

**A STUDY OF FACTORS AFFECTING PROVISION OF QUALITY
EDUCATION IN COMMUNITY SECONDARY SCHOOLS IN ARUSHA
DISTRICT COUNCIL TANZANIA**

BY

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OCTOBER, 2017

DECLARATION

DECLARATION BY THE CANDIDATE

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ABSTRACT

Since 2001, the Tanzanian Government has taken many initiatives to reform its Primary and Secondary school Education sectors. These reforms include implementation of PEDP (2002 -2006) & SEDP from 2004. The strategies were to combat ignorance, disease and poverty in line with the National Vision 2025. Despite these initiatives, the status of Secondary School Education had not been stable which had led to low academic achievement in National Form Four Examinations results. The purpose of this study was to analyse factors affecting the provision of quality education in community secondary schools in Arusha District, Tanzania. Despite the government initiatives, the achievement in Certificate of Secondary School Education Examination (CSEE) has been declining especially in the community secondary schools. The study Objectives was based on the following: to find out the staffing status, to establish the adequacy of instructional materials, the role of English as a language of instruction and to assess the adequacy of physical facilities in community secondary schools. The study employed Pragmatic paradigm. The study followed descriptive survey design and was undertaken in Arusha District Council Tanzania. The study was carried out in 26 out of 41 Community Secondary Schools in Arusha District Council. Simple random and purposive sampling was used to select a sample size of 318 respondents. The target population of the study was 26 heads of schools, One District Education Officer and 1049 teachers in community secondary schools. Context, Input, Process and Product (CIPP) Model by Stufflebeam cited in Frye and Hemmer guided the study. A pilot study of 51 teachers from community secondary schools in neighbouring Region was done. Data collection was done through closed and open ended questionnaire and semi-structured interview. Descriptive statistics in terms of frequencies, mean scores, percentages and standard deviations was used to analyze quantitative data. Qualitative data was analysed using themes emerging from the interviews. The study established that inadequate teachers, instructional materials, limited competence in English as a language of instruction, inadequate of essential physical facilities are determinants for low academic achievement among students in Community Secondary Schools in Arusha District Council, Tanzania. In order to increase students' academic achievement, it is recommended that, the government of Tanzania employ enough teachers in all secondary schools to make the variation of teacher-student ratio low. The Government of Tanzania should also come up with a policy on provision of textbooks and other instructional materials in secondary schools.

DEDICATION

This study is dedicated to almighty God for his providence. To my dear husband Eliphas

Richard Mollel, My children: Vivian Eliphas Mollel, Ebenezer Eliphas Mollel and Jedidiah

Eliphas Mollel for their patience.

I also dedicate this study to my late Mother Tikisande Shuma, who inspired in me the gift

of endurance.

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ABBREVIATIONS/ ACRONYMS

ADEA	Association for the Development of Education in Africa
AED	Academy for Education Development
BEST	Basic Education Statistics of Tanzania
BRNEd	Big Results Now in Education
CSEE	Certificate of Secondary Education Examination
EFA	Education for All
ESDP	Education Sector Development Program
ETP	Education Training Policy
LOI	Language of Instruction
MDG	Millennium Development Goals
NECTA	National Examinations Council of Tanzania
NGO	Non-Governmental Organization
NSGRP	National Strategy for Growth and Reduction of Poverty
PRT	Pupil –Teacher Ratio
SEDP	Secondary Education Development Plan
STR	Student Teacher Ratio
SEMP	Secondary Education Master Plan
TCU	Tanzania Commission for Universities
TIE	Tanzania Institute of Education
TTC	Teacher Training Colleges
UNESCO	United Nations Educational, Scientific and Cultural Organization
URT	United Republic of Tanzania
USAID	United States Agency International Development
DEO	District Education Officer
KCSE	Kenya Certificate of Secondary Examination

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter addresses the key issues that lay the foundation to the study. These include Background to the Study, Statement of the problem, Objectives of the Study, purpose of the Study, Significance of the Study, Scope and limitations of the Study as well as definition of the key terms and concepts as used in the Study.

1.2 Background to the Study

Secondary Education is widely believed to provide the optimum setting to prepare especially adolescents, for healthy and productive adult lives. This entails participation in social, political, and economic spheres. In addition, for countries like Tanzania to compete in the global economy, a significant number of their citizens need a secondary education in order to acquire the specific skills and aptitudes necessary for an increasingly technology driven market place (Jacob and Lehner, 2011). Currently, global access to Secondary Education is growing at an increasing pace (UNESCO, 2008, 2010).

In the mid-1990s, the Millennium Development Goals (MDGs) and the Education For All (EFA) initiatives had driven an education reform agenda predominantly focused on improving access to Primary Education in developing countries like Tanzania. In more recent years, proponents of post-basic education have gained a voice and wider access to good Secondary Education as being increasingly recognized as a critical element in achieving the goals of human development, political stability, and economic competitiveness (Acedo, 2002; Alvarez et al, 2003; Holsinger and Cowell, 2000; King et al, 2007; Lewin and Caillods, 2001; Lewin 2005, 2007, 2008;

UNESCO, 2001, 2008; World Bank, 2005, 2007). As an intermediary step between Primary and Tertiary Education, Secondary Education serves as a preparatory phase for youth before they enter the workplace, helping to equip a largely adolescent population with the skills, aptitudes, and social values for a productive and healthy adult life (Jacob and Lehner, 2011).

In Tanzania, Secondary Education occupies a pivotal role in the functioning of the economy and the education system itself. Experience shows that, the majority of the people in both the private and public sectors are expected to be secondary education leavers. The whole Primary Education system relies on teachers who are a product of the Secondary Education system. Candidates of higher and Tertiary education and Training are products of the Secondary Education system. This is the essence of being pivotal (URT, 2010).

Since 2001, the Tanzanian Government has taken many initiatives to reform its Primary and Secondary school Education sectors to achieve its pivotal role in education. These reforms include implementation of Primary Education Development Program (PEDP) from 2002 to 2006 and Secondary Education Development Plan (SEDP) starting in 2004 all focusing in the Tanzania development strategies on combating ignorance, disease and poverty in line with the National Vision 2025 (Sumra and Rajani, 2006). The PEDP 2002-2006 raised the enrolment rate in Primary education from 59 per cent in 2000 to 97 per cent in 2007 (World Bank, 2008). This created a social demand for and even an expectation of transition to secondary education (UNESCO, 2007, Wedgwood, 2007).

In 2004, the Government of Tanzania launched its Secondary Education Development Plan (SEDP) aiming significantly to reform the Secondary Education system throughout the country. SEDP was formulated in line with the development of ward/Community based Secondary schools. The goal was to ensure more access and equity in participation across geographical, gender, disadvantaged group, and the marginalized among the community. Such a critical plan was to curb the substantial increased number of pupils enrolled in Primary schools, thereby creating an upward demand for increased access to Secondary Education (Kambuga, 2013). In 2005, nearly 124,884 students were enrolled in Forms 1-6 and 1,602,752 in 2012. By any measure, these are large enrolment increases over a short period of time (BEST, 2013).

Table 1.1: Academic Performance in Certificate of Secondary Education Examinations (CSEE) 2008-2012

Year	Division (in %)				4	% Pass	% Fail	Candidature
	1	2	3	Totals 1-3				
2008	3.5	6.4	16.8	26.7	56.9	83.6	16.3	163,855
2009	1.9	4.4	11.6	17.9	54.7	72.5	27.5	248,336
2010	1.5	2.8	7.1	11.4	38.9	50.4	49.6	352,840
2011	1.1	2.4	6.5	10.0	43.6	53.6	46.4	339,330
2012	0.9	2.8	5.9	9.5	33.5	43.1	56.9	397,222

Source: Basic Education Statistics of Tanzania (BEST, 2013).

Despite the Tanzanian government initiatives, since 2001 the status of Secondary School Education has not been stable which has led to low academic achievement in National Form Four Examinations results. For example, the proportion of students passing with Divisions 1, 2 and 3 has been declining since 2008 and reached its critical point in 2012 as can be evidenced in Table 1.1 (BEST, 2013).

In Table 1.1, the proportion of students passing with divisions 1, 2 and 3 has been declining since 2008; those with Division 4 and failures have increased tremendously and reached a critical point in 2012. However, the analysis of the CSEE results shows that performance varies according to the type of school. A survey conducted by Hakielimu (2011) involving 36 schools in six regions of Tanzania showed that performance varies according to school type. Private schools owned by Religious organizations performing better in comparison to Government schools and private schools (that is schools owned by non-governmental organizations and individuals). This survey also showed that 33% of the students in the government centrally owned schools and 15.9% in the schools owned by non-government organizations and individuals fail the examination. Further, Hakielimu (2011) showed that 65.5% of the students in the sampled Government community-owned schools failed the 2010 CSEE. This variation implies that there could be factors contributing to low academic achievement of students in community secondary schools. Hence, it is important to find out what can be the determinants of low academic achievement in Community Secondary School students in Tanzania, so that the information can be used to influence the curriculum planners, policy makers and budgeting in education sector.

In the light of the above scenario this study therefore, examined the determinants of low academic achievement among community secondary school students in Arusha District, Tanzania, with specific focus on staffing status, the use of English as a language of instruction, availability and adequacy of instructional materials, and adequacy of physical facilities.

Furthermore, Laddunuri (2012) confirmed that schools have been established by the citizens in every ward but there are insufficient staffing numbers. In some schools,

there are no teachers at all, so the problem has worsened day by day particularly in rural area.

However, in Tanzania most of schools are anticipated to have shortage of instructional materials such as textbooks and reference books and physical facilities such as classrooms, desks and chairs. The language of instruction is also a problem.

In Tanzania the curriculum medium of instruction in Primary Schools is Kiswahili then abruptly it switches to English at Secondary School level. Majority of public Primary School leavers develop little confidence in English and many cannot string together a simple paragraph. Consequently, they may not be able to follow what is taught or written in English in Secondary School, and this may contribute to low academic achievement.

Also the enrolment rate to public/government Secondary Schools has increased tremendously with more students expected to join Community Secondary Schools every year. For example, enrolment of Form 1 to 4 increased from 1,293,691 in 2009 to 1,504,711 in 2013 (BEST, 2013).

While acknowledging the government initiatives in increasing access to Secondary School Education, the academic achievement of the students in Community Secondary Schools are still poor. Hence, the purpose of this study was to analyse factors affecting the provision of quality education in Community Secondary Schools in Arusha District Tanzania with specific focus on the adequacy of staffing and adequacy of instructional materials, the use of English as a language of instruction in secondary schools and adequacy of essential physical facilities.

1.3 Statement of the Problem

In recent years, students' academic achievement in the CSEE in Tanzania has been declining, especially in the Community Secondary Schools. This decline in academic achievement has raised a number of questions about what might be the reasons for this low academic achievement and how it could be addressed. For example the proportion of students passing with Divisions 1, 2 and 3 has been declining since 2008 and reached its critical point in 2012 with only 9.5 % pass of the total candidature as shown earlier. This is a worrying trend by any standards that has necessitated this study.

This significant variation in performance implies that there could be specific determinants of low academic achievement of students in Tanzania. Hence, it is important to find out what could be the factors contributing to low academic achievement among Community Secondary School students so that the information can be used to influence the curriculum planning and making policy in the education sector in community secondary schools in Tanzania.

1.4 Purpose of the Study

The purpose of this study was to analyse factors affecting the provision of quality education in Community Secondary Schools in Arusha District Council in Tanzania.

1.5 Objectives of the Study

In order to achieve the purpose of the study, the main objective of the study was to assess factors affecting provision of quality education in community secondary schools in Tanzania. The following specific objectives addressed the topic.

- i. To find out the staffing status in Community Secondary Schools in Arusha District Council, Tanzania.
- ii. To establish the adequacy of instructional materials in Community Secondary Schools in Arusha District Council, Tanzania.
- iii. To establish the use of English as a language of instruction in Community Secondary Schools in Arusha District Council, Tanzania.
- iv. To assess the adequacy of essential physical facilities in Community Secondary Schools in Arusha District Council, Tanzania.

1.6 Research Questions

The specific research questions for the study were as follows:

- i. What is the staffing status in Community Secondary Schools in Arusha District Council?
- ii. Are the instructional materials available and adequate in Community Secondary Schools in Arusha District Council Tanzania?
- iii. What is the role of English as a language of instruction in Community Secondary Schools in Arusha District Council Tanzania?
- iv. Are the essential physical facilities adequate in Community Secondary Schools in Arusha District Council Tanzania?

1.7 Justification of the Study

In the mid-1990s, the government of Tanzania initiated a number of reform programmes, including those in the education sector with the objective of improving performance of its institutions that eventually could improve the state of service delivery to the public. In the education sector, the reform program was implemented under the Education Sector Development Programme (ESDP) with the objectives of

ensuring equity in access to quality of formal education as well as improving academic achievement of student in public institutions. In the execution of the reform program, the Secondary Education Master Plan (SEMP) was introduced specifically to systematize the reform process at secondary school level (Tanzania Institute of Education (TIE), 2013). In order to realize the objectives of Secondary Education Master Plan (SEMP) of improving the education sector learning environment, then, SEDP II which was the continuation of SEDP I, was implemented between 2004 and 2009 so as to build on the national goals of secondary education provision.

The SEDP launched by the government of Tanzania in 2004 was aiming significantly to reform the secondary education system environment throughout the country. SEDP was formulated in line with the development of ward/Community based secondary schools with the overall goal of improving general learning environment.

Despite the Tanzanian government initiatives, since 2001 the status of secondary school education has not been stable. This has led to low academic achievement in National Form Four Examinations. For example, the proportion of students passing with divisions 1, 2 and 3 has been declining since 2008 and reached its critical point in 2012. In the light of the above scenario the findings from this study therefore is expected to:

- i. Provide a comprehensive analysis to policy makers in the education sector on the proposed new ways of improving academic achievement of community secondary school and how it is likely to affect the country's economy by having a big number of citizens who are not working as a result of failing in their Form four examinations.

- ii. Formulate options to mitigate such risks of low academic achievement of students in community secondary schools in Tanzania.

1.8 Significance of the Study

The findings of this study are expected to provide new knowledge about factors affecting provision of quality education in Community Secondary Schools in Arusha District Council, Tanzania. The findings of this study may be beneficial to the policy makers, educational planners and the community in general. This is because it is expected to provide possible answers to why academic achievement of the students in community secondary schools is declining.

The findings of this study are also expected to bridge the gap in the literature on the factors affecting provision of quality education in community secondary schools in Tanzania. It can further serve as secondary data for prospective researchers.

1.9 Scope of the Study

The implementation and evaluation of Secondary School Education and National Public Examination in Tanzania is uniform. This study was conducted in Community Secondary Schools of Arusha Region. It involved 257 teachers, 26 heads of school and one District Education Officer in Arusha District Council, Tanzania.

1.10 Limitations of the Study

In general, the study went well and the respondents were largely cooperative. However, as with most research, there were some limitations, but this did not in any way compromise the validity of the data collected since the researcher took necessary steps to address all the setbacks.

First of all, teacher respondents in the Community Secondary Schools were rather too busy with the mid-term examinations. Hence the researcher had to wait for teacher respondents to attend students first then to attend the researcher by filling their questionnaire. The head of schools were also too busy but the researcher managed to interview all of them. Also some of teachers did not take their time to fill out the questionnaires. While some filled them wrongly others did not fill it completely and this resulted in 32 questionnaires being poorly or inappropriately filled and these were excluded from the analysis.

Another limitation of this study is that, it was carried out in the Ordinary Level Community Secondary Schools in Arusha District Council. Hence, this may limit the ability of the researcher to generalise the findings for the country as a whole. However given that all students in Tanzania follow same curriculum the findings apply to all community secondary schools.

1.11 Assumptions of the Study

In carrying out this study, there are several assumptions that were made; these were:

- i. The government was extremely committed to providing good education in Community Secondary Schools in Tanzania.
- ii. All Community Secondary School teachers were adequately trained and are always helped to develop professional competence.
- iii. The respondents sampled for the study have the needed information and that they would be honest and willing to provide the information.
- iv. Educational stake holders would accept the findings of this study and they would work on the recommendation given.

1.12 Theoretical Framework

According to Kerlinger (1983) theories are statements that explain a particular segment of phenomena by specifying certain relationships among variables. This study was based on the Model of Curriculum Evaluation developed by Stufflebeam (1971) cited in Frye and Hemmer (2012) Context, Input, Process, and Product (CIPP) Model. The study on the factors affecting provision of quality education in Community Secondary School in Tanzania, called for an appropriate theoretical framework which would embrace the major components and combine all relevant attributes that are considered essential in relation to the study. The usefulness of the CIPP model across a variety of educational and non-educational evaluation settings has been thoroughly documented (Stufflebeam and Shinkfield, 2007).

Hence, Stufflebeam's Context, Input, Process, and Product evaluation model is a comprehensive framework for this study. Stufflebeam's model provides a means for generating valuable information to fulfil the intended objectives of this study. In this model, most of the study objectives are explained in the input evaluation aspect. Input evaluation assesses alternative means for achieving the intended goals and objectives of the program to help decision makers choose the best optimal means. It asks the question, "How should it be done?" and identifies procedural designs and educational strategies that will most likely achieve the desired results (Zhang et al, 2011). Additionally, Yahaya (2001) acknowledged that, input evaluation aspect of the Model focussed on the resources involved in helping the achievement of programme goal and objective. A CIPP model Input evaluation aspect is useful when resource allocation (e.g. staff, instructional materials, physical facilities like classrooms) is part of planning an educational program or writing an educational proposal Therefore,

Input evaluation aspect in this study was staffing status, availability and adequacy of instructional materials and adequate physical facilities.

