QUALITY OF EDUCATION OF SECONDARY SCHOOLS UNDER SECONDARY EDUCATION DEVELOPMENT PROGRAM (SEDP). THE CASE OF KARAGWE DISTRICT, TANZANIA

BY

PAUL PAULIN

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN RURAL DEVELOPMENT OF SOKOINE UNIVERSITY OF AGRICULTURE. MOROGORO, TANZANIA.

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ABSTRACT

The main objective of this study was to analyze the quality of education of secondary schools established under Secondary Education Development Program (SEDP) in comparison to private schools in Karagwe District. Specifically the study determined the perception of community members (students, teachers, and parents) toward public ward secondary schools; also a comparison of academic performance between public ward and private secondary schools in rural and urban areas was made. Teaching practices and environment that promote quality of education in schools were also examined. It was an exploratory study which used a cross-sectional approach. The study was carried under two phases. Phase one of the study involved pilot study and the second phase involved structured questionnaire surveys which used as the major tool for data collection. Other instruments used were interview and observation schedules, likert scale, Focus Group Discussion (FGDs) checklist and documentary review. The study was carried in eight secondary schools purposefully selected out of 46 secondary schools in Karagwe District. Four of the selected schools were under SEDP while the other four were private schools. It involved 377 respondents who were purposefully and randomly sampled. The Statistical Package for Social Science was used to analyze quantitative data whereas Content Analysis was used for qualitative data. The study reveals that all community members (students, teachers and parents) had positive attitude toward ward secondary schools. The study findings reveal that the quality of education in public ward and private secondary schools was relatively poor. However, the study reveals that active and participatory teaching and learning methods were not frequently used, in all schools. The study also highlighted teaching environment for improving the provision of quality education. Finally the study highlighted practical recommendations on different educational stakeholders.

DECLARATION

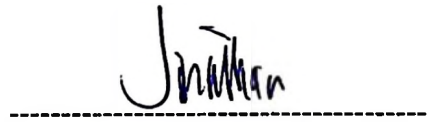
I, PAUL PAULIN, do hereby declare to the Senate of Sokoine University of Agriculture that this dissertation is my own original work and that it has neither been submitted nor being concurrently submitted for degree award in any other institution.

22.10.2010

Paul Paulin — Date

(MA.Rural Development Candidate)

The above declaration is confirmed



22/10/2010

Dr. Jonathan Stephen Mbwambo — Date

(Supervisor)

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DEDICATION

This work is dedicated to my father Paul G.Kabyazi and my mother Clara D. Rwangoga, who laid the foundation of my education and the uncountable sacrifices for upbringing and educating me. May the Almighty God bless them.

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LIST OF ABBREVIATIONS

DEO	District Education Officer
EFA	Education For All
ESDP	Education Sector Development Programme
ESP	Education Strategic Plan
ETP	Education Training Policy
FGD	Focus Group Discussion
GER	Gross Enrolment Rates
GPA	Gross Point Average
GPI	Gender Parity Indicators
KARASECO	Karagwe Secondary School
MDGs	Millennium Development Goals
MoEC	Ministry of Education and Culture
MoEVT	Ministry of Education and Vocational Training
NECTA	National Examinations Council of Tanzania
NSGPR	National Strategy for Growth and Reduction of Poverty
P	Probability
PEDP	Primary Education Development Programme
PRS	Poverty Reduction Strategy
SAPs	Structural Adjustment Programmes
SPSS	Statistical Package for Social Sciences
STBR	Student Textbook Ratio
TANESCO	Tanzania Electricity Supply Company
TEN	Tanzania Education Network
TLMs	Teaching and Learning Materials

TPRS	Tanzania Poverty Reduction Strategy
TSR	Teacher Student Ratio
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPE	Universal Primary Education
URT	United Republic of Tanzania
USAID	United States Agency for International Development
WCEFA	World Conference of Education For All

CHAPTER ONE

1.0 INTRODUCTION

1.1 Overview

This chapter gives the introduction of the study and is divided into seven sections; section 1.1 present general overview of chapter one, section 1.2 present background information, section 1.3 presents problem statement of the study while section 1.4 present justification for the study. Section 1.5 and its subsections present general and specific objectives of the study while section 1.6 present research questions. The last section (1.7) in this chapter presents and elaborates the conceptual framework of the study.

1.2 Background Information

The goal of providing and achieving basic quality education for all children in all nations has been in the international agenda since the affirmation of the Universal Declaration of Human Rights in 1948. The Dakar Framework for Action in 2000 (UNESCO, 2003) recognizes the quality of education as a prime determinant where it is declared that increasing access alone would be insufficient for education to contribute fully, socially, economically and politically to the development of an individual and the society at large.

The Government of Tanzania has shown serious commitment in achieving Education for All (EFA) through its poverty reduction strategy which led to the introduction of Secondary Education Development Programme (SEDP, 2004-2009). The National Strategy for Growth and Reduction of Poverty (NSGPR) and SEDP have affirmed governments' commitment to the attainment of the Millennium Development Goals (MDGs) by 2015 (URT, 2004). The Ministry of Education and Vocation Training

through SEDP has four thematic areas outlined in its Education Strategic Plan (ESP) in achieving the MDGs. These areas include the provision of quality education, enrolment expansion and access, equity and efficiency in the management of secondary schools. One of the policy goals under quality of education is to improve the quality of teaching and learning for enhancing student achievement. The comprehensive nature of Tanzania's education strategy has been acknowledged by the international community hence SEDP has been enjoying financial support from the International Development Association (URT, 2004).

Good progress has been made in three years after the inception of the SEDP in terms of access across many areas of the sector. By July 2009, Karagwe District had managed to establish 23 secondary schools out of 28 targeted under SEDP. In particular, enrolment rates in secondary schools have risen dramatically. The increase has in general, led to improved Gender Parity Indicators (GPI), Net Enrolment Rates (NER), survival and completion rates at the national level. Poverty and Human Development report (URT, 2009a) indicates that the net enrolment in secondary school has been sustained from 20.6 percentages in 2007 to 27.8 percentages in 2009 and the report estimate about 4.1 million of secondary school students (Form 1 to 4) to be enrolled by 2010. This significant increase has outstripped the estimated government enrollment (URT, 2009b). Such changes would undermine the achievement of quality education if no predetermined scientific information to help get precautions as experience from Malawi demonstrates (UNESCO, 2003).

While we have impressive numbers as indicated above, it is still not clear whether the above mentioned achievements are associated with quality. Research has shown that "in many parts of the world, an enormous gap prevails between the numbers graduating from

public schools and those among them who can master a minimum set of cognitive skills". That rapid of quantitative improvement is slightly associated with poor qualitative outcomes (UNESCO, 2005).

Measurement of the quality of education in developing countries as well as Tanzania has focused principally on resource inputs and outcomes (i.e. student teacher ratio, student textbook ratio and national examinations outcome). This study went a step ahead by studying students' characteristics and classroom interaction process as important variables in analyzing the quality of education. There is a general perception in Tanzania that educational standards are low in public community schools in both urban and rural areas compared to private schools of the same location. This is because unlike public community schools, private schools have generally, been performing well in the national examination results. Many parents therefore continue to patronize private schools as places and means of getting quality education for their children, the myth which need to be investigated. No scientific data has been established with regards to disparities of the quality of education between public (specifically community schools) and private schools in Tanzania. This is the motivation behind assessing the quality of education in community and private secondary schools.

1.3 Problem Statement

Quality of education of secondary schools under Secondary Education Development Programme is still unknown since its establishment.

There is a drastic decrease of teacher student ratio (TSR) and student textbook ratio (STBR) in most of public/community secondary schools since their establishment in 2006, the situation which is endangering the quality of education in these schools (Lwaitama and Galabawa, 2008).

The policy of the Ministry of Education and Vocation Training stipulates a ratio of forty students to one teacher in secondary schools and each student to have access to one textbook in each of the subjects. This represents a policy target of 1:1 STBR and 1:40 TSR. Between 2005, the STBR was closer to the target but thereafter most schools in Tanzania experienced a decline between 2006 and 2009; the STBR fell from 1:2.3 to 1:3.7 and TSR declined from 1.29 to 1.53 (URT, 2007b).

According to Pigozzi (2008), simple quantifiable improvements such as STR. STBR and national examination results alone do not help to understand the dynamics of classroom level interactions and other factors associated with good quality education and their effect on student achievement. What seems to be equally important is how input resources into schools and classrooms are utilized to promote quality education. According to Heck (1993), since 1966, debate on education quality has been dominated by two schools of thought, namely, the effective schools approach and schools quality improvement approach. Whereas the effective schools approach has relied on quantitative and analytic techniques to determine the relative effects on different education inputs while quality improvement approach for so long have relied on the academic achievement and its results (Heck, 1993).

Tanzania adopted these approaches through SEDP with the main objective of improving the quality of education through enrolment expansion and access, improving learning outcomes of students, making efficient use of resources, provision of enough textbooks and teaching materials, expanding the supply of teachers and enhances their professional development. There is so far no empirical information with regards to these variables and their impacts on academic achievement; hence the quality of education of secondary schools established under SEDP and private schools in Karagwe District is still unknown.

1.4 Problem Justification

The investigation of the quality of education on how input factors are utilized as teachers and students engage each other in the classroom learning environment in different contexts (rural, urban, public, private. deprived and non-deprived) is needed for better understanding on how to improve quality of education. Data and information would be useful to; educational planners, policy makers and other stakeholders hence clear educational policies and programme with high emphasize of its quality at classroom level. The study would also be used as feedback to program supporters, World Bank, International Development Association and community members.

Since the government of Tanzania through SEDP is dedicated to the improvement of the quality of education especially in community schools, hence studying the quality of education delivered at the classroom level in community secondary schools is of paramount importance.

1.5 Objectives

1.5.1 General objective

This study aim to analyze the quality of education at classroom level in secondary schools established under SEDP.

1.5.2 Specific objectives

i. To determine perception of quality of education by community members.

ii. To compare academic performance between community and private schools in rural and urban areas.

iii. To identify teaching practices that promotes quality of education at classrooms.

1.6 Research Questions

i. How do community members perceive ward/community secondary schools?

ii. How do community and private schools in Karagwe District differ in the provision of quality education in different areas (urban and rural)?

iii. What teaching practices promote the provision of quality education at classroom level?

1.7 Conceptual Framework

This study defines "quality education" as the availability of relevant and sufficient teaching and learning resources as well as active teaching -learning pedagogies in enabling teachers and students to reach higher levels of performance in examinations (UNESCO, 2003). The conceptual framework used four components of quality education which are; availability of enabling input resources, students' characteristics, classroom interaction process and academic outcome.

The study assumed that quality of education (academic outcomes /performance in national examinations) as dependent variable is directly influenced by independent variables which are academic input resources, students' characteristics and classroom interaction process. The analysis was done to know input resources (teachers' qualification and experience, class size, textbooks, lesson plan books, teaching aids), students' characteristics (students' school readiness, perseverance and their barriers to learning) and how they interact each other at classroom level based on teaching practices, learning time and medium of instruction for better quality of education. The study made a comparative analysis between community /ward secondary schools and private secondary schools in the district.

As Meyer and McKenzie (2009) observe good academic performance of individual student and the school at large is significantly influenced by availability and sufficient use of teaching and learning resources. Also Long and Israelsen (1983) emphasizes on the use of active teaching and learning pedagogies for quality education attainment.

The perception of community members (students, teachers and parents) was also assessed to determine their attitude towards schools under SEDP. This was on the assumption that attitude towards community members a school can indirectly influence the provision and attainment of quality education (Michaelowa, 2001). In the current study, the chi-square test found no statistical association between community members' perception toward ward schools and academic performance of the school. The school was the level of analysis and the data were collected from teachers, students and parents with students in the studied schools.

The quality of education in the community secondary schools was quite different from that in private schools of both areas (rural and urban) due to unequal availability and utilization of favorable teaching and learning environment the same results were observed in the study by Carr-Hill and Ndalichako (2005).

The variables used for data collection in the study were summarized in Appendix 7 and its analysis was based on the standards and best practices of the Ministry of Education and Vocation Training.

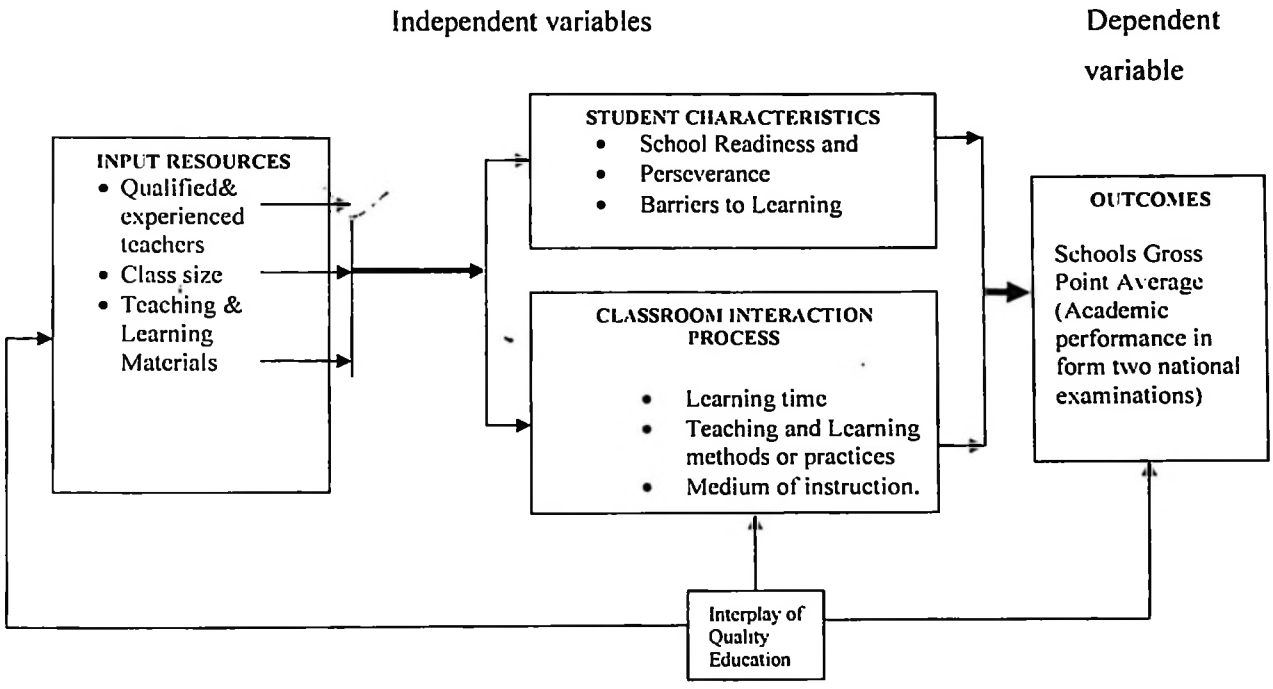


Figure 1: Conceptual framework

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Overview

This chapter provides detailed information from different literatures related to this study. The chapter is divided into nine sections. Following this section is the section where key concepts are defined and elaborated. Historical perspective of quality education in Tanzania is followed by a section on the profile of Secondary Education Development Program in Tanzania. The other section focus on the identification and description of the factors enhancing quality of education, this is followed by a section describing learners' characteristics. The next section explores classroom interaction process followed by a section on education outcomes while the last section presents review of previous studies on quality education.

2.2 Definition of Key Concepts

2.2.1 Education

Education is defined as the process for the provision of learning opportunities in a purposeful and organized manner through various means including, but not limited to, schools and other educational institutions (WCEFA, 1990). McDonald (1967) cited in Benson (2008) defines education in its widest sense and restricted sense. According to him the widest sense, education is considered to be the aggregate of all those experiences that enlighten the mind, increases the knowledge, foster insights, develop abilities and attitudes, and strengthen the will. In its restricted sense, education is the systematic acquisition of knowledge through recognized agencies and controlled environment particularly that of the school in order to attain social competence and optimum personal development. One of the major dimension of education is that learning is no longer an

activity of merely preparing one for productive life but it is also a requirement through life, a continuous process for every human being, of adding to and adapting one's knowledge, skills, judgments and capacities for action. As Neumann *et al.* (1986) argue, education should be an endless process for transmitting and imparting knowledge, skills and values from one generation to another.

2.2.2 Quality education

OECD (1989) defines quality education as a teaching and learning process which should encompass specific skills, and aspects which are less tangible but more profound in the imparting of knowledge, positive judgment and well developed wisdom. Thomas and Vicent (2001) define quality education as a way of facilitating and realization of self-potential and latent talents of an individual which needs an application of active teaching and learning pedagogies.

Traditional approaches to the quality of education have often relied upon 'proxy' measures such as increases in financing and other inputs in the level of educational provision. While clearly not irrelevant or unhelpful, such outlays may not prove decisive when another criterion for defining and measuring the quality of education is used, namely, measurable educational outcomes (George and Nicholas, 2003).

At the beginning of the 21st century, it was widely recognized that education needs are to be more than "reading, writing and arithmetic". Reflecting this understanding is an "expanded vision" of quality education articulated at the Jomtien Conference on Education for All in 1990 and reaffirmed at the World Education Forum in Dakar in 2000 (UNESCO, 2005).

Modern definition of quality education involves the conventional focus on the basics of literacy, numeracy, essential knowledge and skills as well as the related emphasis on the critical factors such as teachers' qualification, the curriculum, teaching/learning methodologies, interaction processes in the learning environment, examinations performance and assessment, management, administrative practices, planning, and policy development. Much concern about the quality of education derives from the belief that poor quality will frustrate efforts to use education as an effective lever of economic growth and development in this age of accelerating globalization. Issues concerning the quality of education cannot be separated from those of developments, which have an impact on the learning environment provided by schools (UNESCO, 2005).

The conceptualization of quality education provides an integrated and comprehensive view of learning which constitute four pillars; i. learning to know acknowledges that learners build their own knowledge daily by combining indigenous and external elements ii. Learning to do focus on the practical application of what is learned, iii. Learning to live together which addresses the critical skills for a life and free from discrimination, where all have equal opportunity to develop themselves, their families and their communities (UNESCO, 2005).

Irwin (2005) describes quality education as the maximization of a school systems' performance based on four functions, preparation of learners for the adult role of the citizen and training to fill an appropriate adult occupational role. It also include development of the personnel especially interpersonal skills to ensure the minimal level of well being necessary for performance of any adult role and recall from the labour market and from unemployed status of the population. In general a quality education is

one that satisfies basic learning needs and enriches the lives of learners and their overall experience of living.

The study focused on investigating the quality of education offered in community schools in comparison to private schools. The next section shows historical perspective of quality education in Tanzania.

2.3 Historical Perspective of Quality Education in Tanzania

Historical perspective for quality education in Tanzania starts from the colonial period where education system was controlled by colonial rulers. Islam and Christian Missionary education was the first ones in terms of classroom education. Both Christian Missionaries from Europe and Arab Muslims from Arabia were striving hard to promote quality education in order to enable their converts to reach and understand religious materials. According to Mlawi (1998) cited in Madale (2007), before the arrival of the Christian Missionaries, Muslim schools had been established along the East Coast of Tanganyika and in some urban areas and trading centres. Similarly, Christian Missionaries established schools both in Zanzibar in 1864 and in Tanganyika at Bagamoyo in 1868, these schools became the main source of spreading Christianity. The quality of education in these schools was based on the curriculum of the mother countries of the founder missionaries and Arabs with little emphasis on African ethics (Madale, 2007).

According to Madale (2007) during colonial period and particularly the Germany rule, the number of schools (primary and secondary) increased but the opportunities were very discriminatory basing on religion, race, sex, and ethnicity. Besides religious schools the German Colonial Government had also established government schools. After the First

World War (1914-1998), Tanganyika became under the British colonial rule, Missionaries, the British government and the Native Authority operated schools. The education system remained discriminatory as it was the case during the German period and the quality of education offered was foreign oriented. For example in 1947 less than one percent of the secondary school age population was enrolled (Cameron and Dodd, 1970).

Immediately after independence in 1961, the government of Tanzania passed the Education Act of 1962 to regulate the provision of education in order to satisfy the needs of Tanzanians. The Act aimed of abolishing racial discrimination, strengthening the curriculum, promoting and making Kiswahili and English as the media of instruction in schools, and to foster local authorities and communities responsible for construction of schools. Further steps were taken between 1967 and 1978 through enacting several laws and formulating policies such as Education Act of 1969, the Decentralization Programe of 1972, the National Examination Council Act No.21 of 1973, the Universal Primary Education (UPE) and Musoma Resolution of 1974. Also there were the Arusha Declaration Act of 1967 and the Institute of Education Act No. 13 of 1975. Relevant results of these policy changes included reforms in school curriculum, compulsory school enrollment for school age children, expansion of teacher training programmes and nationalization of formerly privately owned schools all of which led to rise of the number of schools which in turn led to increase in enrolment.

