

**ROLE OF INSTRUCTIONAL MATERIALS IN ACADEMIC  
PERFORMANCE IN COMMUNITY SECONDARY SCHOOLS IN ROMBO  
DISTRICT**

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**2016**

**CERTIFICATION**

The undersigned certifies that she has read and hereby recommends for the acceptance by the Open University of Tanzania dissertation entitled: “**Role of Instructional Materials in Academic Performance in Community Secondary Schools in Rombo District**” in partial fulfilment of the requirements for the degree of Master of Education in Administration, Planning, and Policy Studies (MED APPS) of the Open University of Tanzania.

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Date

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**DEDICATION**

This work is dedicated to Almighty God and His Prophet T.B Joshua, my wife Fortunata V. Kimario and to my lovely children Kevin J. Tety, Karina J. Tety and Kieran J. Tety.

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**ABSTRACT**

The purpose of this research work is to examine the extent to which the selected community secondary schools in Rombo District utilize quality and adequate instructional materials in classrooms and how this has promoted academic performance of students. This research was based on three objectives including: to explore the views of teachers and students on the extent to which instructional facilities affect student performance, to examine the challenges that teachers in community secondary schools face in accessing instructional materials and to assess the strategies that teachers use to minimize the challenges of attaining and using quality instructional materials. The study adopted a cross sectional survey design. The study population involved all community secondary schools in Rombo district. Out of 38 community secondary schools in Rombo district 5 schools were randomly selected for data collection. In each school, 5 teachers and 20 students filled semi-structured questionnaire. Also heads of each school and 1 secondary district education officer were interviewed. The following were findings of the study: first, instructional materials are the key to teachers' and students' performance. Secondly, most community secondary schools in Rombo District suffer shortage of essential teaching and learning materials. Thirdly, the study revealed that teachers used different strategies to minimize the challenges of attaining and using quality instructional materials like borrowing books and improvisation. The study recommends that the government should budget sufficient funds for improving the availability of instructional materials in all secondary schools. For further research, this study proposes that aspects of how teachers and students use instructional materials for effective teaching and learning processes need to be examined.

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**LIST OF ABBREVIATIONS**

BEMC	Board of Education of Montgomery County
DEWG	Declining Enrolment working Group
FEMSA	Female Education in Mathematics and Science in Africa
ICT	Information Communication Technology
LCT	Low Cost Technology
NBS	National Bureau of Statistics
OCM	Office of Classroom Management
PEFA	Partnership for Education Facilities Assessment
SEDP	Secondary Education Development Programme
UNESCO	United Nations Educational Scientific and Cultural Organization
URT	United Republic of Tanzania

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background Information

Instructional materials have been observed as a powerful strategy to bring about effective teaching and learning. The importance of quality and adequate instructional materials in teaching and learning can occur through their effective utilization during classroom teaching. Instructional materials here include all the tools that the teachers can use to make the learning more interesting and memorable.

According to Farombi, (1998), instructional materials include books, audio-visual, software and hardware of educational technology. He further opines that the availability, adequacy and relevance of instructional materials in classrooms can influence quality teaching, which can have positive effect on students' learning and academic performance. The insight from Farombi on linking instructional resources to students' academic performance serve critical in the provision of quality education. The title of this thesis, role of instructional materials in academic performance in community secondary schools in rombo district originates from such ideas. Efficiency and high productivity in teaching and learning transaction. In my views, start from the access to quality and adequate instructional materials, and these should be prepared well before the class interaction.

According to Oni (1992), instructional resources are teachers' strategic factor in organizing and providing education. This is so because they help to elaborate a concept that the teacher could not, without an instructional material. This allows



students to learn more comfortably therefore influencing positively their academic performance.

Writing on the role of instructional materials in teaching and learning, Balogun (1982) commented that science education programmes cannot be taught effectively without the existence of equipment for teaching. This is because instructional materials help those who learn to develop problem-solving skills and scientific attitudes. Elaborating further on the same point, Ajayi and Ogunyemi (1990) emphasize that when instructional materials are provided to meet relative needs of teaching process, students will have access to the reference materials mentioned by the teacher, and also each student will be able to learn at his or her own pace. The overall result is that students will perform much better.

Before the coming of missionaries in Tanzania, traditional societies in Tanzania had their own means of providing education to the new generation, which was growing up. There was no formal education however the young ones were taught through story telling, and also through tribal traditions. Under this system of education, the youth grew to become brave and skilled men and women; men became hunters, soldiers and craft workers, while women became good mothers and food gatherers and craft workers.

The beginning of formal education is traced to 1876 when the missionaries came to establish their mission stations. The first mission station was the Free Church of Scotland at Cape Maclear, and this group opened the Livingstonia Mission (Pachai, 1973). In the mid 1920s, government appeared on the education scene with more

assistance and policy formulation. The department of education established in 1926 worked hand-in-hand with the missions, and more schools were introduced.

Community secondary school program in Tanzania started in 1970s when the government decided to take over all private secondary schools for the aim of ensuring that all the children had an equal chance of getting education. Further development of community secondary schools in Tanzania took place in 1980s and 1990s; during this era some major changes took place in the history of community secondary education in Tanzania. The first major change was the re-introduction of community secondary schools as a response to the unforeseen increase requirement for secondary education. This demand came into being following the implementation of Universal Primary Education (UPE) (URT, 1995).

The implementation of UPE created unparalleled social demand for secondary education. The increase in the enrolment in primary schools resulted in the expansion of Secondary education through a strategy of constructing community secondary schools in each ward in Tanzania. A circular was issued by the government in 1984 to initiate a ten year programme for the expansion of secondary education. The programme was not implemented until in 1986 when it started and was to be completed by 1995 with the construction of 79 secondary schools which were to be distributed in such a way that each region was to build three schools. Essentially, community secondary schools are government schools in which both local communities and the central government have the responsibility to run the schools (URT, 1995).

The government through Ministry of Education and Vocational Training (MoEVT), with the help of foreign donors, members of the community, development partners, contributions from local government, government through internal and external sources took the initiative to start building community secondary schools all over the country in each ward as pointed earlier. To the large extent, community secondary schools supported by government, community contributions, development partners and local government contributions have provided education to children from poor families, who are mostly found in rural remote areas, while government provided schools with financial and technical support such as paying teachers' salaries.

Secondary school education in Tanzania refers to that full time program of education provided in accordance with Government approved curricula and availed to students who have completed primary education (URT, 1995). According to the Education Policy of 1995, this level of education consists of two sequential phases; ordinary level secondary education which last for four years and a two-year of advanced level secondary education (URT, 1995). The standards that the Ministry of Education and Vocational Training (MoEVT) has stipulated, selection of students to be enrolled into community secondary schools are made on the 'basis of a pre-set national standard cut-off point of performance' in the National Primary School Leaving Examination (PSLE) (URT, 1995). Students enrolled in community secondary schools need to have a minimum of 100 scores in their Primary School Leaving Examination (PSLE).

On the other hand, selection and enrollment into community secondary schools is the same as that which is done in other secondary schools. The selection is done after

students' attainment of appropriate credits in the final secondary examination. In all cycles the emphasis has been on development in terms of access and improved quality of teaching and learning (URT, 2004).

Instructional materials are considered important in teaching and learning in all levels of education because textbooks and other resource materials are basic tools. Absence or inadequacy makes teachers handle subjects in an abstract manner, portraying it as dry and non-exciting (Eshiwani, 1984). For example, textbooks, charts, maps, audio-visual and electronic instructional materials such as radio, tape recorder, television and video tape recorder contribute much in making learning more interesting (Atkinson, 2000). The importance of instructional materials is also evident in the performance of students (Adeogun, 2001).

According to Adeogun, schools, whose teachers use more instructional resources perform better than schools, whose teachers do not use instructional materials. This corroborated the study by Babayomi (1999) that private schools performed better than public schools because students and teachers are provided with sufficient and quality teaching and learning resources. From this importance, schools at all levels of education have been advised to have quality and adequate instructional facilities to raise academic performance of their students.

The advice emanated from the fact that instructional facilities have a potent factor to qualitative education. The dictum is that "teaching is inseparable from learning but learning is separable from teaching." This means that teachers do the teaching to

make the students learn, but with quality and adequate instructional facilities, students can learn without the teachers. According to Akande (1985), learning can occur through one's interaction with one's environment. Environment here refers to instructional facilities that are available to facilitate students learning outcome.

Instructional materials such as the size of classroom, sitting position and arrangement, availability of tables, chairs, chalkboards, shelves on which instruments for practicals, are important in the teaching transaction (Farrant, 1980 and Farombi, 1998). According to these scholars, availability of instructional materials can work best if other conditions are met such as the quality of classroom. I would add, the quality of teachers to use these resources. While acknowledging the importance of instructional materials, there is little agreement on their roles on academic performance and this difference in understanding, is the focus of this study.