Context evaluation aspect, assesses needs and problems in the context to help decision makers determine goals and objectives of the program, for the case of this study context refers to the situation of academic achievement in Tanzania and how the situation can be addressed to achieve the intended objective, Process evaluation aspect, it monitors the processes both to ensure that the goals of education are being implemented and to make the necessary modifications, for this study it includes the issues of English as a language of instruction as a means for the implementation of curriculum in Secondary Schools; Product evaluation, which compares actual ends with intended ends and leads to a series of recycling decisions, in this study product evaluation is the academic achievement of the students in Community Secondary Schools in Arusha District Tanzania (Glatthorn, 1987).

The effective interaction of four stages of Stufflebeam's (CIPP) Model in relation to the objectives of the study is expected to result into improved academic achievement of students in Community Secondary Schools in Arusha District Tanzania. CIPP Model has a lot that can be borrowed by the Tanzanian education system, for instance improved academic achievement of secondary school education, calls for effective interaction of the four stages of Stufflebeam's Model within the Ministry of Education and Government at large, Education administrators, planners, teachers and students need to play their role effectively so as to achieve the improved academic achievement among students in Community Secondary Schools.

1.13 Conceptual Framework

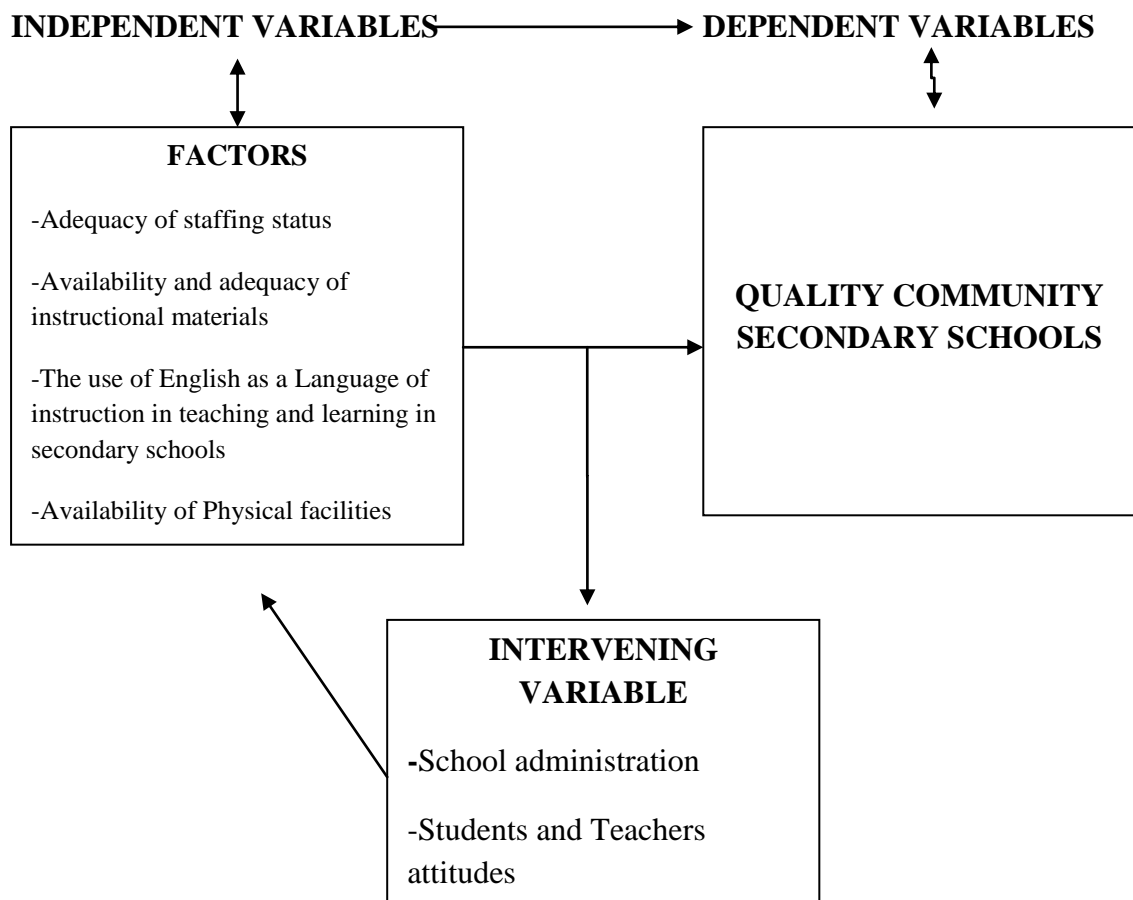


Figure 1.1: Conceptual Framework

This conceptual framework shows the interaction between independent variables and the dependent variable. The independent variables include adequacy of staffing status, availability and adequacy of instructional materials, the use of English as a language of instruction and availability of physical facilities which are to be manipulated during the study in order to analyse factors affecting provision of quality education in Community Secondary Schools. An indicator of successful implementation of Secondary School Curriculum is the positive academic achievement among secondary school students. The bottom line indicates the intervening variables such as students' and teachers attitudes and school administration will affect the academic achievement

of Community Secondary Schools. If teachers are not motivated positively, they will not be able to undertake teaching and learning process willingly, hence would result into low academic achievement. Likewise if students are not ready to learn, though every need is in place, it would not bring about improved academic achievement. The process of determining improved academic achievement in Community Secondary Schools requires that teachers to be sufficiently trained, language of instruction to be clear among teachers and students, instructional materials to be available and adequate, enough and better physical facilities, positive attitudes inculcated to teachers and students, and also educational support to be sufficiently provided will avail to teachers so that they can be able to produce desired results to the learners. The researcher therefore, set out to relate to an established body of knowledge in an attempt to seek answers to questions raised and achieve objectives set out in this study.

1.14 Definition of Terms and Concepts

Community Secondary Schools

Mlozi et al (2013) refers community secondary schools as schools built by the help of people in their localities and later handed over to the government. The government supplies the teaching staff, teaching and learning materials and overall management.

In this study Community secondary schools are those secondary schools which were built from funds raised by the relevant communities and local councils with little financial assistance from the Central Government and all are day schools. These Secondary Schools was introduced for the purpose of increasing access to secondary school education in Tanzania through Secondary Education Development Plan.

Instructional Materials

Isola (2010) referred instructional materials as objects or devices, which help the teacher to make a lesson much clearer to the learner. In this study instructional material refers to availability and adequacy of teachers' reference books, students' text-books and reference books and maps and globes that may be necessary in order to make the teaching and learning process efficient and effective.

Physical Facilities

According to Akomolafe et al (2016) physical facilities refers to the school plant, that is , the school buildings, classrooms, library, laboratories, toilet facilities, offices and other materials and infrastructures that would likely motivate students towards learning.

In this study, physical facilities refers to adequacy of classrooms, desks and chairs, laboratories and libraries in order to create an environment in which implementation of Secondary school Education can take place.

Language of Instruction

Qorro (2006) defined Language of instruction as a vehicle through which education is delivered. Qorro (2006) added that role of language of instruction can be likened to that of pipes in carrying water from one destination to another or that of copper wires in transmitting electricity from one station to another. Just as a pipe is an important medium in carrying water, and a copper wire an important medium for transmitting electricity, the language of instruction is an indispensable medium for carrying, or transmitting education from teachers to learners and among learners.

In this study the language of instruction is a language used in teaching in Community Secondary Schools in Tanzania. English is the language used for instruction in secondary schools and tertiary education in Tanzania and it is taught in primary schools as a subject.

Academic Achievement

Academic achievement or (academic) performance is the outcome of education the extent to which a student, teacher or institution has achieved their educational goals (Wikipedia).

In this study indicators of academic achievement are the Divisions obtained by candidates in their form four National Examinations with respect to the examination standard board of a country such as National Examination Council of Tanzania (NECTA).

According to URT (2012) the NECTA criteria of awarding divisions is as follows: A candidate who sits for NECTA examinations is awarded divisions 1, 2, 3, 4 or 0 on meeting the following conditions: Division One (1); passes in at least 7 subjects passes at grade A or B or C in at least five subjects. Reaches an aggregate of more than or equal to 7 points but less than or equal to 17 points, taking the best seven subjects.

Division Two (2): Passes in at least 7 subjects, passes at grade A or B or C in at least four subjects and reaches an aggregate of more than or equal to 18 points but less than or equal to 21 points, taking the candidates' best seven subjects. Division Three (3); passes in at least seven subjects one of which must be at grade A or B or C or passes in at least five subjects two of which must be at grade A or B or C. Reaches an aggregate of more than or equal to 22 points but less than or equal to 25 points, taking

the candidates' best seven subjects. Division Four (4): Passes in at least one subject at grade A, B or C, or passes in two subjects at grade D, reaches an aggregate of more than or equal to 26 points to 33 points but less than or equal to 33 points, taking the candidate's best seven subjects. Division Zero (0): does not fulfil the conditions for awards of the divisions (1-4) (URT, 2012).

Low Academic Achievement

Asikhia (2010) described low academic achievement as any performance that falls below a desired standard. For the case of this study a candidate who scores below the Divisions 1, 2 and 3 was regarded as showing low/poor academic achievement in community secondary schools.

Quality Education

In this study quality education implies that the majority of the students, if not all, are able to meet the expectation of the "Minimum Level of Learning". That is to say students are able to developing problem-solving skills, stimulating creative thinking and putting emphasis on application of knowledge.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, literature that is related to the study's subject matter was reviewed. It included text books, research reports, periodicals and studies published in journals as well as reviews and critiques of studies found in libraries and internet. They are discussed from the general to the more specific.

2.2 Global Views on Secondary School Education

Secondary school education is an important channel through which young people acquire skills that improve opportunities for good jobs. High quality secondary education that caters for the widest possible range of abilities, interests and backgrounds is vital not just to set young people on the path to the world of work, but also to give countries the educated workforce they need to compete in today's technologically driven world (UNESCO, 2012).

Jacob and Lehner (2011) assert that, secondary education is widely believed to provide the optimum setting to prepare young people, predominantly adolescents, for healthy and productive adult lives, including participation in social, political, and economic spheres. In addition, for countries to compete in the global economy, a significant number of their citizen needs a secondary education in order to acquire the specific skills and aptitudes necessary for an increasingly technology driven market place. Lower secondary school (ordinary level secondary schools for the case of Tanzania) extends and consolidates the basic skills learned in primary school; upper secondary school deepens general education and adds technical and vocational skills. Neither is possible, however, without ensuring that all children complete a good

quality secondary education as the first priority in building the skills that individual, societies and economies need (UNESCO, 2012).

Several efforts have been made for the enhancement of secondary education. The efforts have been taken concurrently with those of boosting primary education. At international level, countries have agreed to ensure that primary education is improved through increased resources. As one set of challenges is being solved through the international community's efforts to achieve primary Education for All (EFA) and the Millennium Development Goals(MDGs) which were replaced by Sustainable Development Goals (SDGs)in 2015 throughout the world. National governments and donor organizations have concentrated investments on increasing school participation at the primary level in the developing countries (Association for the Development of Education in Africa) (ADEA, 2003).

Implementation of secondary school education and the challenges facing it, seem to be international in nature. In Pakistan for example, Representatives from Ministry of Education, donors, Non-Governmental Organizations (NGOs), education researchers and teachers highlighted many problems facing secondary school education which includes teachers low levels of motivation and this was presented at the National Conference on Teacher Education held in December 2004 organized by the Academy for Education Development (AED), USAID and Ministry of Education (MoE) (King, 2013). Similarly, a UNESCO report on the 'Status of teachers in Pakistan, pointed out that non-transparent appointment practices, politicization, poor management, lack of transport and security are amongst the major problems that faced secondary schools in the country. Policy makers and other stakeholders are aware of the motivational crisis in teaching, but to date little effort has been done to take effective action to address teacher motivation and incentive needs (Khan and Ingbal 2012).

2.3 Secondary School Education in Tanzania

In Tanzania, Secondary school education occupies a pivotal role in the functioning of the economy and the education system itself. Experience shows that, the majority of the people in both the private and public sectors are expected to be secondary education leavers. The whole primary education system relies on teachers who are a product of the secondary education system (URT, 2010). Despite the importance role of secondary school education and efforts for its expansion still there are some challenges that need to be addressed. The African Development Fund (ADF) (2007) observed that, even with the significant progress in the expansion of secondary schools education in Tanzania, still academic achievement of secondary schools education have remained the main challenge. This study examined the factors affecting provision of quality education in community secondary schools in Tanzania.

2.3.1 Secondary School Education Delivery in Tanzania

Secondary Education in Tanzania consists of two tiers: The first cycle is Ordinary Level [O-Level], of four years post-primary education. The cycle follows both a core or common national curriculum and specialized optional subjects at the end of which pupils sit for nationally set examinations. It has four curriculum tracks or biases, which are Technical, Agricultural, Commercial and Home Economics. The second cycle is Advanced level, (A-level) which is a two year post O-level course during which students follow a National curriculum and at the end of which they sit for national examinations. The cycle is divided between Science and Arts' streams. It prepares students for tertiary and higher education, as well as entry into the world of work (URT, 2000).

2.3.2 Classification of Secondary Schools in Tanzania

Secondary schools in Tanzania are classified into: Government schools consisting of two categories-the traditional national schools and community built schools. The latter are schools built by local communities, but operated and managed by the government. URT (2009) defines Community/ Ward secondary schools as those schools which are built by the efforts of local communities with both cash and in-kind contributions but operate and are managed by the government and considered as government schools. Among the categories of schools in Tanzania, 'community built schools' are the most challenged (Sumra and Rajani, 2006). Furthermore, care and support for the schools from the local authorities is low due to the poverty level of the community they serve (Wedgwood, 2005). This study was interested in investigating the determinants for academic achievement in Community Secondary Schools.

Schools in Tanzania can be operated as either day or boarding schools, depending on their geographical location, catchment areas, and affordability. The majority of the community built secondary schools are day schools. In fact, the deteriorating quality of secondary school education in Tanzania to a greater extent rests with this community built schools. Definitely the outputs from community built schools are increasingly poor and are negatively affecting the quality of secondary school education in Tanzania (Jimdamva, 2012).

The transition rate from primary to secondary education in 1998 was 19.1%. This figure was very low compared to transition rates in neighboring countries. In Kenya, for instance, it was 53% while in Uganda it stands at 29%. Regional comparisons of participation rate in secondary education show that, Tanzania lags far behind her neighboring countries in gross enrolment rate. This means that the country lacks a

capacity to enroll a great many of the children from both the relevant age cohort and those outside it. For example, according to UNESCO (2005) secondary gross enrolment rates (GER) (%) for Zimbabwe was 44, Zambia 28, Kenya 26, Uganda 12, and Tanzania 5. Thus, in 2004, Tanzania Government initiated the building of community secondary schools among other measures to increase the GER from 5 to 12 percent. As observed by Mlozi et al (2013) the head count enrolment in community schools has increased in the context of scarce resources and a dire need for school infrastructure (laboratories, and library). According to these authors they argued that, the low academic achievement resulted from the parents who demand that their children attend secondary schools; and the existence of a SEDP that children can attend secondary schools even if they have to travel long distances without considering the issue of quality (academic achievement). That was why the study interested in investigating factors responsible for low academic achievement in Community secondary schools in Tanzania.

2.4 Education Sector Development Programmes in Tanzania

In the mid-1990s the government of Tanzania initiated various social sector reforms including those in the education sector. In the education sector the reform is taking place under the Education Sector Development Programme (ESDP). Among its objectives is to ensure equity in access to quality formal education. In the execution of the programme the Secondary Education Master Plan (SEMP) was developed specifically to systematize the reform process at secondary school level. SEMP is operationalized through the Secondary Education Development Programme (Tanzania Institute of Education (TIE), 2013).

2.5 Secondary School Education Development Programme (SEDP)

The Secondary Education Development Programme II (SEDP II) is a continuation of SEDP I, which was implemented between 2004 and 2009, building on the national goals of secondary education provision. It also builds on national and international reforms regarding the education sector which have taken place in the last 15 years. Some of these reforms are based on key policy documents such as the Tanzania Development Vision 2025, the National Strategy for Growth and Reduction of Poverty (NSGRP – commonly referred to by its Kiswahili acronym: MKUKUTA), the Education and Training Policy of 1995, the Education Sector Development Programme (ESDP, 2001) and the Millennium Development Goals (MDGs). Overall the objectives of SEDP I was to improve access with equity, quality, management and delivery of secondary education in Tanzania (URT, 2010). Review of SEDP I implementation has shown that the Programme was most successful in improving access and equity. The number of secondary schools has more than tripled between 2004 and 2009 to serve different underserved communities and so has the number of enrollees. Despite these successes, there have been a number of challenges: some of which are: Poor performance in secondary education examinations, Asymmetrical deployment of teachers, different schools resulting in inequalities of learning outcomes, with girls doing poorly in both participation rates and pass rates, especially in science and mathematics subjects, and community secondary schools doing consistently poorly, Insufficient infrastructure, including many construction projects that started under SEDP I, but were not completed, Lack of, or non-use of, laboratories in most schools resulting in students doing the science theoretically, and most of them doing poorly. This poor performance in science subjects has, in turn, resulted in an avoidance syndrome, with most students choosing to enrol in social

science/arts subjects, rather than natural sciences, Poor teaching approaches in the classroom, as it is teacher-centered, with students relying heavily on the teacher and old notes, and classroom time often not being used efficiently and effectively for mental engagement of the students (URT, 2010). However, this study has investigated the factors affecting provision of quality education in community secondary Schools.