According to URT (1997) majority of the public secondary schools currently in operation were constructed during 1970s. Although these achievements were impressive, rapid population growth in the early of 21st century caused a number of problems, giving rise to the educational crisis. While the number of school children enrolment increased

dramatically, the learning environment and the quality of education declined. Education is the leading sectoral priority and is seen to be the heart of development in the Poverty Reduction Strategy (PRS). The low quality of education in Tanzanian public secondary schools were generally associated with low attendance rates , dilapidated facilities, lack of textbooks, shortage of teachers and other teaching inputs as well as decreased ability of secondary school leavers to secure employment (George and Nicholas, 2003).

One of the fundamental functions of secondary education is to produce literate and numerate people who can function in the modern world where problems encountered at home and in a place of work require the basic skills for survival and functioning (Ololube, 2006). In addition, achievement in Form Two National Examinations was generally poor. The National Examinations Council of Tanzania (NECTA) reports that in the two previous years, 35% of students who sat for the Form Two National Examinations failed to attain a minimum pass rate of 30%. Also it was observed that about 80 percent of the students pass the examination at the end of the four year lower cycle, but half of all the examinees achieve only the lowest level, Division Four (IV) which requires a minimum of a "D" pass in two subjects (and does not require a pass in either mathematics or science subjects). More further the data from NECTA show the overall performance of secondary schools in Form Four National Examinations between 2007 and 2009 as being poor, with children in rural areas generally performing poorly as opposed to their urban counterparts (URT, 2007a).

By 2000, the gross enrollment was low indicating that more than half of all Tanzanian children who were completing primary education did not attend secondary education, with the rural poor being highly represented in this category. As Rajan and Omondi (2003) indicate that despite the government's commitment and efforts to ensure quality

and equitable access to secondary education, shortage of essential resources were reported to persist. These challenges led to the review and reform of the education sector. The efforts involved preparation of necessary policy and planning documents including Education Sectoral Reform and Development Programme (ESDP) and then Secondary Education Development Programme (SEDP).

SEDP primarily focused on expanding access and improving the quality of education in many aspects including increasing the number and quality of teachers, construction of school infrastructures and increasing the availability of teaching and learning materials. Specifically, the government and community members at large are implementing SEDP to address the problems related to secondary education by improving quality, increasing school retention and expanding access. The next section looks at the profile of SEDP and shows its performance in delivering quality education in Tanzania.

2.4 Secondary Education Development Program (SEDP, 2004-09)

In 1995, the Government, through the then Ministry of Education' and Culture (MOEC) issued an Education and Training Policy (ETP) that opened further participation of the non-government sector in the provision of education. Furthermore, ETP led to the development of a framework for the sector by designing the *Education Sector Development Programme* (ESDP) in 1997. A series of master plans were prepared in specific sub-sectors, including primary, secondary, teacher and higher education. The master plans were technically linked to each other to realize the sectoral approach and the basis for developing sub-sector programme. The focus of the second phase of ESDP was to strengthen and improve performance of the secondary education sub sector which resulted from the first phase, Primary Education Development Programme (PEDP) which was launched in 2001 raised the demand of many secondary schools (Lewin and

Kalifunja, 2004). A comprehensive Secondary Education Development Programme (SEDP) was prepared in December 2003 and launched in March 2004.

The SEDP (2004-09) updated and expanded the earlier Secondary Education Master Plan development program. The target was to build one secondary school in every ward; within community members with a strong central government support taking the responsibility. The Secondary Education Development Program (SEDP) seeks to achieve three basic objectives. The first is to increase the proportion of the relevant age group completing secondary education, especially disadvantaged groups who are now getting better opportunities to complete primary education through the PEDP. This would require measures to ease constraints on the enrollment expansion; to reduce the cost per student (a burden shared by households and the public sector); and to provide more equitable access and output. The second objective is to improve learning outcomes of students. The third objective is to enable the public administration to manage secondary education more effectively through the devolution of authority to lower levels and the lengthening of management capacities.

The main challenge of SEDP is quality improvements which would ensure that the education received by students is of high quality and relevant to their daily lives and work prospects. However, quantitative aspect may be the entry point to quality aspect of education, other factors such as teaching aids, number of teachers and their qualification are important as the next section present factors influencing quality of education from theoretical and practical perspective.

2.5 Factors Influencing Quality Education

2.5.1 Enabling inputs

The success of teaching and learning is likely to be strongly influenced by the resources made available to support the process and the direct ways in which these recourses are managed and interacted in the classroom level for the provision of quality education. The enabling inputs are both provided by the government and households or community members and these include textbooks, classrooms, teacher guide books, lesson plan books, chalks libraries and laboratory facilities. Human resource inputs include administrators, supervisors, inspectors and most important professional teachers who are vital to the learning process. The quality and experience of a teacher has been found to be significantly and positively related to active classroom interaction leading to good student performance (WCEFA, 1990). Inequality in the access to such inputs between rural and urban population is a major source of rural-urban inequality in quality educational provision and achievement.

Inputs are enabling in that they underpin and are intrinsically interrelated to learning and teaching processes at a classroom level, which in turn influence the range and the type of inputs used and how effectively they are employed. The main input variables are materials and human resources explained above with the governance of these resources as an important dimension (UNESCO, 2005); nevertheless, governance was considered as an indirect factor in this study. Qualified and experienced teachers, textbooks, lesson plan books and teaching aids are specific academic resource inputs of this study.

2.5.1.1 Number of teachers and their qualifications

The number of teachers and their qualifications show an important but complex relationship to student outcomes (O'Sullivan, 2006). Internationally evidence

shows that non-qualified staff working as teachers or teacher aides does not generally have a positive impact on student outcomes, and in some cases have negative impact on the same. Conversely, highly qualified teachers can have very marked impacts on the outcomes for diverse students, particularly younger students. Students learn more from teachers with high academic skills than teachers with weak academic skills, (Cameron and Baker, 2004).

The findings from MoEVT (URT, 2005) show that the increase in enrollment does not go abreast with the increase of the number of teachers; and teacher-students ratio continued to worsened in the early years of SEDP implementation. The teachers-students ration was 1:56 in 2005 and 1:52 in 2006 respectively whereas the target was to reach a teacher-students ratio of 1:40 at the end of 2009 (URT, 2006b) to enable the provision of quality education.

2.5.1.2 Teaching aids

Teaching aids are objects or representation that may be used to clarify or enhance understanding of a concept or process. The technique had higher education achievement to students and teachers. Furthermore, the use of teaching aids in classroom may help students make better connections between a classroom and the real world literacy hence deepening their understanding of what counts as quality education.

Teaching aids enhance teaching –learning process, provide interest and motivation to students and increase retention of information and other subject content. As Brookover, (1967) observes, learners or students remember 20% of what they hear, 30% of what they see and 50% of what they see and hear. Furthermore, the use of teaching aids in teaching-learning process save instructional time and future preparation time as they can

be re-used as well as help to clarify something difficult, complicated or very important points. Whether or not efficiency use of the discussed resources leads to good academic performance would depend on Learners' characteristics as explained in the next section.

2.6 Learner Characteristics

Other aspects remaining constant, student characteristics remain the only determinant that influences of quality education in the classroom level and at school in general. Learners should be self disciplined and respective to their instructors as well as being well motivated to increase their anxious of studying and thus enabling them to achieve their expectations and the desired education outcomes of the nation. To achieve this, governments and other education stakeholders have to ensure that learners are free from any learning barriers (Gregory, 2005).

The most desirable learner characteristics include their school readiness and perseverance, free barriers to learning and the extent on how they are motivated by their parents and school administration. There are a number of barriers that prevent students from engaging effectively in the teaching-learning process. Family background, socio-cultural and religion beliefs of the community must be carefully investigated as for instance, student learning and achievement is obviously influenced by the educational milieu at home and the community at large, (Leibowitz, 1977, cited by Mumane *et al.*, 1981). On the aspect of learner characteristics the study focuses on student readiness and perseverance as well as barriers to their effective learning at school that is, the factors that underpin school performance and students success.

Students who graduate from quality education systems in the early decades of the 21st century would have to be very knowledgeable and technically competent, multi-skilled,

marketable and committed to continuous learning throughout life. They must be prepared, from primary, through secondary and tertiary levels of education, to be able to think strategically, to recognize, appreciate and respect diversity in all its forms and promote of gender equity, social class, ethnicity, sexual orientation, age, race, creed and other cultural factors. They must be able to communicate well, both orally and in writing, with diverse cultural groups. They would have to be self-assured, confident in their abilities to make a contribution locally at the community level, nationally and or internationally, and to effect change. They must be quality driven, prepared to demonstrate an excellent work ethic and to be catalysts in their communities; committed to empowering others to deal with the new world order intelligently. Most importantly, they must be committed to high standards of ethical behaviour.

2.6.1 Students' attributions for success and failure

Students' attributions for their own success and failure at school can have an impact on motivation and achievement. If students see their failure as having been caused by something that is difficult or even impossible to change, such as the difficulty level of the test or one's inability, such as attribution has a negative impact on motivation and achievement. By contrast, if they attribute their failure to a lack of effort, this attribution is more likely to enhance the student's motivation to try harder in future tasks and is unlikely to lessen motivation.

Thus, academic engagement and performance is heavily influenced by students' attitudes towards education and goals for the future. School alienation accompanied by avoidance of effort has a cumulative negative impact on outcomes. Students who are not interested or who actively avoid opportunities to learn fall further and further behind their peers in skills and understandings across the school years. Three personality variables have been

identified for the current study; self-concept, perseverance and study habit. Self concept is how an individual perceives himself or herself in the context of school and learning, it is one of the determinants of poor academic of performance (Bakare, 1969).

Perseverance has been defined as the amount of time the learner is willing to spend on learning (Carroll, 1963). Perseverance is therefore considered as one of the factors along with time allowed for instruction, aptitude and quality of instruction that influence the degree of learning. Study habits are a well planned and deliberate pattern of study which attains a form of consistency on the part of the student towards understanding academic subjects and passing of examinations (Deese, 1959; Pauk, 1962; Akinboye, 1980).
Learners understanding of the subject content and good academic performance depend much on the interaction of input resources and active methods of teaching and learning as presented in the next section.

2.7 Classroom Interaction Process

Teaching and learning process is the key arena for student knowledge development and change. It is here that the impacts of nation curricula are felt, that teacher methods work well and that learners are motivated to participate actively in the classroom and learn how to learn. Classroom interaction in this study refers to how classroom inputs/resources and teaching pedagogies merge and work together with students and teachers to influence the process of teaching and learning at a classroom level (Barrack, 1990).

Long and Israelsen (1983) also reveal that a strong and active participation between teacher and student emphasize and enhance students' participation in learning and their performance. Education tutors insist the use of instruction materials as they enhance

students' self image and greatly aid the process of teaching and learning hence good achievement. Participatory and learner centered practices /methods are of major concerns in this study. The medium of instruction and the actual instructional time were also considered as classroom interaction process in the study. Education outcomes as interplay of input resources, students' characteristics and classroom interaction process are described in the section below.

2.8 Education Outcomes

The most intended outputs and outcomes of education are literacy, numeracy and life skills. Values, social benefits, creative and emotional skills are also considered as education outcomes. These outcomes are a popular means of assessing its quality and are assessed in the context of agreed objectives. they are often not considered as a means for improving quality but as outputs of it. Outcomes are most easily expressed in terms of academic achievement more usually and popularly in terms of examination performance. Other ways include assessing creative and emotional development also changes in values, attitudes and behaviour have currently been devised though not popularly used and measured as educational outcomes in developing countries.

However, classroom outcomes are interpreted meaningfully by analyzing teacher student ratio (TSR) and student textbook ratio (STBR) in the context of the system that produced them (EQAO, 2007). Briers (1979) observes and emphasis that large or as a class size increase, the number of in-class hours spent on instruction as well as interacting time with students also increase which in turn influence student outcomes. Specifically, the study uses Form Two National Examination results to assess educational outcomes at school. Quality of education is not a new phenomenon it has been affirmed as a critical

aspect in education system. The next section review previous studies on quality education from global level up to the level of specific study.

2.9 Review of Previous Studies on Quality Education

2.9.1 World wide review

Quality of education has been declared as a global issue from the twentieth century as the focal lever for individual and national development in all spheres of life. The World Bank studies in many countries indicate big improvements in school quality with respect to material inputs availability. The World Bank educational journal (2004) reports that classroom learning outcomes significantly depend on the number of textbooks supplied to the number of students in a class, it is argued in the report that one of the critiques to effective education research is the failure to locate conceptions and measures of school quality and effectiveness within everyday classroom processes of teaching, learning and assessment (Gregory, 2005).

2.9.2 Review of Africa

According to Kapinga (2001 cited in Madale 2007) a major concern of quality of education in African countries particularly Tanzania emerged as a response to the adoption of Structural Adjustment Programmes (SAPs). SAPs was implemented through various policy reforms which favoured the private sector against the background of poor performance of the public sector, limited public resources, increasing development needs and limited government capacity. Regardless of the efforts made by private sectors and community members in the improvement of quality education, scientific analysis should be carried out so as to understand the quality of education offered in schools.

In 2003, the United Nation Commission for Education, Science and Culture conducted a study on the impacts of education reform in Malawi (1998-2002). The study reveals that a proportion of school leavers attained minimum masterly levels of the predetermined outcomes. The results of Ampiah (2008) investigation on the provision of basic quality of education in community secondary school in Ghana showed little difference and many similarities in the provision of quality education between public community schools and private schools in the Central region of Ghana.

2.9.3 Review in Tanzania

In Tanzania, studies on school effectiveness have been conducted by the United States Agency for International Development (USAID) in 2005 and the World Bank in 2004 (UNESCO,2003). These studies revel that familiar medium of instruction to teachers and students in classroom, desirable characteristics of students, adequate number of textbooks and well trained teachers significantly contribute to higher levels of students' and school academic achievement. In 2009, Secondary Education Development Programme (SEDP) managed to increase enrollment rate, 2.7 times more than the projected enrollment rate by 2010 (URT, 2009a) the situation which could lead to poor quality education if precaution measures are not considered.

Carr-Hill and Ndalichako (2005) analyzed education sector reform in Tanzania public schools and revealed that some secondary schools particularly in remote rural schools deployed diploma teachers from primary schools due to shortage of qualified teachers in secondary schools. Lwaitama and Galabawa (2008) conducted an appraisal upon the progressing of community secondary schools under SEDP based on availability of enabling inputs only and the study revealed that community schools were served on big inadequate of resource inputs.

The above literature show that no major studies have been conducted to analyze the quality of education of secondary schools established under SEDP in Tanzania, except that similar studies have been conducted in other developing countries. This study has filled the information gap of the quality of education of community secondary schools or schools under SEDP.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Overview

This chapter presents the study methodology and details of all procedures used in conducting the study. The chapter is divided into four sections. Section one presents description of the study area, section two presents the research design, section three presents sampling procedures and data collection methods and section four describes data processing and methods for data analysis.

3.2 Descriptions of Study Area

The study was conducted in Karagwe District in Kagera region. Karagwe is the second district which constructed many schools (23 schools) in the first three years of SEDP. The district has high enrolment rate of 17.4 % which is closer to the national enrolment rate of 27.8. The study was restricted to urban and rural secondary schools. All schools were selected from both rural and urban to reflect education performance in the different contexts of rural and urban settings. Rural settings are generally characterized by poverty, high levels of parental illiteracy, low school enrollments and lack of qualified teachers.

3.2.1 Location

Karagwe is one of the seven districts in Kagera region. The district lies between latitudes 0001°-0002° South of the equator and longitudes 30.6° -31.4° East of Greenwich and is situated in the North West corner of Tanzania. In the Southern part the district share borders with Ngara and Biharamulo districts and in the Northern part live the district is

bordered with river Kagera and Uganda. In the Western part is bordered with Rwanda while two districts Bukoba and Muleba lie in the Eastern part of the District.

The district has tropical climate. The average annual rainfall is 1 040 mm. Rainfall distribution is bimodal with peak rains falling from September to December and from March to May. The period between January and February is dry season; June to September is a period of marginal or no rainfall. The climate is generally favorable for agricultural activities thus household food security is assured throughout the year.

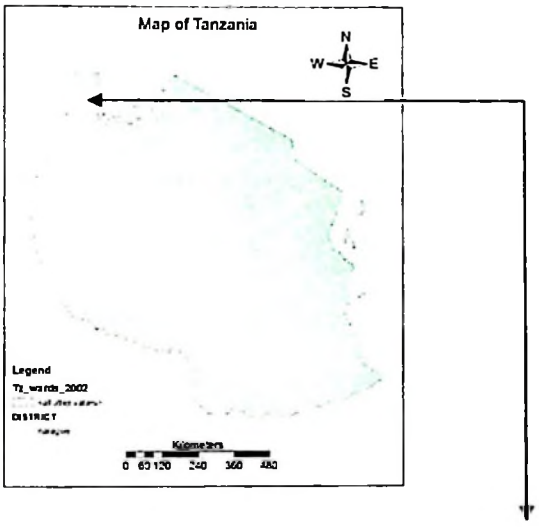
3.2.2 Socioeconomic and socio-cultural characteristics

Administratively, Karagwe district is divided into four divisions which are Kituntu-Mabira, Bugene-Nyaishozi, Kaisho-Murongo and Nyabiyonza. It has twenty eight wards and 115 registered villages. The study was conducted in seven selected wards namely, Kayanga, Bugene, Nyakahanga, Nyaishozi, Kihanga, Kituntu and Nkwenda as shown in Figure Two. Karagwe district covers an area of 7 716 Km^2. The district has two parliamentary constituencies with elected members of parliament of Karagwe and Kyerwa.

According to the national census of 2002 the population of Karagwe District was 424 287, with 249 636 males and 174 648 females. The natural growth rate is 2.9% per year. Population density is 12 people per square kilometer (URT, 2006a).

The major tribe groups found in the district are *Wanyambo, Wahaya and Wanyarwanda*. The *Wanyambo* are the original inhabitants in the district. *Wahaya* from Bukoba District started to move in from 1950s while *Wanyarwanda* refugees found their way into the district in the early of 1960s. These three major tribal groups have some similarities and in terms of cultural aspects. However the district is inhabited by other tribes and foreigners who work with local and international organizations in the district.

Agriculture (crop production) is the main economic activity employing more than 90% of the population in the district. The major cash crops grown include coffee and beans while food crops include bananas, potatoes, beans, maize, millet, vegetables and fruits. Livestock keeping is the second most important activity in the district. Animals reared are cattle, goats, sheep and poultry. There are also commercial activities are mainly done in urban areas and rural trading centers.



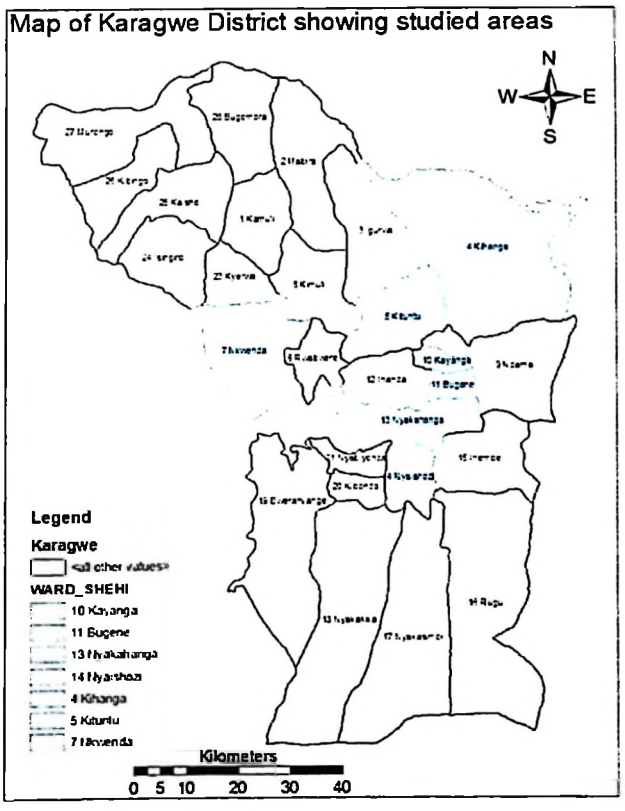


Figure 2: Map of Karagwe District

3.3 Research Design and Data Collection Procedures

3.3.1 Research design

The study was an exploratory which used a cross section approach to investigate the quality of education in classrooms in the selected schools. Unlike longitudinal research designs, cross-sectional research design allows data to be collected at one point in time from different individuals or groups of respondents (Barley, 1995).

The approach also helps a researcher to gain and understand particular aspects of the studied topic in its real-life context by staying in the field for a couple of weeks to few months (Wolcott, 1995, cited by Bryman, 2004).

3.3.2 Sampling procedures

A simple random sampling, purposeful and stratified sampling procedures were used to obtain schools and respondents of the study. The District was purposefully selected as described in section 3.2. The total of eight secondary schools out of 46 schools in the district was also purposefully selected. Four of the selected public schools were under SEDP (two from urban and other two from rural areas) while the other four were private schools (two from urban and other the two from rural areas). Three groups of respondents namely students, teachers and parents were sampled. Two students and two parents were randomly selected from three strata formed purposely (those performing above school average, at average and below average). A total of 377 respondents (192 students, 32 teachers, 144 parents, 8 head of schools and one District Education Officer) were sampled; however only 176 respondents (96 students, 32 teachers and 48 parents) were used for data processing and analysis as shown in Table one. This was because most of respondents were used to collect qualitative information just to give their experience and verify the collected quantitative data. Secondary schools at classroom

level were the main unit of data collection and analysis while students, teachers, and parents were respondents of the studied unit.