Studies have been conducted mainly focusing on pedagogical and curriculum trends. However, studies on the role of instructional materials in academic performance for a country like Tanzania are highly needed due to the importance discussed above and the challenges facing the education system. Academic performance according to the Cambridge University Reporter (2003) is frequently defined in terms of examination performance. Academic performance is normally measured by the examination results because this is one of the major goals of a school. Hoyle (1986) reiterated that schools are built in order to provide knowledge and skills to those who go through them and behind all this is the idea of enhancing good academic performance. In this study, academic performance was characterized by performance in classroom tests, in course work and performance in the final examinations.

In this study, I explored conceptions from teachers' on understanding of the importance of instructional materials in improving teaching and learning in secondary school education in Tanzania. In conducting this study, I have been interested in a reciprocal availability of instructional facilities, where the number of schools and enrollments are increasing while instructional materials are inadequate or in sorry state (see MoEVT, 2010). This reciprocal relationship is creating inefficiency gap between the governmental intentions stipulated in the Secondary Education Development Program (SEDP) and the realities existing in community secondary schools. The gap has led to the emerging criticism that community secondary schools are not effective, as a large number of students do not acquire required skills and hence perform poorly in their final examinations.

A research carried out by Sumra and Rajani (2006) indicated that a number of learners finish secondary education without acquiring essential skills that are needed in life. This shows that increase in number of students has been prioritized over the number and quality of instructional materials (Hakielimu, 2007; Makombe et al, 2010). Some studies have specifically shown that teaching in community secondary schools is poor as these schools lack necessary teaching facilities such as furniture for staff and students, books, science equipment, games and sport equipment (Benell and Mukyanuzi, 2005).

Moreover, teachers lack essential skills to make quality teaching and learning aids. According to a National Audit report, some schools are completely lacking material resources such as textbooks, charts, maps, audio-visual and electronic instructional materials such as radio, tape recorder, television and video tape recorder.

From these facts on the ground, efforts to improve the quality of provision of education in community secondary schools in Tanzania have appeared to slow down, as some of these challenges were not prioritized in the SEDP 2004 – 2009 (Sumra and Rajani, 2006). More studies are needed in Tanzania to expose this situation. If the country aims at producing a competitive economy to meet global market demands, as stipulated in the vision of the Ministry of Education, Science and Technology (MoEVT, 2010), availability of quality and adequate instructional facilities in community secondary schools should be given a high priority. In this study strategy for making quality instructional materials available are suggested as an attempt to narrow efficiency gap in the provision of education in community secondary schools in Tanzania.

Inadequacy of quality instructional materials is not confined to Tanzania, as this is a worldwide phenomenon. Even in developed countries for example, United States of America especially in schools whose majority of population are the poor and minority students are less funded and lack essential quality instructional materials. In addition, policies associated with school funding, resource allocations, and tracking leave minority students with fewer and lower-quality books, curriculum materials, laboratories, and computers (Post and Darling, 2000).

A study conducted in the District of Columbia school system found, after controlling for other variables such as a student's socioeconomic status, that students' examination results were lower in schools with poor building conditions. Students in school buildings in poor condition performed badly, that is, 6% below schools in fair condition and 11% below schools in excellent condition (Edwards, 1991). The

situation is more critical in less developed countries. For instance, studies done by Carron and Chau, (1996) in India, and Willms (2000) in Latin America indicated acute shortage of school facilities such as classroom materials and inadequate library which led to poor academic performance in the areas most affected by this problem in these countries. A survey which was conducted by UNICEF/UNESCO in 1995 in 14 least developed countries showed that the size of classes ranged from fewer than 30 students in rural and urban Bhutan, Madagascar, and the Maldives, to 73 in rural Nepal and 118 in Equatorial Guinea (Postlewaithe, 1998).

In most African countries there is an endemic lack of adequate instructional materials most especially in rural areas. A research done by Gogo (2002) on the input of cost sharing on access, equity and quality of secondary education in Rachuonyo district in Kenya indicated that the quality of education had not changed much for a number of years due to inadequate teaching and learning materials and equipment. Further, studies done in other parts of Africa reveal the same problem.

For example in Nigeria Farombi (1998) did a study on resource concentration, utilization and management as correlates with students learning outcomes in Oyo State. He discovered that instructional facilities in some schools were very poor. He cited examples of schools without chalkboard, absence of ceiling, some roofing sheets not in place, windows and doors removed among others, a situation which the researcher regarded as hazardous to healthy living for the learners. Another study done by FEMSA on the availability of teaching and learning resources for mathematics and science in four African countries, Cameroon, Ghana, Tanzania and



Uganda revealed that there was critical shortage of instructional facilities mostly for teaching science and mathematics.

## **1.2 Statement of the problem**

Most studies that look into the state of instructional resources in schools, rarely do scholars attach poor performance with lack of, or inadequacy of these materials. As the studies above indicate instructional materials are important in teaching and learning and are inadequate in many schools (Kerr, 2003). Although studies in Tanzania (see for example those of Sumra and Rajani, 2006; Hakielimu, 2007; Makombe et al, 2010) have lamented on poor performance, they did not link this situation with inadequate quality instructional resources. These studies are clear that there is a strong link between adequate and quality instructional materials and quality teaching and learning process (Blair, 1998) but have not shown this link with students' academic performance. Other studies conducted by researchers such as Earthman and Lemasters (1996) have shown that learners who are provided with safe, modern and environmentally controlled situation learn much better and their academic performance are high.

School finance trends in Tanzania have shown a notable decrease in funding for educational facilities (MoEVT, 2014). However, studies are needed to draw a clear comparison between the quality of instructional materials in community secondary schools and academic outcomes. In order for the government to support educational reform that will boost student performance, they will need to understand the level of relationship between instructional materials and academic performance.

### **1.3 Objectives**

#### **1.3.1 General Objective**

The general objective of this study was to examine the extent to which the selected community secondary schools in Rombo district utilize quality and adequate instructional materials in classrooms and how this has promoted academic performance of students. The findings of this study have implications for policy and practice regarding the planning and funding of schools for quality provision of education.

#### **1.3.2 Specific Objectives**

The study was guided by the following research objectives:

- (i) To explore the views of teachers and students on the extent to which instructional facilities affect student performance.
- (ii) To examine the challenges that teachers in community secondary schools face in accessing instructional materials.
- (iii) Assess the strategies that teachers use to minimize the challenges of attaining and using quality instructional materials.

The study was guided by the following research questions:

- (i) What are the views of teachers and students on the extent to which instructional materials affect students' performance?
- (ii) What are the challenges that teachers in community secondary schools face in accessing instructional materials?
- (iii) What are the strategies that teachers use to minimize the challenges of attaining and using quality instructional materials?

### **1.3.3 Scope of the Study**

This study dealt with conditions of community secondary schools in relation to students' behaviour and performance. The focus of the study was on the availability and utilization of instructional materials. The study focused on selected community secondary schools around Rombo district. The context of this research is unique to Rombo District and therefore it cannot be generalized for the whole country.

### **1.3.4 Significance of the Study**

This study intended to find the impact of inadequate instructional materials in community secondary schools in Rombo district. The knowledge obtained would help the government most especially local government and educators to reflect and make evaluation on the requirements of other instructional materials apart from class-rooms alone. Since the beginning of community secondary schools, the government and local communities have been putting more emphasis on the construction of new class-rooms, and recently, construction of laboratories. However, provision of quality secondary school education requires more than just class-rooms and laboratory buildings. The evaluation of instructional materials, along with other reform movements, allows educators and planners to plan for appropriate environment for teaching and learning so as to provide quality secondary school education.

The study would also influence education planners to consider appearances of physical structures such as classrooms and availability of other teaching and learning materials as some of the important factors that can influence parents to send their children to particular schools, which have attractive physical appearance and variety

of other facilities. Attractive environment and the availability of other learning resources can influence students to stay in schools and stimulate learning. This study would be helpful for fulfilments of the requirement of Masters of Education degree in Administration, Planning and Policy studies.

Also the knowledge acquired from this study would be very important to other researchers who have interest in demographic dynamics of school age going children in relation to planning of school facilities. If the study concludes that students in community secondary schools perform poorly due to the lack of sufficient instructional materials, this knowledge will enable education planners to re-think the range of services the government and local communities can provide to school-aged children, and the wider community, and to find creative ways of improving school facilities that would otherwise be ineffectively utilized due to funding pressures.