2.6 Academic Achievements as per Tanzania Education and Training Policy

The indicators of academic achievement are marks scored for example: (i) 100-80% signifying **very good** (1 point) (ii) 79%-40% signifying **good** (2 points) (iii) 39%-0% signifying **poor** (3 points) grades for example the CSEE examination has a five (5) point grading scale. Grade A, B, C, D and F. Grade A indicates the highest level of achievement (1 point), Grade B indicates very good principal pass (2 points), Grade C indicates good principal pass (3points), Grade D indicates satisfactory (4 points) and F indicates failure (5 points) and divisions, the Certificate of Secondary Education is awarded in four divisions (URT, 2013). Also URT (2013) indicates that the divisions shall be computed basing on the best 7 subjects as shown below:

(i) Division I: 7 to 17 points (ii) Division II: 18 to 21 points (iii) Division III: 22 to 25 points (iv) Division IV: 26 to 34 points

2.7 Factors Affecting Provision of Quality Education

2.7.1 Quality Education

There are many definitions of quality education exist, testifying to the complexity and multifaceted nature of the concept (Adams, 1993). Rasheed (2000) acknowledged that, considerable consensus exists around the basic dimensions of quality education today: quality education involves learners who are healthy, well-nourished and ready

to participate and learn, supported in learning by their families and communities; Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities; Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace; Processes through which trained teachers use child-centred teaching approaches in well-managed classrooms and schools and skilful assessment to facilitate learning and reduce disparities; Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society (Rasheed, 2000).

Provision of quality education is a priority that every country will aspire to include amongst the national goals of education (Mphale and Mhlauli, 2014). Raising the quality of education is one of Tanzania's national goals. Kimani, Kara and Njagi (2013) added that, the purpose of education is to equip the citizenry with values, skills and knowledge to reshape their society and eliminate inequality. This is because education helps an individual develop his/her capabilities, attitudes and behavior that is acceptable to the society. The benefits of having quality education is that it is able to adapt to the changing needs of the country as the world changes and spearhead the development of human resource and the country's economy.

Likewise, Coombs (2000) avers that quality education pertains to the relevance of what is taught and learned and how well it fits the present and future needs of the particular learners in question, given their particular circumstances and prospects. He emphasized that quality refers to significant changes in the educational system itself, in the nature of its inputs (students, teachers, facilities, equipment, and supplies); its

objectives, curriculum and educational technologies; and its socioeconomic, cultural and political environment.

This study there established the factors affecting provision of quality education in community secondary schools in Arusha District Council- Tanzania.

2.7.2 Staffing Status

Teachers for years have been regarded as the essential catalysts for school improvement. They are the driving force and main resource in the development and academic growth of students as they are sources of knowledge and agents of change (Wallace, 2011). Teachers play a pivotal role in helping the students to direct their potential goals to achieve their destiny.

According to UNESCO (2015) teachers are a critical education resource in every country. From early childhood programmes through primary and secondary school, the presence of qualified, well-motivated and supported teachers is vital for student learning. Effective teaching strongly influences what and how much students achieve in school.

Benya (2010) asserts that, noble as the objectives of any educational programme may be, central to their success is that of adequacy of qualified teachers. Before taking off any educational programme, the adequate provision of manpower (teacher) must have been put in place. The quantity and quality of manpower put in place has a great influence on the kind of school products produced in the society.

However, Hargreaves (2000) argues that there is no any educational system that can rise above the quality of its teachers and that no nation can be elevated above the level of its teaching staff. This statement proves the key role played by teachers in any

progressive society. For this reason the adequacy of qualified teachers cannot be underestimated for attainment of the objectives of any educational system. In support of this view Bregman and Karen (2003:15) insisted that:

The success or failure of any educational system depends greatly on the quantity and quality of its teachers. The service of teachers is indispensable; they contribute immensely to lives of the nation's youth...

Education constitutes the most fundamental industry in many developing countries and it is believed to consume the largest proportion of the local vote earmarked for social services. Consequently, Kemmerer (2001) argues that the destiny of a nation is shaped in its classrooms and it is the teacher who is a very important instrument in shaping the destiny of the nation. In the report by the UNESCO on thirty years of service to peace, the teacher is described as the spark that forced the whole development process (UNESCO, 2005).

Rosenhotz et al (2002) observe that contemporary educational thought holds that one of the pivotal causes of unsteady developments in many countries is the inability to adequately staff schools with teachers. As pointed out by Tyke et al (2002), schools are plagued by shortages of teachers, primarily due to recent increases in student enrolments, teacher attrition and retirements. Severe teacher shortage is believed to confront many Secondary schools worldwide and Tanzania is not exempted. Similar situation was observed in Australia by Klaus et al (2008) who state that: *'The nation will need to hire at least one million teachers over the next ten year and our teacher training institutions are not producing sufficient numbers of teachers to meet the demand'*

Insisting on the shortage of teachers Davidson (2004) indicated that teacher recruitment failed to catch up with the pace of student enrolment. He further asserted

that for example, from 2001 to 2004, the number of teachers employed increased by 13% only while the number of pupils enrolled increased by 44%. As a result, quality of education severely deteriorated as teaching methodology increasingly failed to allow active participatory learning whereby teachers could interact with individual students in their classrooms and support them to become creative and critical thinkers (Rajani, 2007).

However, Sumra and Catabaro (2014) showed that there are many factors that determine the quality of teaching, including teacher qualifications and experiences, their level of motivation, and working conditions. They further reiterated that there are several issues that need to be considered. First is the available number of teachers for both primary and secondary education. Obviously children will not learn if there are no teachers to teach.

Klaus concurs with MacDonald (2007) that the attrition of both new and experienced teachers is a great challenge for schools and school administrators throughout the United States, particularly in large urban districts. At the root of school staffing crisis, according to Chapman (2004) there are two converging macro-demographic trends and increasing student enrolments. Tyke et al (2002) observe that the resulting shortfalls of teachers force many education systems to resort to lowering standards to fill teaching openings, inevitably resulting in high levels of under-qualified teachers and lower school performance.

Mosha (2014) concurs with Chapman (2004) that, in most of the secondary schools in Tanzania especially community built, enough teachers are not available to be able to assist in the implementation of education to the increasing number of students that are currently enrolled making the challenge even more acute. There are also reported

cases by URT (2010) that teachers are in school but their classroom work (delivery, sharing and relationship with learners/students) is not effective and efficient enough. Likewise, in SEDP II (2010/2011) it was pointed out that, the reason for poor performance in form four secondary school examinations is attributed to shortage of teachers, unequal distribution of teachers between urban and rural as well as insufficient learning infrastructure such as classrooms, laboratories and other instructional materials (URT, 2010). However, other studies such as Chapman (2004), MacDonald (2007) and Klaus (2008) observed that shortage of teachers is a growing problem in many developing countries that offer free or public education like Tanzania. According to Benner (2000), the matter has been extensively studied by a variety of governments and states in order to determine how best to swell the ranks of teachers, and what factors might be eliminated in order to attract more people to the profession. Ndalichako and Komba (2014) pointed out that there is the lack of science teachers.

Furthermore, Ndalichako and Komba (2014) ascertain that in most of the schools they visited there were either one or two teachers for the whole school. The shortage of science teachers is a national problem. For example in 2013 the Government employed a total of 14,060 teachers in secondary schools, but only 2,014 of these (14%) were science teachers. There is a nationwide shortfall of 37,130 teachers in secondary schools and most of them 26,948 (73%) are science teachers. The shortage of science teachers has serious implications in terms of the effectiveness of teaching of which results into poor academic achievement in the National Form Four Examinations. Other subjects which are not science may share the shortage of teachers too. The study wanted to assess factors affecting provision of quality education in community secondary schools in Tanzania.

2.7.3 Teacher Student Ratio

Teachers and the number of student to be taught in a single classroom can be a very important determining factor for academic achievement of students in secondary schools in Tanzania. Tanzania Institute of Education (TIE, 2010) pointed out that; teacher student ratio shall be 1:40. The number of students per class shall be 40 and that will help to bring about good academic achievement of secondary school students in Tanzania. Consequently, if the teacher-student ratio exceeds the stated ratio, the academic achievement of the students would be negatively affected. Alderman, Orazem and Paterno (2001) contributed to this discussion. Their study concluded that higher student-teacher ratio had a consistent negative effect on student achievement. Likewise, Graddy and Stevens (2003) in their study concluded that student-teacher ratio was an important determinant of fees and parents choose schools with lower student-teacher ratio. Levacic (2005) concluded in a study on Grade KS3 and found that reduction in the student-teacher ratio had statistically significant positive effect on mathematics achievement.

A study by Waita (2012) on pupil-teacher ratio and its impact on academic performance in public primary schools in Kenya found that, Pupil –Teacher Ratio have statistically significant effect on pupil’s performance in primary schools. The study showed that as PTR increases, average test scores in primary schools decreases. Likewise a study by David (2014) in Sumbawanga District Tanzania found that, one of the factors influencing students’ academic performance is the low number of teachers to students’ ratio especially in public schools. The teacher student ratio stands at an average of 52:1 and as high as 72:1. UNESCO (2006) cited in Mulei et al (2016) found the same problem exist in Mozambique where the study found teacher shortages with the STR of 67.4:1.

However, a study done by Tamasha (2012) in 16 primary and 16 secondary schools in 8 districts of Tanzania found that on average, the student teacher ratio in secondary schools was 1:88 and only one school had a target ratio of 1:40 as suggested by TIE (2010). The study found that in eight out of 13 secondary schools the student –teacher ratio was higher than 50. It was higher than 100 in four out of 13 schools.

The study by Tamasha (2012) also found that, in Musoma and Temeke the ratios were so high that it was difficult to comprehend how learning can take place in those schools. In Arusha, Makete, Musoma and Temeke the student teacher ratio in secondary schools was worse than in primary schools, yet in secondary schools there should be more teachers, including specialist subject teachers. That is where the problem lies in secondary schools.

Shah and Inamullah (2012) in their study states that over-crowded classes could have a direct impact on students' learning. They do not only affect students' performance but the teachers had to face different problems such as discipline, behavioral problems, poor health and poor performance of students, put stress on teachers and increased in drop-out rate of students.

A survey conducted in Kenya by UNESCO (Daily Nation, May 15th 2005 p19) in Bakari et al (2012) shows the average ratio in 162 schools sampled is 58:1, against the required 40:1. Such class sizes in public secondary schools make it difficult for the teachers to teach lessons effectively as compared to their counterparts in private schools who handle a smaller number of pupils.

2.7.4 Demand and Supply of Teachers in Tanzania

Teachers in Tanzania are officially described as individuals that are trained and then registered to perform instructional duties in schools and other related institutions. The Ministry of Education has the responsibility to train and develop teachers to meet the big demand that exists in Tanzania's expanding education at basic education levels of Pre-primary, Primary Schools as well as Lower Secondary. The cadres of teachers are trained at Universities where they qualify with a minimum of a bachelor's degree (Education and Training Policy 1999, 2005).

Training of secondary school teachers either Pre-service or In-service is done at Teacher Training Colleges (TTCs) and Universities which offer education courses. Normally, TTCs offer both Pre-service and In-service teacher education. The Pre-service programme includes Grade A Teaching Certificate and Diploma in Education courses. Currently, Grade 'A' Certificate Course consists of one year Residential Course and one year Teaching Practice in a primary school. The Diploma course consists of a two year Residential Course followed by Teaching Practice which lasts for 6–8 weeks each year. The In-service courses at the TTCs consist of 3–9 month training of teachers at various levels of education.

According to the Basic Education Statistics in Tanzania (BEST) (2010) there are 74 Government TTCs which educate teacher-students at certificate and diploma level and with a total number of 18,500 students. There are 1,804 tutors in TTCs whereby 827 are graduates, 651 with Diploma, and 326 with Special Certificates. There are presently 36 private TTCs with about 950 students. Both Government and private teacher colleges award certificate and diplomas. Currently there are 6 universities training teachers all over the country, (TCU, 2008; NECTA, 2009; BEST, 2010).

However, some studies such as Chapman (2004), MacDonald (2007) and Klaus (2008) observe that shortage of teachers is a growing problem in many developing countries that offer free or public education like Tanzania. According to Benner (2000), the matter has been extensively studied by a variety of governments and states in order to determine how best to swell the ranks of teachers, and what factors might be eliminated in order to attract more people to the profession. URT (2010) asserts that, there is shortage of qualified teachers in secondary schools especially in science subjects; in some schools the situation is disgusting as the number is too small. A total of 28100 teachers have been posted to government schools between 2005 and 2008. Despite of these government effort, there is a still a big shortage of teachers and the teacher pupil ratio in ward/community secondary schools has risen form 1:26 in 2005, to 1:49 in 2009.

This study therefore, assed factors affecting provision of quality education in Community secondary school in Tanzania.

2.8 The Use of English as a Language of Instruction in Secondary Schools in Tanzania

In the Education Training Policy document (1995), the medium of instruction is set to be English language, which is a challenge to both teachers and students in implementing curriculum to secondary schools in Tanzania (Senkoro, 2004; Rubagumya, 2001; Qorro, 2006). In Tanzania medium of instruction at primary schools is Kiswahili then abruptly it switches to English at secondary school level. In real fact, the vast majority of public primary school leavers develop little confidence in English and many cannot string together a simple paragraph. Consequently, they are unable to follow what is taught or written in English in secondary schools, and this

contributes to poor learning which may affect the academic achievement of secondary school education in Tanzania (Sumra and Rajani 2006).

Godfrey (2012) concurs with Sumra and Rajani (2006) that, when a student in a public school advances to secondary school the language of instruction swiftly changes from Kiswahili to English. All subjects except Kiswahili language are taught in English in secondary schools. Little attempt is made to help students make this transition. Apparently, the learning process becomes challenging for most students in secondary schools as the majority of them largely lack a basic command of English language (Qorro, 2006).

In support of this view Ndalichako and Komba (2014) had observed these from the Focus Group Discussion (FGD) students indicated that the use of English language limits their level of understanding of the concepts and hence made them dislike the subject. Students indicated that they liked subject in which the language was clear to them.

The following are some of students' responses in relation to the language of instruction: cited from Ndalichako and Komba (2014):

The biggest challenge here at our school is mainly English language. Our English language proficiency is very low and teachers are not doing anything to help us! Teachers have not implemented the English speaking policy which requires students to speak English. They use Kiswahili in teaching but students cannot use Kiswahili in responding to the national examination questions. We are all required to write in English. So at the end of the day students know points for a particular question but the problem is how to write them in examination paper in proper English language (FGD, school E, 18/2/2014). I think the major factor which contributes to massive failure rate in this school is the use of English language. Many students in the school do not speak English when they find English in Examinations they fail to respond to questions and sometimes they don't even understand the demand of the question. So they end up answering different things from what they have actually been asked (FGD, student, school C, 20/2/2014).

Likewise, studies by Andersen (1975) and Mvungi (1982) in Qorro (2008) show that proficiency in the language of instruction is an important factor in educational performance. The consequence of this is that lack of proficiency in the language of instruction, results in poor academic performance in subjects taught in English. Elsewhere, studies by Cummins (1979, 1981) and Krashen (1985) show that poor proficiency in the language of instruction results in poor academic achievement in other subjects. These findings have been confirmed by studies in Tanzania by Roy-Campbell and Qorro (1987) and Qorro (1999). In other words, when students have a firm grasp of their specialized subjects, that understanding gives them a firm ground on which to build the foundation for learning a second or foreign language, in this case English. However, this firm grasp/understanding, which is central to the quality of education, can only be achieved when teachers and students understand the language of instruction. Likewise Komba and Wilson (2012) argued that, one of the factors frequently mentioned as a cause of poor academic performance in examinations is the language of instruction (LOI) that students who are not proficient in English facing difficulties in learning which lead them to poor academic achievement, incompetence in speaking, writing, and reading in secondary schools.

Malekela (2004) added that, if learners and even teachers are disabled in the language that is used as a medium of instruction, then the learning process cannot take place effectively. In this case, language can simultaneously play conflicting roles in the educational sphere. It can be a factor with holding academic performance of students (Roy-Campbell, 2001). Language of instruction as among the contributing factors to poor academic performance is also supported by Vuzo (2002; 2010) who explained that, learners and teachers have difficulties in using the language with adequate proficiency at the secondary schools. Consequently, he pointed that students can fail

to answer well questions simply because they fail to understand the question, not because they do not know the answer. Language can affect a learner's ability to interpret instructions and questions. It can also lead to failure to express their ideas appropriately.

Mosha (2014) asserts that, it is in language that the business of schooling is still primarily accomplished, whether that be spoken or written. Student academic achievement is a measure of the effectiveness of a teacher. If the learner is handicapped, in the language of instruction, then learning will not take place at all as the educator and the learner will not be communicating on the same situation. Brown (2000) agreed that, one of the key attributes of an effective teacher is lesson clarity consequently can lead to improved academic achievement to the students. Again, Roy- Campbell and Qorro (1997) describe the Language of instruction situation as a crisis. They argued that, result of the low proficiency in the language of instruction is that, students are tongue tied and teachers' professional confidence is undermined, the final outcome is low academic achievement in tests and examinations.