According to Akitanda 1994 cited in Frank (2006) the minimum size of the sample unit for a population ought to be not less than 30 respondents for each sampling category. However according to Barley (1995), a sub sample of 30 respondents is the bare minimum for studies in which data analysis can be done.

Table 1: Respondents selected according to the type of surveyed secondary schools

School type	Total number of Students			Total sampled			
	Male	Female	Total	Male	Female	Total	Percent
Public schools	502	426	928	24	24	48	5.1
Private schools	382	278	660	24	24	48	14.5
Total	**884**	**704**	**1588**	**48**	**48**	**96**	**6**
	Total number of Teachers			**Total sampled**			
Public schools	25	12	37	12	4	16	43.2
Private schools	47	11	58	15	1	16	27.5
Total	**72**	**23**	**95**	**27**	**5**	**32**	**33.6**
	Total number of Parents			**Total sampled**			
Public schools	57	38	95	11	13	24	25.2
Private schools	73	40	113	15	9	24	21.2
Total	**130**	**78**	**208**	**26**	**22**	**48**	**23.0**
Grand total	**1086**	**805**	**1981**	**101**	**75**	**176**	**8.8**

3.3.3 Research phases

The study was carried out under two phases. Phase one involved a pilot study, while the second phase was based on questionnaire survey, FGD and observation. The purpose of pilot study was to test the validity and reliability of the data collection instruments. Pre-testing of the questionnaires was done using a sample size of thirty respondents (4 teachers, 16 students, 9 parents and one key informant). The tools used in the pilot study included indirect observation, interview and checklist. The methods were designed to get

information and obtain the picture of study areas as quickly as possible. After pre-testing research instruments were refined ready for data collection.

The second phase involved questionnaire survey as the main tool for data collection. Prior to questionnaire survey there was a sampling of respondents. The data collection began in the second week of October, 2009 and was completed after five weeks (second week of November, 2009). Other instruments used were interview and observation schedules, focus group discussion (FGDs) checklist and documentary review. All the studied variables employed different instruments of data collection as described in the next section.

3.3.4 Data collection for objective one

Objective number one aimed at determining attitude of community members (students, teachers and parents) toward community or ward secondary school. Specific research question that guided this investigation was, how do community members perceive ward/community secondary schools? The information for this objective was obtained using Likert scale.

3.3.4.1 Likert-type summated scale

According to Barley (1995), attitudinal information concerning any aspect is obtained and measured through the use of Likert scale. The respondents' perception (teachers, students and parents) toward schools under SEDP was determined by the use of likert scale which was the main instrument used in measuring perception/attitude of community members. Students' attitude upon education was also established through this tool. Ten statements for testing perception of the mentioned variables were structured from each variable (Appendix One). Each statement had a maximum of five points

making a total of 50 points. For each statement the respondents were asked to indicate one of the following responses; strongly agree, agree, undecided, disagree or strongly disagree which were assigned points or values 1, 2, 3, 4, and 5 respectively. The total scores for each respondents was obtained, then the attitude of scale was classified into three main categories, which present low attitude (10-29), neutral (30) and high attitude (31-50) (Barley, 1995). The total scores of each respondent, categorized the respondents in one of the categories hence, the overall perception of each group of the respondents was analyzed. The results are shown and discussed in section 4.6.

3.3.5 Data collection for objective two and three

The objective number two of the study focused on the determination of the performance of community schools in different contexts (rural and urban) in providing quality education. The academic enabling input resources (teachers' qualification and experience, class size, textbooks, lesson plan books, teaching aids) and students' characteristics (students' school readiness, perseverance and their barriers to learning) were directly linked to this objective. The central research question for this objective was, How good do community schools in Karagwe District perform to provide quality education in different contexts (urban and rural)?

The third objective intended to identify teaching practices that promote quality education in community schools. The data for classroom interaction process such as teaching practices, learning time and medium of instruction were the main focus for this objective. The research question that guide data collection for this objective was, what teaching practices contribute to the provision of quality education at classroom level in ward/community secondary schools?

Both questions were answered by the employment of four tools; structured questionnaire, interview schedule/checklist, focus group discussion, and documentary review.

3.3.5.1 Structured questionnaire

Structured and standardized questionnaires with both open and closed-ended questions for qualitative and quantitative information were administered to 12 students and 4 teachers in each school. Teachers were selected based on their teaching subjects (two were science teachers and the other two were teaching arts subjects) while students were obtained based on three strata: those performing above average, those performing at average, and those performing below average. Structured and standardized questionnaires were also administered to six parents (3 males and 3 females) with students at school performing at average and below average (Appendices 3, 4 and 5).

3.3.5.2 Checklist of questions

In each school, the head of the school and the District Education Officer were purposefully selected as key informants to collect data and information on enabling inputs, students and school performance on national examinations, as well as classroom interaction process. This was administered to every head of school and District Education Officer. The checklist of questions used to solicit information for objective number two and three in the studied areas is in (Appendix Two).

3.3.5.3 Focus Group Discussion (FGD)

The focus groups covered students and parents; in each school one group of twelve students was studied. Three students were obtained from each (Form One to Four) class based on three strata, those performing at above average, average and below average according to school academic performance standards. Also one group of FGD with

twelve parents was organized and studied in each surveyed school. These were parents with students performing above average, at average and below average according to school academic performance standards. Gender aspect was highly considered when selecting these respondents. An interview guide for the FGD was done simultaneously with the questions of checklist.

3.3.5.4 Documentary review

The collection of secondary data involved a review of different documents related to quality of education. Documents such as lesson plans, students' attendance registers and student exercise books were reviewed in order to get information for the study. Compendiums of Form Two National Examination results for three consecutive years were also used to get academic performance of the schools studied. Documentary review offers an opportunity to compare the collected primary information, the approach which increases the validity of research findings (Creswell, 1994, cited in Madale, 2007). The next section presents methods for data analysis of each studied objectives.

3.4 Methods of Data Analysis

Descriptive statistics was used for analyzing the collected data (qualitative and quantitative). The collected data were first edited and verified in line with the variables of the studied objectives then the data were processed (coding and entry) with the help of computer software, Statistical Package for Social Sciences (SPSS).

The raw data, unorganized figures and statements of both qualitative and quantitative data from the field were first scrutinized and summarized in relation to the studied objectives ready for analysis using different methods and tools as described in the next section.

3.4.1 Analysis of qualitative data

3.4.1.1 Data analysis for objective one

Qualitative data and information for objective one (perception of community members) was analyzed by using SPSS computer software. The total scores for each respondents was firstly calculated, then three main categories of attitude were established that namely low attitude (10-29), neutral (30) and high attitude (31-50), hence the overall perception of each group of the respondents was analyzed based on the total scores of each respondent.

3.4.1.2 Data analysis for objective two and three

Qualitative information for objective two and three collected through observation, FGDs and verbal discussions with key informants /respondents were quantified and then analyzed using content analysis. In content analysis the recorded discussion were broken into meaningful units of information and their meanings synthesized based on the variables of objective two and three. Qualitative data were used for discussion and interpretation of the results.

3.4.2 Analysis of quantitative data

3.4.2.1 Analysis for objective two

Quantitative data were analyzed using SPSS computer software. In the analysis, frequency, percentage, means and standard deviation for the studied variables were computed. Cross tabulation and tables were the powerful ways of communicating as presenting the data for this objective. The associations between different variables in this objective were computed using the two tailed independent sample (t-test) and Chi-square test at 0.05 percent level of significance.

3.4.2.2 Analysis for objective three

Quantitative data for objective three were analyzed using SPSS computer software. In this analysis frequency and percentage tables for teaching and learning practices that promote quality education were presented. The two tailed independent sample (t-test) and Chi-square (χ^2) were computed to find out if there is any statistical significance in terms of the association between variables of this objective.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Overview

This chapter presents and discusses the findings of the study conducted in eight secondary schools in Karagwe District. The chapter provides detailed information on the quality of education offered at the classroom level in the studied secondary schools. The chapter is divided into eight sections. The first section describes the background and socio-economic characteristics while section two presents the availability and use of enabling inputs in rural and urban secondary schools. Section three shows attitudes of community members (teachers, students and parents) towards public ward schools. The fourth section identifies students' characteristics and barriers preventing students from effective classroom participation as well as students' perception to educational. Section five explains teacher-students interaction as well as teaching practices in the classroom. Section six covers the trend of schools academic performance in Form Two National Examinations while section seven present measures for improving quality of education. Finally the last section gives the summary of the chapter.

4.2 Background and Socio-Economic Characteristics of Respondents

The general characteristics of the respondents in this study are presented in Table 2. The parameters for background characteristics included variables like; age, sex, education level, household size, family structure, occupation and sources of income.

4.2.1 Age

The age distribution of the respondents in this study is presented in three groups namely students, teachers and parents. For students, the minimum and maximum ages were 14

and 23 years respectively, for teachers minimum and the maximum ages were 21 and 52 years respectively while for parents the minimum age was 26 years and maximum age was 78 years. Table 2 reveals that majority (70.7%) of students were in 16-19 age group and few (11.5%) were in 20-23 age group with standard deviation of 1.8 years indicating that there is slight difference of age of learners across classes. Also majority of teachers (59.4%) were in 20-28 and few (6.3%) were in 56-64 age with standard deviation of 10.6 years. This indicates that there is a big difference of age between one teacher and another in the studied schools. The study reveals that short training programme of form six leavers and then being employed as teachers is the main reason for this situation. Majority of parents (27.1%) were in 34-42 age group while few (12.1%) of them were in 61-78 age group category with mean age of 48 years and standard deviation of 11.8 years

Table 2: Background and socio-economic characteristics of respondents

Characteristics	Students		Teachers		Parents	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	49	51	23	71.9	29	60.4
Female	47	49	9	28.1	19	39.6
Total	**96**	**100**	**32**	**100**	**48**	**100**
Age						
A. Students						
12-15	17	17.8	-			
16-19	68	70.7	-			
20-23	11	11.5	-			
Total	**96**	**100**				
B. Teachers						
20-28	-	-	19	59.4		
29-37	-	-	10	31.2		
47-55	-	-	1	3.1		
56-64	-	-	2	6.3		
Total	-	-	**32**	**100**		
C. Parents	-	-	-	-		
25-33	-	-	-	-	6	12.9
34-42	-	-	-	-	13	27.1
43-51	-	-	-	-	11	22.9
52-60	-	-	-	-	12	25.0
61-69	-	-	-	-	3	6.0
70-78	-	-	-	-	3	6.1
Total			-	-	**48**	**100**
Education level						
No formal educatio	-	-	-	-	1	2.1
Primary education	-	-	-	-	28	58.3
Secondary educatio	-	-	-	-	11	22.9
Certificate/Diploma	-	-	-	-	5	10.4
University degree	-	-	-	-	3	6.3
Total					**48**	**100**

Family structure						
Single parent	20	20.8	-	-	-	-
Extended family	21	21.9	-	-	23	52.1
Nucleus family	55	57.3	-	-	25	47.9
Total	**96**	**100**	-	-	**48**	**100**
Household size						
2-5	20	20.8	-	-	13	27
6-9	58	60.4	-	-	22	45.8
10-13	13	13.5	-	-	12	25.0
14-17	5	5.2	-	-	1	2.1
Tota	**96**	**100**	-	-	**48**	**100**
Head of the family						
Male	77	72	-	-	42	12.5
Female	19	18	-	-	6	87.5
Total	**96**	**100**	-	-	**48**	**100**

The two tailed-sample tests show that there is a statistically significant difference between the mean age of students for community and private schools in the studied areas ($t= 3.519$, $p= 0.001$). Among other factors this difference (Table 3) was attributed by Secondary Education Development Programe (SEDP, 2004 -09) because it has managed to enroll many students or children of the recommended school age hence achievement of its objective of increasing enrollment rate.

Table 3: Association analysis of student age between public and private schools

Parameter	Type of the school	Mean	df	t	p-value
Age of student	Private schools	17.9583	94	3.519	0.001
	Public schools	16.6875			

4.2.2 Sex

Out of 96 interviewed students 51% were males and 49% were females. For teachers 71.9% and 28.1% were male and female respondents respectively, for parents 60.4% and 39.6% were of males and females respondents respectively. The findings show that there is still a slight difference in accessing education between male and female students as majority of the interviewed students were males (Table 2).

4.2.3 Education

The results on Table 2 show that majority (58.3%) of parents had attained primary education, 22.9% secondary education, 10.4% college education, 6.3% university education and few (2.1%) had not attained any formal education . The study reveals that few parents who have attained secondary education and above were sending their children in private schools where they believe there is good quality education unlike in public schools. Taylor and Mulhall (2001) assert that well educated parents influence positively academic performance of their students. Although majority of parents in the studied public ward schools have attained formal education they were found to have failed to support their children academically in such things as buying textbooks hence threatening the quality of education to their children.

4.2.4 Family structure

The result in Table 2 indicates that majority (57.3%) of the students interviewed was living with both parents, 21.9% were living with other relatives, and 20.8% were living with only one parent. The results indicate that most of the students can be supported academically as most of them are living with both parents.

4.2.5 House hold size

The results in Table 2 show that 45.8% of the parents had 6-9 members and few (2.1%) had 14-17 members. The average number of household members was 7.6. 60.4% of the interviewed students were 6-9 members and few of them responded to have 14-17 members in their family. During focus group discussion few parents reported that, "most of the parents send their children in ward schools due to having big family sizes. This indicates that families with many members can not afford to offer necessary academic resources to their children as well as paying school fees in private schools. Other parents said that, low tuition fees in public ward schools enforce parents to send their children there as most of them can not afford to pay school fees in private school".

4.2.6 Family head

The data in Table 2 show that majority (87.5%) of the interviewed parents had their families headed by males and 12.5% by females and for the interviewed students, 72% of their families were headed by males and 18% by females. This indicates that, males are the ones largely concerned with education of the children at the household level. Ololube (2006) argues that, since males are the main decision makers and many families are headed by males in most of the African societies, hence males are also part of determinants to the quality of education to their children.

4.2.7 Occupation and major source of family income

Students in the study area were asked to mention their parents' or guardians' major occupations, the purpose was to determine if parent's occupation influence quality of education to the students. As presented in Table 4, the study revealed that the majority (67.7%) of students' parents are farmers, 17.7% are government employees, 10.4% business persons and 4.2% are engaged in other activities including food vending. Out of 48 parents interviewed 25% were mainly farmers, 10% government employees, 9% business person, 3% were both farmers and livestock keepers while 1 % were engaged in livestock keeping only.

This shows that farming was the major occupation as well as the major source of income to most of the respondents in the surveyed secondary schools. This implies that most of the students studying in secondary schools (public ward and private) had parents whose main occupation was farming.

Moreover the results in Table 4 show that most parents or guardians with students in public schools especially rural schools were typically engaged in farming activities only. High risks in agricultural sector which include price fluctuation and drought as reported by many parents were among the factors that constrained them from providing necessary facilities for quality education to their children as well as not supporting ward secondary schools for the provision of quality education. These results are in line with "the analysis of causes of high drop out rate among secondary school children in Mtwara region", the study conducted by Oxfam International in 2001.

Table 4: Occupation of family head

School type	Main occupation of family head				Total
	Farmer	Business person	Government employee	Carpenter	
Public Urban	13	5	5	1	24
Public Rural	22	0	1	1	24
Private Urban	10	4	8	2	24
Private Rural	20	1	3	0	24
Total	**65**	**10**	**17**	**4**	**96**
Percentage	**67.7**	**10.4**	**17.7**	**4.2**	**100**

4.2.8 Availability of learning facilities at home

Effective students' participation in learning process in a classroom depends much on students' environment at home. Conducive education environment at home acts as a catalyst for students' learning and simplifies teachers' activity during teaching and learning at a classroom level (Meyer *et at*, 2009). The current study also examined students' home environment to determine availability of educational facilities.

4.2.8.1 Place (s) for students' private study at home

Students were asked to mention the place (s) were they conduct private study at home. The Chi-test square reveals no significant association between places for private study and students' school type ($p>0.05$). The study reveals that students conduct private study at home but majority of them had no special rooms for private study at home. Table 5 shows places where students conduct their study while at home. Majority of students (83.3%) use sitting room and sometimes sleeping room as their main places for study, 2.1% study in the kitchen and few (14.6%) have special rooms for study at home. The results also show a slight difference in this aspect between student studying in private schools and their counterparts in ward schools. This indicates that students studying in

public ward schools have no conducive environment for studying while at home as majority of them have no special places for conducting private study (Gipps, 1994).

Table5: Places for conducting private study at home and students' school type

Places	Student school type				Total	Percent
	Public (Urban)	Public (Rural)	Private (Urban)	Private (Rural)		
Sitting room or Bed room	20	21	20	19	80	83.3
Kitchen	0	2	0	0	2	2.1
Special room for study	4	1	4	5	14	14.6
Total	**24**	**24**	**24**	**24**	**96**	**100.0**

χ^2 =1.975, df = 94, p=0.160

4.2.8.2 Source of light during private study at home

Table 6 indicates that 41.7% of students in the studied schools use small oil lamp as a major source of light when conducting private study at home. This indicates poor learning environment as the source can endanger their health, leading to poor participation in teaching and learning process in a classroom. These results are supported by the statement of the Minister of Education and Vocational Training saying that, "some of secondary schools which have no permanent source of light make students use risky and unhealthy sources including candles and small oil lamp" (Teornest, 2010). This implies that most of ward secondary schools in Karagwe District need durable and safe source of light in order to foster provision of quality education.

Table 6: Major source of light used during private study at home and students school type

Source of light	Student school type				Total	Percent
	Public Urban	Public Rural	Private Urban	Private Rural		
Lamp	7	8	10	8	33	34.4
Small oil lamp/Koroboi	9	15	3	13	40	41.7
Electricity	8	1	11	3	23	24.0
Total	**24**	**24**	**24**	**24**	**96**	**100.0**

4.2.8.3 Educational instruments at home

Students and parents were asked to mention availability of related educational instruments at home. The purpose of this was to asses education environment at home as per UNESCO's (2003) criterion that education analysis should start from home and not at schools only as revealed by Murnane (1981). This study used and assessed radio, television, scientific calculator, and computer as educational instruments at home. Table 7 shows that educational instruments itemized by students that are available at home were radio (52%), TV and radio (21.9%) on the other hand, 7.3% did not have any of the assessed educational instruments. No differences were identified in the availability of studied educational instruments between ward and private schools.

The findings indicate that students learning environment at home are encouraging as they can access educational information through available instruments at home, but more efforts are needed to empower parents economically so that they can have more academic instruments at home for building good education ground for their children. As Grobe and Bishop (2001) assert availability and accessibility of computers and other educational instruments at home influence students' academic achievement at school.

Table 7: Type of educational instruments found at home and students' school type

Educational instruments	Student school type				Total	Percent
	Public Urban	Public Rural	Private Urban	Private Rural		
Radio only	13	17	3	17	50	52.1
TV, Radio and Scientific calculator	0	2	0	2	4	4.2
TV only	1	0	0	0	1	1.0
TV and Radio	7	0	12	2	21	21.8
Radio and Scientific calculator	0	4	5	0	9	9.4
Radio, TV, Computer and Scientific calculator	0	0	4	0	4	4.2
No education assets owned	3	1	0	3	7	7.3
Total	**24**	**24**	**24**	**24**	**96**	**100**

4.2.9 Distance to school

Table 8 shows the total number of minutes students spent walking from home to school. Over a half of students (54) were day scholars and 42 were boarding scholars. All boarding scholars were studying in private schools indicating that most of the studied private schools had at least buildings for students' hostels. Information on the distance to school especially in public ward secondary schools was very important in designing interventions for improving learning environments including the control of school dropout. Students spend an average of 43.8 minutes walking from home to school. Results in Table 8 show that 22 percent of the students walk below thirty minutes, 26 percent spend 31-60 minutes and eight percent use more than sixty minutes from home to school. Students in surveyed public ward schools were mostly affected with this challenge except for one school which had students hostel for girls. This indicates that

long distance covered constrains students from effective participation in teaching and learning process at a classroom level; student become tired walking to and from school.

Table 8: Total minutes students walk from home to school and their school type

Minutes	Number of students and their school type					
	Public Urban	Public Rural	Private Urban	Private Rural	Total	Percent
1-10	2	1	0	1	4	4.17
11-20	1	2	0	4	7	7.29
21-30	7	3	0	0	10	10.42
31-40	3	2	0	0	5	5.20
41-50	1	3	0	3	7	7.29
51-60	6	5	0	2	13	13.54
Above 60	4	4	0	0	8	8.33
Boarding	0	4	24	14	42	43.76
Total	**24**	**24**	**24**	**24**	**96**	**100.00**

4.3 Availability and Use of Enabling Inputs at School

Qualification and teaching experience of teachers, class size (number of students in a class or teacher-student ratio), textbooks, lesson plan and teaching aids were used as enabling inputs for quality education provision in this study. The findings in relation to these inputs are presented in the following sub-sections.