### **1.3.5 Operational Definition of Key Terms**

**Instruction materials** are facilities given to students, so that they can use every opportunity to develop full potential. Instructional materials include fixtures, equipment, and buildings necessary for the effective and efficient operation of the program of public education (uslegal.com, 2015).

**Academic performance** refers to the level at which a student, teacher or institution has managed to reach their educational goals.

**Community** refers to a group of people with common socio-economic and cultural characteristics or interests, legally and administratively recognised to designate a village or a ward. Thus, school community is defined as the catchments areas of the

school, that is, the area from which all or most of the students are drawn and where the families and neighbours of the students reside, who assist financially or otherwise with the establishment, maintenance and continuing operation of the school.

**Community secondary schools** are secondary schools owned by local community or owned by an institution on behalf of a community (URT 1995).

### **1.3.6 Chapter Summary**

The analysis of the availability of instructional materials which this study did is very important due to its impact on the students' and teachers' achievement, behaviour and attitudes towards continuing learning and teaching. It is illogical to expect good results from programs that have to take place in environments, which are not conducive. Based on the general objective and research questions, the state of instructional materials in community secondary schools in Rombo district and their impact on learning and teaching processes was revealed.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the relevant literature for this study. The first part presents theoretical literature. This is focused on two theories: Instructional material theories and Sociocultural theory of teaching, learning, and development. The second part presents empirical literature that revolves around the three objectives developed in chapter 1. These include: the extent to which instructional facilities affect student performance; the challenges that teachers in community secondary schools face in accessing instructional materials; and the strategies that teachers use to minimize the challenges of attaining and using quality instructional materials. The last part presents conceptual framework that was developed by Stufflebean comprised of the context, input, process and output.

#### **2.2 Theoretical Framework**

##### **2.2.1 Instructional Material Theories**

Instructional material theories assume that there is a direct link between the materials that the teachers use, and the students' learning outcomes. These outcomes include higher abilities to learn, quality strategies to learn and perform classroom activities and positive attitude towards learning. Further, these theories assume that instructional materials have the capacity to develop into students the highest order of intellectual skills as they illustrate clearly, step by step how to follow the rules/principles and elaborate on the concepts, all of which have positive impact on

solving new problems by analyzing the situation and formulating a plan (Gagné et al. 2005). According to Gagne et al, instructional material can be used to develop higher learning abilities to the learners through self-teaching or guided learning. This implies that the instructional materials mainly comprise “eliciting performance” and “providing feedback on performance correctness,” in addition to “providing learning guidance” for guided discovery learning. Many of Gagné’s 9 ideas have broad implications for secondary teachers in community secondary schools in Rombo district. Many of these ideas have capacity building undertones with themes of students’ acquisition of critical thinking and problem-solving skills. However, the theory does not relate to whether or not students can think critically in what aspects or how they can solve a particular problem by themselves. However, I have the opinion that the purpose of instructional materials or technology in education is to stretch students’ imagination and to encourage them to solve problems in their lives.

Similar ideas are held by Lev Vygotsky, a Russian psychologist who held a view that tools and signs, which are in a form of instructional materials, have the capacity to develop in students higher level of thinking, which is important in problem-solving activities. However, since they are considered to be domain-specific, the ways instructional materials can start cognitive development is yet to be studied with respect to classroom teaching. Thus, this study stretches these views.

### **2.2.2 Sociocultural Theory of Teaching, Learning, and Development**

Sociocultural theory of teaching, learning and development is the second theory that framed this study. Largely inspired by the seminal works of Lev Vygotsky, this theory assumes that human minds do not develop by virtue of some predetermined

cognitive structures that unfold as one matures. Rather, this theory posits that human's minds develop as a result of constant interactions with the social material world.

According to Vygotsky, human mind develop through interaction with materials in the learning process where people learn from each other and use their experiences to successfully make sense of the materials they interact with. These experiences are crystallized in 'cultural tools', and the learners have to master such tools in order to develop specific knowledge and skills in solving specific problems and, in the process, become competent in specific profession. In the classroom, these tools can be a picture, a model, or pattern of solving a problem. Most often however, such tools are combinations of elements of different orders, and human language is the multi-level tool par excellence, combining culturally evolved arrangements of meanings, sounds, melody, rules of communication, and so forth.

Learning by using such tools is not something that simply helps the mind to develop. Rather, this kind of learning leads to new, more elaborated forms of mental functioning. For example, when children master such a complex cultural tool as human language, this results not only in their ability to talk but leads to completely new levels of thinking, self-regulation and mentality in general. It is the specific organization of this tool (e.g., the semantic, pragmatic and syntactic structures of language) that calls into being and in effect shapes and forms new facets of the child's mind. Importantly, cultural tools are not merely static 'things' but embodiments of certain ways of acting in human communities. In other words, they represent the functions and meanings of things, as discovered in cultural practices:



they are "objects-that-can-be used- for-certain-purposes" in human societies. As such, they can be appropriated by a child only through acting upon and with them, that is, only in the course of actively reconstructing their meaning and function. And such reconstruction of cultural tools is initially possible only in the process of cooperating and interacting with other people who already possess the knowledge (i.e. the meaning) of a given cultural tool.

This short account is presented here to illustrate the fact that the sociocultural approach, unlike that of instructional materials by Gagne discussed above, not only allows for a synthesis of teaching, learning, and cognitive development; it actively calls for it. This theory implies that instructional materials lead to cognitive development because they mediate learners' thinking through the tools, and such mediation constitutes the very cornerstone of mental development.

## **2.3 Empirical Literature**

### **2.3.1 The Extent to which Instructional Materials Affect Student Performance**

In his study Adeogun (2001) revealed a strong positive link between instructional resources and academic performance. According to Adeogun, schools that possess more instructional resources performed better than schools that have less instructional resources. This finding supported the study by Babayomi (1999) that private schools performed better than public schools because of the availability and adequacy of teaching and learning resources. Adeogun (2001) noted that there was a low level of instructional resources available in public schools and hence commented that public schools had acute shortages of both teaching and learning resources. He

further commented that effective teaching and learning cannot occur in the classroom environment if essential instructional resources are not available.

Fuller and Clark (1994) suggested that the quality of instructional processes experienced by a learner determines quality of education. In their view they suggest that quality instructional materials create into the learners quality learning experience. Mwiria (1995) also supports that students performance is affected by the quality and quantity of teaching and learning resources. This implies that the schools that possess adequate teaching and learning materials such as textbooks, charts, pictures, real objects for students to see, hear and experiment with, stand a better chance of performing well in examination than poorly equipped ones.

A study by Chonjo (1994) on the physical facilities and teaching learning materials in Primary schools in Tanzania supports the above views. Chonjo interviewed teachers and students on the role of instructional materials on effective learning. From his study he learned that performance could be attributed to adequate teaching and learning materials and equipments that are in a school. He recommended that in order to provide quality education the availability of sufficient quality facilities is very important. Chonjo's study was one of its kinds in Tanzania which directly linked the role of physical facilities with students' academic performance in primary schools.

However, Chonjo focused only on physical facilities, leaving out instructional materials. To me, physical facilities such as buildings including classrooms, chairs and desks are not enough to provide quality teaching and learning. Instructional

materials are also necessary. The study done by Maundu (1987) agrees with my ideas that, in order for a school to have a good performance it must be well equipped with relevant and adequate text books and other teaching and learning resources.

### **2.3.2 Challenges that Teachers Face in Accessing Instructional Materials**

Teachers in community secondary schools most especially in rural community schools face some challenges in accessing instructional materials. One of the big challenges that teachers in community secondary schools face in accessing instructional materials is meagre funds provided by the government to community secondary schools for purchasing instructional materials. Community secondary schools depend to the large extent on the government for funding. Very little support is received from local government and communities around the schools most especially in rural areas due to poverty. The funds are provided in form of capitation grants. The capitation grant is aimed at improving the quality of education by making sure that sufficient teaching and learning material are found at school level. In particular, the capitation grant is meant to finance the purchase of textbooks and other teaching and learning materials as well as to fund repairs, administration materials, and examination expenses (Uwazi, 2010).

However, while the number of students who are enrolled in schools has been increasing each year, education capitation grant has been dropping. Even without adjusting for inflation, the actual amount of money reaching schools for capitation grants is clearly much less today compared to what it was between 2002 and 2003. According to the Education Public Expenditure Tracking Survey of 2004, in the period 2002-2003 schools received an average of 5,400 shillings per pupil. In

2007/08 however, the money actually reaching the schools had declined to 4,189 shillings per pupil (URT, 2010). This amount of money is grossly insufficient to purchase a minimum set of textbooks apart from other instructional materials which are highly needed by the teachers. According to Onche (2014), government's Policy towards efficient provision of these aspects of educational resources has not been encouraging and has always not been well planned, monitored, supervised and evaluated with rural schools as the back bench of implication of these policies.