However contrary ideas from other scholars like Vuzo (2001) have shown that, in the primary schools in Tanzania, Kiswahili is used as the Language of instruction (LOI) but the academic achievement is not good, this illustrates the point that language is important but not a sole contributor to quality education. Other factors such as lack of teaching and learning resources, time on task in teaching and learning, teacher commitment, high teacher student ratios should be taken into consideration and can explain why the performance in primary schools is poor despite using a familiar language for instruction.

Likewise, Sumra and Catabaro (2014) affirmed that, the debate on the LOI has primarily focused on the use of English at Secondary level. The current practice of using Kiswahili in Primary Schools for the majority of children and English at Secondary and higher level is creating quality problems at Secondary levels. This would not have been a problem had children in public schools received a good grounding in English. Also Sumra and Catabaro (2014) acknowledged that, although passing PSLE, a vast majority of children entering Secondary Schools have very low competency in English. This does affect their performance in Secondary Schools. Looking from the students' perspective, all the terminologies they learned and used for seven years of Primary Education in Kiswahili were not of use from day one in Secondary Schools.

However, Sumra and Catabaro (2014) argued that, most of the debate on the use of English appears to be confusing. Confusion is between using English as a medium of instruction and teaching English as a foreign language. No one would argue against teaching English to our students. English is an important language in today's world and all Tanzanian students should learn it and be fluent in it. The issue of language of instruction is totally different; it is using English in classrooms to teach other subjects such as History, Geography, and Biology and so on (Sumra and Catabaro, 2014), Especially when this is done when majority of the students, and of teachers, do not have the required language competency to teach and learn in English. It is well documented that students and teachers in secondary schools have not attained levels of competency required to make English as a language of instruction. Both teachers and students struggle to express themselves in English. Studies have shown that using English as a language of instruction in secondary education has a profound effect on the academic performance of the students (Sumra and Catabaro, 2014).

A study conducted by Hakielimu (2008) cited in Sumra and Katabaro (2014) found that,

Overall, data show that while children's Kiswahili language competencies are generally well developed, English language competencies are poorly developed in both primary and secondary school students. Students had difficulty in reading, writing and translating the language. This is particularly troublesome in case of secondary school students.

On entering secondary schools, children not only have to relearn all the terms and concepts in a new language but also to take on a more difficult set of subjects. If the majority of the students in secondary schools are unable to read and understand the language in which they are taught, it is difficult to see how their learning can be enhanced (Sumra and Katabaro, 2014).

Therefore, the overall academic achievement of Tanzanian Secondary School students depends on the LOI to a great extent. In Tanzania secondary school classrooms and higher education the language of instruction is not well understood by the majority of teachers and most students, hence may contribute to low academic achievement (Sumra and Katabaro, 2014).

A study from Botswana by Mphale and Mhlauli (2014) agreed that, there are several factors which can contribute to students' poor academic performance. One of such is language barrier, which greatly affects students' academic performance in schools. Many students enter the classroom not fluent in the languages of instruction. These languages are used for testing students' mastery of subject content and in the examinations. The student might understand the concepts in their mother tongue but

fail to express it in the language of examinations. At the end, the student is rated a low achiever because of the language problem. Elsworth (2013) affirmed that, children take years to master their native language. Hence the student might understand the concepts in their mother tongue /native but fails to express it in the language of examinations. At the end it results into low academic achievements.

This study therefore, wants to establish the use of English as a language of instruction in relation to Community Secondary Schools academic achievement in Arusha District Tanzania.

2.9 Adequacy of Selected Instructional Materials

The primary purpose of teaching and learning process is to bring a significant change in behavior through active participation and critical thinking of the learner. This cannot take place without the availability of instructional materials (Afework and Asfaw, 2014). Likoko et al (2013) insisted that Instructional materials which are educational inputs are of vital importance to the teaching of any subject in the school curriculum. Muthamia (2009) supported that that the use of instructional resources would make discovered facts glued firmly to the memory of students.

Oladejo et al (2011) referred instructional materials as objects or devices, which help the teacher to make a lesson much clearer to the learner. Instructional materials are also described as concrete or physical objects which provide sound, visual or both to the sense organs during teaching.

Adeogun (2001) discovered a very strong positive significant relationship between instructional resources and academic performance. According to Adeogun, schools endowed with more resources performed better than schools that are less endowed.

Furthermore Gogo (2002) in the study the input of cost sharing on access, equity and quality of secondary education in Rachuonyo district found that, the quality of education had remained average for the entire period 1996 to 1999. The author concluded that performance could be attributed to inadequate teaching and learning materials and equipment. In addition, Gogo recommended that in order to provide quality education the availability of relevant teaching /learning materials and facilities is crucial. Muthamia (2009) pointed out that teachers can only be effective and productive in their work if they have adequate and relevant instructional materials.

Likoko et al (2013) added that, for effective teaching and learning, textbook and other instructional materials are basic tools, in absence or inadequacy make teachers handle subjects in an abstract manner, portraying it a dry and non-exciting. In addition, Ayot and Briggs (1992) pointed out that poor results in education relates to the amount of resources and instructional materials allocated to it.

In this study Instructional materials involve students' textbooks, teacher's guides and reference books, maps, charts and globes among others. These are key ingredients in learning and teaching thus enhances students' academic achievement (Wiggins, 1998) cited in (Afework and Asfaw, 2014). Instructional materials are very important in the whole process of teaching and learning in any subject. They make learning more pleasant to the students because they offer a reality of experience, which stimulates self-activity and imagination on the part of the students. They also supply concrete basis for conceptual thinking and hence, reduce meaningless word responses from students (Nyamubi, 2003). Likewise (Campbell, 1999) agreed that, Instructional materials enhance the teaching/learning process by exhibiting information necessary to acquire knowledge and skills.

Tanzania Institute of Education (TIE) (2007) outlined that, apart from teachers, instructional materials are the most important resources needed at classroom level. If the curriculum is to succeed, the preparation and production of instructional materials must be handled with utmost care. The Ministry of Education and Vocational Training shall be responsible for putting in place criteria for evaluating and ensuring that only quality instructional materials will be selected to support the teaching and learning in the classroom. It is expected that quality instructional materials shall:

- i. Correspond to the curricula and syllabi.
- ii. Be piloted or tried out in pilot schools.
- iii. Promote competences intended for the learners.
- iv. Be enough, adequate interesting and learner friendly especially for the learners with special needs.
- v. Stimulate the learners' cognitive, affective and psychomotor domains during teaching/learning.
- iv. The materials shall also address requirements of learners with special needs including the hearing and the visually impaired and physical handicapped.

There are basically two types of teaching/learning materials, namely; textual and non-textual.

a) Textual Materials

These shall include printed materials such as: textbooks; syllabi; modules and manuals; reference books; charts and maps; newspapers, journals and encyclopaedias; texts in Braille; posters, fliers, photographs, booklets and brochures.

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b) Non-textual Materials

These shall include materials such as: Laboratory apparatus; prototypes; Braille machines; writing boards; weather stations; samples of actual materials; ICT resources such as computers, internet connectivity, photocopying machines printers and scanners.

Likewise, Kapoli (2001) noted that authentic materials enable the students to explore the language used in day-to-day life and which is tailored to their needs and interests. UNESCO (2000) reported that the provision of teaching and learning materials especially books is an effective way of improving results. However, the World Education Report (1998) reveals out that in many countries, conditions are difficult, whether they relate to the physical states of schools and the availability of instructional materials, class sizes, or the changing characteristics of the student population.

Mosha (2014) acknowledge that, the quality of secondary school education cannot be separated from the context and circumstances that are found in schools. A number of secondary schools in Tanzania considered to have shortage of instructional materials (Sumra and Rajani, 2006), are understaffed, and some teachers under-qualified and de-motivated (Davidson, 2006; Komba and Nkumbi, 2008). Classrooms are also overcrowded, which affects teaching negatively (Wedgwood, 2007). Association for the Development of Education in Africa (ADEA) (2003) in support of this idea point out that, sufficient supplies of teaching materials and up to date student textbooks augment the teaching and learning process. Schools with sufficient infrastructure, laboratory space, electricity, water supply and sanitary facilities provide a comfortable and healthy environment conducive to learning.

Hakielimu (2007) and Laddunuri (2012) concurs with ADEA (2003) that, most of secondary schools have an acute shortage of teaching and learning materials such as text books, classrooms as well as laboratory equipment's and this is due to insufficient fund received from the Government aimed to carter for the same, hence limiting the improved academic achievement of Community Secondary Schools in Tanzania. Kimeu et al (2015) in their study Influence of instructional resources on secondary school students' academic performance in Makueni County, Kenya confirmed that inadequacy of teachers' reference books and guides, students text books, maps and charts negatively affected student's academic performance.

Also Walklin (2000) clarify that, instructional materials enhance perception and retention and so improve the efficiency of learning. The limitations of words in conveying new concepts are greatly minimized by the use of relevant teaching and learning materials. Materials which involve many senses are the most suitable. However, Ishengoma (2003) observed that schools and Colleges in Tanzania face an acute shortage of textbooks and reference books and that the Ministry of Education cannot provide them due to limited funding capacity. His study suggests that measures to overcome the shortage of materials include the establishment of well coordinate, materially-equipped, and convenient centres (schools) to allow adjacent schools to borrow the required materials from there. Moreover, Kiveria (1993) advises that potential people should be requested to help with the provision of learning materials. These include the community, resource persons, and education stakeholder. All these are teaching and learning materials used by both teachers and students to facilitate the teaching and learning process.

Adeyanju (2002) did a study in Nigeria on the importance of teaching resources and found that teachers, whether those on training or those who have qualified, perceive

the use of learning aids in teaching as advantageous to both teacher and the students since their use reduces the talk and chalk method of teaching. On the same line of thought, Thompson (1996) notes that electronically related teaching-learning materials are expensive to purchase, maintain and operate. He also adds that the situation is more serious in developing countries such as Tanzania where a dilemma occurs as to whether to furnish the concerned schools with inputs or arrest some social or economic maladies such as unemployment, diseases or poor communication channels first. Such an observation concurs with Mungai (2004) who declared that schools in Tanzania suffer from amenities such as water, electricity and proper buildings, sustainable for educational purposes. However, it is strongly recommended that each learner should possess the appropriate materials during the lesson if at all improved academic achievement is to be observed. Muthamia (2009) opined that, teachers can only be effective and productive in their work if they have adequate and relevant instructional materials. Likoko et al (2013) reiterated that, for effective teaching and learning, textbook and other instructional materials are basic tools, in absence or inadequacy makes teachers handle subjects in an abstract manner, portraying it a dry and non- exciting.

Adeogun (2010) discovered a very strong positive significant relationship between instructional materials and academic performance. According to Adeogun, schools endowed with more instructional materials performed better than schools that are less endowed. Adeogun (2010) also discovered a low level of instructional materials available in public schools and stated that our public schools are starved of both teaching and learning resources. He expresses that effective teaching cannot take place within the classroom if basic instructional materials are not present.

According to World Bank (2014) Tanzania through BRNEd intends to achieve the objective to improve quality of education in Tanzanian primary and secondary schools and providing adequate instructional materials is one of the areas which the programme claim to give priority. It is for this reason that this research will be conducted to assess factors affecting provision of quality education in Community Secondary Schools in Arusha District Tanzania.

2.10 Adequacy of Essential Physical Facilities

Okomolate and Adesua (2016) refers physical facilities as the school plant, that is, the school buildings, classrooms, library, laboratories, toilet facilities, offices and other materials and infrastructures that would likely motivate students towards learning. Schools exist for the purpose of teaching and learning. Human and material resources are deployed for this purpose. School physical facilities are the material resources provided for staff and students to optimize their productivity in the teaching and learning process. TIE (2007) indicates that, physical facilities include classrooms, laboratories, libraries, ICT facilities, dormitories, health and kitchen facilities, as well as facilities for students with disabilities. Physical facilities provide and maintain, safe, clean, and creative educational environments that are conducive to high achievements of the students. Physical facilities strive to give students a comfortable atmosphere in which they work and learn. In developing countries like Tanzania, low levels of learning among children can partly be attributed to poor or inadequate physical facilities of the schools.

Physical facilities are germane to effective learning and academic performance of students. In support of this, Hallak (1990) cited in Odeh (2015) identified physical facilities as the main factor contributing to academic achievement in the school

system. These include the school buildings, classrooms, furniture, libraries, laboratories, recreational equipment, apparatus and other instructional materials. While the availability, relevance and adequacy of these resource items contribute to academic achievement, the scholar acknowledged the fact that unattractive school buildings, inadequate classrooms, furniture's such as desks and chairs absence of libraries and laboratories can contribute to poor academic achievement.

Likewise Likoko et al (2013) commented that, schools that lack adequate classrooms for instance, students hold their lessons outside or under trees. During bad weather such lessons are postponed or are never held altogether. This interferes with syllabus coverage and students from such schools do not perform well in examination.

World Bank publication (1990) cited in Owoeye and Yara (2011) linked performance of students to the provision of adequate physical facilities while referring to a survey of 51 primary schools in Botswana that students performed significantly better on academic tests when they had adequate classrooms, desks and chairs. Owoeye (2011) succinctly said that school buildings are very vital input to educational system; emphasizing that even though they do not teach but their use may facilitate or impede learning. However, he did not see school building as one of the critical variables affecting school academic achievement because he found no evidence to show that an expensive school building would necessarily improve academic achievement.

Ogunmoyela (2009) lamented that school physical facilities like classrooms of public schools have no roof, windows and doors, some walls are cracked, instructional facilities are lacking while teachers are frustrated consequent upon lack of equipment/facilities to meet educational endeavours. Comparing schools in

developing countries with what obtains in industrialized world, in terms of physical facilities, materials, utilization and provision.

Physical facilities are the fundamental factors in better learning and achievements of the students (Saeed and Wain, 2011). All facilities must be provided to the schools for the students' better, concrete, and real experiences. Physical facilities help to enhance the learning of the students. Research shows that availability of the physical facilities including classrooms, water, electricity, boundary wall, toilets, furniture, playgrounds, libraries, and dispensaries have a significant positive influence on the performance of the students and their achievement (Saeed and Wain, 2011).

The study undertaken by Shami and Hussain (2005) revealed that the availability of physical facilities in a school had a significance impact on students' performance. In the context to school facilities, environment in which the students learn is very crucial and without the suitable environment effective learning cannot take place. Bruce (2006) has rightly called the learning environment as the third teacher but it is important that, the environment is not an end in itself; we have to look at the settings. Space is an important factor in providing a rich environment for learning, but it is only significant to the degree that it assists in providing a suitable climate for learning. Saeed and Wain, (2011) confirms that, physical conditions have direct positive and negative effects on teacher morale, sense of personal safety, feelings of effectiveness in the classroom, and on the general learning environment.

Sabitu et al (2016) opined that when physical facilities are available and skilfully utilized, they influence learning and making it more meaningful. Physical Facilities in education are very vital because they aid teaching and learning.

Adeyemi and Igbeneweka, (2000) emphasized the significance of various categories of physical facilities towards the quality of education at the different levels of the educational system. Saeed and Wain, (2011) identified school buildings, classroom accommodation, furniture such as desks and chairs, libraries, laboratories, recreational equipment, apparatus and other instructional materials as contributing to academic achievements.

Ethnographic and perception studies have also indicated that inadequate school physical facilities have a negative impact on teachers' motivation that in turn negatively affects students' academic achievement (Earthman, 2002). In the same way Lawrence (2003) emphasized that the unavailability of school physical facilities negatively affects staff and students motivation. A good school environment and adequate school with enough physical facilities have a significant positive effect on teacher's motivation and student's academic achievement. Additionally O'Neill (2000) describes that school facilities impacts on student achievement, attendance and teacher retention.

Reyonds et al (1996) found that a negative impact on student achievement where lack of school physical facilities. Also Akinfolarin (2008) commented on the physical facilities as a major factor contributing to academic performance in the schools system. These include classroom, chairs, desks, laboratories among others. Different studies conducted by Ayodele (2000) and Vandiver (2011) showed that positive relationship exists between availability of physical facilities and student academic performances.

Buckley, Schneider and Shang (2004) agreed that school facilities enable the teacher to accomplish his/her task as well and help the learner to learn and achieve

effectively. They also highlighted that the availability and proper use of school facilities can affect the interest of the teacher to teach effectively in turn that positively affects student's academic achievement. Therefore, the school facilities in the school needs a proper attention as they have a great value in the support of teachers and students morale, motivation and plays a significant role to improve the quality of education. In contrary, Hedges and Theoreson (2000) argued that, the adequacies of school facilities do not a guarantee for student's academic performance but the proper utilization of the facilities has a great value.

Likewise, Khan and Iqbal (2012) asserted that, adequate and quality school physical facilities are basic ingredients for quality education and to achieve the intended goal of the school program. They also strengthen the idea by emphasizing that learning is a complex activity that requires students and teachers' motivation, adequate school facilities such as standardized buildings and classrooms with their facilities, instructional materials and equipment for child's development.

Furthermore, Hansen (2000) acknowledged that, there are several factors affecting students' academic achievement. These include internal and external class room factors. He mentioned the classes size as a factor that can affect academic performance, with enough infrastructures, the smaller the class, the better the performance. In addition Hakielimu (2011) agreed that most community secondary schools in Tanzania particularly those in rural areas are at disadvantage group because they lack adequate physical facilities and human resources. Most of the community secondary schools are anticipated to have lack of enough classrooms.

A study by Karue and Amukowa (2013) in Embu day secondary schools in Kenya acknowledged that, factors teachers' postulated included lack of adequate physical

facilities to enhance their teaching, inadequate learning materials and resources to the extent that some schools lacked totally in such important facilities as laboratories. Vandiver (2011) showed that a positive relationship exists between availability of physical facilities such as classrooms, desks, chairs, libraries, laboratories and student academic performances.