4.3.1 Qualification and teaching experience of teachers

4.3.1.1 Education level of teachers

High performing schools distinguish themselves from their average or low performing counterparts in the way in which a school recruits, supports and distributes expertise of teachers (Sanders and Rivers, 1996).

Teachers were requested to provide information concerning their qualification and teaching experience. The two-sample tests show that there is no statistical significant differences of teacher qualification (number of years studied) between private and public secondary schools ($t = 1.557$, $p = 0.130$) at $\alpha = 0.1$ level of significant. Most of studied schools were staffed with teachers who have studied up to Form Six. Table 9 shows that 34.4% of the interviewed teachers had attained form six only, 18.8% attained form Six plus short course training in teaching, 37.6% were Diploma holders, 6.3% attained Advanced diploma and only one teacher had Master of Business Administration. In general, private schools were staffed with more qualified teachers compared to ward secondary schools. Also the study reveals that rural private and ward secondary schools were faced with a shortage of qualified staff. Furthermore the study reveals that among the surveyed eight schools only two (1 private urban and 1 private rural) were headed by degree holders and the rest were headed by Diploma holders. These findings indicate poor provision of quality education and that public ward schools were mostly affected vis-à-vis private schools; thus immediate and more support for qualified teachers was of high concern in these schools to ensure the provision of quality education. As Parker (2004) reveals a well qualified teacher is important for a good mix of subject matter knowledge and pedagogic content knowledge for the provision of quality education and effective delivery of the lesson.

Table 9: Education level attained by the teachers and their school type

School type	Education level					Total
	Form six	Form six plus short course training in teaching	Diploma	Advanced diploma	Second degree/Masters	
Public Urban	3	1	4	0	0	8
Public Rural	4	2	2	0	0	8
Private Urban	1	1	4	1	1	8
Private Rural	3	2	2	1	0	8
Total	**11**	**6**	**12**	**2**	**1**	**32**
Percent	**34.4**	**18.8**	**37.6**	**6.3**	**3.1**	**100**

$t = 1.557$, $df = 30$, $p = 0.130$

4.3.1.2 Teaching experience of teachers

It is a generally accepted fact that, the number of years spent in teaching influence the quality of instruction in the classroom. This study therefore looked at the teaching experience of teachers (Table 10). The two sample tests show that there is a statistical significant differences between teaching experience of teachers in public and private secondary schools ($t = 2.078$, $p = 0.046$) in Karagwe District. The results show that the average teaching experience of teachers in the surveyed schools was 53 months equivalent to 4.4 years. Teaching experience of the private school teachers was generally higher (mostly in urban private schools) than those it was in the public ward schools both in the urban and rural schools. This is due to the fact that some of the private schools have built good teaching and encouraging environment as opposed to public secondary schools. Furthermore the study reveals that rural secondary schools of both types, private and public mostly used Form Six leavers in teaching, thus many of them work for less than 12 months before quitting for further studies. The head of school at Adolec rural

private school (Mr. Justus Kachekolela) reported that, "uncondusive working and living environment in most of the rural secondary schools do not attract professional teachers to go and work there, hence the situation force these schools to engage unqualified staff mostly Form Six leavers in teaching. These findings imply that schools in rural areas mostly public schools have poor and unattractive environment for the provision of quality education as supported by the study of Malila (2003).

Table 10: Number of months a teacher has taught and their school type

Number of months	School type				Total
	Public Urban	Public Rural	Private Urban	Private Rural	
< 12 months	3	3	0	5	11
13-21	1	1	0	0	2
22-30	1	1	1	1	4
31-39	0	1	1	1	3
40-48	3	0	0	0	3
84-92	0	2	1	1	4
93-101	0	0	1	0	1
120-128	0	0	1	0	1
> 130 months	0	0	3	0	3
Total	**8**	**8**	**8**	**8**	**32**

t = 2.078, df = 30, p = 0.046

4.3.2 Class size and teacher-student ratio

Teacher-student ratio is one of the key input indicators used as a proxy measure for quality education within the Education Strategic Plan (ESP). It is also used to reflect access and efficiency of teachers in the education sector (Blatchford, 2003).

The two sample tests show that there is no significant difference between teacher-student ratio in public and private secondary schools (t =1.598, p = 0.121).The Ministry of Education and Vocational Training (MoEVT) policy advocates for a teacher-student ratio (TSR) of 1:40 at a secondary level school. The study reveals the average class size of 1:66 as featuring in all surveyed schools (public and private) of both areas that is rural and urban areas. This ratio was much higher compared to the stipulated and targeted teacher-student ratio of 1:40. Table 11 shows that, none of the surveyed schools operated

at the targeted TSR. However there was a slight higher class size in the urban schools compared to that in the rural school of both types.

These findings indicate that a high class size (above 50 students per teacher) reduces teacher-student interactions and minimizes class management, the practice which could lead to the provision of low quality education. These findings are contradictory with the ones by Burke (2003) who suggests that better trained teachers can handle more students with no decline in learning outcomes and that large classes with instructional materials do better than small classes with no instructional materials. Also Haddad (1978 cited in Burke 2003) noted that students tend to be less concerned with class size and instead tend to feel that the quality of the teacher affects the quality of learning more than the class size.

Table 11: School type and teacher-student ratio

School type	Teacher-student ratio
Public Urban	1:80
Public Rural	1:65
Private Urban	1:70
Private Rural	1:50

$t = 1.598$, $df = 30$, $p = 0.121$

4.3.3 Availability and use of teaching and learning materials

This study used textbooks, lesson plan and teaching aids as the main materials which facilitate teaching and learning process at a classroom level. Information on these materials is presented and discussed in the sub-sections below.

4.3.3.1 Availability and use of text books

The textbook continues to be a major influence on classroom teaching and has high cost effectiveness for improving learning for both teachers and students (Gipps, 1994). The Ministry of Education and Vocational Training (MoEVT) policy advocates for a student-textbook ratio (STR) of 1:1 at the secondary school level meaning that one textbook for one student.

Availability and use of textbooks by teachers and students in the classroom was therefore studied in private and public schools of urban and rural areas in Karagwe District. Teachers and students were asked on the availability and use of textbooks at school as well as textbooks availability at home for students only. The situation of textbook ratio to all studied schools in both areas rural and urban was generally poor. The two sample tests show that there is no significant difference between student-textbook ratio in public and private secondary schools ($t = 1.245$, $p = 0.223$) in the studied area. Majority of teachers (87.5%) and students (90.6%) strongly agreed that their schools had few textbooks. The situation was a bit worse in rural private and all public ward secondary schools.

The average student-textbook ratio (STBR) in all the studied schools was 12 with a minimum of one and a maximum of 30. The results in Table 12 indicate that STBR in one of the urban private schools was a bit better with an average of 1.6 meaning that one textbook was shared with 1.6 students while the situation in rural private schools was also not favoring the provision of quality education as most of students had a high STBR (above 7 STBR). The situation was worse in all public ward secondary schools of both locations, that is rural and urban in which the average student-textbook ratio was above ten. The above results imply that secondary schools in the studied area still have a long

journey to ensure the provision of quality education as the STBR in these schools is far lower compared to the targeted textbook ratio.

Table 12: Student-textbook ratio and school type

Number of student(s) per textbook	Number of respondents and their school type				Total
	Public Urban	Public Rural	Private Urban	Private Rural	
1-3	0	0	8	0	8
4-6	2	0	4	1	7
7-9	6	8	7	11	32
> 10	16	16	5	12	49
Total	**24**	**24**	**24**	**24**	**96**

t =1.245, df = 30, p = 0.223

There was a serious shortage of textbooks in all subjects although a slight difference was identified among the schools as seen in Table 13. Majority (44.8%) of the students in all schools agreed that science subjects have a serious shortage of textbooks with a worse scenario in public rural schools as well as private rural schools. Mathematics also ranked a second (24.0%) subject for shortage of textbooks. The study reveals that all public and private rural schools in the studied area had serious shortage of textbooks in all the subjects , but the situation is much worse in Mathematics and science subjects. Such an environment endangers the provision of quality education (Biggs, 2003).

Table 13: Respondents' school type and subjects with serious shortage of textbooks

School type	Subjects with serious shortage					Total
	Science subjects	Mathematics	Arts subjects	English and Kiswahili	No serious shortage	
Public Urban	13	7	2	2	0	24
Public Rural	11	6	4	3	0	24
Private Urban	8	2	8	0	6	24
Private Rural	11	8	3	2	0	24
Total	**43**	**23**	**17**	**7**	**6**	**96**
Percentages	**44.8**	**24.0**	**17.6**	**7.3**	**6.3**	**100**

The current situation with regards to shortage of textbooks has forced students and their parents to take their own initiatives by buying some textbooks. The study interviewed students and parents on private ownership of textbooks at home. The findings in Table 14 reveal that few (42.1%) of students own different type of textbooks bought by their parents, guardians or relatives, while majority of them (47.9%) do not own any type of textbook. Students (46 out of 96) in all public secondary schools and rural private schools were the ones found to have no textbook in any of the subject taught. The results indicate that these students cannot have intensive private study at home as they do not own and have no access to any type of textbooks at home.

Table 14: Students school type and the type of textbook(s) owned privately

School type	Type of textbook(s) owned						Total
	Mathematics	Science	Arts	KAMUSI	Dictionary	Don't have any book	
Public Urban	3	3	2	1	1	14	24
Public Rural	0	2	3	0	5	14	24
Private Urban	1	5	11	0	5	2	24
Private Rural	0	3	3	1	1	16	24
Total	**4**	**13**	**19**	**2**	**12**	**46**	**96**
Percentages	**4.2**	**13.5**	**19.8**	**2.1**	**12.5**	**47.9**	**100.0**

The results in Table 14 show that 19.8% of students own textbook(s) of arts subjects, 13.5% have textbooks of science subjects while 12.5% own English dictionaries only and 2.1% own *"Kiswahili Kamusi"*. Students possession of textbooks in the subjects studied was much better in private secondary schools as oppossed to public ward schools. This result were in line with a quotation from one of the interviewed parents who said *"we send our children to private schools because the required academic materials are readily available as opposed to public ward schools"* The study also reveals that, the few available subject textbooks at school were not easily accessed by the students except the subject teachers who stayed with the textbook (s) throughout. Only a few students mostly fast or bright learners were allowed to borrow textbooks, but even these students were allowed to keep these books for short periods (at most five days a month).

Shortage of textbooks in Tanzanian secondary schools has also affected students writing skills and reading behaviour (Carr-Hill and Ndalichako, 2005). Regardless of the problem of textbooks availability in the studied schools, the study reveals that students have no interest in borrowing and reading textbooks.

4.3.3.2 Availability and use of lesson plan books

Successful teachers are invariably the ones who prepare and use lesson plan during teaching (Tierney and David, 1990). There is no substitute for this and a teacher should prepare it whenever he/she has a lesson or goes to class for teaching (Heck and Mayor, 1993). The current study shows that 71.9% of the interviewed teachers in all types of schools studied agreed that they recognize the importance of using a lesson plan during teaching and they know how to prepare lesson plan, while 28.1% were aware but did not know how to prepare a lesson plan. Moreover Table 15 shows, that, majority (31.3%) of teachers prepare and use lesson plan sometimes (four times in every ten lessons), 25% prepare and use a lesson plan whenever they have a lesson (always), 21.9% prepare and use a lesson plan very rarely (less than three times in every ten lessons) and the remaining 21.9% of teachers do not use a lesson plan during teaching in a classroom. This practice ignores one of the good practices for the provision of quality education (Artuso, 1990).

Preparation and use of a lesson plan in a classroom was seen to be much better in private schools and it was more encouraging in urban private schools. The Academic Master of Karagwe Secondary School (Mr. E.Ngambeki) reported that "school administrators of private schools are serious on academic aspect including making a follow-up on the preparation and use of a lesson plan" the practice which fosters the provision of quality education.

Table 15: School type and teachers' frequency of preparing and using lesson plan during teaching in classroom

Respondents' school type	Frequency of preparing and using lesson plan				Total
	Always	Sometimes	Very rare	Don't prepare	
Public Urban	2	1	2	3	8
Public Rural	2	0	2	4	8
Private Urban	3	3	2	0	8
Private Rural	1	6	1	0	8
Total	**8**	**10**	**7**	**7**	**32**
Percentages	**25.0**	**31.3**	**21.9**	**21.9**	**100**

The situation was the worst in public secondary schools of both locations as all teachers (7) who where found to be teaching without lesson plan were working in these schools. The Headmaster of Kihanga rural ward secondary school (Mr. Martini Masele), commented that "the use of unprofessional teachers mostly Form Six leavers is among the factors for them not using lesson plan during teaching". Also Pigozzi (2004) asserts that teachers' lesson plan books should be marked with the head of school and or senior teachers before and after being used in the classroom. This however was not the practice in the studied schools. The result in Table 16 show that 46.9% of the interviewed teachers said that their lesson plan books were only assessed by academic masters or mistress after being used in a classroom, 15.6% before being used, 6.3% before and after being used. On the other hand 9.4% of teachers' lesson plan books had completely not been assessed for the past eight months as it was observed by this study. This situation was worse in rural and urban public ward schools as opposed to Private schools.

Table 16: School type and time of marking teachers' lesson plan books

Respondents' school type	Time of marking lesson plan					Total
	Before used in the classroom	After being used	Before and after being used	Don't prepare	Not marked at all	
Public Urban	1	3	0	3	1	8
Public Rural	1	2	0	4	1	8
Private Urban	2	4	1	0	1	8
Private Rural	1	6	1	0	0	8
Total	**5**	**15**	**2**	**7**	**3**	**32**
Percentages	**15.6**	**46.9**	**6.3**	**21.8**	**9.4**	**100**

The findings indicate that public ward schools need qualified administrators for close supervision, monitoring and evaluation of teaching and learning process to ensure that teaching and learning practices for quality education are well practiced at school.

4.3.3.3 Availability and use of teaching aids

The best way to ensure good outcomes in teaching and learning process is to present information by the use of different teaching aids related to the topic to be taught. As Burgess (1998) observed greater attention to the use of teaching aids may result into greater overall literacy development hence good quality of education. The study reveals that teaching aids were completely not used in most of the surveyed schools except for few teachers who used teaching aids very rarely.

Table 17: Student school type and frequency of using teaching aids

Respondents' school type	Frequency of using teaching aids				Total
	Always	Sometimes	Very rare	Not used at all	
Public Urban	0	4	2	18	24
Public Rural	0	0	2	22	24
Private Urban	7	7	7	3	24
Private Rural	2	1	2	19	24
Total	**9**	**12**	**13**	**62**	**96**
Percentages	**9.4**	**12.5**	**13.6**	**63.5**	**100**

All the interviewed teachers in the schools surveyed agreed that they were aware of the importance of using teaching aids in teaching and learning process but students' findings on this aspect show that only 36.5% of the interviewed students admitted that their teachers use teaching aids, 63.5% said that their teachers do not use teaching aids during teaching. As shown in Table 17, the situation was worst in public ward secondary school of both locations than it was in private schools. This indicates that school administration in private schools was very firm in monitoring teaching process, for this reason teachers were trying to abide by teaching ethics. In this study it was observed that although teachers were aware of the importance of using teaching aids in the process of teaching and learning but they gave less value on using such aids in teaching, also during informal discussion some teachers were quoted as saying "the school administration does not support teachers when such teachers need to use teaching aids" thus rendering this vital teaching technique as value less. Services like electricity, television, news papers, computers and internet were also important in promoting the quality of education as discussed in the next section.

4.3.4 Availability and usage of other enabling services at school

During focus group discussion students gave their views concerning general learning environment at their schools. It was assumed that the availability and application of information and communication technologies through education system can improve students' performance and the quality of education regardless of location of the school (Taylor and Mulhall, 2001). Availability and usage of electricity, computer, internet, news papers and television services were discussed in student focus groups. The services were found to be poorly and little accessed by students and teachers to most of the studied schools. The study reveal that only two urban schools, (one private and another ward school) were accessing electricity service from the government company (TANESCO) while other urban private schools were accessing electricity service through generators while the remaining urban public schools had no electricity service. Three of the rural schools (two private and one public school) were accessing electricity service through generators except one public rural school which had no electricity service.

Furthermore, the study through observation revealed that, only one school (urban private) had effective utilization of computers which were connected to internet service. Television and news papers services were also accessed to students and teachers. Another urban private school had computers though not in use due to lack of enough electrical power. Television service was also found in one of the public rural school although students reported that the service was mostly accessed by teachers only. Also Taylor and Mulhall (2001) found that, absence of the sustainable source of electricity as well as unavailability of different sources of information make students and teachers in rural areas fail to access and use update academic materials. According to Taylor and Mulhall (2001) this should be analyzed when assessing for quality education as it

contribute much on it. According to these results it is surprising that rural school mostly ward secondary schools hardly participate in accessing current education information. Addressing this disparity is a major challenge to the education stakeholders as well to community members at large for ensuring the provision of quality education in public rural schools.

4.4 Perceptions of Community Members on Public Schools

Community members' attitude toward public ward secondary schools was assessed and three groups involved in this analysis were teachers, parents and students. In assessing attitudes of these groups, Likert scale was used comprising a set of attitudinal statements associated with SEDP or ward secondary schools. The respondents were asked to express their attitude based on five points scale, strongly disagree (SD-1), disagree (D-2), undecided (UN-3), agree (A-4) and strongly agree (SA-5). Each degree of agreement was given a score from one to five thus the total scores were calculated from all the respondents. All total scores of each respondent was grouped in three categories as follows; low attitude (10-29), neutral (30) and high attitude (31-50), (Barley, 1995). All the interviewed students, teachers and parents have a positive attitude upon public ward schools. The overall perception of each group of the respondents was analyzed and the results are presented and discussed in the sub sections below.

4.4.1 Teachers' perception towards public ward schools

The findings indicate that regardless of unconducive teaching and learning environment in public secondary schools, most teachers have high attitude toward the schools.

Evaluation of the attitude of teachers towards public schools under SEDP reveals that 46.9% of teachers have high or positive attitude, these results were contrary with the

expectations and assumptions of the current study. It was only 34.4% of the respondents who had low or negative attitude and 18.8% of teachers were neutral and remained uncertain toward ward schools (Table 18).

Teachers strongly agreed that the idea of establishing schools in each ward was good as such schools have helped low income households to send their children in secondary schools. Teachers strongly disagreed that students selected to ward secondary schools were of low academic ability. Teachers with low attitude (34.4%) towards ward schools strongly agued that most of the ward schools in their area have no enough qualified teachers and also lack teaching and learning materials including textbooks. The findings in Table 18 also show that most of the teachers in public schools have high attitude toward schools under SEDP as opposed to teachers in private schools. Furthermore these teachers argued that poor performance of ward schools is due to being built in remote areas in where the enabling inputs for teaching and learning are not easily accessed as well as the schools are not frequently inspected by educational inspectors.

Table 18: School type and teachers' perception upon public ward (SEDP) schools

School type	Teachers' perception upon ward/SEDP schools			Total
	10-29 (Low attitude)	30 (Neutral)	31-50 (High attitude	
Public Urban	1	1	6	8
Public Rural	2	2	4	8
Private Urban	4	1	3	8
Private Rural	4	2	2	8
Total	**11**	**6**	**15**	**32**
Percent	**34.4**	**18.7**	**46.9**	**100.0**

4.4.2 Students' perception on public ward schools

The findings show that students in the studied schools positively perceived wards public schools as better institutions for providing quality education. There was no significant difference identified between perception of students in public and that of students in private schools in both urban and rural areas.

The results in Table 19 show that majority of students (67.7%) have high attitude toward public ward schools. Furthermore 26.0% of students have low attitude while 6.3% were neutral or undecided upon public ward schools. These results show that students of all schools (private and public) have positive perception upon public ward schools regardless of the existing poor educational environment. During FGDs, students argued strongly that public ward schools have much reduced school costs to students, also reported that ward schools have helped to reduce illiteracy rate in the communities, on the other hand, students strongly disagree that the quality of education offered in public ward schools is of low quality. Few students (26%) with negative attitude toward public schools reported that, these schools have no enough qualified teachers, also do not have enough libraries. Furthermore students said that public ward schools lack enabling inputs for teaching and learning including shortage of textbooks, tables and chairs for students and teachers.