Another challenge that teachers face is the lack of exposure and limited accessibility to modern instructional facilities. Most community secondary schools especially in rural areas do not have access to information communication technology (ICT) which could alleviate shortage of instructional materials. As we are in a new millennium, there is an increased awareness of the need to use modern scientific approach in teaching and learning processes in our schools.

At present, there is a universal recognition of information and communication technology as a major force in the dissemination of knowledge (Aina, 2013). Majority of teachers who were trained early 1990's and backward do not have skills in the field of Information and Communication Technology. Where there are skilled teachers, other problems naturally include problem of installation, maintenance, operation, network administration and local technicians to service or repair these equipment's and the other facilities. In most of the rural secondary schools, most of the facilities are non-existent, hence the traditional chalk and duster approach still dominates in secondary school pedagogy (Obasi, 2008).

Poor salary is also another challenge that teachers face. Teachers like most civil servants in Tanzania are poorly paid. This becomes a hindrance for them to purchase their own teaching materials or acquisition of new ideas, skills and knowledge by failure in enrolling for further educational programmes including Information and Communication Technology (ICT). With this, the academic and intellectual capacities of teachers and learners are bound to be affected substantially during classroom interaction (Onche, 2014). Lack of sufficient skills and creativity may hinder teachers to improvise their own instructional materials.

Local governments and communities around community secondary schools are supposed to provide resources most especially funds to these schools so that teachers can use them to access instructional materials. But very often this is not the case due to number of reasons. Some local communities have very narrow tax base. Also the performance of local councils in the collection of their own revenue have been recorded very poor.

According to Galabawa (1993), there are few types of councils in Tanzania, which can manage to collect government grants. Many local authorities however have found themselves unable to deal with such a rapid increase in expenditure and their budget deficit increase. Education is one of the sectors, which are mostly affected by this situation. Poverty is another reason, which may hinder members of the community in supporting teachers and schools financially so that they can access instructional materials. According to Kimego (2011), Parents and communities participation differ from rural to urban communities and from one mode of economy to another. Parents who are involved in cash crops economy have economic ability to

finance education compared to parents who are not involved in cash crop economy. For example pastoral communities such as Masai have displayed poor financing strand for their children. Teachers who work in such areas have more challenges in accessing instructional materials.

Another challenge that teachers face in accessing instructional materials is lack of clear policy and monitoring mechanisms to ensure that enough funds are provided to community secondary schools for purchasing instructional materials and also these funds are used for the intended purpose. As Onche (2014) comments, government's Policy towards efficient provision of these aspects of educational resources has not been encouraging and has always not been well planned, monitored, supervised and evaluated with rural schools as the back bench of implication of these policies.

### **2.3.3 Strategies to Minimize the Challenges of Attaining and using Quality Instructional Materials**

There are a number of strategies, which can be used in order to minimize the challenges of attaining and using quality instructional materials. According to studies done in different parts of the world including Africa, one of the strategies is improvisation of instructional materials. Eshiet (1996) states that improvisation involves sourcing, selection and deployment of relevant instructional materials into the teaching-learning focus in the absence or shortage of standard materials for a meaningful realization of specified educational goals and objectives.

According to studies done by Abodelraheem & Al-Rabane (2005), Udosen (2011) and Ibe-Bassey (2012) some creation of improvised media of low technological

materials and resource-centred learning can enlarge the limited knowledge base of any course of study and enrich instruction to a guaranteed quality. It can also promote strategies that ensure the integration of technology in the teaching and learning process of basic science education. their findings are in agreement with the findings of Dodge (1997) who observed that using technologies like simulation devices open new horizons for individual learning tools, the environment resources and services.

The use of ICT can also minimize some of the challenges in accessing instructional materials. According to UNESCO (2004), the use and rapid spread of electronic communications has the capacity to affect the quality and efficiency of basic education throughout the world. The ease with which teachers and students can gather information over the Internet on virtually any topic has the potential to transform instructional content and pedagogical practice.

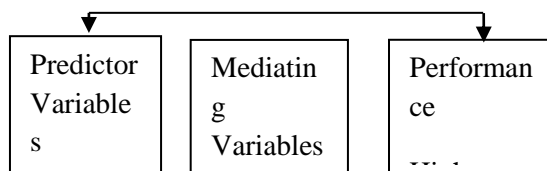
Moreover, courses developed by the best teachers in one country can be made available to students across many countries. Newer technology-based instructional strategies, incorporating the Internet and the World Wide Web (WWW), can therefore be used more to expand communication and increase access to resources. Tinio (2002), points out that ICT has potentials in increasing access and improving relevance and quality of education in developing countries. Tinio further states the potentials of ICT as follows: ICTs greatly facilitate the acquisition and absorption of knowledge, offering developing countries unprecedented opportunities to enhance educational systems.

### 2.3.4 Knowledge Gap

Most studies that look into the students performance, do not attach it with inadequacy or lack of instructional materials. Although studies in Tanzania (see for example those of Sumra and Rajani, 2006; Hakielimu, 2007; Makombe et al, 2010) have lamented on poor performance in secondary schools, they did not link this situation with inadequate quality instructional resources. These studies are clear that there is a problem in secondary schools and this is directly linked to inadequate quality instructional materials and thus, it will contribute to the literature on quality education in Tanzania.

### 2.3.5 Conceptual Framework

Conceptual framework in this study is based on Bloom's (1982) model of evaluation because of its suitability in utilization and usage of instructional materials in the process of teaching and learning. It was useful in examining the interdependence of variables, teaching materials, teaching and learning process to students' performance as an outcome. The model consists of three items: Predictor variables, Mediating variables and Performance.



**Figure 2.1: A Model for Explaining Role of Instructional Materials in Students' Academic Performance**



According to Bloom (1982) predictor variables and mediating variables influence greatly students' performance. Figure 2.1 summarises the idea contained in the model that if the predictor variables and mediating variables were of high quality, then teaching and learning process would produce high academic performance.

Figure 2.1 show Model for Explaining Students' Performance in English Language Learning. The model examines the relationship between variables, availability and effective use of adequate and quality instructional materials in the process of teaching and learning for higher performance.

It is anticipated that if there were enough and quality instructional materials in the teaching transaction, and well utilization of those materials, they would contribute to quality teaching and students' high academic performance. It was also hoped that students would be more motivated to learn when they are exposed to quality instructional materials because their motivation would determine their success.

### **2.3.6 Summary**

This chapter presented the relevant literature for this study. The first part looked at theoretical literature. This is focused on two theories: Instructional material theories and Sociocultural theory of teaching, learning, and development. The second part presented empirical literature that revolved around the three objectives developed in chapter 1. These included: the extent to which instructional facilities affect student performance; the challenges that teachers in community secondary schools face in accessing instructional materials; and the strategies that teachers use to minimize the

challenges of attaining and using quality instructional materials. The last part presented conceptual framework that was developed by Stufflebean comprised of the context, input, process and output.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter provides a description of the methodology, which was used in this study. It includes description of the research design, sampling procedures, description of the study location, data collection procedures and data management procedures.

#### **3.2 Research Design**

Aaker et al (2002) defines a research design as the detailed blue print used to guide a research study towards its objectives. Method design, sample design and analysis design was used. Cross section studies were used during data collection. According to Saunders et al (2004) a cross sectional design allows data to be collected at a single point in time without repetitions from a sample selected to represent some large population and therefore using minimum time and resources. In this study, the design was favourable because of limited resources like time, labour (personnel) and transport.

#### **3.3 Sampling Procedure**

The study population involved all community secondary schools in Rombo district. The main target groups of sampling were the heads of schools, teachers, students and secondary district education officer. The sampling methods that were used to get the required sample included systematic random sampling and purposive sampling techniques. 2 community secondary schools from lower Rombo district were

randomly selected from the list of schools, 2 community secondary schools from upper Rombo district were also be randomly selected. 1 community secondary school was selected from the administrative town of Mkuu. To obtain the samples, the names of the schools were written on piece of papers, put in a container and then drawn randomly. Purposive sampling technique was also used to obtain the desirable population. In this case heads of schools in the selected community secondary schools and one district education officer were involved in the study. Purposive technique has been generally recommended in social science research as it focuses directly on the area intended for the study (Kothari, 2006).

### 3.3.1 Sample Size

In the study area, 5 community secondary schools were selected for data collection, and in each school, 5 teachers and 20 students filled semi-structured questionnaire. In each school, head of the school was also interviewed. One secondary district education officer was also interviewed. The population studied comprised of both sexes regardless of age, literacy levels and also included persons with disabilities who are stakeholders in education provision. The total number of respondents were 131.