Bakari et al (2014) in the study effects of physical facilities on performance in Kenya certificate of secondary examination in public schools in Bungoma acknowledge that, the academic performance of schools with physical facilities has been improving over the years steadily while the schools that have inadequate physical facilities, performance in K.C.S.E fluctuated with time despite new reforms and innovations that have been designed and introduced to make education relevant to socio-economic and political aspirations and expectations of the society at large.

A study by Likoko et al (2013) on the adequacy of instructional materials and physical facilities in Kenya found out that some schools lacked enough classrooms, desks and chairs leading to overcrowding such conditions frustrated students during learning.

Olowoselu and Bello (2015) acknowledged that physical learning facilities or places in which formal learning occur range from relatively modern and well-equipped buildings to open-air gathering places. They further asserted that quality of school facilities seems to have an indirect effect on learning an effect that is hard to measure.

Carron and Chau (1996) argued that there is inconclusive empirical evidence on whether the condition of school buildings is related to higher student achievement after taking into account students' background.

Hallack (1990) discovered that learning experiences are fruitful when there are adequate quantity and quality of physical facilities and that unattractive school buildings, crowded classrooms, non availability of playing ground and surroundings that have no aesthetic beauty can contribute to poor academic performance. To put more emphasize on the physical facilities Ajayi and Ayodele (2001) highlighted the importance of developing adequate and appropriate physical facilities for quality education to be realized.

Adewunmi (2000) revealed that the availability of adequate number of physical facilities had significant influence on pupil's academic performance. Ademilua (2002) observed that inadequate provision of school physical facilities had been a major factor of poor student's academic performance in their National Examinations. He equally remarked that without adequate physical facilities there would be a continuous decline in student's academic performance.

Sallis (2002) supported that an educational programme cannot be effectively implemented using only policy guidelines even if the teachers are trained and committed without adequate and appropriate physical facilities such as classrooms, desks, chairs, toilets and playgrounds.

Likewise, Likoko (2013) accepted that schools that lack adequate quality classrooms for instance, hold their lessons outside or under trees. During bad weather such lessons are postponed or are never held altogether. This interferes with syllabus coverage and students from such schools do not perform well in their final examinations.

A study by Opel (2000) who looked at optimal utilization of educational resources in schools in Kisumu District, revealed that only a few schools in the district had above

five laboratory rooms (19.35%). Since no school can provide adequate teaching services without the use of laboratories, the study concluded that lack of laboratory facilities was a major contribution to poor performance of some schools in Kenya Certificate of Secondary Education, because candidates could not answer questions in practical science subjects. The generalization of an education innovation is accompanied by the need for new resources which should be available for a sufficiently long time in order that the innovation becomes part of the daily life of educational establishment.

This study therefore, established the adequacy of physical facilities such as classrooms, desks, libraries and laboratories in relation to students' academic achievement in Community Secondary Schools in Tanzania.

2.11 Recent Related Studies

For the past three decades, a range of factors has been reported to constrain the poor academic performance in Secondary Schools worldwide. The problems are well documented in studies by Hakielimu (2011), Mkumbo (2013), Mosha (2014), Jimdamva (2012), Laddunuri (2012) and Mlozi et al (2013) among the others. For instance Hakielimu (2012) researched on the relationship between examination practice and curriculum objectives in Tanzania and identified that, the teaching and learning environment was generally poor in supporting the effective implementation of the curriculum. Therefore, the poor performance in national examination is due to poor curriculum implementation rather than the examination papers themselves.

The schools with building had insufficient accommodation (students mostly sit on mats). In addition, textbooks for teachers, copy of curriculum and resource materials are never provided (Hakielimu, 2012). Mlozi et al (2013) conducted a study on the

factors influencing students' academic performance in community Built secondary schools in Tanzania: a case of Mbeya Municipality. The researcher observes that in most of the community built secondary schools there were poor teaching and learning resources. Also, availability of facilities in the schools did not match with the number of students. Teaching was dominated with a mixture of English with Kiswahili. In Kenya, more or less similar barriers are also reported. Karue and Amukowa (2013) conducted a study on factors that lead to poor performance in Kenya certificate of secondary examination in Embu district and found such barriers include inter – alia unfavourable home environments and family backgrounds, which work negatively for students as they pursue their reading, lack of reading materials, chores at home, poor lighting, bad company, lack of proper accommodation, chronic absenteeism emanating from lack of school fees, admission of weak students at form one entry, inadequate instructional materials and physical facilities.

In Tanzania, moreover, Laddunuri (2012) researched on Status of School Education in Present Tanzania and Emerging Issues and identified several limitations which seemed to paralyse the teaching/learning processes. The study revealed that, a majority of teachers were unqualified and most schools had poor infrastructural facilities and insufficient books in the school library. It has been found that the cost of books is very high when compared with their economic situation. Frequent changes in the curriculum are also one of the reasons for the less pass percent of the students in Tanzania.

Jimdamva (2012) researched on Understanding and Improving Quality of Secondary School Education: Conceptions among Teachers in Tanzania. The study discovered among other things the problem of overcrowded classes, lack of facilities such as

housing, offices and other support materials. He concluded that such problems have a negative effect on students' academic achievement.

Similarly Galabawa (2001) avers that, the status of Secondary School Education in the area of pastoralists' community of Manyara in Tanzania was generally low. The typical Secondary Schools were characterised by, among other things, crowded classroom 1:100 inadequate desks, 1:4 and inadequate housing for teachers. Additionally, Cheldiel (2004) investigated on working conditions for Tanzanian teachers in Arusha and concludes that, overcrowded classrooms are not the only challenge contributing to a decline in working conditions for Tanzanian teachers. Resources too are being stretched too thin, in this poor country, negatively impacting educators and the education system at large.

2.12 Gap in the Literature

Since Independence studies have been conducted on different aspects of Secondary School Curriculum in Tanzania by various scholars as shown by Hakielimu (2011), Mkumbo (2013), Mosha (2014), Jimdamva (2012) Laddunuri (2012) Mlozi et al (2013) among others. But perhaps no comprehensive study has so far been conducted to analyse factors affecting provision of quality education in Community Secondary Schools in Arusha District Tanzania, covering the aspects of adequacy of staffing status, adequacy of instructional materials, the use of English as a language of instruction and adequacy of physical facilities. Also Community Secondary Schools are new compare to other government built secondary schools. Therefore this study sought to fill the gap using Arusha District Council as a case in point.

2.13 Chapter Summary

This chapter has discussed the related literature on the determinants of academic achievement in Community Secondary Schools in Tanzania. The literature reviewed provided the rationale for and support for the study. From the review the factors affecting provision of quality education in community Secondary Schools was noted to have a significant contribution towards students' academic achievement in Secondary Schools in Tanzania.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the Research Design and the Methodology used in the study. It describes in details how the study was conducted by explaining the Research design, Study area, Research paradigm, Sampling procedures and Instruments used in data collection. It also covers Validity and Reliability of the instruments used as well as data analysis techniques. The discussion ends with the summary of the chapter.

3.2 Research Design

The present study utilized a descriptive survey design because this design deals with an in-depth multi-faceted investigation using both quantitative and qualitative methodologies in the examination of the single social phenomenon (Scheerens, 2000). Orodho (2012) asserts that, descriptive survey research design is used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. It also involved an extensive review of literature in order to identify the context, structure and process through which implementation of Secondary School Curriculum is provided. The study was conducted in Arusha District Council, Tanzania and it sought information from the national, regional, and schools level.

3.3 Study Area

The implementation of Secondary School Education in Tanzania and national public examination are uniform throughout. This study was conducted in Arusha District Council, the District had 41 Community Secondary Schools. Arusha District is among the two councils that forms Arumeru District. Administratively is divided into 3

divisions, 20 wards, 75 Villages. It occupies an area of 1,547.6 square kilometres. Arusha District Council in the East is bordered by Meru District Council, in the West bordered by Monduli District Council, in the North bordered by Longido District Council, In the South bordered by Simanjiro District Council. Either this Council surrounds Arusha Municipal Council.

This District was selected because:

- a). The District had the highest number of Community Secondary Schools as compared with other Districts in the region.
- b). The problem was very common in Arusha District in terms of low Academic achievement.
- c). There was no study similar to the one under investigation that had been done in study area in the recent past.

3.4 Research Paradigm

The term paradigm originated from the Greek word *paradeigma* which means *pattern* (Cherryholmes, 1992) also viewed pragmatism as a worldview arises out of actions, situations, and consequences rather than antecedent conditions.

A paradigm may also be viewed as a set of basic beliefs that deals with principles. It represents a worldview that defines the nature of the “world”, the individual’s place in it, and the range of possible relationships to that world and its parts (Lincoln 2001; Dash 2003). Alternatively, the term “paradigm” may be defined as a collection of logically-related assumptions, concepts, or propositions that orient thinking and research or the philosophical intent or motivation for undertaking a study (Cohen *et al*, 2001).

According to Martens (2008), research paradigms are rooted in philosophy paradigm which aims to determine the direction of researches, how the researches reach to the reality, how they answer the questions of the seeking mind. Martens argued that these paradigms create not only the mind-set of the researcher (what the reality is and how it can be accessed), but also help him and her use the research methodologies, research methods, and apply the research findings.

3.4.1 Types of Research Paradigms

During the past century, different paradigms have emerged due to the remarkable growth in social sciences research. Four main research paradigms distinguished so far are: positivism or quantitative, constructivism or qualitative, critical theory or Praxis and Eclectic-Mixed Research or Pragmatic (Johnson, 2003).

Empirical Positivist or Quantitative paradigm

Quantitative paradigm is scientific approach dealing with numerical measurements. It prefers methodologies of empirical, hypothetical-deductive and experiments. Quantitative paradigm can test hypothesis and validates existing theories. It generalises research findings and the researcher should assess the cause and effect relationships of variables (Cohen *et al*, 2001; Howe, 2002).

Constructivist or Qualitative paradigm

Qualitative paradigm, on the other hand, emphasises that, social reality should be viewed and interpreted by the individuals according to their ideological. Thus it aims to explore meaning and issues which, for some reasons, are difficult to be measured (Rossman, 2001). Nevertheless, Bryman (2005) observes that qualitative data are based on the participants' own categories of meaning when describing complex

phenomena hence it provides individual case information which can conduct cross-case comparisons and analysis.

Critical theory or Praxis

Critical theory paradigm is social theory oriented toward critiquing and changing society as a whole, in contrast to traditional theory oriented only to understanding or explaining it (Blackwell, 2003). Blackwell distinguishes Critical theory paradigm as a radical, critiquing principles of knowledge put forward by both positivism constructivism. According to Anderson (2002), Critical theory theorists suggest two kinds of research methodologies for undertaking research work namely ideology critique and action research.

Eclectic Mixed Methods or Pragmatic Paradigm

Pragmatic or mixed method refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings (Rorty, 2006). Then again, Dash (2000) states that Pragmatic research is the research paradigm where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study.

The study employed Pragmatic Paradigm with the aim of increasing the credibility and validity of the results by obtaining findings through convergence of different perspectives. The approach gave the opportunity to cross-check data from multiple sources embraced by different paradigms hence to give more detailed and balanced picture of the situation.

Pragmatism is not committed to any one system of philosophy or reality. Pragmatist researchers focus on the “what” and “how” of the research problem (Creswell, 2013). The pragmatic paradigm places the research problem as central and applies all approaches to understanding the problem (Creswell, 2013). With the research question central, data collection and analysis methods chosen were those most likely to provide insights into the research study without philosophical loyalty to any paradigm. The researcher believes that mixed method in research was a powerful technique in this study since it facilitated validation of data through cross verification from more than two sources.

Such perception has been confirmed by Miller et al (2004) who state that, many research questions are best and most fully answered through mixed research solutions. What is most fundamental is that research methods should follow research questions in a way that offers the best chance to obtain useful answer.

Another ground of opting Pragmatic methodology is basing on its importance as put forward by different scholars (Dash, 2003; Creswell, 2013; Greene, 2007) when insisting the use of the mentioned paradigm. The general strengths of Pragmatic Paradigm include: Words, pictures, and narrative can be used to add meaning to numbers; Numbers can be used to add precision to words, pictures and narrative; It can provide quantitative and qualitative research strengths, It can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach; A researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study; and It can add insights and understanding that might be missed when only a single method is used. For these reasons the study will apply pragmatic research paradigm in order to conduct quality educational research.

3.5 Study Population

The target population for this study consisted of all 26 head of schools and 291 sampled teachers from 26 Community Secondary Schools in Arusha District Council, and one District Education Officer which makes a total population of 318. These are the persons who interact with learners and curriculum more frequently. Thus, they have first-hand information about possible determinant of low academic achievement in Tanzania. According to Best and Kahn (2006) the target population is any group of individuals who have one or more characteristics in common that are of interest to the researcher. Community secondary schools in Arusha District Council are of interest to the researcher due to its poor academic performance in National Examinations

3.6 Sample and Sampling Procedures

Simple random sampling was used to select research respondents. In this study 26 out of 41 community secondary schools were sampled. Arusha District Council had a population of 1049 teachers which was sampled to get a representative to the study. However, to get head of schools and District Educational Officer, purposive sampling was employed. The sample size for teachers was based on the guideline proposed by Krejcie and Morgan (1970). The sample size of 291 teachers from the population of 1049 was determined using the guideline by Krejcie and Morgan (1970). Appendix E shows the sample determination table. The guide gives sample sizes for various population sizes up to 300,000,000 at different confidence levels. The study used the proposed sample size at 95% confidence level and 5% margin of error.

Obtained sample size for teachers from 26 Community Secondary Schools was 291. The summary of the samples for teachers from different schools are attached in Appendix F.

Therefore, the study sample comprised total of 318 respondents from the following categories: Teachers 291, Heads of schools 26 and District Educational Officer one (1). For the reason that District has only one Education Officer and each school has only one head of school, the participation of mentioned schools and officials/ leaders based on their titles hence they were purposively selected.

Simple random sampling technique was applied to select sampled teachers from 26 sampled community secondary schools in Arusha District Council. Only teachers who teach in Community Secondary Schools participated in this study. This was done by assigning random numbers to every member of the staff list in the respective schools. Then the numbers were placed in a fishbowl container and picked randomly to get the required sample size of teachers from each community secondary school. Schools visited and their sample characteristics are summarized in Table 3.1, see Appendix F.

3.7 Data Collection Methods

According to Hillway (1995), the choice of techniques to be used in the study is dictated by research design, objectives and questions. Therefore, a wide range of research instruments were designed and used in data collection, namely, questionnaire and interviews.

3.7.1 Questionnaire

The questionnaire is one of the most widely used techniques in research for obtaining information from subjects (Kothari, 2002). According to Best and Kahn (2006) a questionnaire is a set of questions dealing with some topic or related group of topics, given to a selected group of individuals for the purpose of gathering data on a problem under consideration. Travers (2004) observes that questionnaire, in spite of their risks in data collection, are useful and handy because they are relatively

economical, can ensure anonymity and collection of information from respondents in a relatively short time, and while maintaining confidentiality as well as freedom. In this study, the questionnaire comprised of open-ended and closed-ended questions. The open-ended questions enabled the researcher to look critically at a problem by getting divergent views and opinions from the respondents. Closed-ended questions elicited specific information from respondents regarding a matter. For these reasons the 291 questionnaire was administered to 291 sampled teachers from the respective secondary schools. The questionnaire was composed of five different sections. Section I consisted of questions relating to the background information of the respondents. Section II focused on questions relating to objective number one (Adequacy of Staffing). Section III focused on the questions relating to the objective II (Availability and adequacy of instructional materials). Section IV concentrated on the questions relating to the objective number III (the use of English as a language of instruction). Section V focused on the objective number IV (Availability and adequacy of physical facilities). Appendix B shows the questionnaire items for teachers used in the study.

3.7.2 Interview Guide

This is a guided set of questions administered through oral communication in a face-to-face relationship between a researcher and respondents (Travers, 2004). Lichtman and Cech (2006) assert that, one of the advantages of the interview is that it allows for greater depth than is the case with other methods of data collection. The interview is flexible and the opportunity to restructure the question is always there. Yet, problems can be controlled effectively as they arise, with no difficulty of missing returns and non-response generally remaining very low (Kothari, 2002). The interviews therefore can help the interviewer to seek clarification and/or confirmation in regard to

information obtained through questionnaire. In this study semi-structured interview was administered to 26 Headmasters/Mistresses and 1 District Education Officer. Appendix C shows the interview guide items for teachers, head of schools and District Education Officer.

3.8 Piloting

Opie (2005) and Bell (2005) say basic purpose of a pilot is to check that the basic aspects of the design and procedure work. A pilot study gives the researcher an idea of what the method will actually look like in operation and what effects (intended or not) it is likely to have. In other words, by generating many of the practical problems that will ultimately arise, a pilot study enables the researcher to avert these problems by changing procedures, instructions and questions. Before collecting the actual data, the researcher conducted a pilot study involving 51 teachers from two Secondary schools in neighbouring Region (Kilimanjaro Region) which were not included in the final sample. The purpose of the pilot study was to enable the researcher to improve the reliability and validity of the instruments, and to familiarize with questionnaire and interview administration.