Table 19: Students school type and their perception toward SEDP schools

Students' school type	Students' perception upon ward/SEDP schools			Total
	10-29 (Low attitude)	30 (Neutral)	31-50 (High attitude)	
Public Urban	7	2	15	24
Public Rural	8	2	14	24
Private Urban	7	0	17	24
Private Rural	3	2	19	24
Total	**25**	**6**	**65**	**96**
Percent	**26.0**	**6.3**	**67.7**	**100.0**

4.4.3 Parents' perception toward public ward schools

The study findings show that most of the parents had positive perception toward public ward schools and there was no difference in perception between parents from public and those from private schools in both urban and rural areas (Table 20). The results in Table 22 show that majority (87%) of students' parents and guardians have high attitude toward the performance of public ward schools which was also out of assumption of this study. Few parents (6.3%) had low attitude and 6.3% were neutral toward the performance of public ward schools. These findings reveal that regardless of the existing educational situation in public ward schools most of the parents and guardians with students in these schools were still proud of having secondary school in each ward. Most of the parents said that apart from the quality of education offered, the establishment of secondary schools in the nearby environments was a good thing as it has come to liberate rural areas and its people. The government and other stakeholders should now insist on the provision of better quality education. During FGDs, parents and guardians strongly supported ward schools because they have helped many rural children to proceed with further education as opposed to past years in which few students had access to secondary education. This was caused by economic inability of parents (mostly from rural areas)

who failed to send their children to schools something which slowed development. Few (6.3%) parents and guardians who had negative attitude toward ward school because most of them lack enabling inputs for quality education. They reported that the schools have no enough qualified teachers; the schools also had no libraries and laboratories. Shortage of textbooks, accommodation for teachers, hostels for students and other necessary services as explained in the previous sections were some of the factors that made these parents dislike ward secondary schools. Lastly, parents recommended that public ward schools would do better and play a great role in hastening rural development in Tanzania if the identified barriers would be solved without delay.

Table 20: School type and parents' perception toward SEDP schools

Respondents' school type	Parents' perception upon ward/SEDP schools			Total
	10-29 (Low attitude)	30 (Neutral)	31-50 (High attitude)	
Public Urban	0	0	12	12
Public Rural	0	1	9	10
Private Rural	2	1	11	14
Private Urban	1	1	10	12
Total	**3**	**3**	**42**	**48**
Percent	**6.3**	**6.2**	**87.5**	**100.0**

4.5 Learners Characteristics

How an individual perceives himself in the context of education and learning influence his or her performance. Thus students' efforts and habits towards learning at home and school contribute much to his or her academic performance (Bakare, 1969). On determining learners' characteristics the study assessed students' perception on

education, their readiness and perseverance on learning. It also identified barriers to students' effective learning in classroom or school. The findings from these variables are presented and discussed in the following subtopics.

4.5.1 Learners' perception on education

The study measured the attitude of students toward education and likert scale was the main instrument used in this analysis. Five responses of likert scale strongly disagree (SD-1), disagree (D-2), undecided (UN-3), agree (A-4) and strongly agree (SA-5) were used where upon students were supposed to score each given statement according to his or her perception toward the statement (Babbie, 1990).

The study findings indicate that most of students have high perception toward education and there was no difference in perception between students from public and those from private schools in both urban and rural areas.

Table 21: Student school type and their perception upon education

Students' school type	Students' attitude upon education			Total
	8-23 (low attitude)	24 (Neutral)	25-40 (High attitude)	
Public Urban	8	4	12	24
Public Rural	8	1	15	24
Private Urban	3	3	18	24
Private Rural	10	4	10	24
Total	**29**	**12**	**55**	**96**
Percent	**30.2**	**12.5**	**57.3**	**100**

Majority (57.3%) of students in all schools have positive perception toward education although a slight difference was observed between students in rural and urban schools. This indicates that all students need and should be facilitated with all necessary inputs

and resources for learning regardless of the type of schools they go to. Conducive and encouraging environment for teaching and learning should be provided to all type of studied schools with much emphasize on public schools as their environment was not supporting the provision of quality education to students. Students viewed education as the way of eradicating poverty in any society as it helps an individual to improve his ability of production by imparting learners with attributes for survival including knowledge and skills. The government and community members around these schools and other educational stakeholders should strive to fulfill the dreams of these young rural children. More efforts are needed to rise the awareness of few students (30.2%) found to have low attitude and other groups (12.5 %) which are undecided toward education as they are not aware of the value of education and its importance. The study reveals that most of these students believe that going to school is a waste of time and other resources as education leads to destruction of norms, values and traditions of the given society. Students also judged education negatively as they reported that "education creates different classes in the society which would influence exploitation in the society".

4.5.2 Learners readiness and perseverance

The study used student reporting time at school, school attendance and time for private study at home to assess learners' willingness to learn or study; this would in turn determine of learners' readiness and perseverance as measurable variables. The results on these variables are described in the next sections.

4.5.2.1 School reporting time

Students reporting time and morning schedule (before class) was found to be the same in all the surveyed schools. All students were supposed attend to school early in the morning at 0700 h and spend half of an hour for cleaning school environment, other

thirty minutes were spent to parade activities. The morning teaching timetable starts at 0800 h. Reporting to school on time and participating in morning activities help students to build time management habit hence effective participation in teaching and learning process in classroom (Meyer *et al*, 2009). The study findings indicate that majority of students did not report at school on time (later after 0700 h). The two sample tests showed a strong significant mean difference on reporting time between students in public and private schools ($t = -7.185$, $p = 0.000$). Table 22 shows that 45.8% of the studied students report at school on time (before or on 0700 h) and 54.2% report late (after 0730 h). Furthermore, the results show that 16.7% of the studied students do not participate in school morning activities as they reported to school after 0730 h while 8.3% report after the morning lessons have started.

Students in public schools report much late unlike their counterparts in private schools. Staying far away from the school hence long walking distance cause students in public ward schools to report late at school.

It was observed that all students in the urban private school (Karaseco) stay in school hostels while few students in other private schools stay a bit far away from the school due to shortage of hostels. There were no students' hostels in all the surveyed public ward schools except one rural ward school (Kituntu secondary) which has a building which can only accommodate few girls. These findings indicate that most students in public ward schools do not use all specified time for learning or studying at school due to late reporting and some of them sometimes do not attend the first morning lessons the situation which could affect their academic performance.

Table 22: Student school type and reporting time at school

Student school type	Reporting time				Total
	0650-0700 hrs	0701-0730 hrs	0731-0800 hrs	Above 0801 hrs	
Public Urban	1	15	6	2	24
Public Rural	3	10	7	4	24
Private Urban	24	0	0	0	24
Private Rural	16	3	3	2	24
Total	**44**	**28**	**16**	**8**	**96**
Percentage	**45.8**	**29.2**	**16.7**	**8.3**	**100**

t = -7.185, df = 94, p = 0.000

4.5.2.2 Students school attendance

In the New Zealand Smithfield study it was that good student attendance in a classroom is one of the most significant variables influencing student learning habits hence good academic performance (Partington, 2001). District Education Officer of Karagwe reported that the total recommended academic days are twenty for each academic month. The study analyzed the rate of students' attendance at schools per month; and the results reveal that all public ward schools had poor students' school attendance as opposed to private schools. The two sample tests showed a significant difference between school attendance mean for students in public schools and those in private schools (t = 4.194, p = 0.001).

Students in all the surveyed schools attended school at an average of 17.5 days in a month, a minimum of 12 days and a maximum of 20 days. Table 23 shows that majority (56.3%) of students attends a total of 18-20 days per month and most of these (36 out of 54) were studying in private schools while few (4.2%) attended 12-14 days. Three out of four students in this group were studying in urban public schools and the rest were

studying in rural public schools. The situation is largely caused by poor and discouraging learning environment in public schools. Furthermore, students reported that, apart from lack of students' hostels in public ward schools, students' poor attendance was also due to inability of their parents/guardians to pay some school costs. It can be concluded that although student school attendance was encouraging, more efforts are needed to maintain and improve it. As Boma (1980) cited in Alphaxide (2008) asserts absenteeism or poor attendance of both teachers and students cause wastage of learning time, and thus negatively affect students' academic performance.

Table 23: School type and students school attendances

Students' school type	Number of days student attend school per month (20dys a month)			Total
	12-14	15-17	18-20	
Public Urban	3	13	8	24
Public Rural	1	13	10	24
Private Urban	0	5	19	24
Private Rural	0	7	17	24
Total	**4**	**38**	**54**	**96**
Percent	**4.2**	**39.5**	**56.3**	**100**

$t = 4.194$, $df = 94$, $p = 0.001$

4.5.2.3 Private study

The study assessed students in terms of doing private study at home and in school. In assessing this aspect, the following variables were analyzed, availability of student's private timetable at home, frequency of observing the planned timetable, time and duration for private study at home. The total time spent for individual private study has been found to have a significant association to students' academic performance, (Wylie *et al*, 2006). The results in Table 24 show that 93.8% of the studied students agreed that

they conducted private study and they had timetable for private study at home except six students (6.3%) who had no timetable. Three of the students with no timetable were studying in urban public schools and the other two were studying in the urban private schools while one student was studying in rural private school.

Table 24: Students school type and timetable ownership

Students' school type	Do you have timetable for private study at home?		Total
	Yes	No	
Public Urban	21	3	24
Public Rural	24	0	24
Private Urban	22	2	24
Private Rural	23	1	24
Total	**90**	**6**	**96**
Percent	**93.7**	**6.3**	**100**

Table 25 shows that 57.3% of the students follow and use their planned timetable everyday, 30.2% use it sometimes (three days in a week) while 6.3% use and follow their timetable very rare (below two days per week). Students in private schools were slightly better than their counterparts in ward schools on observing and using their planned timetable. The results in Table 26 show that students (36.5%) in private schools conduct their private study immediately after dinner (night preparation) unlike students in public ward schools who mostly go for private study after school hours and other students do that after evening home activities.

Table 25: Student school type and frequency of using timetable

Students' school category	How frequent do you follow your planned timetable				Total
	Everyday/always	Sometimes (3dyays in a week)	Very rare (below two days per week)	Don't have timetable	
Public Urban	9	11	1	3	24
Public Rural	11	10	3	0	24
Private Urban	18	4	0	2	24
Private Rural	17	4	2	1	24
Total	**55**	**29**	**6**	**6**	**96**
Percent	**57.3**	**30.2**	**6.3**	**6.3**	**100**

The study also reveals that, students in all the studied schools conduct private study at an average of 71.5 minutes everyday. The two sample tests showed a significant difference between mean time for private study for students in public schools and their counterparts in private schools ($t = 11.584$, $p = 0.000$).

Table 26: Student school type and time for private study at home/school

Students' school type	Time for private study			Total
	After school hours	After home activities	After dinner (Night Preparation)	
Public Urban	6	17	1	24
Public Rural	7	15	2	24
Private Urban	2	0	22	24
Private Rural	13	1	10	24
Total	**28**	**33**	**35**	**96**
Percent	**29.2**	**34.3**	**36.5**	**100.00**

Most of the students in private schools use 90-150 minutes (they start at 1930 h to 2230 h) while their counterparts in public ward schools spend only 30-45 minutes for private study at night (Table 27). During Focus Group Discussion students in public schools reported to lack permanent source of light hence forcing them to spent short time for private stud during night. It was also observed that some of the schools used small power generators which can not supply electricity in all classrooms and for long time. The environment was so terrible in public schools and this was due to lack of permanent source of light hence students used their own source including candles, lamp and small lamp hence spent short time for private study. One generator observed in rural ward school (Kituntu secondary) which was reported (by students) to be used mostly by teachers for charging their mobile phones and watching news on the Television and not for students as it was intended. These findings indicate that the environment in the studied area mostly in public ward schools were not favoring students to have intensive private study and the situation frustrates government target and efforts to provide quality education in all secondary schools.

Table 27: Student school type and length for private study at home/school

Students' school type	Duration for private study					Total
	5-30 min	31-45 min	46-60 min	61-90 min	121-150 min	
Public Urban	7	13	3	1	0	24
Public Rural	12	8	1	3	0	24
Private Urban	0	0	1	11	12	24
Private Rural	1	1	4	18	0	24
Total	**20**	**22**	**9**	**33**	**12**	**96**
Percent	**20.8**	**22.9**	**9.4**	**34.4**	**12.5**	**100.00**

t = 11.584, df = 94, p= 0.000

4.5.3 Barriers to student effective learning in classroom

The study assessed different barriers affecting students' participation in the process of teaching-learning at classroom level. For quality education provision and improvement,

education stakeholders should identify and address educational barriers by designing supportive programs and services that enable students to learn and teachers to teach effectively (Adelman and Taylor, 1997). The identified barriers were presented and discussed in the subsections below.

4.5.3.1 Travel distance and transport status

Table 28 indicates long traveling distance from home to school as one of the identified problems constraining effective participation of students and teachers in the process of teaching and learning at a classroom level. The distance was measured by using total minutes a student travels from home to school and the results are shown in Table 28. The findings show that students in public ward school walk more than thirty minutes to school compared to their counterparts. Descriptive data in Table 28 show that majority of students (26%) mostly in ward secondary schools and few in rural private schools were used to walk 31-60 minutes an average of 43.8 minutes which is equivalent to seven kilometers to and from school everyday (one kilometer equal to 15 minutes) the journey which is so tiresome. The results also show few students (6.3 %) in the studied schools walk more than 61minutes just to school only, this is a frustrating situation which does not offer conducive environment for learning at school and at home.

Table 28: Student school type and minutes traveled from home to school

Students' school category	Traveled minutes from home to school				Total
	5-30 min	31-60 min	Above 61 min	Boarding	
Public urban	11	10	3	0	24
Public Rural	8	10	2	4	24
Private Urban	0	0	0	24	24
Private Rural	4	5	1	14	24
Total	**23**	**25**	**6**	**42**	**96**
Percent	**24**	**26**	**6.3**	**43.7**	**100.00**

In all the surveyed areas there was no school with its own means of transport for students or teachers. Table 29 shows that most of students (54.2%) go to school on foot as their major means of transport and (45.8%) were boarding scholars in private schools and few of them in public rural school. The status of transport and distance traveled were among the major challenges in rural schools; this is because students and teachers encounter many difficulties in the way to school. The results are supported by the World Bank report of 2006 statement that insufficient means of transport to rural schools is an indication of the many challenges that remote schools and students face. This is an addition to limited frequency of visits by education inspectors, the situation which could hinder the provision of quality education. Also Oxaal (1997) cited in Gervas (2007) reveals that,' insecurity during walking between home and school constrained girls from doing well in school.

Table 29: Means of transport for students

Student status	Frequency	Percent
On foot	52	54.2
Boarding scholars	44	45.8
Total	**96**	**100.0**

4.5.3.2 Nutritional status

Lack of nutrition programme at school diminishes students' cognitive development by reducing their ability to participate in learning practices hence poor school attendance rate and performance (Hilda and Gelagister, 2007). The study findings reveal that public schools had poor nutrition status unlike to private schools. Table 30 shows that 61.5% of the students and 65.6% of teachers identified nutritional programs as part of the constraints in teaching and learning process for both students and teachers. The study also looked at the status of food provision in terms of the number of meals students get while at school. The study reveal that food provision in the surveyed schools was a big problem to students mostly in public ward secondary schools as opposed to private schools. The results in Table 31 shows that 35.4% of students in public ward schools do not get even a single meal, 19.8% get one meal (porridge) and only 2.1% get two meals. Most students (42.7%) in private schools reported to have been getting three meals per day while at school. These findings indicate that poor nutritional programe at school cause students to stay in class while hungry, and thus become less attentive to teachers, the situation which negatively affects students' effective participation in the process of teaching and learning. The four public ward schools visited have had established food programs for students although students have to contribute for it. Most of the interviewed students (35.4%) admitted that school administration had established food programs, but which required students to pay for the meals. As many students could not afford to pay for the meals, they stayed without meals and as the results failed to attend school.

Table 30: Problems preventing students from effective learning

Parameters	Students		Teachers	
	Frequency	Percent	Frequency	Percent
Lack of enough subject books	92	95.8	29	90.6
Lack of enough & qualified teachers	87	90.6	27	84.4
Absence of laboratory & library	78	81.3	27	84.4
Overcrowding in one class	67	69.8	25	78.1
Absence of food, electricity and water services	59	61.5	21	65.6
Long distance from home to school	56	58.3	17	53.1
Corporal punishment	22	22.9	4	12.5
Poor English background	16	18.7	8	25.8

NB: Results was based on multiple responses for each parameter

Table 31: Student school type and number of meals eaten per day at school

Students' school type	Number of meals eaten				Total
	None	One meal	Two meals	Three meals	
Public Urban	15	9	0	0	24
Public Rural	17	7	0	0	24
Private Urban	0	0	0	24	24
Private Rural	2	3	2	17	24
Total	**34**	**19**	**2**	**41**	**96**
Percent	**35.4**	**19.8**	**2.1**	**42.7**	**100.00**

4.5.3.3 Library service

Library service for any learning institution is important in supporting learners and instructors to get references and textbooks for academic purpose and once the service is not accessed, academic performance is likely to be poor (Alphaxide, 2008). Table 30 shows that majority of students (81.3%) and teachers (84.4%) reported lack of library and laboratory as major problems hindering effective learning. Field observations indicate that, out of eight schools only one school (Karaseco, urban private) have a library which was well furnished and fully equipped with necessary facilities (textbooks, computer service, magazines and news paper) while other private schools have just a small room serving as a library. These observed rooms could not even accommodate ten students at once; one teacher among the respondents had this to say, "the rooms were used to keep few textbooks which are old and outdated ones. During focus group discussion, one parent said that "there is no need for having a library while the school has no textbooks", also some students in rural ward schools reported that, "the absence of libraries and shortage of textbooks in their schools has made them to depend on teachers' lesson notes". These results indicate that the quality of education in the studied schools is questionable because most schools lacked functioning libraries and students

have no other sources of materials that can be used to expand the knowledge gained from teachers. Thus students totally depend on teachers' notes given during teaching session, the situation which is counter productive to quality education provision.

4.5.3.4 Absence of laboratory and its instruments

Availability of laboratories and its instruments is an important factor to education provision in all secondary schools in the third world countries in this century. Tanzania and mostly rural areas are mostly affected with this problem as the areas featured extreme poverty hence high need of science and technology for fast development. Availability of laboratories and its instruments was assessed and the results were presented. Accordingly, the study revealed that most of the studied schools especially schools in rural areas had no laboratory service. The results in Table 30 show that, majority of students (81.3%) and teachers (84.4%) in the studied schools indicated laboratory and library as among the barriers of students' participation in taught science subjects (physics, chemistry and biology). Students reported that much of teaching sessions of science subjects in their schools depend on theoretical part only using teachers' notes. One (Karaseco urban private school) out of eight schools surveyed was found to have good laboratory infrastructures such as laboratory equipment, detergents and chemicals; the other private schools were found to have just few basic laboratory equipment kept in a small room. These results indicate that schools in the studied areas were not moving with the twenty first century as schools do not offer opportunities for the practicals in science subjects. To cope with this situation some of the schools used to borrow some laboratory equipment sometimes students used to visit nearby schools with laboratories to see demonstrations of subject content in science subjects as reported by Mr. Martini Masele, the Headmaster of Kihanga rural public school.

4.5.3.5 Corporal punishment

Heavy and regular punishments to students were among the itemized barriers to effective students' participation in teaching and learning process. Although Table 30 shows that teachers (12.5%) indicate that students were not frequently and unreasonably punished, students (22.9%) strongly supported the statement that they were frequently punished and sometimes on flimsy excuses such as failure or late payment of school contributions. During informal discussion with teachers one of them reported that "African child cannot be taught and understands the lesson without a stick". This was strongly condemned by students who argued that stick affects their academic performance. Field observation also reveals that some students were given outdoor punishments while the lessons were being conducted in the classrooms. It can be concluded here that extra strategies are needed to avoid the use of corporal punishment.

4.5.3.6 Poor use of English language

Infrequent use of English language was observed as a big challenge to most of the surveyed schools. The problem was supported by students and teachers at a varying degree as shown in Table 30. Teachers (25.8%) argued strongly for this argument because it first affects them and the whole process of teaching and learning in a classroom. This study observed that most of the students and teachers were found to be using Kiswahili frequently in classroom; commenting on this, teachers said that, "students have poor English background from primary education that's why teachers are forced to use mix of Kiswahili and English otherwise the lesson would not be understood to students". During FGDs students reported that some of teachers were also not compent in English as they taught in Kiswahili throughout the teaching session. The study reveals the official medium of instruction was not commonly used in most of the

surveyed schools; this practice hinders the provision of quality education as most of the subjects in secondary school level are supposed to be taught in English language.

4.5.4 Other factors contributing to poor students' performance in classroom

During focus group discussion students and parents itemized other problems contributing to poor provision of quality education leading to poor students' participation in classroom process. The identified problems are presented and discussed hereunder.

Delays in starting academic teaching timetable for Form One students; the study revealed that classes for Form One students in most public ward schools started one to two months late after the normal beginning of the school academic calendar. The problem was caused by shortage of infrastructures specifically classrooms and its facilities (desks and chairs). Waiting for second and third selection for Form One students to join the school was another cause for late start of academic teaching timetable for Form One students. One teacher reported that "teachers teach partially and some topics were skipped just to be in line with school academic calendar.

Another issue is the release of government circular number five of 2008 of the MoEVT. Apart from other guidelines, the circular permit failures of Form Two National Examinations to continue with studies. The move has led to negligence and negative attitudes towards Form Two National Examinations among students, teachers and parents as students are upgraded to the next class regardless of whether they have passed or failed the National Examinations. The study revealed that some parents delay to pay examination fees as the examinations seem to have no impacts. On other hand, teachers were no longer working hard the situation which has also been described as a major reason behind poor school academic performance in Form Two National Examinations.