**Table 3.1: Respondents' Distribution**

<b>N/S</b>	<b>Type of respondents</b>	<b>Number of respondents</b>
1.	District education officer	1
2.	Head of schools	5
3.	Teachers	25
4.	Students	100
<b>Total respondents</b>		<b>131</b>

### **3.4 Description of the Study Location**

The study involved community secondary schools which are located in Rombo district. Community secondary schools were chosen by the researcher because most community secondary schools are day schools and therefore all students live with their parents or relatives who are inhabitants of Rombo district. Like all other community secondary schools all over the country, members of the community, district council and the ministry of education and vocational training have the responsibility to ensure that these schools are provided with adequate quality instructional materials.

The study was conducted in three geographical zones in Rombo district. These areas were the lower zone which borders Kenya. This zone is characterized by being dry due to scarcity of rainfalls, and poor soil. Due to these factors agricultural production is very low and hence the inhabitants are relatively poorer compared to the other people living in Rombo district.

The second zone was the upper zone. This zone receives a lot of rainfalls and it has fertile soil, hence the inhabitants are able to actively participate in agricultural activities. Production is high and therefore people living in this zone are better off than those living in the lower zone. The third zone was the middle zone, which forms the administrative town of Mkuu. The administrative town is growing very fast due to different economic activities that are taking place such as business and some farming activities. Differences in these three zones helped the researcher to explore the nature and magnitude of limits and opportunities in community secondary

schools to acquire quality and adequate instructional facilities from these three different settings.

According to the national census of 2012 Rombo district has a population of 260,963. There are 24 wards in Rombo districts. Some of the wards have more than one community secondary school. There are 38 community secondary schools in Rombo district.

### **3.5 Data collection Procedures**

Data was collected from the sampled community secondary schools around Rombo district. A variety of methods and sources of information was used in this study as a means for cross-checking. The main data sources were from questionnaires and interview.

#### **3.5.1 Key Informant Interviews**

Knowledgeable respondents especially the heads of the schools, teachers and the district education officer were involved in the study to capture the key information on the impact of instructional materials in raising academic performance.

#### **3.5.2 Secondary Data**

Extensive review of secondary data especially previous studies or research and previous district reports on the availability of instructional materials and academic performance were conducted. Secondary data were collected through consulting different publications relevant to the study from internet and other documents from Rombo education district office.

### **3.5.3 Primary Data**

Primary data was collected from the field using various instruments.

## **3.6 Instrumentation**

Research instrument is a survey, questionnaire, test, scale, rating, or tool designed to measure the variable(s), characteristic(s), or information of interest, often a behavioural or psychological characteristic. In this research, questionnaire, and Interview checklist were used.

### **3.6.1 Questionnaire**

The study involved the use of questionnaire with both open ended and close ended questions. Data was collected from all respondents forming the necessary study population. Pre-testing was done involving 05 respondents in the study area. Self administered questionnaire was used where by the respondent was required to read and answer the questions given, while at a given condition i.e. inability to read, the researcher would ask a respondent a series of questions.

### **3.6.2 Interview Checklist/Guide**

An interview is a conversation between two people (the interviewer and the interviewee) where questions are posed by an interviewer to obtain information from the interviewee to get more information concerning the particular study (Rampur, 2010). In this study the interview guide was constructed to capture supplementary information and for triangulating information that was obtained from respondents. In this case heads of schools and one education officer from the district were picked to be involved in the study.

### **3.7 Data Analysis and Presentation**

Data was verified, compiled, coded and summarized prior to analysis. Univariate analysis was used to determine the distributions and magnitude of individual variables among respondents which included percentages and frequencies. Percentages under multiple responses were established in open ended questions to describe various issues on the subject matter. The Statistical Package for Social Science (SPSS) computer program was used. Descriptive statistics (including percentages, frequencies, figures etc) were determined where the implication of its results would lead to recommendation.

### **3.8 Ethical Issues**

Prior to the research conducting, a researcher asked for permission from the supervisor for an introductory letter to acknowledge the administrators of the selected respondents, where the study was conducted. All participants were ensured by the researcher that their identity would not be revealed in order to strengthen their confidence. The researcher asked for informed consent from respondents and respected their right. The researcher abode to research conduct and ensured that there was no negative effect to respondents. Also cultural differences and gender aspects were considered.

### **3.9 Reliability of Research Instruments**

Reliability is the extent to which a measurement instrument or procedure yields the same results on repeated trials (Carmines, 1979). Therefore in this study the developed tools for data collection, questionnaires and interview guides were



checked if they were able to produce expected results across schools. The use of different tools to the respondents helped to triangulate the truthiness of data.

### **3.10 Validity of Research Instruments**

Validity is the ability of the research tools to measure what is required to measure. A measurement procedure cannot be valid unless it is reliable. Without reliability and validity it would be very difficult to decide which research should be trusted and which should be completely disregarded (Mattick,1998). In order to check for validity the tools for this research were piloted to see if they collected data and measure what was expected.

### **3.11 Summary**

This chapter included among others the research design, description of the study area, population and sampling procedures, data collection procedure and tools, data analysis, ethical considerations, validity and reliability of data.

## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSION

#### 4.1 Introduction

This chapter presents and discusses findings from the field. The first part discusses the background information of the respondents, the second part discusses findings on the views of teachers and students on the extent to which instructional facilities affect students performance, the third part discusses findings on the challenges facing teachers in community secondary schools in accessing instructional materials and the last part of this chapter discusses findings on the strategies that teachers used to minimize the challenges of attaining and using quality instructional materials.

#### 4.2 Demographic Characteristics

This section describes the general background information about the categories of respondents, students, teachers, head of schools and district education officer.

**Table 4.1: Summary of Information of Respondents**

<b>Participants</b>	<b>Expected Number</b>	<b>Actual Number</b>	<b>Percentages</b>
Students	100	100	100%
Teachers	25	25	100%
Head of School	5	5	100%
District Education officer	1	1	100%

Source: Field Data, 2016

Table 4.1 indicates that all 100 questionnaires for students who were sampled to participate in the study were returned to the researcher, which makes 100% of the expected respondents from students. 100% of the expected teachers managed to fill

and return the questionnaire to the researcher. The research managed to interview 5 heads of schools and 1 district education officer as expected. This implies that 100% of the expected number of respondents which is 131 participated in the study.

#### 4.2.1 Students Demographic Information

The students demographic information comprises of sex and their form (class of study). The information is summarized in Table 4.2.

**Table 4.2: Demographic Information for Students (n= 100)**

Sex		Class				Total
		Form 1	Form 2	Form 3	Form 4	
Male	Frequency	12	11	11	10	44
	% of Total	12%	11%	11%	10%	44%
Female	Frequency	13	14	14	15	56
	% of Total	13%	14%	14%	15%	56%
Total	Frequency	25	25	25	25	100
	% of Total	25%	25%	25%	25%	100%

Source: Field Data, (2016)

Table 4.2 shows that out of 100 students participated in the study 56% were female and 44% were males. However for each class(form) the respondents were 25%. Equal proportion of respondents were done in order to get the opinions on the effectiveness of the instructional materials across classes irrespective of gender. Gender presentation by classes was almost considered.

#### 4.2.2 Teachers Demographic Information

Demographic characteristics of the teachers who took part in the study were also determined. These characteristics included; gender, academic qualifications and working experiences. The responses were summarized and recorded in Table 4.3.

**Table 4.3: Demographic Information of the Teachers; Gender (n= 25)**

School	Gender		Total
	Male	Female	
Kelamfua Secondary Frequency	2	3	5
Olele Secondary Frequency	4	1	5
Mraokerio Secondary Frequency	3	2	5
Umarini Secondary Frequency	2	3	5
Bustani Secondary Frequency	3	2	5
Total Frequency	14	11	25

Source: Field Data, 2016

Table 4.3 shows that each school had a total number of 5 respondents which is 20% of all teacher respondents. In each school the researcher thought of gender representation in order to get information across gender among teachers in the selected schools.

**Table 4.4: Demographic Information of the Teachers; Academic Qualifications**  
(n= 25)

<b>Qualification</b>	<b>Frequency</b>	<b>Percent</b>
Diploma	12	48.0
Degree	12	48.0
Masters	1	4.0
<b>Total</b>	<b>25</b>	<b>100.0</b>

Source: Field Data, (2016)

Table 4.4 shows the academic qualification of the teachers in the study area. The findings indicate that the qualification is too high. 48% have diploma, 48% have degree and 4% have a master degree. In the teaching professional the teachers in the study area have the required amount of education for teaching in secondary schools.