3.9 Validity and Reliability of Instruments

3.9.1 Validity of Instruments

Validity can be described as the extent to which the instrument measures what it purports to measure. Cohen et al (2000) defines validity as the degree to which a measuring instrument satisfies the purpose for which it was constructed. Validity is that quality of a data-gathering instrument or procedure that enables it to determine what it was designed to determine. Likewise, Healy and Perry (2000) pointed that, validity determines whether the research truly measures that which it was intended to

measure. Thus validity measures how truthful the research results are or the extent to which scores truly reflect the underlying variable of interest. Faux (2010) supported that, an effective and practical approach to pre-testing questionnaire instruments is to ensure that the questionnaire is understood by participants. Also, Faux (2010) insisted that, the benefits of the approach are improved questionnaire reliability and planning which results in better response rates.

In this study validity was considered in three types; content validity, criterion validity and construct validity. Koshy (2005) and Best and Kahn (2006) distinguish among three types of validity: Content validity refers to the degree to which the test items actually measure, or are specifically related to, traits for which the test was designed and is to be used. Criterion validity refers to the relationship between scores on a measuring instrument and an independent variable (criterion) believed to measure directly the behaviour or characteristic in question. The criterion should be relevant, reliable and free from bias and contamination. Construct validity is the degree to which test items and the structure of a test can be accounted for by the explanatory construct of a sound theory.

However in this study, the content-related validity of instruments was determined by giving the questionnaire to the supervisors, colleagues in class and other experts in the education field to carefully and critically examine and assess the relevance of the items to the objectives of the study. This was done and question items modified so as to collect right instruments.

It enabled the researcher to assess the clarity of the questionnaire so that items found to be unnecessary and misunderstood were modified to improve the quality of the research instrument, in so doing increasing its strength and validity.

Also, in the process of data collection the researcher used triangulation, that is, the use of more than one approach in order to increase the credibility and validity of the results (Kothari, 2002).

3.9.2 Reliability of Instruments

According to Fraenkel and Norman (2006) reliability is a statistical concept and relates to consistency and dependability consistency of obtaining the same relative answer when measuring phenomena that have not changed. A reliable measuring instrument is one that, if repeated under similar conditions, would present the same result or a near approximation of the initial result.

Reliability also refers to the degree of consistency or whether the research instrument can be relied upon to produce the same results when used by someone else (Leedy, 1999). Furthermore, Best and Kan (1993) define reliability as a degree of competency that an instrument or procedure demonstrates. Two aspects of reliability namely; stability and equivalence deserved special attention in this study. The stability aspect is concerned with securing consistent results with repeated measurements of the same person and with the same instrument (Hillway, 1995).

Zikmund (1997) added that, reliability refers to the degree to which measures are free from random error and therefore yield consistent results. Likewise, Sekaran (2003) acknowledged that, reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of the measure. Thus the extent to which any measurement procedure produces consistent results over time and an accurate representation of the total population under study is referred to as reliability. Consequently, a pilot study with 51 respondents who were not part of the study was done before the actual data collection

and the researcher used Cronbach's Alpha as a measure of internal consistency. Cronbach's Alpha is a reliability coefficient that indicates how well items in a set are positively correlated to one another (Sekaran, 2003). Darren and Mallery (2001) acknowledged that, coefficient alpha is a measure of internal consistency based on the formula $\alpha = rk / (I + (K-I)r)$, where k is the number of variables in the analysis and r is the mean of the inter-item correlation. They however caution that the alpha value is inflated by a larger number of variables so there is no set interpretation as to what is acceptable. Nevertheless, a rule of thumb that applies to most situations is given as:

$\alpha > .9$ – excellent

$\alpha > .8$ – good

$\alpha > .7$ – acceptable

$\alpha > .6$ – questionable

$\alpha > .5$ – poor

$\alpha < .5$ – unacceptable

Table 3.2 is a summary of the reliability test based on the Cronbach's alpha coefficient for the four scales items in the survey instrument. The Cronbach's alpha value was mainly 0.8 and is thus considered as good.

Table 3.1: Summary of Reliability Test from Teachers Responses on questionnaire items

SN	VARIABLE	ITEMS	CRONBACH'S ALPHA
1.	Staffing Status	4	.871
2.	Instructional Materials	5	.727
3.	Physical Facilities	7	.878
4.	Language of instruction	5	.792

Source: Field data (2016)

3.10 Ethical Considerations

Ethics in research according to Gravetter and Forzano (2006) has to do with the responsibility of researchers to be honest and respectful to all individuals who are affected by the research studies or reports of the results of the studies. Orb et al (2001) acknowledge that, gaining the trust of respondents and their willingness to support the researcher's role is a step in the right direction, but it is the recognition of the relevance of ethical principles that must guide any research.

The research clearance for this study was provided by the Moi University School of Education in accordance with the research procedures at the institution. The research clearance applied to obtain research permits from the participating district, see appendix G. All ethical guidelines were adhered to, including briefing participants about the objectives of the study, maintaining anonymity and confidentiality and ensuring that respondents participated voluntarily having given full consent.

3.11 Data Analysis

The study employed both quantitative and qualitative analysis. Data analysis involved the organization and interpretation of all the collected data so as to simplify and present them in the best way possible for easy interpretation and understanding. Quantitative analysis entailed analyzing numbers about a situation by choosing specific aspects of that situation. Descriptive statistics was used to analyze the quantitative data in terms of frequencies, percentages, mean scores and Standard Deviations. Statistical Product and Service Solution (SPSS) (formerly known as Statistical Package for Social Sciences) version 20.0 was employed to further analyse the data. Also tables were used for data presentation. Correlation was used to test the strength of the relationship between the variables.

Qualitative data was analysed using themes emerging from the interviews. The study findings were presented, analyzed and interpreted sequentially following research questions with meanings and inferences drawn from the findings as compared with concepts in the literature review.

3.12 Chapter Summary

This chapter discussed the research design and methodology used in the study. The descriptive survey design was employed to get perceptions of the respondents on the low academic achievement in Community Secondary Schools in Tanzania. The chapter also dealt with how research tools was designed, validated, and administered to the participants during the research process. Data analysis procedure was also presented.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter dealt with presentation of findings, analysis, interpretation and discussion of findings about factors affecting provision of quality education in Community Secondary Schools in Tanzania, particularly, in Arusha District. This was done by the use of data obtained through questionnaire and interview guide from teachers, school heads and one District Education Officer.

4.2 Response Rate

Two hundred and eighty nine (291) teacher respondents were targeted for the survey hence the same number of questionnaires was admitted. Respondent rate for questionnaire instrument was 257 out of 291 teachers, which is 88.31%. However, out of 291 questionnaires were received out of which 32 were poorly or inappropriately filled and were therefore not used in the analysis. In all a total number of 257 questionnaires were used in the analysis. From the interview instrument, all 26 head of schools and One District Education Officer was interviewed.

Table 4.1: Distribution of Total Responses

Rank	Total population	Target sample	Actual response	Response percentage
Teachers	1049	291	257	88.31
Head of school	26	26	26	3.14
District educational officer	1	1	1	1
Total	1076	318	294	92.45

Source: (Field Data, 2016)

4.3 Analysis of Demographic Profile for Teachers

This part presents demographic profile for teachers who filled the questionnaire. A total of 257 teachers from Arusha District filled the questionnaire. Twenty-six heads of schools and one District Education Officer were interviewed to enhance the discussion of findings from the questionnaire.

Teachers of varied backgrounds were involved in filling the questionnaire. As Table 4.2 indicates, a total of 257 teachers from 26 secondary schools filled the questionnaire. Of these, 133 (51.8%) were males while 124 (48.2%) were females. This implies that majority of sampled teacher respondents were males than their female counterparts. Teachers were also categorized according to their age. Table 4.2 further indicates that 164 (63.8%) teachers were in the category of 30 years and below, followed by 76 (29.6%) who belonged to the age group of 31-40 years, 13 (5.1%) who belonged to the age group of 41-50 and 4 (1.6%) who belonged to the age group of 51 and above. This implies that majority of teachers in Arusha District Secondary Schools are youths.

Table 4.2: Demographic Profile of Sampled Teachers

SN	Demographic Information	Category	Frequency	Percentage
1	Gender of Teachers	Male	133	51.8
		Female	124	48.2
		Total	257	100.0
2	Age of Teachers	30 and Below	164	63.8
		31-40	76	29.6
		41-50	13	5.1
		51 and Above	4	1.6
		Total	257	100.0
3	Education Level of Teachers	Doctorate	1	0.4
		Master's Degree	10	3.9
		Bachelor Degree	201	78.2
		Diploma	45	17.5
		Total	257	100.0
4	Teachers' Working Experience	10 and Below	221	86.0
		Years	31	12.1
		11-20	5	1.9
		21 and Above	257	100.0
		Total		

Source: Field Data (2016)

Teachers was also categorized according to their education level, majority of whom, 201 (78.2%) possessing Bachelors' degree, followed by 45 (17.5%) who possessed Diploma Education and 10 (3.9%) teachers who possessed Master's Degree. Only one teacher (0.4%) possessed doctorate degree.

Teachers' working experience was also looked at. Table 4.2 further indicates that 221 (86%) of teachers were having working experience of 10 years and below, followed with 31 (12.1%) with the experience of 11-20 years while 5 (1.9%) teachers possessed an experience of 21 and above years of teaching experience. This suggests that the higher the working experience of teachers, the lesser the number of teachers. This might be due to a recent rapid increase of higher learning institutions, which have increased the number of teacher graduates.

4.4 Analysis of Research Objectives

Having looked at analysis of demographic characteristics of teachers who responded to the questionnaire, this section deals with presentation, analysis and interpretation of research questions which guided this study, namely,

- i. What is the staffing status in Community Secondary Schools in Arusha District Council Tanzania?
- ii. Are the instructional materials adequate in Community Secondary Schools in Arusha District Council Tanzania?
- iii. What is the role of English as a language of instruction in Community Secondary Schools in Arusha District Council Tanzania?
- iv. Are the physical facilities adequate in Community Secondary Schools in Arusha District Council Tanzania?

Discussion of closed-ended data from the questionnaire was analyzed through Descriptive Statistics and enhanced by the open-ended data from both the questionnaire and the interview guide.

Research Objective 1: How Adequate are the Staffing Status in Community Secondary Schools in Arusha District Council?

Importance of the adequacy of instructional staff cannot be over emphasized. In order to answer this research question, it was necessary to determine the perception of teachers on adequacy of teaching staff in their respective schools, the average teacher-student-ratio, and the average teaching load for teachers per week. Table 4.3 indicates teachers' perception on the adequacy of teaching staff in secondary schools under investigation.

Table 4.3: Teachers Perception on the Adequacy of Teaching Staff

Teachers' Response	Frequency	Percentage
Adequate	94	36.6
Not adequate	160	62.3
Neutral	3	1.2
TOTAL	257	100.0

Source: Field Data (2016)

In particular, the Table 4.3 shows that a total number of 160 teachers (62.3%) perceived that teachers are not adequate in schools under investigation while only 94 teachers (36.6%) considered teachers to be adequate and 3 teachers (1.2%) were neutral. This implies that majority of teachers in schools under investigation perceived that the number of teachers is not adequate in their particular schools. This situation concurs with the findings of Mosha (2014) and Chapman (2004) who found that, in most of the secondary schools in Tanzania, especially community built schools; there

is inadequacy of teaching staffs to be able to assist the implementation of education to the increasing number of students that are currently enrolled making the challenge even more acute. The findings also confirm the findings of URT (2010) that, the reason for poor performance in form four secondary school examinations is attributed by acute shortage of teachers and unequal distribution of teachers.

Thus, poor academic achievement of Community Secondary Schools in Arusha District could be attributed to inadequacy of teaching staff. In view of this issue, some studies such as Chapman (2004), MacDonald (2007) and Klaus (2008) have further observed that shortage of teachers is a growing problem in many developing countries that offer free education like Tanzania. Therefore, while it is good deal to offer free education in Tanzania, the government and policy makers, particularly, need to come up with strategies to fight detrimental effects of free education, such as inadequacy of teachers in Community Secondary Schools.

During interview guide, one of the interviewees had these to say in regard to adequacy of teachers: “Yes for Arts subjects but science subject not enough although we have at least good number of them compare to my neighbor schools” (Interviewee 5). This suggests that the school had sufficient number of teachers in Arts but not in sciences, and the interviewee was aware of the scarcity of teachers in surrounding/ neighboring schools. This is in harmony with the findings in a recent study of Magoti (2016) who investigated whether Tanzania has achieved the second Millennium development goal and came to a conclusion that, Tanzania has made very promising steps towards achieving the goal in Primary Education. But one of notable challenges was shortage of teaching staff to cater for the need of rapid increase of learners in Primary Schools, which is a result of free education.

This was also supported by the second interviewee who had this to say: *“Actually, I don’t have enough teachers especially for science subjects. Art subjects at least have teachers not like science subjects.”* Further, the interviewee added: *“Before free education, we used to hire science teachers from surrounding schools and we depended on financial contributions from the parents but now, no any kind of contributions, so we can’t do anything rather than waiting for the government to supply teachers.”* The third interviewee also indicated a similar concern that insufficiency of teaching staff is one of the key issues that face secondary education in Tanzania. The interviewee had this to say: *“we depend on the students who are coming for the field attachments from different Colleges and Universities. This suggests that the shortage of teaching staff is a possible determining factor for poor or limited academic achievement of learners in Tanzanian Public Secondary Schools and particularly in Arusha District Council.*

Furthermore, Ndalichako and Komba (2014) in their study *Students Subject Choice in Secondary Schools in Tanzania: A matter of students’ ability and interests or force circumstances?* Stressing on the shortage of teachers Ndalichako and Kombafound this in the Focus Group Discussion (FGD)

Sincerely speaking, we are enjoying studying arts subjects. There is a serious shortage of science teachers, there are no textbooks in some subjects. For instance there is no physics textbook to the extent that even the teacher borrows a book from the students. Also, our science laboratory lacks the facilities that would allow us to conduct experiments. We don’t do practical seriously, we are only swindling (FGD, student, school P, 17/4/2014).

Other student commented that:

I don't like science subject because in our school we have a shortage of science teachers. For instance we have only one Chemistry teacher who teaches all the classes from Form I to Form IV. So the teacher cannot teach effectively. The other challenge we have is lack of science laboratory equipment and chemicals. In some cases you can be in a laboratory doing say a food test practical and then you are told there are no chemicals for testing starch (FGD, School D, 18/2/2014).

The interview with District Education Officer (DEO) when asked: Do you have sufficient teachers in your District? Had this to say:

“Actually, we don't have enough teachers especially science teachers. Art subjects at least have teachers not like science subjects. And this is due the increase in the enrolment rate from primary to secondary schools whereby the number of students enrolled to secondary schools is not propositional to number of teachers” (Interview, DEO, 4/10/2016).

To further ascertain the intensity of teacher's inadequacy in schools under investigation, Table 4.4 shows teachers-student ratio as perceived by teachers in schools under investigation. Particularly, the Table4.4 indicates that 54 (21%) teacher's perceived teacher-student ratio to be 1:20 while 34 (13.2%) teachers considered the same to be 1:30 and (15.6%) teachers regarded the ratio to be 1:40. It was also worth noting that 124 (48.2%) teachers perceived the ratio to be greater than or equal to 50 while 5 respondents were neutral.

Table 4.4: Teacher to Student Ratio in the Investigated Schools

Teachers' Response	Frequency	Percentage
1:20	54	21.0
1:30	34	13.2
1:40	40	15.6
1:50 and Above	124	48.2
Neutral	5	1.9
TOTAL	257	100.0

Source: Field Data (2016)

This implies that almost a half of teachers in schools under investigation considered the teacher-student ratio to be greater than or equal to 50, which is greater than the recommended/ normal teacher-student ratio for secondary schools in Tanzania which is 1:40. This finding is in harmony with data from the interview guide which indicated variation of perceived teacher-student ratio from one school to the other.

One of interviewed school heads, for instance, explained that “teacher-student ratio in my school is 1:100, one teacher attending 100 students of which this number is too big indeed” (Interviewee 9). Another school head revealed that “teacher-student ratio in my school is about 1:80; one teacher attending 80 students (Interviewee 11).

Another interviewee revealed that:

In my school, one teacher attends 50 students, and this is because we have no enough teachers. The recommended ratio is one (1) teacher to 40 students. But the condition is even worse to science subjects in that, in some schools you may find no teachers at all (interviewee 17).

A similar view was also given by interviewee 3: “Teacher student ratio in my school is like this, one teacher attends more than 60 students of which this number is bigger for a teacher to work with an individual student.” The Head of School 4 also expressed serious scarcity of teachers in schools by maintaining that “teacher student ratio in my school is 1:56 one teacher attending more than 56 students, which is a big number for a teacher to attend.”

When teachers, through open-ended information in the questionnaire were asked to comment on how the student teacher ratio affect students’ academic achievement, it was commonly held that, when the teacher-student ratio is higher than the normal, teachers cannot have sufficient time to mark students’ assignments, return them on time and even counsel students with difficulties in learning. Other teachers contended that, when the teacher-student ratio is too big, teachers cannot identify and actually solve individual weaknesses of students and manage the classrooms. Particularly, one teacher, for instance, contended that “when the ratio is very high, it affects student-teacher interaction, hence, poor performance in the results.”

Other teachers expressed their concerns that the higher the ratio, the limited the time for teachers to deal with individual needs of the learners and to monitor the progress of each student in the classroom, thus it is quite difficult to prepare students to achieve intended goals and objectives in the teaching-learning transactions and therefore make them not to pass the National Examinations. It is also worth noting what one teacher through the questionnaire indicated: “ineffective follow-up, which is a result of higher student-teacher ratio, leads to mass failure in the Form four National Examinations.”