4.6 Teacher-Students Interaction in Classroom

The study investigated the process of interaction between teacher and students in the classroom. Classroom practices were assessed using the following variables, actual contact time in classroom, medium of instruction and teaching/learning methods. The results are presented and discussed in the following sub sections.

4.6.1 Actual learning time in each subject

Academic timetables for all surveyed schools showed forty minutes as the specified minutes for teaching and learning in one single period and this was in line with the directive of MoEVT. An average of ten minutes was wastage per single period in all schools. The actual time used in classroom for the single period in each school was shown in Table 32. The results show that 25.0% of students reported that an average of thirty five minutes was used for actual teaching and learning out of forty specified minutes for single period. The situation was worse in all public and rural private schools than it is in urban private schools in which some students reported to use less than thirty five minutes in a single period (Table 32).

Table 32: School type and actual teaching-learning minutes used per single period

School type	Actual teaching-learning minutes in a single period							Total
	30.min	32 min	34 min	35.min	36.min	37.min	38.min	
Public Urban	6	4	1	12	1	0	0	24
Public Rural	3	4	4	6	3	1	3	24
Private Urban	0	1	0	2	10	2	9	24
Private Rural	8	8	2	4	1	0	1	24
Total	**17**	**17**	**7**	**24**	**15**	**3**	**13**	**96**
Percent	**17.7**	**17.8**	**7.3**	**25.0**	**15.6**	**3.1**	**13.5**	**100.00**

Students were interviewed to mention activities which waste teaching time in the classroom and the results were presented in Table 33. Twenty four percent of the interviewed students indicated outdoor activities as the main activities wasting students time for learning in classroom, 16.7% indicated notes copying practice and 13.3% said that teachers' habit of punishing students during classroom hours also cause allocated time for teaching-learning not be effectively utilized as targeted. These challenges were found to be practiced in all types of schools. The use of mobile phones during teaching time and late coming among teachers were also reported by students as bad time management practice by teachers in the ward and rural private schools. It can thus be said that mismanagement of academic time is intolerable practice as it affects academic performance because most teachers do not complete the syllabuses of some subjects, also the practice does not impart time management habit to both teachers and students.

Table 33: Activities which consume the lost teaching minutes in classroom

Parameters	Students' school type				Total
	Ward urban	Ward Rural	Private Urban	Private Rural	
To copy and write notes	6	2	5	3	16
To mark students notes and exercises	4	3	3	2	12
To do outside activities	2	8	7	6	23
Late coming of teachers	7	2	1	1	11
Explaining unrelated stories	1	2	4	2	9
Provision of punishment to some students	3	5	2	3	13
Reinforcing class activities	1	2	2	4	9
Mobile usage	0	0	0	3	3
Total	**24**	**24**	**24**	**24**	**96**

4.6.2 Language of instruction in classroom

Teachers and students were asked to comment on the medium of instruction at classroom level and the findings show that, all teachers and students were aware of the official medium of instruction during teaching and learning and all the respondents indicated English language as the main language used during teaching and learning process. English language was not always used in most public ward schools as indicated in Table 34. Students were interviewed on the frequency of using English language and majority (55.2%) of the students said that, language was sometimes or occasionally used during

teaching and learning process, 36.5% said that English language was always used, while 8.2% said that the language was rarely used (Table 34). The study revealed that this problem existed in all types of the studied schools. The academic Master of Nyaishozi urban private school (Mr.Fabience,Kajula) reported that "poor English background of students from primary schools was one of the major factors causing poor use of English language at school", English debate clubs existed in each school as coping strategy on this problem.

Table 34: School type and frequency of using official language

School type	Frequency of using English language in classroom			Total
	Always	Sometimes	Very rare	
Public urban	8	14	2	24
Public Rural	6	13	5	24
Private Urban	13	10	1	24
Private Rural	8	16	0	24
Total	**35**	**53**	**8**	**96**
Percent	**36.5**	**55.2**	**8.3**	**100**

Furthermore, this study found that poor practices of English language in classroom were associated with the use of a local language that was "*Kinyambo*", and sometimes the use of Kiswahili language in the classroom by both teachers and students. During informal discussion with teachers one teacher said, "most public schools were populated with students from the same locality hence teachers have to use the local language (*Kinyambo)* and sometimes Kiswahili in order to make the subject content understood".

4.6.3 Teaching and learning methods in classroom

The curricula of the Ministry of Education and Vocational Training at secondary school levels emphasize the use of active and participatory teaching and learning methods while the use of rote learning and drill-oriented methods is totally discouraged. Lecture method, discussion, demonstration method and activity approach /technique were assessed as part of teaching and learning methods assessed in this study; the results are presented and discussed in the next sections.

4.6.3.1 Lecture method

The study findings in Table 35 show that lecture method was the main method used by most of teachers for teaching in the surveyed schools. The study findings indicate that the method was dominated by chalk and talk practice while students remain silent listening to their teacher. The method does not give opportunities to students to conceptualize subject concepts as recommended by Partington (2001), that lecture method should be used based on age and education level of the learners. Teachers were requested to recommend on this method and most of the teachers said that "the method is comfortable to them as it save teaching time and it is a convenient in large classes.

Regular use of this method implies that students were not challenged enough to develop their own ideas, and the subject was made less meaningful to students. Also, the method assist students to do well on recall questions while perform poorly on questions that require higher thinking ability. According to Amphiah (2008) observes, lecture method is not desirable to low level learners as the method emphasizes much on higher ability thinking skills and problem solving skills.

Table 35: School type and mostly used method/techniques for teaching-learning in classroom

Students' school type	Mostly used method/technique for teaching-learning				Total
	Activity approach	Demonstration	Lecturing	Discussion	
Public Urban	1	7	8	5	24
Public Rural	2	4	11	4	24
Private Urban	6	3	11	10	24
Private Rural	3	5	6	10	24
Total	**12**	**19**	**36**	**29**	**96**
Percent	**12.5**	**19.8**	**37.5**	**30.2**	**100**

4.6.3.2 Discussion method

Discussion method was another method ranked number two by 30.2% of the respondents in the surveyed schools (Table 35). The study revealed that questions and answers on a particular topic(s) were mostly discussed instead of discussing the content of the whole topic(s). However, it was observed that it was the teachers who asked most of the questions and in few cases, teachers do invite questions from students. The study revealed that students were not motivated to ask questions, the practice which inhibits their thinking ability. Learning opportunities is sometimes determined by the structure of teacher - students interactions in class and the extent to which students interact with teachers and fellow students in a classroom (UNESCO, 2005). Global Monitoring Report by UNESCO (2003) shows that, students who tend to study in group(s) enjoy more challenging interactions with teachers, dominate classroom activities and receive more attention, praise, criticism and constructive feedback from teachers and fellow students. The study recommends discussion method to be more emphasized for teaching and learning in school as it builds students' self confidence in arguing and increase learners thinking ability the practice which builds responsible citizens.

4.6.3.3 Demonstration method

Demonstration method use different pictures, or exhibitions which are related to the subject content. The related objects are displayed in classroom and students are left to interact and explore the object(s) in line with the subject content with little assistance from teachers. The use of demonstration method in teaching and learning help learners to understand the lesson as well as to conceptualize the subject content for a longtime (Piggozi, 2008). The study revealed that students in all the studied schools were not exposed to thinking and problem solving skills, the situation which does not abide by good practices of quality education. The results in Table 35 show that the method was rarely (19.8%) used in all the types of schools studied. Teachers reported that the method is not well taught in teachers' training colleges also their school administrations do not support them in getting the objects to be used in this method.

4.6.3.4 Activity approach

Activity approach is the best active and participatory method for teaching and learning. It is mostly termed as hands activity teaching technique because students are given physical activities to perform in which subject knowledge and skills are explored and learnt with minimum interference from teacher. The use of activity approach to teaching and learning challengs students to develop their own ideas, and make the subject more meaningful and relevant to them (Jenkins, 1998).The use of hands activities was however not the normal practice in all types of schools studied as presented in Table 35. However, the results show a slight difference on using this method between private schools and public schools. The variation was due to the presence of the laboratories and its instruments in some of private schools in which students reported to be involved in different practical activities in the laboratory though it was very rare. Biology was reported to be the subject in which practical activities were practiced the most unlike in

other science subjects. In agricultural based school, students reported to participate in different agricultural activities including farm preparation and harvesting the practice which gave students life knowledge and skills. These results indicate that activity method was rarely practiced in the studied schools hence most students were not given the opportunity to excel their aptitude, know-how and talents the situation which do not abide by the provision of quality education.

4.6.4 Note writing/taking in classroom

The study assessed different techniques used by students to get notes of the taught subject. The study reveals that the techniques varied from one school to another although copying notes from the chalk board was the predominant technique used in all schools. The results in Table 36 show that majority (85.4%) of students in all types of schools indicated the chalk board as the only source students copy notes from teachers. Eighty one point three percent (81.3%) of the interviewed teachers indicated this technique as the one mostly used to provide notes to students while few (4.2%) of the students in private schools said that teachers dictated notes for students to copy while 2.1% of students in urban private schools reported to make subject notes using their own textbooks and other textbooks available at school. The study revealed that this practice was not practiced by student studying in ward schools due to shortage of textbooks.

The situation was worse in ward secondary schools as teachers sometimes would chose a student with good handwriting to write notes on the board for other students to copy. The results indicate that more time was wasted due to the use of this method (copying notes on and from the chalk board) as the practice takes a lot of time which could have been used to engage students in other teaching and learning activities. Furthermore the study revealed that even when there were limited numbers of textbooks; teachers still write

notes on the chalkboard for students to copy, the practice which is termed as information giving. The study calls for educational stakeholders to provide enough textbooks in the studied schools as well as encouraging teachers to enable students construct notes from their own initiatives instead of depending on teachers' notes (Peter, 2002).

Table 36: Respondents school type and method used to get notes in classroom

Respondents' school type	Method used to get notes in classroom								Total	
	Copying from the chalk board		Through teachers' dictation		Teachers use gap-filling technique		Students make notes by the use of textbooks			
	Students	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students	Teachers
Public Urban	23	8	0	0	1	0	0	0	24	32
Public Rural	22	8	0	0	2	0	0	0	24	32
Private Urban	15	3	2	0	5	3	2	2	24	32
Private Rural	22	7	2	1	0	0	0	0	24	32
Total	**82**	**26**	**4**	**1**	**8**	**3**	**2**	**2**	**96**	**32**
Percent	**85.4**	**81.3**	**4.2**	**3.1**	**8.3**	**9.4**	**2.0**	**6.3**	**100**	**100**

4.7 School Academic Performance

The study assessed the trend of school academic performance by evaluating three consecutive years of Form Two National Exams. The data on this aspect were easily obtained with the assistance of academic master/mistress of the studied schools and Karagwe District Education Officer. The data obtained were crosschecked in the compendium of Form Two National Examinations results of 2006, 2007 and 2008. It was found that two public ward schools did not participate in form two national examinations of 2006 because they had no Form Two students by that time. The results in Table 37 show academic performance of the specific schools studied for three consecutive years. Generally both types of schools (private and ward) performed poorly in the Form Two

Nation Examination for three consecutive years with an average of grade 'D' and a GPA of 38.6. The two-sample tests show that there is statistical significant differences of academic performance for the past three consecutive years between private and public schools (t = 4.210, df =94, p =0.000). Also Table 38 show a statistical significant difference between rural and urban schools (t = 2.223, df =94, p =0.029). Many parents during FGDs argued that private schools have advantages of enough textbooks, qualified teachers (poached from government schools or imported from other East African Countries through clandestine destination Tanzania teachers program), good learning environment as well as crime and intelligent applicants. These are distinguished factors that make private schools to perform better than to public ward and other government schools in Karagwe District. Academic performance of each type of school is discussed in the next sections.

Table 37: General academic performance (GPA) of Public and Private schools in form two nation exams for three consecutive years

School type	Year	GPA scored	Overall GPA
Public schools	2006	43.0	
	2007	36.5	38.5
	2008	36.0	
Private schools	2006	40.5	
	2007	42.0	41
	2008	40.5	

t = 4.210, df =94, p =0.000

Table 38: General academic performance (GPA) of Urban and Rural schools in form two nation exams for three consecutive years

School location	N	Mean	Std. Deviation	Df	t	P
Urban	4	40.6292	7.81362	94	2.223	0.029
Rural	4	37.4087	3.96839			

4.7.1 Trend of academic performance in public ward secondary schools

Academic performance of ward secondary schools in three consecutive years (2006, 2007, and 2008) was generally poor. The results in Table 37 show that majority of these schools scored an overall GPA of 38.5 an average of grade 'D'. It is only one rural school (Kintuntu) that scored a GPA of 43.6 an average of grade 'C' in all three consecutive years. No public school had an average score of grade 'B' or 'A' and no school scored grade 'F'. Furthermore the descriptive results in Table 39 show that rural schools of this type performed slightly better (with GPA of 38.3) than did the urban schools which scored a GPA of 34.0 in two consecutive years of Form Two National Examinations. The findings indicate that public ward secondary schools of both locations (urban and rural) were doing poorly academically, this justify the pre-assumption of community members who assumed that quality of education (academic performance) in public ward secondary schools was relatively poor than it was in private schools (Lwaitama and Galabawa,2008). One of the parents during FGD said that private schools have an advantage of enrolling best students that's why they were doing better and if public ward secondary schools had such an opportunity, students would also have performed well.

Table 39: Academic performance (GPA) of Urban and Rural Public schools

Location of the school	N	Mean	Std. Deviation
Urban	2	34.0	1.362
Rural	2	38.3	9.6839

4.7.2 Trend of academic performance in private secondary schools

Academic performance of four private schools in the studied area was also examined. This was aimed at comparing their general academic performance with that of public schools found in the same locality. Table 40 show that academic performance of private secondary schools in the studied area was better than that of their counterparts. In three consecutive years of Form Two National Examination majority of these schools scored an overall GPA of 41 which is an average of grade 'C' as opposed to a GPA of 38.5 for public schools. Table 40 shows that urban private schools did better with a GPA of 45.8 than did rural private schools which scored a GPA of 36.15. Also no school of this type scored an average of 'B', 'A', or grade 'F'. The study revealed that the encouraging results in urban private schools is due to conducive learning environment and availability of teaching and learning material/facilities, the situation was contradictory in rural private schools. Thus more efforts are needed to provide conducive teaching and learning environment to all schools regardless of their locations.

Table 40: Academic performance (GPA) of urban and rural private schools

Location of the school	N	Mean	Std. Deviation
Urban	2	45.8	7.813
Rural	2	36.15	1.359

Table 41: Trend of school academic performance in form two National exams

School name	School type	Years	School GPA	Grade	Position in the District	Number of students sat for exams	Number performed the Exams		Number failed Exams	
							Boys	Girls	Boys	Girls
Karaseco	Private urban	2006	51	C	1/28	92	65	27	None	None
		2007	53	C	1/36	105	69	36	None	None
		2008	52	C	1/43	112	69	42	None	1
Nyaisho zi	Private urban	2006	40	D	6/28	76	43	33	None	None
		2007	42	C	3/36	55	20	35	None	None
		2008	37	D	8/43	65	32	31	None	2
Adolec	Private rural	2006	33	D	23/28	36	16	12	3	5
		2007	36	D	16/36	41	19	15	4	3
		2008	39	D	24/43	34	23	11	None	None
Rumany ika	Private rural	2006	38	D	16/28	28	6	14	4	4
		2007	37	D	13/36	27	11	16	None	None
		2008	34	D	19/43	22	7	15	None	None
Nyakah anga	Ward urban	2006	*	*	*	*	*	*	*	*
		2007	32	D	11/36	99	34	22	26	17
		2008	35	D	13/43	104	36	40	13	15
Kayang a	Ward urban	2006	*	*	*	*	*	*	*	*
		2007	35	D	22/28	72	35	20	8	9
		2008	34	D	22/43	119	40	34	19	26
Kituntu	Ward rural	2006	43	C	4/28	78	52	24	1	1
		2007	47	C	3/36	129	70	58	1	None
		2008	41	C	4/43	119	58	57	2	2
Kihanga	Ward rural	2006	*	*	*	*	*	*	*	*
		2007	32	D	23/36	57	38	11	5	3
		2008	34	D	17/43	121	63	33	13	12
OVER ALL	**8**	**N/A**	**309 (38.6)**	**D**	**N/A**	**1581**	**806**	**576**	**99**	**100**

* The school did not participate in form two national examinations.

Source: URT (2009b).

4.7.3 Classroom practices hindering quality education provision

The study identified classroom practices which were contributing to unacceptable quality of education in the classroom. The identified weaknesses were practised at a classroom level to most of the studied schools, these included the following;

Shortage of subject textbooks: the situation was reported to affect the process of teaching and learning for both teachers and students. Students in these schools depended much on teachers' lesson notes and sometimes teachers used subject notes which they get when studying in secondary school many years ago. The study revealed that students in the studied schools could have been taught well if subject textbooks were available and effectively used.

Time wastage: a lot of time was wasted by teachers in copying lesson notes on the chalkboard for students to copy, the situation which was caused by shortage of subject textbooks. The practice led to late in completion or failure in completing syllabuses as reported by students and teachers.

Large class size: most of the studied schools were overcrowded whereby each class had an average of 66 students as described in section 4.3.2 except Form Four classes which were found to have few students (below 66 students). Large classes made students pay little attention to teachers during teaching and learning as teachers could not address problem (s) of individual students (Wellington and Osborne, 2001).

Medium of instruction: the main medium of instruction at school (English) was also found to constrain the effectiveness of teaching and learning process. The language prevented some students from asking questions in classroom. Students also reported that

some teachers failed to elaborate well the subject content due incompetence in the English language.

Other unacceptable environment influencing poor provision of quality education have already been presented and discussed in the previous sections, these include shortage of qualified teachers, inadequans of libraries and laboratories, shortage of students' hostels and lack of stable and durable food programs in school. These findings imply that secondary schools in Karagwe District were subjected to poor provision of quality education as the presented environment may lead to poor academic performance to students.

4.8 Measures (Environment) for Improving Quality of Education in Public Ward Schools

In response to the challenges highlighted and discussed in the previous sections, teachers, students and parents provided their views on what should be done in order to improve the provision of quality education in the ward secondary schools as indicated in Table 42. The suggested measures are discussed hereunder.

Availability and accessibility of Teaching and Learning Materials (TLMs): Students and parents recommended to look for enough number of teaching and learning materials as a panacea of quality education in the ward secondary schools. Subject textbooks, maps, charts and other teaching aids were reported to be in high demand in schools TLMs. Most of teachers argued that if teaching and learning resources were addressed there would be good environment for quality education provision in public schools in Karagwe District.

Construction of libraries and laboratories with enough required equipment and other facilities. Each school should have at least one library and laboratory for conducive teaching and learning environment. This would enable students and teachers to be active and effectively participate in the process of teaching and learning. Laboratories and its basic equipment would also make science subjects to be taught effectively and thus attract many students to undertake and study science subjects (Alton-Lee, 2003).

The construction of students' hostels and teachers' quarters would also provide good environment for students and teachers to participate in the process of teaching and learning at school. This situation would reduce the problem of traveling long distances for teachers and students as some of the students were found to miss morning lessons and few of them found a-sleep in classroom during the sessions due to becoming tired of traveling long distances to and from school.

Availability of sustainable sources of water, electricity as well as nutritional program at school: It was reported that the searching for water in distant places from school was among the problems causing poor students performance in most of the surveyed public ward schools. Also unclear or lack of nutritional program was reported as a big problem to students in each school. Permanent and sustainable source of electricity to school would give students more time for private study it would also provide teachers ample time and environment for the preparation of the next lesson (Woessmann and Martin, 2002).

The construction of more classrooms would also reduce concentration of students in one classroom as well as reduction of teacher student ratio, the situation which would increase teacher students interaction. It is equally important to explore alternative

teaching approaches that may be suitable for mediating teaching and learning in large classes.

Availability of enough and qualified teachers who are well motivated to work, is the key factor in improving the quality of education in public secondary schools in Karagwe district. A well motivated and qualified teacher should reflect the following traits; high expectations for student learning, provision of clear and focused instructions, closely monitored student in learning process, re-teaching of the lesson using alternative strategies when students fail to learn, the use of incentives and rewards to promote students learning, efficiency in the classroom routine, setting and enforcing high standards for classroom behaviour, maintaining excellent personal interaction with students, reflect enthusiasm in the form of acting, demonstration and role playing (Michaelowa, 2001).

Some few parents had different suggestions for improving the quality of education in the ward schools as indicated in Table 42.

Well disciplined and motivated students and teachers would enable every participant in the interplay process of teaching and learning to play his part and responsibility effectively. Attractive salary and other fringe benefits to teachers is another strategy of attracting and retaining qualified teachers in all schools.

The establishment of tuition program was also proposed as an alternative in addressing problems of modest mastery of lesson content caused by over congestion of students in a classroom, causing minimum teachers attention to students and shortage of teachers at school.