**Table 4.5: Demographic Information of the Teachers; Working Experiences**  
(n= 25)

<b>Working Experience</b>	<b>Frequency</b>	<b>Percentage</b>
Below 10 years	23	92.0
Between 10 – 20 years	2	8.0
<b>Total</b>	<b>25</b>	<b>100.00</b>

Source: Field Data, (2016)

Table 4.5 indicates that many teachers in the study area are relatively new employed staff of less than 10 years in the teaching profession. 23% of the teacher respondent pointed out that they had less than 10 years in the teaching. This is due to the fact that many teachers were employed during the establishment of community secondary schools at the time of implementation of Secondary Education Development Programme (SEDP).

#### **4.2.3 Head of Schools Demographic Information**

The demographic characteristics of heads of schools involved in the study were also established. 5 heads of schools were involved in a face-to-face interview with the researcher.

#### **4.2.4 District Education Officer Demographic Information**

The researcher also conducted an interview with the Rombo district education officer for secondary schools.

### **4.3 The Views of Teachers and Students on the Extent to which Instructional Materials Affect Student Performance**

The first objective sought to solicit information from the teachers on their views about the extent to which instructional facilities affect student performance. Three questions were used to solicit information for this objective. First the research wanted to establish types of instructional materials normally available and used in secondary schools, and second the perception and opinions on their effectiveness in on students' performance. Questionnaire was used to collect information from 25 teachers and 100 students. The following are the responses.

### 4.3.1 Common Instructional Materials Used in the Study Area

The common instructional materials used by teachers in the study area are summarized in Table 4.6.

**Table 4. 6: Common Instructional Materials Used in the Study Area According to Students' Responses**

<b>Instructional Material</b>	<b>Frequency</b>	<b>Percent</b>
Models	11	11.0
Posters	39	39.0
Laptops	2	2.0
Maps	26	26.0
Past papers	22	22.0
Total	100	100.0

Source: Field Data, (2016)

Table 4.6 shows that 11% of students described that models were used by the teachers, 39% pointed out that posters were used, 2% indicated that teachers used laptops, 26% affirmed that maps were used by the teachers and 22% noted that past papers were used as instructional materials.

From the responses, it is clear that posters, maps and past papers were the most common instructional materials used in secondary schools. When one looks critically on these materials, they are ready made and the teachers are not required to develop them, nor buy them individually. Normally these materials are purchased by the

schools. This may lead us into believing that teachers in community secondary schools do not bother to develop or create their own instructional materials, nor do they bother to ask their students to make them. The second question wanted to find out the types of the instructional materials and their level of importance in teaching and learning. The responses are presented in the Table 4.7.

**Table 4.7: Types of the Instructional Materials and Levels of Importance**

<b>Instructional Material</b>	<b>Very Important</b>	<b>Important</b>	<b>Not Important</b>	<b>Total</b>
Use of E-learning	23(92%)	1(4%)	1(4%)	25(100%)
Use of Posters, Charts and Diagrams	21(84%)	4(16%)	0	25(100%)
Use of Instructional Manuals	17(68%)	8(32%)	0	25(100%)

Source: Field Data, (2016)

The findings show that in the study area 92% of the teacher responded affirm E-learning instructional materials were very important, 84% of teachers agreed that the use of posters, charts and diagrams in teaching were very important for students learning and 68% of the teacher respondents noted that the use of Instructional manuals for teaching is very important. It was interesting to find that, all the teachers agreed that posters, charts, diagrams and instructional manuals were important, but one teacher indicated that e-learning was not important. Although this was a minority, it is worth thinking on why this response came about. One could only speculate that, may be the respondent was e-learning challenged and he or she did not consider e-learning as important in teaching and learning.



However when they were asked whether the materials used in class are commercial or improvised locally; 76% pointed out that most of the materials are commercially based and 24% are locally made by the teachers (Table 4.8).

**Table 4.8: Shows Nature of Instructional Materials Used in the Study Area**

<b>Nature of Instructional materials Used</b>	<b>Frequency</b>	<b>Percent</b>
Commercial Based	19	76.0
Locally Made	06	24.0
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Field Data, (2016)

The findings indicate that there was very minimal use of improvised materials by the teachers which suggests creativity on improvisation of locally made materials by the teachers was low.

#### **4.3.2 Opinions on the Effectiveness of Instructional Materials for Students**

##### **Performance**

The researcher wanted to explore the views of teachers and students on the extent to which instructional facilities affect student performance. This question had a goal to determine the reasons why the teachers used instructional materials in teaching. The findings are summarized in Table 4.9.

**Table 4.9: Reasons that Instructional Materials Help in learning in the Study Area**

<b>Reason for Using Instructional Materials</b>	<b>Frequency</b>	<b>Percent</b>
To pass examinations	17	17.0
To Improve Knowledge and skills	83	83.0
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Field Data, (2016)

On whether the instructional materials used by teachers help students in the learning process; 17% of students pointed out that the materials help them to pass examination and 83% of students respondents pointed out that the materials help them in improving knowledge and skills. This response is in line with the literature where scholars (see for example, Adeogun, 2001 and Adeogun (2001) assert that there is a very strong positive significant relationship between instructional resources and academic performance.

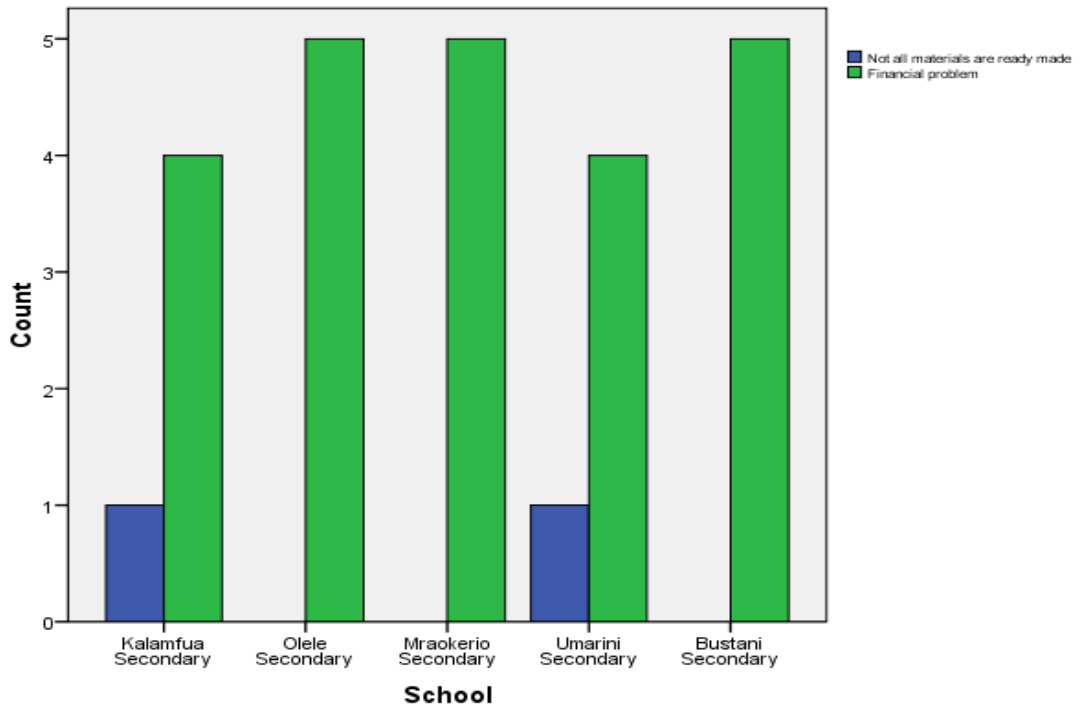
As Adeogun suggested, schools endowed with more resources performed better than schools that are less endowed. The respondents in this study are in agreement with the literature. This is corroborated by the study by Babayomi (1999) that private schools performed better than public schools because of the availability and adequacy of teaching and learning resources.

#### **4.4 The Challenges Facing Teachers and Students in Community Secondary Schools in Accessing and using Instructional Materials**

The study aimed at finding out challenges facing teachers and students in secondary schools in accessing and using instructional materials. The goal was to determine whether the challenge emanated from the schools or from the inability of teachers to develop the instructional materials.