Likewise study by Waita (2012) on pupil-teacher ratio and its impact on academic performance in public primary schools Kenya confirmed this finding that, Pupil – Teacher Ratio have statistically significant effect on pupil’s performance in primary schools. The study showed that as PTR increases, average test scores in primary schools decreases. David (2014) agreed that one of the factors influencing students’ academic performance is the low number of teachers to students’ ratio especially in public schools. The finding is also in line with Mulei et al (2016) who found the same problem exist in Mozambique where the study found teacher shortages with the STR of 67.4:1. The findings also agreed with the findings of Tamasha (2012) who did a study in 16 primary and 16 secondary schools in 8 districts of Tanzania and found that, on average the student teacher ratio in secondary schools was 1:88 and only one school had a target ratio of 1:40 as suggested by TIE (2010). The study found that in eight out of 13 secondary schools the student –teacher ratio was higher than 50. It was higher than 100 in four out of 13 schools. Similarly, the finding can be linked with the study by Bakari et al (2012) who found the average ratio in 162 schools sampled was 58:1, against the required 40:1. They concluded that such class sizes in public secondary schools make it difficult for the teachers to teach lessons effectively as compared to their counterparts in private schools who handle a smaller number of pupils.

Table 4.5: Analysis of how teachers rate teaching workload

Teachers’ Response	Frequency	Percentage
Heavy	59	23.0
Moderate	174	67.7
Light	19	7.4
Neutral	5	1.9
TOTAL	257	100.0

Source: Field Data (2016)

Table 4.5 further indicates how teachers under investigation rated teachers' workload in their particular schools: The Table 4.5 reveals that only 19 (7.4%) teachers considered their teaching loads light while 174 (67.7%) regarded the load to be moderate and 59 (23.0%) considered it to be heavy. This implies that about a quarter of teachers in schools under investigation consider their teaching loads to be heavy. Heavy teaching loads, therefore, could be one among possible causatives for mass failure of students at Form Four National Examinations which has been a major problem in schools under investigation.

The study reveals that shortage of secondary school teachers was among the determinant of poor academic achievement in Arusha District Council in Tanzania. Shortage of teachers resulted into heavy work- loads to teachers and higher students-teacher- ratio which hinders effective teaching to bring about improved academic achievement to students. This was supported by all the heads of schools, teachers and District Education Officer and several studies from different areas confirmed the findings for this study. It can therefore be inferred that inadequate teachers in community secondary schools contributes to students' poor academic achievement in their National Form Four Examinations.

Research Objective 2: To Establish the Adequacy of Instructional Materials in Community Secondary Schools in Arusha District Council Tanzania.

Are Instructional Materials Adequate in Community Secondary Schools in Arusha District Council?

This research question was analyzed by the help of data obtained from the questionnaire through Mean Scores and Standard Deviations.

Table 4.6: Adequacy of Instructional Materials

SN	Statement	Mean	STD Dev.
1	There are adequate teachers' reference books and guides.	2.4711	.85529
2	There are adequate students' textbooks.	2.4463	.90595
3	There are adequate reference books.	2.3249	.88294
4	There are adequate maps and globes.	2.1447	.92974

Source: Field Data (2016)

In order to determine the availability of instructional materials, the aggregate perception of teachers was interpreted based on mean scores and standard deviations of the responses to selected closed-ended items rated on four-point scale; and since the mean scores required proper interpretation, it was important to give the scale for interpretation as follows:

Table 4.7: Mean Scores and Standard Deviations for Adequacy of Instructional Materials

Means	Interpretation
3.50-4.00	Very Adequate
2.50-3.49	Adequate
1.50-2.49	Inadequate
1.00-1.49	Very Inadequate

Source: Field Data (2016)

As Table 4.7 indicates, all the four selected instructional materials were perceived by teachers to be inadequate, that is, falling in the category of 1.50 to 2.49 Mean Scores. Particularly, teachers perceived teachers guides and reference books (M=2.4711, STD Dev. .85529); students' textbooks (M=2.4463, STD Dev. .90595); reference books (M=2.3249, STD Dev. .88294); and maps and globes (M=2.1447, STD Dev. .92974); to be inadequate in their particular schools. This is in harmony with what Sumra and Rajani (2006) established that community built schools in Tanzania lack most of the important facilities, e.g. laboratories and teaching and learning materials. As observed by Mlozi et al (2013) the head count enrolment in community schools has increased in the context of scarce resources and a dire need for school infrastructure (classrooms, desks, laboratories, and library). Based on this finding, a genuine question could be asked: What could be the reason for such scarcity of instructional materials? In response to this question, the Review of SEDP I, the number of secondary schools has more than tripled between 2004 and 2009 to serve different underserved communities and so has the increased number of enrollees. Mlozi et al (2014) further asserted that, despite these successes, there have been a number of challenges, including poor performance in secondary education examinations, with most students getting marginal pass of Division IV. Thus, inadequacy of instructional materials could be a possible determinant of poor academic achievement by students in Community Secondary Schools in Arusha District Council.

This indicates serious shortage of instructional materials in schools under investigation. This finding is in harmony with the information from the interview guide where it was reported that "teaching learning materials are not sufficient especially for arts subjects, we don't have things like reference books, text books and also teaching aids" (Interviewee 1). Another school head revealed that "Teaching

learning materials in my school are not sufficient. Teachers are struggling much to find ways to help students understand but no reference books, no teachers guide, no text books, and no teaching aids, hence we are doomed to serious students' failure.” Nyamubi (2003) opined that teaching materials are very important in the whole process of teaching and learning. They make learning more pleasant to the students because they offer a reality of experience, which stimulates self-activity and imagination on the part of the students. They also supply concrete basis for conceptual thinking and hence, reduce meaningless word responses from students. This fact could imply that scarcity of teaching-learning materials could be a contributing factor to poor academic achievement among students in Community Secondary Schools in Arusha District Council.

Another interviewee maintained that “instructional materials are not sufficient; we don't have things like reference books, text books and also teaching aids. Science subjects books are there but no teachers” (Interviewee 3). Another head of school expressed similar response in the interview guide that:

Inadequacy of instructional materials is another serious problem facing my school. I have so many students because of the free education policy but teaching-learning materials are not available and the problem is even worse to Arts subjects because students opting for arts subjects are also more as compared to those who are opting for science subjects.

Likewise interview with District Education Officer when asked the question on the adequacy of instructional materials had this to say:

Teaching learning materials are not enough especially to arts subjects, we don't have things like reference books for teachers and students, text books and also teaching aids. Fun enough for arts subjects we have at least good number of teachers although they are not enough but teaching learning materials are not there. Science subjects' books are there but no teachers.

Table 4.8 further, indicates that textbooks, the most basic instructional materials for students and teachers, are in serious scarcity as majority of teachers indicated that the ratio of textbook-students is 1:10+. This implies that one textbook is shared by 10 or more students in schools under investigation.

Table 4.8: Analysis of Textbook-Student Ratio

Student-Textbook Ratio	Frequency	Percentage
1:1	17	7.0
1:5	57	23.4
1:10	37	15.2
1:10+	133	54.5
TOTAL	244	100.0

Source: Field Data (2016)

When asked to explain the reasons for such scarcity, teachers attributed the scarcity to limited funds, poor budgeting and lack of government support. Other teachers indicated that the increase of students is not commensurate to the number of books allocated in schools under investigation. This implies that government has increased the number of students in public schools without consideration to increase the number of textbooks. Thus, it can be inferred that the increase of enrolment compromises the quality of education, and therefore makes the country not to realize the hopes of Big Results Now in Education (BRNEd). This finding proved that there is shortage of instructional materials in secondary schools in Tanzania. In order to solve this problem, it is very necessary for policy makers to put top priority in textbook distribution to all secondary schools.

Research Objective 3: What is the Role of English as a Language of Instruction in Community Secondary Schools in Arusha District Council?

The role of English as a language of Instruction in Community Secondary Schools in Arusha District was determined by five indicators namely, effect of the use of English Language as Medium of Instruction on Students' Academic Achievement, challenges facing the usage of English as Medium of Instruction, students ability to understand when taught in English and English Language as determining factor for low academic achievement.

4.5 Effect of English Language on Students' Academic Achievement

Teachers were asked whether English as Medium of Instruction has any effect on students' academic achievement. As Table 4.9 suggests, majority of teachers registered their feelings that, English as a Language of instruction has some effects on students' academic achievement.

Table 4.9: Use of English as Language of Instruction and Students' Academic Achievement

Teachers' Response	Frequency	Percentage
Affect	205	79.8
Not Affect	44	17.1
Neutral	8	3.1
TOTAL	257	100.0

Source: Field Data (2016)

Particularly, one of interviewed school heads expressed his deeper feelings that “because language is a tool for sharing knowledge with the students in the classroom, so if the language used is not understood by both teacher and the students, we don’t expect to have good performance in their final examinations.”

Another head of school added: “Yes, this is really a problem. As students can’t express themselves using the language of instruction, they can’t even apply the knowledge using the language, and so this shows that there is a big problem.”

Interviewee further indicated that the root of this problem is in the switch from Kiswahili as medium of instruction in primary schools to English as a language of instruction in secondary schools as expressed:

To me I can say English as a language for instruction in secondary schools may be the major cause of students’ failure. As you know, these students at primary school level Kiswahili was the Language of instruction, but when they join secondary school they find themselves into another new language of instruction, again they need to master the language first so that they can use it, so it becomes very difficult to master and apply the language for that short period of time. And remember at primary level English is been taught as a subject, this brings so much confusion not only to students but also teachers (Interviewee 1).

This implies that barriers of English as a language of Instruction is a problem to both teachers and learners. This led to further investigation on specific challenges facing the teachers in the use of the English language as medium of instruction.

Through questionnaires, teachers were asked to indicate whether they face challenges in the use of English as a language of instruction in secondary schools. As Table 4.10 indicates, 198 (73.2%) teachers agreed that they face challenges in the use of English as a language of Instruction in Community Secondary Schools in Arusha District,

while only 65 (25.3%) teachers did not agree. Four teachers (1.6%) were neutral. This implies that majority of teachers in Community Secondary Schools in Arusha District agreed that they face challenges in the use of English as a language of Instruction. The most common challenge cited through open-ended data from the questionnaire was learners' limited competence in English Language as of Instruction.

Table 4.10: Challenges faced by teachers in the use of English as a Language of Instruction

Teachers' Response	Frequency	Percentage
Yes	198	73.2
No	65	25.3
Neutral	4	1.6
TOTAL	257	100.0

Source: Field Data (2016)

One head of school, for instance, added: "Students sometimes fail not because they don't know the answers but simply because of the language barrier." Another head of school commented, "English language is an obstacle to students as most of the essay questions are not attempted due to lack of vocabulary in students' heads." This was in harmony with what was indicated during interview guide where one of the school heads maintained that the use of English as a language of instruction "contributes to failures in our school, this is because of poor background in the language of instruction from Primary level, where Kiswahili is the language used and when they join Secondary level they find English as the language of instruction" (Interviewee 1).

The interview with DEO when asked, do you think language of instruction may result into low academic achievement among the learners? Had these to say:

Yes, this is obvious because language is like a tool for sharing knowledge with the students in the classroom, so if the language used not understood by both teacher and the student, we don't expect to have good performance in their final examinations (DEO, 2016).

The finding of this study is in agreement with the findings arrived by Ndalichako and Komba (2014) who conducted a research on Students' Subject Choice in Secondary Schools in Tanzania: A Matter of Students' Ability and Interests or Forced Circumstances? They found these from Focus Group Discussions (FDG):

The biggest challenge here at our school is mainly English language. Our English language proficiency is very low and teachers are not doing anything to help us! Teachers have not implemented the English speaking policy which requires students to speak English. They use Kiswahili in teaching but students cannot use Kiswahili in responding to the national examination questions. We are all required to write in English. So at the end of the day students know points for a particular question but the problem is how to write them in examination paper in proper English language (FGD, school E, 18/2/2014).

To further confirming this study finding Ndalichako and Komba (2014) also discovered these:

I think the major factor which contributes to massive failure rate in this school is the use of English language. Many students in the school do not speak English when they find English in Examinations they fail to respond to questions and sometimes they don't even understand the demand of the question. So they end up answering different things from what they have actually been asked (FGD, student, school C, 20/2/2014).

The finding also supported by literature in the work of Sumra and Rajani (2006) who bring to view the fact that the vast majority of public primary school leavers in

Tanzania develop little confidence in English and many cannot string together a simple paragraph. Consequently, they are unable to follow what is taught or written in English in secondary school, and this contributes to poor learning which affects the academic achievement of secondary school education in Tanzania. This situation led to further investigation on the effect of English Language on students' academic performance as perceived by teachers.

Students Ability to Understand when Taught in English

A total number of 227 (88.3%) teachers rejected that their students understand when English is used as a language of Instruction while 5 (1.9%) teachers were neutral.

Table 4.11: Students Ability to understand when taught in English

Teachers' Response	Frequency	Percentage
Understand	24	9.3
Not understand	227	88.3
Neutral	5	1.9
TOTAL	257	100.0

Source: Field Data (2016)

This implies that majority of teachers (more than three quarters) rejected that their students have ability to understand when English is used as a language of Instruction in classrooms. This is in harmony with the contention of Sumra and Rajani (2006) that the vast majority of Public Primary school leavers develop little confidence in English and many cannot string together a simple paragraph. Consequently, they are unable to follow what is taught or written in English in secondary school, and this

contributes to poor learning which affects the academic achievement of Secondary School Education in Tanzania. Studies by Andersen (1975) and Mvungi (1982) in Qorro (2008) show that, proficiency in the language of instruction is an important factor in educational performance. This implies that if students are not competent in the language of Instruction, they cannot experience better achievement, and therefore, lack of proficiency in the language of instruction could be a possible determining factor for low academic achievement among students in Community Secondary Schools in Arusha District. To further determine the place of English Language in teaching-learning transaction, it was necessary to find out about teachers' perception whether English Language is a determining factor for low academic achievement by students under investigation.

English Language and Low Academic Achievement

It was also necessary to have the view of teacher on the connection between the use of English language and students' low academic achievement. As Table 4.12 indicates, majority of teachers (76.3) agreed that English as a Language of Instruction is a determining factor for students' low academic achievement. This is in harmony with what has been previously expressed by teachers that incompetence in English Language as a language of Instruction is a major hindrance for students to succeed in their studies. The findings of this study revealed that, English as a language of instruction in secondary schools is among the cause of low academic achievement to students in Form Four National Examination in Tanzania.

Table 4.12: Analysis of English as a Language of Instruction as Determining Factor for Students' Low Academic Achievement

Teachers' Response	Frequency	Percentage
A factor	198	76.3
Not a factor	58	22.6
Neutral	3	1.2
TOTAL	257	100.0

Source: Field Data (2016)

Research Objective 4: Are the physical facilities adequate in Community Secondary Schools in Arusha District Tanzania?

In order to ascertain adequacy of selected physical facilities in Community Secondary Schools, it was necessary to interview heads of schools. Particularly, one of school heads commented that, "Physical facilities like classrooms, desks are not enough at all, also library is available but not big enough to accommodate that big number of students and they are with limited resources" (Interviewee 6). Further, one of school heads indicated that "Classrooms are not enough, this leads to many students attending lesson in a single congested room of which a teacher cannot help managing them (Interviewee 9). It was also similarly expressed by another school head that "Classrooms are available but not enough and they are too small with few desks (Interviewee 1).

Furthermore, the researcher had seven items in the questionnaire which appear in Table 4.12, to measure the adequacy of physical facilities. The perception of teachers about adequacy of physical facilities was indicated by descriptive statistics in terms of mean scores and standard deviations of the responses to the closed-ended questions rated on four-point scale; and since the ratings required the interpretation of the means, it was important to give the scale for interpretation as follows:

Means	Interpretation
3.50-4.00	Strongly Agree
2.50-3.49	Agree
1.50-2.49	Disagree
1.00-1.50	Strongly Disagree

Table 4.13: Inadequacy of Physical Facilities

S.NO	ITEM	MEAN	STD. Dev.	Interpretation
1	There is non-functional library (e.g. outdated and irrelevant books	2.8884	.102254	Agree
2	There is lack of laboratories	2.5301	.97847	Agree
3	There is ineffective Science Laboratories	2.7623	.92566	Agree
4	There are no enough classrooms	2.7107	1.04217	Agree
5	There is inadequate classroom spacing	2.8300	1.08736	Agree
6	There is lack of desks and chairs	2.6762	1.05296	Agree
7	There is lack of libraries	3.0744	1.01985	Agree

Source: Field data (2016)

Information from Table 4.13 indicates teacher acceptance of inadequacy of selected physical facilities for teaching and learning. Particularly, teachers perception was that, there are non-functional libraries (e.g. outdated and irrelevant books) (M=2.8884, STD Dev. 1.02254), there is lack of laboratories (M=2.5301, STD Dev. 97847), there is ineffective science laboratories (M=2.7623, STD Dev. 92566), there are no enough classrooms (M=2.7107, STD Dev. 1.04217), there is inadequate classroom spacing (M=2.8300, STD Dev. 1.08736) and there is lack of desks and chairs (M=2.6762, STD Dev. 1.01985).