The headmaster at Karagwe secondary school (Mr.Joseph Kabalimu) narrated strategies and techniques which have made his school emerge as the best school in the district for five consecutive years; such practices can also be used in the ward secondary schools to improve academic performance. The mentioned practices included;

Frequent and effective monitoring of teachers who are already motivated to work, the exercise which can easily be carried out by the use of class journals and weekly academic meeting. Encouraging and rewarding students who borrow and read many books. This technique would reduce or avoid spoon feeding practices in the teaching process, although the technique is significantly impeded by the absence of libraries and shortage of textbooks in most of the schools.

Provision of many exercises and weekly tests can also make students become busy in academic matters hence influence teachers and students effectively participation in the process of teaching and learning at school.

Table 42: Suggested measures for improving quality of education in public schools

Parameters	Teachers		Students		Parents	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Enough teaching and learning materials	30	93.8	88	91.7	44	91.7
Enough number of qualified teachers	30	93.8	89	92.7	45	93.8
Build libraries and laboratories with enough facilities	28	87.5	87	90.6	30	62.5
Build students' hostels and teachers' quarters	28	87.5	82	85.4	40	83.3
Durable and permanent sources of water, electricity and nutritional program at school	26	81.3	72	75	38	79.2
Strong and responsible school administration	23	71.9	54	56.6	37	77.1
Build more classrooms	18	56.3	54	56.3	25	52.1
Well disciplined and motivated students and teachers	*	*	*	*	7	14.6
Attractive salary and other fringe benefits to teachers	*	*	*	*	5	10.4
Establishment of tuition programs	*	*	*	*	4	8.3

NB: Results are based on multiple responses for each parameter

* Suggested by parents only

Ampiah (2008) also insisted on the following teaching practices for promoting quality of education in classrooms.

i. Teachers' mastery over the subject matter, the situation which increase teaching confidence and good communication between teacher and students in the classroom.

ii. Close and high number of interactions between teachers and students during teaching and learning process.

iii. The mixture of English language and local language in the rural schools is helpful in enabling students in rural areas to understand easily the lesson taught.

iv. Effective use of textbooks and teaching and learning materials (TLMs) to both students and teachers and lessons should be systematically developed and taught with appropriate TLMs.

4.9 Summary

The chapter has presented the results and discussion of the study on the quality of education offered in public secondary schools vis-à-vis private schools of rural and urban areas. Majority of the studied community members (teachers, students and parents) have positive perception toward public ward schools regardless of poor academic performance and uncondusive environment for quality education provision in these schools.

Further more the findings showed poor school performance in terms of availability and usage of textbooks, lesson plan, teaching aids, and outcomes in the national examinations. Teaching and learning methods/techniques, library and laboratory facilities, the number of qualified teachers and their experience were still a big challenge to quality education provision in the studied schools. These variables were likely affecting students and school academic performance and accounted for the often perceived elements of poor quality of education provision in the studied schools. Most of the studied schools were not adhering to the national desired standards of quality education except private schools of urban settings which were doing slightly better than public schools in urban and rural areas.

Frequent use of inactive and non participatory methods (dull methods) was found to be another challenge influencing poor quality of education in most of the studied schools. The chapter presented possible measures to improve quality education provision in the studied secondary schools.

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

In the previous chapter the major findings of the study were presented and discussed. In this chapter, conclusion of the findings is presented, followed by recommendations and suggestions for further studies.

5.2 Summary of Major Findings

The study found that community members (students, teachers and parents) had positive attitude toward secondary schools under SEDP. Also the study findings signify that the quality of education offered in public and private schools in the studied area was relatively poor. Furthermore the findings show that active and participatory teaching and learning methods or techniques were not effectively used by teachers and students in the studied schools

5.3 Conclusions

The study aimed at determining the quality of education of the public Ward secondary schools vis-à-vis that of the private schools of urban and rural areas. Firstly, the study determined the perception of community members (students, teachers and parents) upon public ward secondary schools. The study revealed that all community members (students, teachers and parents) had positive attitude toward ward secondary schools regardless of the fact that these schools had poor environment for the provision of quality education including shortage of teaching and learning resources.

In comparing academic performance of the studied schools, the study findings indicate that the quality of education offered in public and private schools was relatively poor.

The major differences between public and private schools were based on the availability and use of quality education and enabling inputs in these schools. Urban and rural schools studied had almost similar characteristics apart from academic performance which was quite different in both schools. However the study findings revealed that public rural schools performed slightly better in Form Two National Examinations than did the urban public schools. The situation was different in private schools in which urban private schools performed much better than rural private schools.

The quality of education offered by private and public schools studied were constrained by shortcomings such as lack of textbooks, inappropriate teaching-learning methods, lack of use of TLMs and inadequacy of qualified teachers. Ward schools were much disadvantageous in which textbooks and qualified teachers were so inadequate as opposed to private schools.

The study revealed that active and participatory teaching and learning methods were not found to be effectively used by teachers in the studied schools. An average of ten minutes per single teaching lesson was found to be wasted in a classroom in all the studied schools. This was likely to affect negatively the quality of teaching and learning in the subjects which were given lesser time.

Finally, the study highlights good teaching environment and practices for promoting and improving provision of quality education at school. These good practices should be emphasized in the school studied and spread across other schools in the studied district. A number of unacceptable practices and environment which do not promise the promotion of good quality education have also been described. If these practices are checked, learning outcomes could be better in the schools studied.

A transformation of education system from quantitative inputs to qualitative capabilities is easier said than done. Quality and quantity cannot be improved simultaneously; one cannot expand education access and increase its quality at the same time. Changes will take time. Nevertheless, however difficult, Tanzania cannot afford to go on blindly along the current path if it is to achieve real development and assurance of wellbeing of its people.

5.3 Recommendations

The study recommend that quality improvement requires recognition of schools and it members as units which drive changes and development to individual learners and the entire nation. Successful leaning requires well prepared and motivated students and teachers, favourable learning environment, active and participatory learning methods, as well as regular monitoring and inspection of students and teachers progress.

The study also recommends the following to be adhered and done by different educational stakeholders;

i. Parents should be sensitized on quality education. The practice which would help parents to build good education environment at home and have close collaboration with teachers and school administration for promoting good school environment to enhance quality education provision.

ii. For the provision of quality education, teachers should be diverse in active and participatory teaching and learning methods. Teachers should also embark on frequent use of teaching aids and assignment of hands activities to students these practices which would make the lessons meaningful and attractive to students. The practice would also lead to physical and intellectual development of learners.

iii. Students should develop textbook (s) reading habit the practice would help them to be more knowledgeable on the subject (s) content and thus reduce dependence on teachers' lesson notes.

iv. Central and local governments of the studied schools should abide by and consider the following recommendations:

a) Much effort should be focused on teacher training in skills and pedagogy. Apart from having pre-service teacher education programmes, on going in-service teacher training programmes is highly required to enable teachers to continually develop and upgrade their content knowledge and pedagogical skills such as problem solving, analysis, critical thinking, creativity and self confidence.

b) Teacher recruitment, deployment and retention: The government has to ensure that recruitment of qualified teachers is in line with and keep pace with the expansion of students' enrolment. More investment should be on teacher recruitment, with practical incentives to encourage deployment and retention in difficult and underserved areas, otherwise the quality of education in public ward schools would continue to slide and the learning outcomes would be further compromised.

c) Ensure basic quality whilst expanding access: In public ward schools classrooms construction and enrolment expansion have received more attention than the aspect of quality education. There is an urgent need to devote more attention to quality improvement aspect as UNESCO (2003) argues where quality of education is poor, attendance and enrolment rates would often fall drastically and learners fail to develop skills and aptitudes that would enable them to succeed in life.

d) The provision of adequate subject textbooks to the existing number of students as well as construction and provision of appropriate library and laboratory facilities.

v. In addition to the above, the issue of language of instruction cannot be ignored. English is used in secondary schools even when most teachers and learners are not proficient in the language. As the result, most students find themselves learning in a language that they do not understand well. The scientific evidence is clear that students learn better in their mother tongue or other language in which they are very competent and especially the first language.

5.4 Areas for Further Research

i. Research on comprehensible measures or indicators of quality education. Form Two Examinations are not a valid measure and are not designed to assess conceptual understanding of quality education; hence they are a poor measure of the quality of education. Form Two National Examination measure student' lower- order thinking skills such as memorization and simple recall of facts rather than the higher-order thinking skills such as generating ideas, problem-solving and evaluating. These latter skills are far better gauged with quality as they indicate a more complex and conceptual understanding.

ii. The study also recommends that a similar study be conducted in other schools of Karagwe District and other parts of the country as the problem is still notorious in many of the established community secondary schools in Tanzania.

REFFERENCES

Adelman, H.S. and Taylor, L. (1997). Addressing barriers to learning beyond school-linked services and full service schools. *American Journal of Orthopsychiatry,* 67: 408-421.

Akinboye, J.O. (1980). *How to study*: A Psychological Approach, Maritime Printers. Ibadan. 36pp.

Akitanda, P.C. (1994). Local people participation in the management and utilization of catchment forests Reserve. A case of Kilimanjaro catchments forest reserve, Tanzania. Management of Natural Resources and Sustainable Agriculture. Thesis for award of Msc. At Norwal University of Agriculture, Norway. 405pp.

Amphiah, J.G. (2008). An investigation of provision of quality of basic education in Ghana. Journal of International Cooperation in Education 11(3):19-37.

Alton-Lee, A. (2003). Quality Teaching for Diverse Students in Schooling: *Best Evidence Synthesis, Ministry of Education and Counselling.* (Edited by Alexandratos, N *et al.*), Wellington, University press, Ibadan, Nigeria. 13-39.

Alphaxide, B.E. (2008). Factors Affecting Girls Performance in Primary Schools: A case of Kasulu District, Tanzania. Dissertation for Award of M.A Degree at Sokoine University of Agriculture. Morogoro, Tanzania, 100pp.

Artuso, M. (1999). The relationship of the selected educational indicators to students learning. *Internal EQAO research paper presented to the EQUIP Advisory committee.* (Edited by Dorward, A.G), 12-15 May 1998, Toronto. 28-55pp.

Babbie, E.R. (1990). *Survey Research Methods.* Wards worth Publishing company, Califonia. 196pp.

Bakare, C.G.M. (1969). Study Habits Inventory. *Journal of Educational Psychology and practices* 4: 45-67.

Barley, K.D. (1995). *Methods of Social Research* (Fourth Edition). The Free Press, Macmillan Publisher, London 281pp.

Barrack, R.K. (1990). Perceptions regarding supervised experience programs: Past and future direction. *Journal of Agricultural Education.*32 (4): 31-36.

Benson, C.S. (2008). Household production of human capital: Time uses of parents and children as inputs. In: *Financing Education*: Overcoming Inefficiency and Inequity. (Edited by McMahon, W.W. and Geske, T.G.), University of Illinois Press, Urbana. pp. 52-77.

Biggs, J. (2003). Teaching for quality learning at university. *Journal of Education Research 4(2):* 59-73.

Blatchford, P. (2003). A systematic observational study of teachers' and pupils' behaviour in large and small classes. *Journal of Education in Learning and Instruction* (13): 569-595.

Briers, G.E. (1979). An experimental packet on supervised occupational experience programs for beginning vocational agriculture students in Lowa. *College Article*, Dissertation Abstracts International. pp 1-4.

Brookover, W. E. (1967). *Self-concept of ability and school achievement,* Proceedings of UNESCO Workshop, Michigan State, 18 August 1967.23pp.

Bryman, A. (2004). *Social Research Methods.* Oxford University Press, Oxford.592pp.

Burgess, P. Walford, G. (1998). Schooling in an empty Library and Laboratory. *Journal of Educational Research* 12(7):152-181.

Burke, W. M. (2003). The class size debate: Is small better? *British Journal of Educational Studies* 51(4): 428-430.

Cameron, M. and Baker, R. (2004). Research on Initial Teacher Education in New Zealand. *Council for Education Research Annual Report.* Government Printer, Wellington, New Zealand. 11pp.

Cameron, J. and Dodd, W.H. (1970). Schools Society and Progress in Tanzania. Pergamon Press, Oxford, 304 pp.

Carr-Hill, R. and Ndalichako, J. (2005). Is Secondary Education Progressing? Key Findings from Government Reviews of SEDP Implementation. In: Education Sector Situation Analysis by HakiElimu. (Edited by Gelagister, G and Jackson), 8-11September 2005, Dar es Salaam, Tanzania. 4 -37pp.

Carroll, J. B. (1963). A model of school learning, Teachers College Record. 64, 723-733. In: *Financing Education*: Overcoming Inefficiency and Inequity. (Edited by McMahon, W.W. and Geske, T.G.), University of Illinois Press, Urbana. pp. 52-77.

Deese, J. (1959). Environmental effect on study habits-and attainment. Reading Research determinants of learning achievement and efficiency considerations. *World Development Journal* (29): 1699-1716.

Frank, E. K. (2006). An assessment of people's awareness and attitudes on individualized land tenure in Njombe district, Tanzania: Dissertation for award of MA. Degree at Sokoine University of Agriculture. Morogoro, Tanzania, 111pp.

George, M. and Nicholas, G. (2003). *Does School Choice Increase School Quality?* National Bureau of Economic Research, University Press, Tokyo, New York and Paris.113pp.

Gervas, M. (2007). Educational challenges facing female students in secondary schools. Dissertation for award of MA Degree at Sokoine University of Agriculture, Morogoro, Tanzania, 98pp.

Gipps, C. V. (1994). *Beyond testing:* Towards a theory of educational assessment.The Falmer Press, London. 56pp.

Gregory, M. (2005). Providing Rural Students with a High Quality Education: The Rural Perspective on the Concept of Educational Adequacy. Rural School and Community Trust, Washington, DC. [http://www.ruraledu.org] site visited on 18/3/2009.

Grobe, C. and Bishop, G. (2001) School attributes and students achievement. *Educational Analysit Journal* 4: 1-3.

Haddad, W. (1978). Educational Effects of class size. In: Proceedings of Staff Working Papers in Education, Harare, Mozambique, 3-5 November 1978.30pp.

Heck, R.H. and Mayor, R.A. (1993). School characteristics, school indicators and students outcomes Implication for policies to improve schools. *Journal of education policy* (8):143-154.

Hilda, M. and Gelagister,G. (2007). School Meals a Luxury or Necessity. Quality Education Workshop, Dar-es-Salaam, 12-15 August, 2007. 17pp

Irwin, G. (2005). Understanding Quality education. Brooklyn College City of Education [http://www.quality/coll/edu.org] site visited on 15/5/2009.

Jenkins, E. (1998). The schooling of laboratory science. In Practical work in classroom. [http://www.practical/sc.lab/edu.org] site visited on 8/4/2009.

Leibowitz, A. (1977). Parental inputs and children's achievement. *Journal of Human Resources* 12: 242-251.

Lewin, K. and Kalifunja, O. (2004). Secondary Education Development Programme, A Position Paper,Strategies for Increased Output in Education. Mkuki na Nyota Publishers, 114pp.

Long, G.A. and Israelsen, C. (1983). Relationship between student performance and organizational and program variables in agricultural education. *The journal of American Association of Teacher Educators in Agriculture* 24 (2): 34-39.

Lwaitama, A. and Galabawa, J. (2008). *The Status of the Schools in the Context of the SecondaryEducation Development Programme* (SEDP) Tanzania Education Network (TEN/MET).28pp. [http://www.ten/met.com/educatio/quality/pdf] Site visited on 21/3/2009.

Madale, M.M. (2007). Contribution of NGOs to Primary Education in Kibaha and Kisarawe District Councils. A case of Plan Tanzania. Thesis for Award of Doctor of Philosophy at Sokoine University of Agriculture, Morogoro, Tanzania.194pp.

Malila, M.N. (2003). Time Resource Management and Secondary School Students' Performance in Tanzania: A case of Dodoma Region. Dissertation for Award of MA.Degree at Sokoine University of A griculture. Morogoro, Tanzania. 117pp.

Meyer, L.H. and McKenzie, L. (2009). Secondary student motivation orientations and standards-based achievement outcomes. *British Journal of Educational Psychology 79:* 273-293. Wellington: Ministry of Education and Victoria University. [http://www.eqao.com/EQI/EQI_Framework.aspx?Lang=E] Site visited on 21/7/2009.

Meyer, L.H., McClure, J., Walkey, F., Weir, K.F. and McKenzie, L. (2009). Secondary student motivation orientations and standards-based achievement outcomes. *British Journal of Educational Psychology 79:* 273-293.

Michaelowa, K. (2001). Primary education quality in Franco-phone Sub-Saharan Africa: Determinants of learning achievement and efficiency considerations. *World Development Buletin* 29: 1699-1716.

Murnane, R. (1981). Home resources and children's achievement. Rev. Eon. Statistic, NBER Working Papers 9683, In: National Bureau of Economic Research. (Edited by Rosen, S. and Caswell, M.), 23-25 March 1981, Lusaka, Zambia. 23pp.

Neumann, F.M, Rutter, R.A. and Smith, M.S. (1986). Organizational factors that affect school sense of efficacy, community and expectations. *Journal of Sociology of Education* 62: 221-238.

O'Sullivan, M. C. (2006). Teaching in large classes: The international evidence and a discussion of some good practices in Ugandan primary schools. *International Journal of Educational Development* 26: 24-37.

OECD (1989). Schools and Quality. An International Education Analysis Annual Report .Paris. 15pp. [http://www.oecd/educ/quality.pdf.org] site visited on 28/4/2009.

Ololube, N.P. (2006). *School Effectiveness and Quality Improvement*: Quality Teaching in Nigeria Secondary School. 1-33pp.

Partington, G. (2001). Improving Attendance and Behaviour in Secondary Schools. Strategies to Promote Educational. In: *Office for Standards in Education.* (Edited by Smith,L.C and Jensen,H),Government Printers Birmingham. 18-43.

Pauk, W. (1962). How to study in college. Bostoni Aoughton Miffiln Company [http://www.oecd/educ/quality.pdf.org] site visited on 22/4/2009.

Peter, T. (2002). "Teacher Quality and the Future of America.*Eastern Economic Journal, of Eastern Economic Association,* planning section 28(3):285-300.

Pigozzi, M.J. (2008). *Quality Education and the Global Learning Group*, AED New York. 16-59PP. [http://www.qualityeducation.com/AEDI/sect7_e.html] site visited on 16/3/2010.

Sanders, W.L. and Rivers, J.C. (1996). Cumulative and residual effects of teachers on future academic achievements. An Inquiry of Education for All in Sub Saharan African Region. World Bank Working Paper No.26. The World Bank, Woshington, D.C. 19pp.

Thomas. K. and Vincent, G. (2001). *Using assessment to improve quality education.* UNESCO:International Institute for Education Planning. [http://www.unesco.org.inept] site visited 13/03/2009.

Taylor, L and Mulhall, D. (2001). Improving teacher preparation and selection: lessons from the Pennsylvania experience, *Journal of Economics of Education Review* 19(4):387-415.

Tierney, R.J. and David, P. (1990). *Learning to Learn from Texts*: A Framework for Improving Classroom Practice. Academy for Educational Development: Washington, D.C.33pp.

Teornest, A. (2010). Are private schools really better than government ones? Sunday news paper, Issue No. 0866-3822. p.12. 18/3/2010.

UN (2002). *Decade of Education for Sustainable Development (2005-2014)* Monitoring Report, New York.65pp. [http://www.un.deds sustainabledevpt.org/] site visited 18/4/2009.

UNESCO (2005). *Education for All* in Sub Sahara African Countries, Annual Report.[http://www.unesco.efa. quality education.subafr.org/] site visited 06/3/2009.

UNESCO (2003). Education for All. A Global Monitoring Report. The Dakar Framework for Action in 2000. [http://www.unesco.efa.quality education.org/] site visited 06/3/2009.

URT (1997). *Tanzania Education Policy* (Second Edition). Ministry of Education and Vocation Training. Dar es Salaam. 96pp.

URT (2004). *Secondary Development Program Document*, First Draft. Ministry of Education and Vocation Training. Dar es Salaam.70pp.

URT (2005). *National Strategy for Growth and Reduction of Poverty.* Second Draft. Vice President's Office. Dar es Salaam.66pp.

URT (2006a). *Population, Reproductive Health and Development.* Department of Population. Ministry of Finance and Economy. Dar es Salaam. 26pp.

URT (2006b). *Millenium Development Goals.* Monitoring Report. Ministry of Planning,Economy and Empowerment. Mkuki na Nyota Publisher. 47pp.

URT (2007a). "*Hali ya Uchumi wa Taifa.* Ministry of Finance and Economy. Dar es Salaam.78pp.

URT (2007b). *Poverty and Human Development Report.* Research and Analysis Working group. Dar-es-Salaam. 101pp.

URT (2009a). *Poverty and Human Development Report.* Research and Analysis Working group. Dar-es-Salaam. 51pp.

URT (2009b). Basic Statistics in Education: Regional Data. MOEVT.Dar es Salaam. 65pp.

