: RUHUSA YA KUFANYA UTAFITI.

Tafadhali rejea somo la hapo juu,

Ofisi imepokea barua ya chuo kikuu Huria cha Tanzania ya Tarehe 05/07/2016 inayomtambulisha Nd.Albert P. Mabiki Mwanafunzi shahada ya uzamili kufanya utafiti katika shule zetu za halmashauri.

Ruhusa imetolewa kufanya utafiti huo kuanzia tarehe 06/07/2016 hadi tarehe 20/08/2016 katika shule ya sekondari Kilangalanga na Acacia.

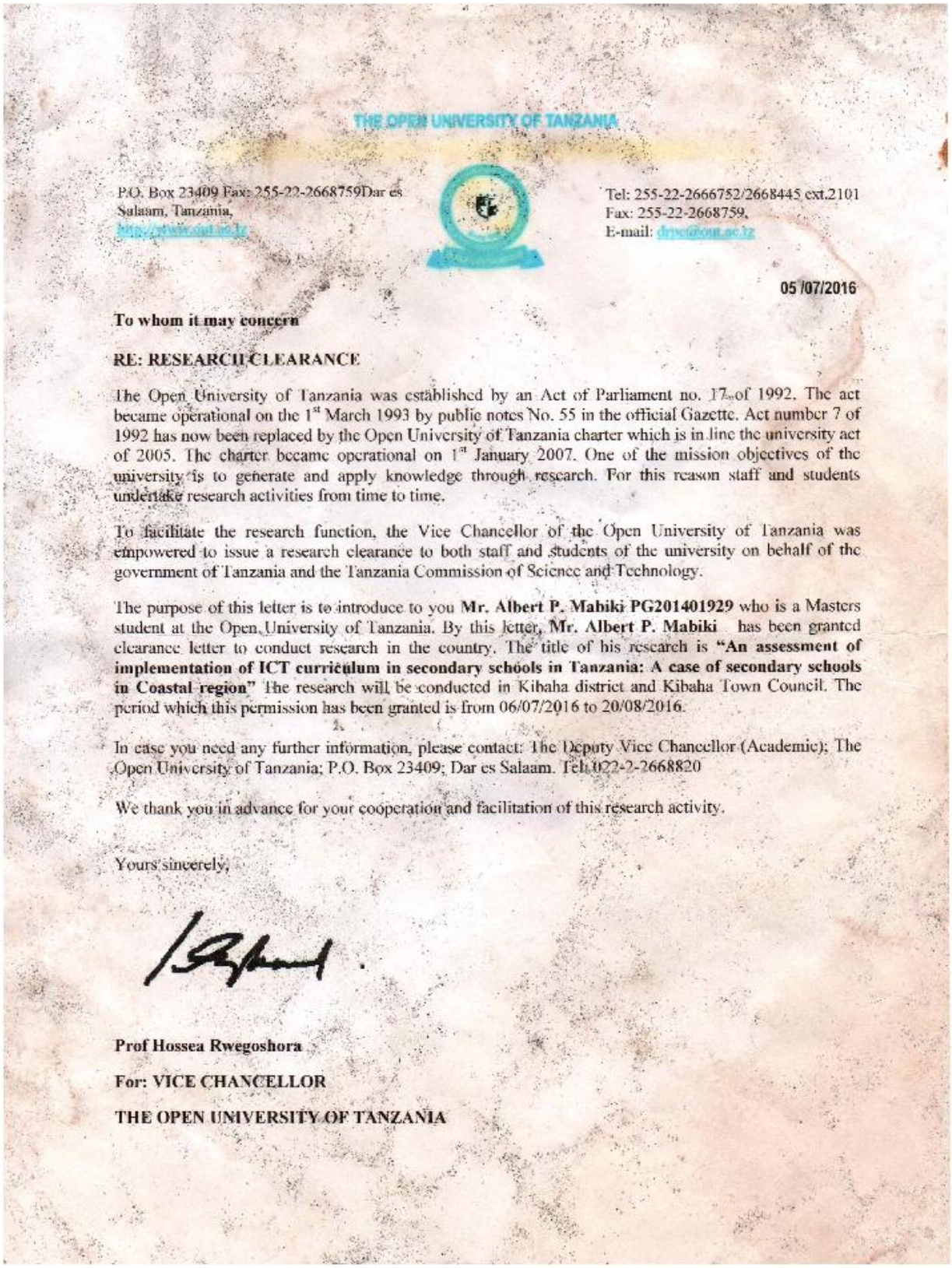
Tafadhali apewe ushirikiano atakaohitaji kukamilisha utafiti wake.

C.MAFURU
AFISA ELIMU SEKONDARI
HALMASHAURI YA WILAYA
KIBAHA

Nakala.

1. Makamu mkuu wa chuo kikuu Huria Tanzania.
2. Ndg Albert Mabiki

APPENDIX 6: Research Clearance Letter



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05/07/2016

To whom it may concern

RE: RESEARCH CLEARANCE

The Open University of Tanzania was established by an Act of Parliament no. 17 of 1992. The act became operational on the 1st March 1993 by public notes No. 55 in the official Gazette. Act number 7 of 1992 has now been replaced by the Open University of Tanzania charter which is in line the university act of 2005. The charter became operational on 1st January 2007. One of the mission objectives of the university is to generate and apply knowledge through research. For this reason staff and students undertake research activities from time to time.

To facilitate the research function, the Vice Chancellor of the Open University of Tanzania was empowered to issue a research clearance to both staff and students of the university on behalf of the government of Tanzania and the Tanzania Commission of Science and Technology.

The purpose of this letter is to introduce to you **Mr. Albert P. Mabiki PG201401929** who is a Masters student at the Open University of Tanzania. By this letter, **Mr. Albert P. Mabiki** has been granted clearance letter to conduct research in the country. The title of his research is **"An assessment of implementation of ICT curriculum in secondary schools in Tanzania: A case of secondary schools in Coastal region"** The research will be conducted in Kibaha district and Kibaha Town Council. The period which this permission has been granted is from 06/07/2016 to 20/08/2016.

In case you need any further information, please contact: The Deputy Vice Chancellor (Academic); The Open University of Tanzania; P.O. Box 23409; Dar es Salaam. Tel: 022-2-2668820

We thank you in advance for your cooperation and facilitation of this research activity.

Yours sincerely,

Prof Hossea Rwegoshora

For: VICE CHANCELLOR

THE OPEN UNIVERSITY OF TANZANIA