# UNIVERSITY OF NAIROBI DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK.

Constraints in the Utilization of Community
Resources in Teaching by Primary Schools: A Case
Study of Nairobi District Public Primary Schools

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(Rural Sociology and Community Development).

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# **DECLARATION**

This Research Project is my original work and has not been presented for degree in any other University.

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This Research Project has been submitted for examination with my approval as University Supervisor

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# **DEDICATION**

This study is dedicated to my parents Beatrice Isungwa Kitavi and my late father Pastor Gideon Kitavi Ngindo, my husband John Kahangi and children Michael, Hannah, Christopher Mwiva, Richard, Victoria, Tabitha and grandson John Curtis Kahangi.

# **ABSTRACT**

The study undertook to investigate the utilization of community resources in teaching and learning by Primary Schools with the view of establishing the constrains that hinder the effective utilization of such resources, a case study of Nairobi district public primary schools.

Specifically the study sought to fulfill the following objectives: Identify and classify community resources found around the schools of study that could be used in teaching and learning, determine the extent to which community resources are being used by primary schools, determine the factors which hinder effective utilization of community resources, find out the teaching methods teachers use in teaching and determine the frequency of consultation and guidance provided by primary school administrators to their staff regarding utilization of community resources in teaching and find out the adequacy of teacher training education of the would-be teachers in the development of competency in the utilization of community resources in teaching.

Related literature was reviewed under four parts: basis of utilization of community resources in teaching and learning, call for utilization of community resources in other countries, background study in utilization of community resources by Kenya primary schools and constrains that hinder effective utilization of community resources by primary schools.

Simple random sampling technique was used to select divisions of the study and simple random sampling technique was used to select schools for the study and the respondents. The research instruments used were a questionnaire for classroom teachers, a questionnaire for school administrators, a questionnaire for class six pupils and a proforma for collecting observed data from the schools and their surrounding communities. The collected data was analyzed using tables and frequencies.

The following were the findings of the study: that every community has sufficient resources that can be used in teaching and learning, fourteen specific types of resources found in the communities surrounding the schools of study were identified and classified. Also the study established the following constrains that hinder effective utilization of community recourses in

teaching: Lack of articulation of the need for utilization of community resources in the educational objectives and policies at national, curricular and instructional levels, adoption of expository teaching methods such as lectures, demonstrations by teachers which do not lent themselves to the use of community resources in teaching and learning, lack of funds to purchase the resources, examination pressure especially the national examination KCPE, lack of parental support for learning activities that do not seem to prepare pupils for better performance in examination, inflexibility of teaching time tables where time allocated for lessons are considered too short to incorporate community oriented teaching and learning methods like field trips, surveys or nature walks, inadequate training of teachers in utilization of community resources during teacher training.

Outstanding recommendations from the study were that: all the suitable community resources in the environment of the primary schools should be identified by school subject panels, catalogued in detail and recorded for use in teaching and learning, guidelines and criteria for selection of suitable community resources for primary schools should be developed and an education policy should be developed to encourage the utilization of community resources.

# **TABLE OF CONTENTS**

# **List of Contents**

Fitle page(i)
Declaration(ii)
Acknowledgement(iii)
Dedication(v)
Abstract(vi)
Table of contents(vii)
List of tables(x)
List of figures(xi)
Abbreviations (xiii)
Chapter One
1.0 Introduction 1
1.1 Background of the study
1.2 Problem Statement 5
1.3 Research Questions8
1.4 Objectives of the study9
1.5 Significance of the study9
1.6 Scope10
1.7 Limitations10
1.8 Definitions11
Chapter Two
2.0 Literature Review
2.1 Introduction
2.2 Basis for the utilization of community resources in teaching and learning13
2.3 Call for utilization of community resources in Africa and other parts of the world 24
2.4 Background factors which have influenced utilization of community resources
in Kenyan primary schools32

2.5 Factors that hinder effective use of community resources in teaching and learning40	)
2.6 Concluding remarks43	
2.7 Theoretical framework	
2.8 Conceptual Framework47	
Chapter Three	
3.0 Methodology	
3.1 Introduction48	
3.2 Site selection	
3.3 Sampling Design	
3.4 Unit of Analysis50	
3.5 Unit of Observation50	
3.6 Development of research instruments51	
3.7 Procedure for collection of data52	
3.8 Problems encountered during data collection52	
3.9 Data analysis53	
Chapter Four	
4.0 Data analysis54	
4.1 Introduction54	
4.2 Questionnaire return rate54	•
4.3 Identified community resources54	,
4.4 Teachers as respondents59	)
4.4.1 Demographic characteristics of teachers59	
4.4.1.1 Age of teachers	
4.4.1.2 Gender	
4.4.1.3 Professional qualification of teachers60	
4.4.1.4 Duration of services in school of study61	
4.4.2 Objectives of primary education6	