WCEFA (1990). *Meeting Basic Learning Needs*, A Vision for the 1990s. World Conference on Education for All. UNICEF House Publishing Limited, New York. 97pp.

Wellington, J. J. and Osborne, J. (2001). *Language and literacy in science education.* Sage Publications, New Delhi. 121pp.

Woessmann, H. and Martin, R. (2002). Class-Size Effects in School Systems around the World: IZA Discussion Papers 485, Institute for the Study of Labor (IZA). [http://www.classl/sizec/edu.org] site visited on 12/4/2009.

Wylie, C., Ferral, H., Hodgen, E. and Thompson, J. (2006). Competencies at Age 14 and Competency Development for the Competent Children, *Competent Learners study sample*. (Edited by Willis, R.and Maxwell, D.G.), Wellington Ltd, New Zealand. 87-107pp.

APPENDICES

Appendix 1: Structured questionnaire for students

SECTION A; BACKGROUND INFORMATION

1. Name/Number of respondent.....
2. Date of interview.....
3. Name of school.....
4. Student school category l

   1. Public Urban 2. Public Rural 3. Private Urban 4. Private Rural ☐

5. Age (in years)..... 6. Sex, Male 2. Female ( )
7. Distance from home to school in hours or minutes.....
8. Structure of your family

   1. Single parent 2. Extended family 3.Nucleus family 4.Widow/widower ☐

9. How many members are there in your family.....
10. Who is the family head

    1. Mother 2. Father 3.Other, please specify..... ☐

11. What is the occupation of the family head

    1. Farmer 2.Livestock keepers 3.Business 4. Government employee ☐

    5. Other, please specify.....

12. Number of years head of family has gone

    1.0=None 2. 4-7 = Primary education 3.8- 12 = Secondary education

    4.1317 = Diploma

    4.14 5.18 and above = Higher education (1st Degree/Masters/ PhD) ☐

13. Which of the major source of family income

    1. Crop production only 2.Crop and salary 3.Crop and business ☐

    4. Crop and farm worker 5.Crop and livestock 5.Crop, salary and farm worker

SECTION B: AVAILABILITY OF LEARNING FACILITIES/SERVICES AT HOME

14. (a) Is there any special room for private study

1. Yes 2.No

(b) If no, mention two areas where you conduct private study at home

1..... 2.....

15. Which major source of light do you use for private study at home

1. Lamp 2.Small oil lamp (koroboi) 3.Electricity 4.Candle

16. Do you have any academic books at home which are privately owned

1. Yes 2. No

17. If yes, please list them.....

18. Please fill the table below by putting a tick and writing appropriate number of assets owned by your family

ASSETS OWNED	RESPOND		NUMBER OF ASSETS OWNED
	YES	NO	
1. Is there a radio at your home?			
2. Is there a television at your home?			
3. Is there a computer at your home?			
4. Is there a scientific calculator at your home?			

SECTIONC: AVAILABILITY AND USE OF ENABLING INPUTS AT SCHOOL

I.TEXTBOOKS

1. Do your school have library

   1. Yes 2. No

2. (a) If yes do you borrow text books from school library

   1. Yes 2. No

   (b) If yes, how long are you allowed to stay with the book?

   1. one day 2. Two to three days 3. one week

   4. Other, please specify..... in day/weeks

3. (a) Do your school has enough textbooks for each subject

   1. Yes 2. No

   (b) If yes, what is the ratio of students sharing a book in the classroom?

   A. 1:1 B. 1: 2 C. 1:3 D. 1:4 E. 1:5 F. Other, please specify.....

(c) If the answer is no, for question number 3 'a', please list subject (s) with shortage of books and their students sharing ratio in classroom

Example

	SUBJECT	RATIO
	1. Physics	1:8
	2. English	1: 5

1..... ---------2..... --------- 3..... ---------

4. Please circle the best responses from the table below

QUESTIONS	RESPOND
1. Do you have your own textbook for Mathematics	1. Yes, my own 2. Yes, school property 3. NO
2. Do you have your own textbook in science subjects	1. Yes, my own 2. Yes, school property 3. NO
3. Do you have your own textbook for language subjects (Kiswahili and English)	1. Yes, my own 2. Yes, school property 3. NO
4. Do you have your own textbook in Arts subjects (History, Geogragy, Civics, B/Keeping, Commerce)	1. Yes, my own 2. Yes, school property 3. NO

SECTION D; LEARNER CHARACTERISTICS

(School Readiness and Perseverance)

1. At what time do students supposed to attend/report to school everyday..... (12hrs)
2. At what time do you wake up in the morning ready for school? preparation..... .(12hrs)
3. Who wake up you?
   1. Sister 2. Brother 3. Mother 4. Father 5. Other please specify ☐
4. Which transport do you use to go to school?
   1. Bicycle 2. Public transport 3. Private vehicle/motorbike 4. By foot ☐
5. Do you study when you at home?
   1. Yes 2. No
   (a) If yes, do you have time table for private study at home ☐
   1. Yes 2. No
6. (a) Are you punctual in following/observing the planned table?
   1. Yes 2. No
   (b) If yes, how frequent do you follow it ☐
   1. Always 2. Sometimes 3. Very rare

(c) If no, mention any three obstacles/problems which prevent you from following your time table effectively

i.....ii..... iii.....

7. (a) Do you like to study/learn in groups

1. Yes 2. No

(b) D o you have any private group for study

1. Yes 2. No

(c) If yes, how many members are you in your group.....

(d) Which days do you meet per week (Please mention them) and the time you meet for each day..... .....

8. (a) Do you seek more academic assistance from your teachers or your fellow senior students?

1. Yes 2. No

(b) How frequent do you seek that assistance

1. Always 2. Sometime 3. Very rare

9. is there any problems/barriers which prevent you from effective learning in classroom

1. Yes 2. No

(b) If yes, mention three problems which prevent you from effective participation in learning process at classroom

i.....ii.....iii.....

(c)Suggest three measures/strategies which can be used improve the situation above in question 16 'b' hence provision of quality education at classroom level.

i.....ii.....iii.....

SECTION E; CLASSROOM PRACTICES

I. ACTUAL LEARNING TIME

17. (a) What is the specified time (in minutes) for teaching each subject

Single period..... (in minutes)

Double period..... (in minutes)

(b) What is the average actual time (in minutes) for teaching and learning process in each subject period?

Example,

Single period 35/40,(.....) Double period 45/60 (.....)

18. Mention two activities in which the above lost time is used for

i..... ii.....

19. do your teachers complete on time all the planned topics to be taught in each subject

1.Yes 2. No

(b) If no, list four reasons which cause them not to complete teaching topics on time

i.....ii.....

THANKS FOR YOUR COOPERATION

Appendix 2: Structured questionnaire for teachers

SECTON A; BACKGROUND INFORMATION

1. Date of interview.....
2. School name.....
3. Teacher school category

   1.Public Urban 2.Public Rural 3.Private Urban 4. Private Rural

4. Ward.....
5. Identity of the teacher (name/number).....
6. Sex , 1. Male 2. Female ( ) 7. Age.....(in years)

SECTION B; AVAILABILITY AND USE OF ENABLING INPUTS AT SCHOOL

I. TEACHER QUALIFICATION AND EXPERIENCE

7. Education level

   1. Form six 2.Form six plus short course training in teaching

   3. Diploma 4.Advanced diploma 5.First degree 6.Masters 7.PhD

8. Profession

   1. Teacher 2.Engineer 3.Environmentalist 4.Doctor 5.Other, please specify.....

9. Teaching subjects

   1. Mathematics 2.Science (Biology, Chemistry and Physics)

   3. Arts (History, Geography, Civics, B/keeping and Commerce)

   4. Language (Kiswahili and English)

10. Number of years/months you have taught.....

II.CLASS SIZE AND TEACHER-STUDENT RATIO

11. (a) What is the average number of students per each class in this school.....

(b) What is the current situation of teacher-student ratio in this school.....

Example.

1:25, 1:30, 1:40, 1:80 .....

III.TEXTBOOKS

12. Are you aware on the national policy/strategy about student-textbook ratio

1. Yes 2.No

(b) If yes, name the student textbook ratio which is emphasized by this Policy/strategy.....

13. Do your have enough textbooks for teachers and students

1. Yes 2. No

(b) If yes, choose the best ratio which show the present situation of student-textbooks ratio

A.1:1 (one textbook for one student) B.1:2 (one textbook for two students)

C.1:3 (one textbook for three student) D.1: 4 (one textbook for four student) [ ]

IV.LESSON PLAN

14. (a) Are you knowledgeable on how to prepare and use lesson plan

1. Yes 2. No

(b) If mention four items to be considered when preparing lesson plan

i..... ii.....

iii.....iv.....

15. How frequent do you prepare and use lesson plan in teaching and learning process in classroom. [ ]

a. Always 3.Sometimes 3.Very rare

16. (a) Do your senior (academic master/mistress or head of school) mark your lesson plan [ ]

1. Yes 2.No

(b) If yes, when does your senior mark the lesson plan? ( )

1. Before used in the classroom only 2. After being used 3. Before& after being used

17. How frequent does he/she mark your lesson plan [ ]

1. Daily 2. Once per week 3. Once per month 4. Once per term

V.TEACHING AIDS

17. Are you aware on the importance of using teaching aids

1. Yes 2.No

(b) If yes, do you use teaching aids in classroom? 1. Yes 2. No ( )

(c) How frequent do you use teaching aids in classroom

1. Always 2. Sometime 3. Very rare

(d)What type of teaching aids do you mostly use in classroom?

1. Artificial which are bought by school administration

2. Made from locally available resources

17. Do the school administration support you when need of using teaching aids which are not found locally

1. Yes 2. No

(b) If no, what do you do in teaching the topic (s) .....

18.Mention four importance of using teaching aids in the process of teaching and learning process in classroom

i..... ii.....

iii.....iv.....

SECTION C; LEARNERS CHARACTERISTICS

I.STUDENTS READINESS AND PERSEVERENCE

18. What is the general attendance of students in this school?

1. Good and encouraging 2.Good but not encouraging 3.Not encouraging at all

19. Are students in this school self motivated in learning/studying

1. Yes 2.No

(b) If yes, give three indicators which show that, real students in this school are self motivated and they are ready for learning/studying

i.....ii.....iii.....

(c) If no, give three indicators showing that students in this school are not self motivated in learning

i.....ii.....iii.....

20. Do the students in this school aware on the importance benefits of education

1.Yes 2.No

(b) If yes to what extent are they aware on the importance of education?

1. Little awareness 2. Partial awareness 3. High awareness

II. BARRIERS TO EFFECTIVE LEARNING

21.Is there any barriers/problems which prevent students from effective participation in learning process at classroom level?

1. Yes 2. No

(b) If yes, please mention four barriers/problems

i.....ii.....iii.....

(c) Suggest four strategies/measures to improve students participation in learning process at classroom level

i.....ii.....iii.....

III.MEDIUM OF INSTRUCTION

22. Do the mother-tongue 'Kinyambo' used in the process of teaching and learning in classroom

1. Yes 2. No

(b) If yes, how frequent is it used

1. Always 2. Sometimes 3. Very rare

23. (a) Does 'Kiswahili' language used in teaching and learning process rather than being used in Kiswahili as a subject? 1. Yes 2. No

(b) If yes to what extent is used

1. Always (through out the subject period)
2. Sometimes (only to elaborate difficult terminologies of English)
3. Very rare (to elaborate the subject to slow learners)

24. (a) Is there any English debate clubs in this school ?

1. Yes 2. No

(b) Name the day and time which club members meet per month

Meeting day (s).....Duration of meeting.....(in minutes)

THANK YOU FOR YOUR COOPERATION

Appendix 3: Structured questionnaire for parents

SECTION A; BACKGROUND INFORMATION

1Name/Number of respondent.....

2. Date of interview.....

3. Name of village.....School.....

4. Parent school category

1. Public Urban 2. Public Rural 3. Private Urban 4. Private Rural

5. Age (in years)..... 6. Sex , 1.Male 2.Female

7. Distance from home to school in minutes or hours.....

8. Structure of your family

1. Single parent 2. Extended family 3. Nucleus family 4.Widow/widower

9. How many members are there in your family.....

10. Who is the family head?

1. Mother 2. Father 3.Other, please specify.....

11. What is the occupation of the family head?

1. Farmer 2. Livestock keepers 3. Business 4. Government employee

5.Other, please specify.....

12. Number of years head of family has gone

1.0=None 2. 4-7 = Primary education 3.8- 12 = Secondary education

4.15-17 = Diploma 5.18 and above = Higher education (1st Degree/Masters/ PhD)

13. Which of the major source of family income

1. Crop production only. 2. Crop and salary 3. Crop and business

4. Crop and farm worker 5. Crop and livestock 6.Crop, salary and farm worker

I. AVAILABILITY OF LEARNING FACILITIES/SERVICES AT HOME

14. (a) Is there any special room for students private study at your home?

1. Yes 2. No

(b)If no, mention two areas where do students conduct private study at home

1.....2.....

15. (a) Is there any academic text books available at home which are privately owned?

1. Yes 2. No

(b) If yes, please list them i.....ii.....iii.....iv.....

17. Please fill the table below by putting a tick and writing the appropriate number of assets owned by your family.

ASSETS OWNED	RESPOND		NUMBER OF ASSETS OWNED
	YES	NO	
1. Is there a radio at your home?			
2. Is there a television at your home?			
3. Is there a computer at your home?			
4. Is there a scientific calculator at your home?			

SECTION B; AVAILABILITY AND USE OF ENABLING INPUT RESOURCES

I. QUALIFIED TEACHERS

18. (a) Does your school have enough teachers? ☐

1. Yes 2. No

(b) If yes, are they qualified professionally to teach? ☐

1. Yes 2. No

II. TEXTBOOKS

19. (a) Does your school have enough textbooks for students in all subjects?

1. Yes 2. No

(b) If yes, does the school land textbooks to student for private study at home? 1.Yes 2. No

(c) How long do they stay remain with the textbooks

1. One day 2. Two to three days 3. One week 4. Other specify.....

SECTION C; LEARNERS CHARACTERISTICS

(School Readiness and Perseverance)

20. Do your child/students aware on the importance/ benefits of education

1. Yes 2. No

(b) If yes to what extent are they aware on the importance of education? ☐

1. Little awareness 2. Partial awareness 3. High awareness

21. What is the general attendance of your child/students at school? ( )

1. Good and encouraging 2. Good but not encouraging 3. Not encouraging at all

22. (a) Do your child self motivated to go to school for learning/studying

1. Yes 2. No

(b) At what time does s/he supposed to attend/report to school in the morning.....(in 12hrs)

(c) Does s/he wake up early in the morning ready for school preparation?

1. Yes 2. No

(d) If yes, at what time does s/he wakeup ..... (in 12hrs)

(e) Does s/he wake up him/her self?

1. Yes 2. No

(f) If no, who wake up him/her?

1. Sister 2. Brother 3. Mother 4. Father 5. Other, please specify.....

23. (a) Do your child/students study when s/he is at home?

1. Yes 2. No

(b) If yes, does s/he have a time table for private study at home?

1. Yes 2. No

(c) Does s/he observe/follow the table as s/he planned?

1. Yes 2. No

(d) If yes, how frequent does s/he observe/follow it?

1. Always 2. Sometimes 3. Very rare

THANKS FOR YOUR COOPERATION

Appendix 4: Checklist of focus group discussion

FGD CHECKLIST/GUIDLINES

1. Do teachers complete teaching all stipulated topics on time?
2. Do teachers use effectively specified time in teaching for each period (single or double period)?
3. Mention at least three activities (not related in academics) which lost or spend teaching time in class.
4. Subject (s) which are mostly taught in class
5. Teaching and learning method (s) mostly used in classroom
6. Advantages, disadvantages and frequency of using each of the following methods
    i. Lecture method
    ii. Discussion method
    iii. Demonstration
    iv. Activity approach
    v. Notes writing/taking
7. Do students always ask questions during teaching and learning?
   (b) How frequency do students ask questions
   (c) Reasons why they don't ask questions always
8. Which problems/barriers prevent you/students from effective participation in teaching and learning process in classroom? (at least four barriers)
   (b) How do the mentioned barriers can be reduced (i.e. ways/measures to improve student participation in classroom learning)
9. How frequency do exercises/assignments given to students marked by teachers?
10. Do you have English debate clubs in this school?
11. Student Text Book Ratio in each subject

THANK YOU FOR YOUR COOPERATION

Appendix 5: Observation guidelines

1. Teaching time table
    a. Length of single period
    b. Length of double period
    c. Subjects which have many periods than others
2. Number of textbooks available in each subject
3. Teaching and learning methods which are used in classroom
4. Lesson plans, and how are they prepared
5. How frequency do the lesson plans marked/signed by academic master/mistress or head of school
6. Teaching aids available and those already used in previous lesson at least five in each subject
7. Students' exercise books, are exercises/assignments given enough? , are they marked?
8. Medium of instruction in classroom and the frequency of using each language
    a. English language
    b. Kiswahili
    c. Kinyambo
9. Files for English debate clubs
10. Hands-activities done/made by students in this term (at least five)
11. Students' private time table at home

THANK YOU FOR YOUR COOPERATION

Appendix 6: Likert scale for determining community members' attitude upon ward/public schools

SECTION A. TEACHERS' PERCEPTION UPON PUBLIC/WARD SCHOOLS

ATTITUDINAL STATEMENTS	SA (1)	DA (2)	UN (3)	AG (4)	SA (5)
1.Community schools has no enough teaching and learning materials					
2. Community schools have enough number houses for teachers.					
3. Community schools have been built to help low income people.					
4. Candidates selected to join community schools are of low competency.					
5. Most of students studying in community schools are coming from poor families.					
6. Community schools are closely and highly supported by central government.					
7 .Most of community schools have been built in marginalized areas with no or little basic services.					
8. Iam comfortable in teaching/working in community schools.					
9. Buildings in community are of low quality standards					
10. People living around community schools are very cooperative.					

SECTION C. PARENTS' PERCEPTION UPON PUBLIC/WARD SCHOOLS

ATTITUDINAL STATEMENTS	SA (1)	DA (2)	UN (3)	AG (4)	SA (5)
1. Community schools have no enough number of teachers.					
2.Community schools have reduced school costs to parents					
3. Teachers in community schools are highly qualified.					
4. Community schools have made students to become more exposure and integrate with different environment and people.					
5. Community schools have helped to reduce illiteracy rate within communities.					
6. There are few laboratory instruments in community schools.					
7. Buildings in community schools are of good quality standards.					
8. The quality of education offered in community schools is poor.					
9. There is no enough number of textbooks in community schools.					
10. Classrooms in community schools have few numbers of tables and chairs.					
Overall Attitude (Total)					

SECTION D: STUDENTS' PERCEPTION UPON EDUCATION

ATTITUDINAL STATEMENTS	SA (1)	DA (2)	UN (3)	AG (4)	SA (5)
1. Education is the way to eradicate poverty in the society.					
2. Educated people always succeed in life.					
3. Going to school is wastage of time and money.					
4. Education help an individual to improve his ability to production					
5. Most of educated people are jobless and uncivilized.					
6. Education provides learners copying skills and attributes for survival.					
7. It is education which creates classes in the society.					
8.Education leads to destruction of norms, values and traditions of the given society					
Overall Attitude (Total)					

THANK YOU FOR YOUR COOPERATION

Appendix 7: Operational definitions, indicators and measurement levels of variables studied

VARIABLE	DEFINITION	INDICATORS	MEASUREMENT LEVEL
Dependent Variable QUALITY EDUCATION **(OUTCOMES)**	It is a comprehensive term which include; • Efficiency use of enabling input resources • Active pedagogies • Desirable Learner characteristics Academic performance or results in national examination	-TSR and TBSR -Learner centered methods -Barriers to learning School average performance (Grades or GPA) in form two national examinations.	Ratio Nominal Ratio
Independent Variables A: INPUT RESOURCES 1.Teaching and Learning Materials	Availability and use of official basic academic materials.	-STBR -Lesson plan book -Teaching aids	Ratio Yes /No
2.Qualified and Experienced teacher	Working profession of academic staff and time they have worked.	-Years studied at college/university -Years worked	Ratio Interval
3.Class size	Number of students per class.	TSR	Ratio
B: CLASSROOM INTERACTION 1.Learning Time	Time used in teaching and learning based on instructional time per lesson	Actual hours/minutes used per lesson	Ratio
2.Teaching practices 3.Medium of instruction	Participatory methods and techniques of imparting knowledge and skills	Learner centered methods	Nominal
	Official language used in classrooms (English).	Frequency of using English language	-Yes /No -Low /High

C:STUDENTS' CHARACTERISTICS 1. School readiness and perseverance 2.Barriers to learning	The state of being willing voluntarily go to school for learning or, Continued efforts or hard work and self determination of the student for achieving high.	-Number of days attended to school per month -Reporting time at school. -Hours spent for private study per day/week -Ownership of academic materials	Ratio Interval Yes / No Ratio Nominal
	Psychological and physical factors that prevent student from effective participation in learning process at classroom.	-Distance to school -Number of meals per day -Other barriers	Ratio Nominal