Scarcity of selected physical facilities can therefore be attributed to as a major factor hindering academic achievement of learners in Community Secondary Schools in Arusha District. This finding is in agreement with the findings of Odeh (2015), Saeed and Wain (2011) and Owoeye and Yara (2011) who identified physical facilities such as classrooms, furniture such as desks and chairs, libraries, and laboratories as among the contributing to low academic achievement of students. The finding of this study is in corroboration with the findings obtained by Shami and Hussain (2005) who revealed that the availability of physical facilities in a school had a significance impact on students' academic performance. In the context to school physical facilities, environment in which the students learn is very crucial and without the suitable environment effective learning cannot take place. The study also confirmed the observation of Khan and Iqbal (2012) who acknowledged that, adequate and quality school physical facilities are basic ingredients for quality education and to achieve the intended goal of the school program. They also strengthen the idea by emphasizing that learning is a complex activity that requires students and teachers' motivation, adequate school facilities such as standardized buildings and classrooms with their facilities, instructional materials and equipment for child's development. The study

finding supported the findings by Hakielimu (2011) who agreed that most community secondary schools in Tanzania particularly those in rural areas are at disadvantage group because they lack adequate physical facilities and human resources. Most of the community secondary schools are anticipated to have lack of enough classrooms.

4.6 Summary of Findings

After data presentation, analysis, interpretations and discussion, the researcher was able to come up with the following important findings with regard to determinants of low academic achievement in Community Secondary Schools in Arusha District Council:

The first objective of this study was to establish the adequacy of teaching staff in Community Secondary Schools in Arusha District. Particularly, the objective sought to establish whether number of teachers in schools under investigation is a determinant of low academic achievement in schools under investigation, and the following findings were established:

- a. There is inadequacy of teachers to meet the demands of rapid increasing number of students in schools under investigation. Therefore, offering free education would compromise the quality of education if the government and policy makers, particularly, will not come up with strategies to fight detrimental effects of free education, particularly inadequacy of teachers in community secondary schools.
- b. Teacher-student ratio in Community Secondary Schools in Arusha District ranges between 1: 50 and 1:100, which is greater than the recommended/ normal teacher-student ratio for secondary schools in Tanzania.

- c. Teachers experience heavier teaching loads as Only 7.4% of them considered their teaching load to be light while majority (67.7%) regarded it to be moderate and almost a quarter (23%) regarded their teaching load to be heavier. Therefore, the weight of teaching load could somehow be a possible determinant for low academic achievement in Community Secondary Schools in Arusha District. This is because when teachers are having heavier teaching loads, they will not have time to concentrate on individual needs of their students, and therefore, chances for students' high achievements will be limited.

The second objective of this study was to establish the availability and adequacy of instructional materials in schools under investigation. In this objective, the following findings were established:

- a. Through questionnaire and Interview guide responses, respondents perceived that textbooks, reference books, maps and globes are inadequate in schools under investigation. They also considered inadequacy of such materials as a serious problem facing their schools and therefore contributing to low academic achievement in form four National Examinations.
- b. Textbooks, for instance, the most basic instructional material for students and teachers, are in serious scarcity as majority of teachers indicated that the ratio of textbook-students is 1:10+. This implies that one textbook is shared by 10 or more students in the schools. Particularly, the increase of students in Community Schools is not commensurate to the number of textbooks allocated in the schools. This suggests that government has increased the number of students in public schools due to free education,

without consideration to increasing the number of textbooks in schools. Thus, the increase of enrolment compromises the quality of education, and therefore makes the country not to realize the hopes of Big Results Now, which is quality education.

The third objective of this study was to establish the role of English as a language of instruction in Community Secondary Schools in Arusha District Council Tanzania. In this objective, the following findings were established:

- a. Majority of teachers expressed their feelings that English Language has some negative effects on students' academic achievement in that, students can't express themselves using the language; they can't even apply the knowledge taught using the language, and so this shows that, the use of English as a language of instruction contributes to students low academic achievement.
- b. Majority of teachers agreed that they face challenges in the use of English as a language of Instruction. The most common challenge cited through open-ended data from the questionnaire and interview guide was learners' limited competence in English as a Language of Instruction. Thus, English as a Language as of instruction is a determinant of low academic achievement in Community Secondary Schools in Arusha District.

The fourth objective of this study was to assess the adequacy of essential physical facilities in Community Secondary Schools in Arusha District Council Tanzania. With regard to this objective, it was established that physical facilities like classrooms, libraries, chairs and desks are not enough to cater for the rapid increase

number of students in schools under investigation, something which brings about students congestion in the classrooms. Particularly, teachers indicated their acceptance of the fact that there are non-functional libraries (with outdated and irrelevant books), there is lack of science laboratories and poorly constructed classrooms, inadequate classroom spacing, and lack of desks and chairs. Thus, scarcity of selected physical facilities is a determinant of low academic achievement of students in Community Secondary Schools in Arusha District Council.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter gives an overview of the study starting from Background of the Study to the analysis of the investigation. Further, it gives summary of findings and gives conclusions and recommendations which provide answers to the present investigation.

5.2 Summary of the Study

The purpose of this study was to assess the determinants of academic achievement of students in community secondary schools in Arusha District Council Tanzania: In order to achieve the purpose of the study, the specific objectives of this study were;

- i. To find out the staffing status in Community Secondary Schools in Arusha District Council, Tanzania.
- ii. To establish the adequacy of instructional materials in Community Secondary Schools in Arusha District Council, Tanzania.
- iii. To establish the role of English as a language of instruction in Community Secondary Schools in Arusha District Council, Tanzania.
- iv. To assess the adequacy of essential physical facilities in Community Secondary Schools in Arusha District Council, Tanzania.

The present study utilized a descriptive survey research design. This study was conducted in Arusha Region specifically Arusha District Council. The study employed Mixed Methods or Pragmatic Paradigm with the aim of increasing the credibility and validity of the results by obtaining findings through convergence of different perspectives such as questionnaire and interview guide.

The target population for this study consisted of 291 teachers, all head of schools from 26 Community Secondary Schools in Arusha District Council and One District Education Officer which makes a total population of 318. These are the persons who interact with learners and curriculum more frequently. Thus, they have first-hand information about possible determinant of low academic achievement in Tanzania. Respondent rate for questionnaire were 257 out of 291 teachers, which is 88.92%. The questionnaire comprised open-ended and closed-ended items. The open-ended items enabled the researcher to look critically at a problem by getting divergent views and opinions from the respondents. Closed-ended questions elicited specific information from respondents regarding determinants of low academic achievement in Community Secondary Schools in Arusha District Council. The open-ended data was analyzed and arranged using thematic approach. Review of related literature and studies were used to enhance discussions and findings of the investigation.

5.3 Conclusions of the Study

The study sought to assess the determinant of low academic achievement of students in community secondary schools and has identified some factors that significantly results into low academic achievement of students. However, the findings of this study lead to an overall conclusion that, secondary education in Tanzania is facing many challenges which contributes to low academic achievement of students. In more specific terms, conclusions drawn from the findings are as follows:

First, there is inadequate number of teaching staff to be able to assist individual learners so as to bring about improved academic achievement in secondary schools. This is reflected by abnormal teacher-student ratio and heavier teaching loads as emerged from the study findings.

Secondly, there is inadequate number of textbooks, reference books, maps and globes in schools under investigation. This is because the increase of students in Community Schools is not commensurate with the number of learning materials allocated in the schools. This is a serious problem facing schools under investigation and therefore contributing to low achievement in CSEE National Examinations.

Thirdly, students have limited competence in English Language. The use of English a language of instruction has some negative effects on students' academic achievement since they can't express themselves and they can't even apply the knowledge taught using the language.

Fourthly, schools under investigation have inadequate physical facilities such as classrooms, desks, chairs and the available classrooms are poorly constructed with inadequate spacing. Therefore, scarcity of these physical facilities is attributed to low academic achievement of students in Community Secondary Schools in Arusha District, Tanzania.

5.4 Recommendations of the Study

Based on the findings of this study and conclusions, the following recommendations were made:

1. The government of Tanzania to employ enough teachers in all secondary schools to make the teacher student ratio low as recommended for secondary schools. This will enable teachers to have time to effectively mark students' assignments and meet needs of individual students, something which will improve academic achievement of students in their respective schools.
2. Curriculum developers at Tanzania Institute of Education (TIE) together with policy makers in the Ministry of Education and Vocational Training

(MoEVT) should come up with a policy guideline that will enhance provision of enough textbooks, reference books and other instructional materials to facilitate smooth learning in secondary schools for better academic achievement of the students. Also, the government of Tanzania to ensure that, the increase of students in the schools should commensurate with the number of instructional materials allocated in each school. This will pave ways for students to reach their highest possible academic achievement.

3. There is a need for the government of Tanzania to think on how it can revisit its language policy so that the policy can reflect the students need and classroom practices at large. This will help to solve the language problem and make them successful for the rest of their secondary school education journey and thus, reaching highest possible academic achievement.
4. The government of Tanzania should come up with a policy on provision of physical facilities in secondary schools to allow teaching/learning process take place easily.

5.5 Recommendations for Further Studies

1. Comparative Study on Factors Affecting Academic Achievement between Public and Private Secondary Schools in Tanzania.
2. Students and Teachers' Perception on the Use of English Language as Medium of Instruction in Tanzanian Secondary Schools.
3. Availability and Use of Teaching and Learning Materials in Secondary Schools.

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APPENDICES**APPENDIX A: LETTER OF INTRODUCTION TO THE RESPONDENTS**

Lyimo,
NaisujakiSephania
P.o Box 296,
Arusha- Tanzania.

Dear Respondent,

RE: EDUCATIONAL RESEARCH WORK

I am post-graduate student at the Moi University, pursuing Doctor of Philosophy in Education (PhD. Education). Am conducting a study on the *factors affecting provision of quality education in Community Secondary Schools in Arusha District Tanzania* and your school has been selected to participate in the study. I therefore, request for your assistance and cooperation when collecting information regarding this study. Please comply and give your honest and accurate information required by the questions. Thank you in advance.

Yours Sincerely,

.....

Lyimo, Naisujaki Sephania

APPENDIX B: QUESTIONNAIRE FOR TEACHERS

This research is meant for academic purpose. The aim of the study is to *analyse factors affecting provision of quality education in Community Secondary Schools in Arusha District Tanzania*. You are requested to provide answers to these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential. Please do not write your name or that of your school anywhere on this questionnaire. Please tick [√] where appropriate or fill in the required information on the spaces provided.

SECTION: I

Background Information

1. What is your gender?

Male Female

2. What is your age in bracket?

21– 25 years 26– 30 years 31– 35 years 36– 40 years

41– 45 years 46– 50 years 51– 55 years 56– 60 years

3. What is your highest professional qualification?

PhD M. Ed B. Ed Diploma

Any other specify

4. For how long have you been a teacher in your teaching career?

1– 5 years 6– 10 years 11– 15 years 16– 20 years 20– 25 years 25 - 30 years

SECTION II: Adequacy of Staffing

Are there enough teachers in your school?

- Yes No Neutral

What is the reason for your answer above.....

8. (a) What is the average teacher student ratio in your school?

- 1:20 1:30 1:40 1:50 and above

(b) How does the teacher student ratio affect students' academic achievement?

.....

9. (a) What is your average teaching load per week?

- Below 20 periods 20-24 periods 25- 30 periods More than 30 periods

(b) How do you rate this work load?

- Heavy Moderate Light

(c) What effect do you think the teaching load has on the student academic achievement?

.....

10. What do you think could be done to improve students' academic achievement in your school?

.....

SECTION III: Availability and Adequacy of Instructional Materials

Please indicate with a tick (√) the adequacy of the following instructional materials in your school in the table provided below. The alternate choices are as follows: a. Very adequate - VA b. Adequate-A c. No Idea-NI Inadequate- IA e. Very Inadequate-VI

Teaching /learning Materials	VA	A	NI	IA	VI
------------------------------	----	---	----	----	----

1. Teachers reference books and guides
 2. Students' textbook
 3. Reference books
 4. Maps and charts
-

11. (a) Does your school have enough instructional materials?

- Yes No Neutral

What is the reason for your answer above.....

(b) Which of the following materials available in your school

- i. Student Text books
- ii. Teachers reference books and guides
- iii. Reference books
- iv. Maps and charts

12. How is the distribution of the copy per student-book (student-book ratio). Please tick [√] accordingly on the space provided.

- 1:1 1:5 1:10 1:10+

13. (a) What is the attitude of students towards learning in your school?

- Positive Neutral Negative

(b) Please explain your answer above

.....

14. What is general academic achievement of your school in Certificate of Secondary Education Examinations? (CSEE)

Please tick [√] accordingly

-
- | | |
|----|-----------|
| 1. | Very good |
| 2. | Good |
| 3. | Fair |
| 4. | Poor |
-

15. How does students' behaviour affect academic achievement in Certificate of Secondary Education Examination (CSEE)?

.....

16. What other related determinants do you think contribute to low academic achievement of students in exams?

.....

17. State at least three challenges that you face as a teacher.

.....

SECTION IV: The Role of English as a Language of Instruction

18. As a teacher do you face any challenge/problem of teaching using English as a Language of Instruction (LOI)?

- Yes No Neutral

What is the reason for your answer above?

.....

19. What are the effects of using English as LOI on students' academic achievement?

.....

20. Are you comfortable using English as a Language of Instruction in teaching and learning?

- Yes No Neutral

What is the reason for your answer above?

.....

21. (a). Does the use of English as Language of Instruction affect students' academic achievement?

- Yes No Neutral

(b). If yes please, specify why.....

.....

22. In your opinion what is the future of education in Tanzania?

.....

26. Do you think that language used for instruction can be among the determinant of low academic achievement to students?

Yes No Neutral

27. Do student understand when you are teaching in the classroom using English only?

Yes No Neutral

SECTION: V Physical Facilities

28. Kindly give your opinion basing on four point scales as shown below and tick [√] accordingly

Availability and Adequate Physical Facilities

Physical Facilities		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	Non functional libraries (e.g. outdated and irrelevant academic equipment)				
2.	Lack of laboratories				
3.	Ineffective science laboratories (e.g. lack of sufficient science equipment)				
4.	Poor classrooms (e.g. no windows)				
5.	Inadequate classroom space (e.g. overcrowded classrooms with 3 to 4 learners sharing a desk)				
6.	Lack of Desks and chairs				
7.	Lack of libraries				

APPENDIX C: INTERVIEW GUIDE

1. What is the staffing status in your District?
2. Did you prepare the Secondary School Teachers to implement the programme?
3. Do you have enough teachers in your District?
4. If no, how do you control the situation?
5. Do you have enough teaching/learning materials in your District?
6. Are you comfortable with the Language of Instruction used in Secondary schools?
7. Do you think language of instruction may be among the cause of low academic achievement in your District?
8. Do you have enough physical facilities in your District?
9. What is the general performance of Certificate of Secondary School Education Examinations in your District? (CSEE)
10. What do you think could be done to improve students' academic achievement in your District?
11. What is the attitude of students towards learning in your District?

APPENDIX D: HEAD MASTERS/MISTRESS INTERVIEW GUIDE

1. How would you explain the sufficiency of teachers in your school?
2. How do you comment on the language used for instruction in your school?
3. Do you think language of instruction may result into low academic achievement among the learners?
4. Do you have enough physical facilities like classrooms, desks etc in your school?
5. What is the teacher student ratio in your school?
6. What is the general academic achievement of Certificate of Secondary School Education Examinations in your District? (CSEE)
7. What do you think could be done to improve students' academic achievement in your school?
8. Please would you mind to comment on the availability of teaching/learning materials?
9. What is the attitude of students towards learning in your school?

APPENDIX E: SAMPLE SIZE DETERMINATION TABLE

Required Sample Size[†]								
Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

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Source: Formula by Krejcie & Morgan (1970)

APPENDIX F: SUMMARY OF SAMPLES

Table 3.1: Summary of Samples

S/N	Schools	Target population (N)	Sample size
01	Oldonyo-Sambu	23	06
02	Nduruma	34	09
03	Olturoto	25	07
04	Olmotonyi	35	09
05	Olokii	30	08
06	Oljoro	36	10
07	Mwandet	40	11
08	Musa	20	05
09	Mringa	60	16
10	Olemedeye	15	04
11	Mlangarini	80	22
12	Bangata	40	11
13	Oldadai	83	23
14	Ngires	26	07
15	Mateves	64	17
16	Einoti	52	14
17	Kiranyi	60	16
18	Kimnyaki	60	16
19	Sambasha	10	03
20	Lengijave	27	07
21	Mukulati	41	11
22	Ilikiding'a	48	14
23	Oltrumet	20	05
24	Osiligi	30	08
25	Endevesi	28	08
26	Enyoito	80	24
TOTAL		1049	291

APPENDIX G: RESEARCH PERMIT LETTER

MOI UNIVERSITY
Office of the Dean School of Education

tel: (053) 43001-8
 (053) 43553
 fax: (053) 43555

PO Box
 Eldoret, Kenya

REF: MU/SE/PGS/54

DATE: 12 February 2014

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: RESEARCH PERMIT IN RESPECT OF LYINO, NAISUJAKI
SEPHANIA - (EDU/D.PHIL/CM/01/14)


The above named is a 2nd year Doctor of Philosophy (D.Phil) student at Moi University, School of Education, Department of Curriculum, Instruction and Educational Media.

It is a requirement of her D.Phil Studies that she conducts research and produces a thesis. Her research is entitled:

"Determinants of Academic Achievement of Students in Community Secondary Schools in Tanzania: A Case of Arusha District"

Any assistance given to her to enable her conduct her research successfully will be highly appreciated.

Yours faithfully,


PROF. J. N. KINDIKI
DEAN, SCHOOL OF EDUCATION

JNK/db

APPENDIX H: MAP OF ARUSHA DISTRICT