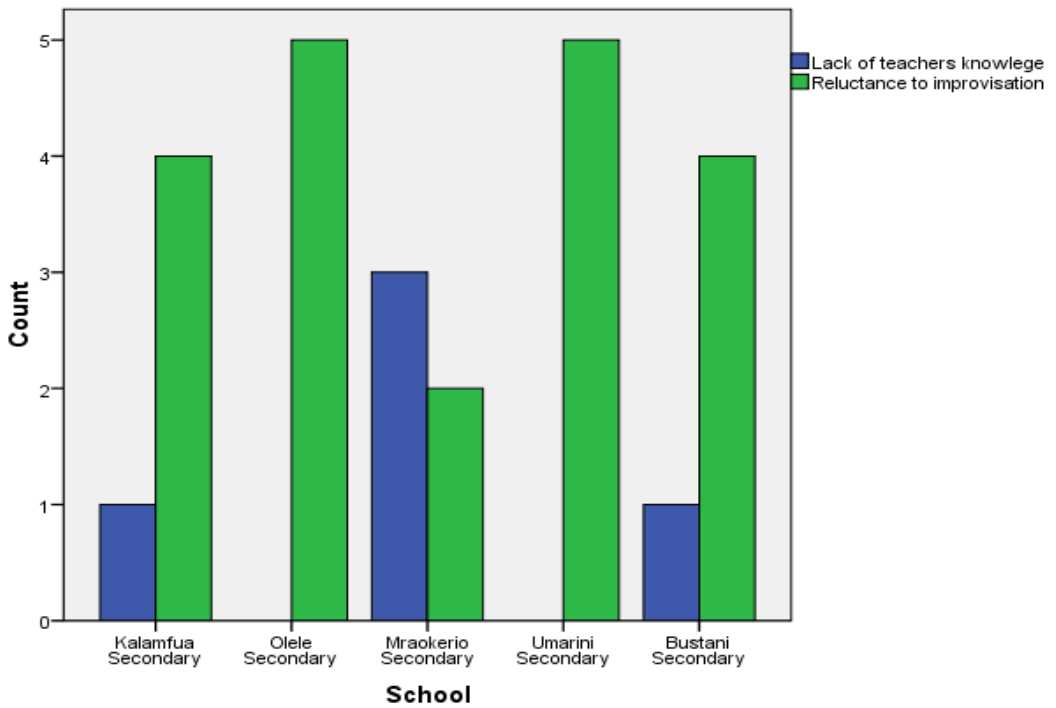
##### **4.41 Challenges Facing Teachers in Accessing Instructional Materials**

The researcher thought to investigate on the challenges that teachers face in accessing instructional materials. The results are summarized in Figure 4.1 and Figure 4.2.



**Figure 4.1: Shows the Challenges for Accessing Commercial based Materials**

Source: Field Data, (2016)



**Figure 4.2: Shows the Challenges for Accessing Locally Made Materials**

Source: Field Data, (2016)

Figure 4.1 shows that 92% of the teachers are facing financial problem to access commercial based instructional materials and 2% faced by the challenge that not all the materials that they need for teaching are ready made and found in shops.

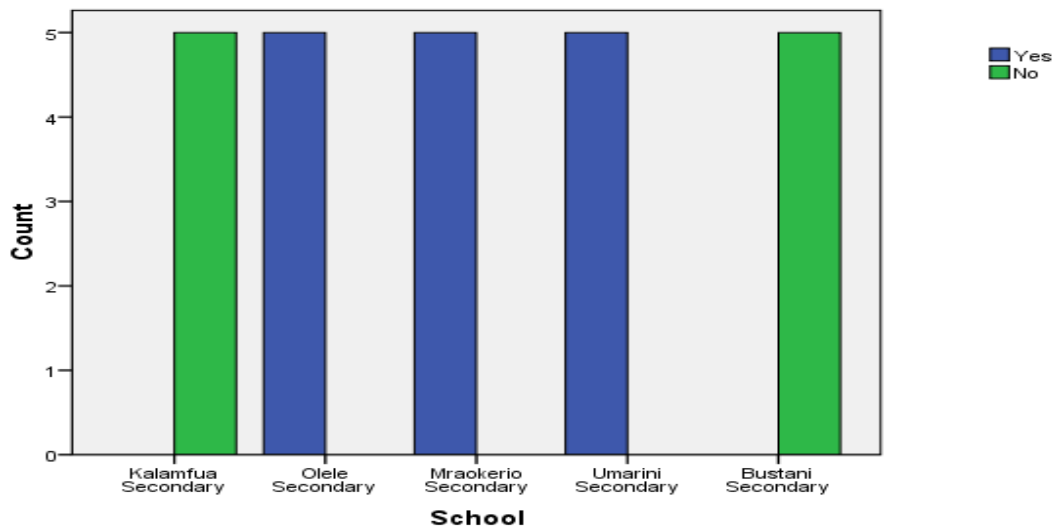
Figure 4.2 shows that 80% of the teachers don't want to improvise local materials for teaching and only 20% of the teachers affirm that the access to locally based materials is hindered due to lack of knowledge of preparing them among teachers.

The results from interview from heads of schools indicated that many teachers had qualifications and the required professionalism in the teaching. The only problem that teachers had was motivation to effectively execute their professionalism which include developing instructional materials.

The results concur with the findings by Onche 2014; He pointed out that, lack of using instructional materials in secondary schools was very much related to insufficient skills and creativity among the teachers. These, Onche opined, may hinder teachers from improvising their own instructional materials.

### **4.3.2 Challenges Facing Teachers in Using Instructional Materials**

Most of the teachers affirm that schools do not have libraries where instructional materials could be found. The findings show that 60% of the teacher respondents pointed out that their schools do not have a library and 40% pointed out that their schools have library. The findings on whether a school has library across schools is shown in Figure 4.3



**Figure 4.3: Shows the Schools with Library Across Schools in the Study Area**

Source: Field Data, (2016)

#### **4.5 The Strategies that Teachers use to Minimize the Challenges of Attaining and Using Quality Instructional Materials**

The third objective aimed at assessing the strategies that teachers use to minimize the challenges of attaining and using quality instructional materials. The question was: What are the strategies that the teachers use to minimize the challenges in obtaining instructional materials? 25 teachers responded to this question and the results are summarized in Table 4.10.

**Table 4.10: Shows the Strategies Used to Minimize the Challenges in Attaining and Using Instructional Materials**

Strategies Used by Teachers	Frequency	Percent
Borrowing books from nearby schools	10	40
Buying own books	9	36
Improvisation	6	24
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Field Data, (2016)

The findings show that 40% of the teachers borrowed books to minimize challenges in learning, 36% used their own money to buy books and 24% used improvisation to minimize the challenges in teaching and learning.

These findings are totally incongruent with those in the literature. While the teachers in Rombo rely on borrowing books, buying their own books, the literature suggests improvisation of instructional materials (Eshiet, 1996); creation of improvised media of low technological materials and the use of resource-centred learning (Abodelraheem & Al-Rabane, 2005 and Udosen, 2011); and the use of technologies like simulation devices (Ibe-Basse, 2012).

General findings in the study area show that the use of internet and LCT is not realized. The possibility of teachers and students to interact with online learning resources for improvement and replenishing of the existing knowledge is ignored. This may in other way cause problem of lagging behind and become outdated in terms of dynamic changes in knowledge.

#### **4.6 Summary**

This chapter presented the data on the views of teachers and students on the extent to which instructional facilities affect students' performance; the challenges that teachers in community secondary schools face in accessing instructional materials; and the strategies that teachers use to minimize the challenges of attaining and using quality instructional materials. On the first objective, key findings indicate that instructional materials are essential for good academic performance (refer to table

4.9). Schools which do not have adequate instructional materials are likely to perform poorly.

On the second objective, the data show that some of the challenges teachers in community secondary schools face in accessing instructional materials include lack of school libraries, lack of sufficient textbooks, and lack of reliable internet connections.

Lastly, the data for objective three shows that teachers use a variety of strategies to minimize the challenges mentioned above. These include borrowing of books, use of capitation funds to purchase essential textbooks and through the use of instructional materials developed by teachers such as posters and models.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This section presents the summary of the study, conclusion and the recommendations of the study.

#### **5.2 Summary**

The objective of the study was to examine the extent to which the selected community secondary schools in Rombo district utilize quality and adequate instructional materials in classrooms. The researcher reviewed related literatures on the role of instructional materials for academic performance and established that there was limited research on the same locality. The limited research on this motivated the researcher to carry out this study.

The study used cross sectional survey design since the area under the study has been extended and the entire population could not be covered on individual basis. The survey design employed enabled the researcher to be able to generalize the characteristics of the entire population because of its sample. The target population included District Education Officer, Head of Schools, Teachers and Students in Rombo District.

The study used both probability and non-probability sampling methods. The probability sampling was used to select students and teachers in selected schools where simple random sampling was used. Convenient non probability sampling was



used to select the District education officer as well as the Heads of Schools because they were the only representatives basing on their status.

The instruments which were used to collect data in this study included questionnaires and interview. Questionnaires were used to collect data from students and teachers while interview was used to collect data from District Education Officer and Heads of Schools. The collected data were coded and analysed and the results were presented in condensed form in terms of tables and figures.

The findings for the research questions of this study are as follows:

The first objective of this study was to explore the extent to which instructional materials affect students' performance. The findings revealed that teachers consider instructional materials as key to academic performance. This implies that the Schools with inadequacy of instructional materials and instructors are likely to perform low where as schools with adequate instructional materials and instructors are likely to perform high.

The second objective was to examine the challenges that teachers in community secondary schools face in accessing instructional materials. The findings show that schools are faced with different problems to include among others; Lack of school library, lack of books and lack of reliable internet connection. This implies that many schools perform low. In order to raise academic performance in these schools teachers need to be creative in preparing relevant instructional materials and be dedicated to improvisation. However in a situation where there is no even a single

book, a teacher should buy some working tools including books otherwise she/he will be abusing the profession.

The third objective was to assess the strategies that teachers use to minimize the challenges of attaining and using quality instructional materials; The findings show that in schools that have no libraries teachers borrow books from nearby schools, some buy their own books, the heads of schools also use portion of capitation funds to purchase books that they keep in cupboard for teachers and students to borrow though they are not enough. Another strategy that is used is improvisation, in which few teachers develop and use instructional materials such as posters and models. This implies that teachers in the study area are not comfortable with the working environment due to lack of working tools, a situation which may demotivate them to dedicate themselves to work.

### **5.3 Conclusion**

From the study findings it is apparent that many schools in the study area do not use appropriate instructional materials. They do not have instructional materials that the schools need to buy, nor do they improvise their own. Although all the teachers agree that instructional materials are important in contributing to students' academic performance, they do not show a need to have these materials in their classrooms.

This implies that, although the teachers have the knowledge about the importance of instructional materials, they are not inclined to develop them. This may have many reasons. One could guess that teachers do not care whether the students perform or not, and this from the management point of view, may emanate from low morale and

motivation towards their teaching. Another explanation may be, poor supervision from their heads of schools. Normally, heads of schools are supposed to be instructional supervisors, to ensure that instructions are going on and students are provided with quality education coupled with quality instructional resources. Lack of supervision may be the reason for the situation found by this study.

#### **5.4 Recommendations**

Basing on the findings from this study the following are the recommendations;

The government should strive and set aside a reasonable amount of education budget which will be directed to improve and construct libraries in schools like what it did to promote laboratories in schools. The heads of schools should rise their voice to be heard by parents as well as the government on the importance of improving and promoting good instructional materials in community schools and that success or failure of a student will not only depend on the content that the students receive in class as well as access to materials for further review by his or her own.

The parents should not sit down and wait for the government to effect on the availability of libraries and other valid learning materials and facilities in schools. The parents should consider the problems of lacking facilities as a challenge that needs to be redressed by them. So the study urges parents to effectively participate physically and financially where possible for the development of the schools.

#### **5.5 Recommendations for Further Studies**

The study investigated on the role of instructional materials in improving student's performance to include among others accessibility to these materials in schools. But

for the materials to be effective depends on how the material is used. This study did not cover the aspect of how teachers and students use instructional materials for effective teaching and learning process.

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### Importance of instructional resources in students' learning

8. How important are the following instructional resources in students' learning in your school?

Instructional resource	Very important	Important	Not important	Never important
Textbooks				
Worksheets				
Computer software for reading instruction (e.g., CD, DVD)				
Reading material on the Internet (Web pages)				
Instructions or manuals about how things work				
Charts, diagrams, graphs, Posters				

### Accessibility of Instructional Materials

9. What type of instructional materials you often use?

1. Commercial based  2. Locally made

10. What Challenges do you get in accessing;

(a) Commercial based material

1.....

2.....

(b) Locally made material

1.....

2.....

**Strategies to minimize the challenges of attaining quality instructional materials**

11. Do you have internet access in school 1. **Yes**  2. **No**

12. If Yes how do you use internet for the following activities?

<b>Activity</b>	<b>Very often</b>	<b>Often</b>	<b>Never</b>
Look up information on the Internet			
Use instructional software to develop reading skills			
Use the computer to write stories or other texts			

13. Do you have a school library 1. **Yes**  2. **No**

14. If Yes, about how many books with different titles that fits your subject are in the library?

\_\_\_\_\_different titles of books

Write in a number.

15. How often do you give the students in your class time to use the school library?

1. Every day or almost every day
2. Once or twice a week
3. Once or twice a month
4. Never or almost never

16. How much emphasis do you place on the following sources to monitor students' performance?

Sources	Major emphasis	Some Emphasis	Little emphasis
Diagnostic reading tests (including miscue analysis)			
Classroom tests (for example, teacher-made or textbook tests)			
National or regional achievement tests			

17. How much do you agree with the following statements? (circle where appropriate)

1. I am satisfied with the availability of instructional resources **1. Agree a lot 2. Agree 3. Disagree**



2. I am satisfied with how instructional resources are used    **1. Agree a lot 2. Agree 3. Disagree**
3. I am convinced that proper use of instructional resources rise performance  
**1. Agree a lot 2. Agree 3. Disagree**

**Thank you**

## Appendix 2: Questionnaire for Students

1. Sex 1. Male  2. Female

2. Class 1. Form 1 ( ) 2. Form 2 ( ) 3. Form 3 ( ) 4. Form 4 ( )

5. Form 5 ( ) 6. Form 6 ( )

3. How Often do you go to the library?

1. **Very often**  2. **Often**  3. **Never**

4. Do you have internet access in your school? 1. **Yes**  2. **No**

5. If you have access which site are very important for you?

1. Facebook  2. Instagram  3. Whatsapp  4. E-learning sites

6. How many times Have you visited the web site for e-learning materials?

1. Every day or almost every day

2. Once or twice a week

3. Once or twice a month

4. Never or almost never

7. How often do you use textbooks?

1. Every day or almost every day

2. Once or twice a week

3. Once or twice a month

4. Never or almost never

8. How many students share a text book in your class?

1. Two  2. Between 2 and 5  3. More than 5

9. What materials do teachers use in the class apart from textbooks?

1 .....

2 .....

3 .....

10. Do you think those materials help you in the learning progress? 1. Yes  2.

No

If Yes, Explain.....

.....

.....

.....

11. Are you given chance to prepare materials for learning? e.g. Posters

1. Yes  2. No

12. What challenges do you face in understanding teachers materials?

1 .....

2 .....

3 .....

13. How do you overcome the challenges?

1 .....

2 .....

3 .....

**Thank you**

### **Appendix 3: Interview for Head of Schools**

1. Has your school developed instructional activities or learning materials to address the curriculum taught in your school?
  
2. Is your school's capacity to provide instruction affected by a shortage or inadequacy of any of the following?
  - a) Instructional materials (e.g., textbooks) .....
  - b) Budget for supplies (e.g., paper, pencils) .....
  - c) School buildings and grounds .....
  - d) Heating/cooling and lighting systems .....
  - e) Instructional space (e.g., classrooms) .....
  - f) Special equipment for handicapped students .....
  - g) Computer software for instruction .....
  - h) Calculators for instruction .....
  - i) Library materials relevant to instruction .....
  - j) Audio-visual resources for instruction.....
  - k) Science laboratory equipment and materials .....
  - l) Teachers qualified to teach .....
  
3. What challenges do you get in developing instructional materials in your school?
  
4. How do you manage to overcome these challenges you mentioned?
  
5. How does the capacity to provide instruction materials affect student performance in your school?

**Thank you**

#### **Appendix 4: Interview for District Educational Officer**

1. Has your office developed instructional activities or learning materials to address the curriculum taught in your schools in the district?
2. Is your school's capacity to provide instruction in the district affected by a shortage or inadequacy of any of the following?
  - a) Instructional materials (e.g., textbooks) .....
  - b) Budget for supplies (e.g., paper, pencils) .....
  - c) School buildings and grounds .....
  - d) Heating/cooling and lighting systems .....
  - e) Instructional space (e.g., classrooms) .....
  - f) Special equipment for handicapped students .....
  - g) Computer software for instruction .....
  - h) Calculators for instruction .....
  - i) Library materials relevant to instruction .....
  - j) Audio-visual resources for instruction.....
  - k) Science laboratory equipment and materials .....
  - l) Teachers qualified to teach .....
3. How do you manage to overcome some of the challenges mentioned above?
4. In your view, does the capacity to provide instructions affect student performance in your district? (Probe if the answer is either Yes or No especially Why?)

**Thank you**