4.4.2.1 Strategies for attainment of primary objectives	.64
4.4.2.2 Teaching methods	
4.4.2.3 Class enrolment	
4.4.2.4 Community and its resources	
4.4.2.5 Selection of resources from community	70
4.4.2.6 Criteria used by individual respondents to select community resources	71
4.4.3 Sources of teaching materials in primary school	
4.4.4 Actual utilization of community resources	
4.4.5 Factors that hinder the efforts of school to use community resources	75
4.4.6 Teacher education on utilization of community resources	
4.5 School administrators as respondents	
4.5.1 Demographic characteristics of administrators	
4.5.2 Age	
4.5.3 Gender	
4.5.4 Professional qualification of respondents	81
4.6 Duration of service in the study school	82
4.7 Rating of teacher education	87
4.8 Pupils as respondents	
4.8.1 Demographic characteristics of the pupils	88
4.8.2 Gender	
4.8.3 Age	
4.8.3 Learning activities	89
4.8.4 Learning materials	
4.8.5 Oral items brought from home for learning	92
4.8.6 Learning subject	9
Chapter Five	
5.0 Conclusion and Recommendations	95
5.1 Findings that have emerged from the study	
5 2 Suggestions for further study	

# LIST OF TABLES

Table I	Page
3.1 Categories of respondents in the sample	50
4.1 List of identified community resources5	5
4.2 Classified community resources	5 <b>7</b>
4.3 Age of distribution of teachers	59
4.4 Gender distribution of teachers	<b>50</b>
4.5 Professional qualification of teachers	51
4.6 Length of service in current schools	52
4.7 Objectives of primary education as ranked by teachers	64
4.8 Strategies used by primary school to attain educational objectives	65
4.9 Ranking teaching methods used by teachers to achieve primary objectives	.66
4.10 Average class enrolment	.68
4.11 Teachers view about community surrounding the school and its	
learning resources	.69
4.12 Availability of guidelines for selection of community	
resources for teaching	.70
4.13 Criteria used by individual teachers to select community	
resources for teaching	.71
4.14 Guidance provided by school administrators on selection of community resou	ırces
for teaching	.72
4.15 Sources of teaching materials for primary schools	.73
4.16 Actual utilization of community resources by primary schools in the	
teaching/learning process to achieve educational objectives	74
4.17 Constrains faced by teachers when using community resources	
for teaching	.76
4.18 Rating of teacher training by teachers	
4.19 Subjects that lent themselves to the use of community resources in	
teaching	. 78
4.20 Age distribution of school administrators	
4.21 Gender distribution of school administrators	79

1.22 Professional qualifications of school administrators
1.23 Duration of services as school administrator in school of study
4.24 Sources of teaching materials in primary schools
4.25 Availability of guidelines for selection of
community resources for teaching
4.26 Criteria individual school administrator use to select community
resources for teaching by individual respondents87
4.27 Consultation between the school administrators and their teaching staff regarding
use of community resources in teaching
4.28 School administrators' rating of teacher education on use of community resources
in teaching87
4.29 Gender distribution of pupils88
4.30 Age distribution of pupils88
4.31 Learning activities carried out by pupils in primary schools89
4.32 Agreement on bringing resources by pupils90
4.33. Types of materials brought from home for learning91
4.34 Oral items brought for learning
4.35 Subject for which pupils brought learning materials93

## **ABBREVIATIONS**

KCPE - Kenya Certificate of Primary Education

MOEST - Ministry of Education Science and Technology

NCEOP - National committee on Educational Objectives and Policies

TAC - Teacher Advisory Centre

KIE - Kenya Institute of Education

UNESCO - United Nations Educational, Scientific and Cultural Organization.

## **CHAPTER ONE**

### 1.0 INTRODUCTION

At independence in 1963, Kenya inherited an ill designed educational system which had been created to serve colonial and minority interests. Its curriculum was infused with British content, practice and ethos and administered by expatriates. The system too was ill designed for economic and social aspirations. Kenya saw as her immediate challenge the urgent need to reform the educational system in order to serve as an efficient tool for national and individual development. Since then, several commissions of inquiry have been instituted to investigate into the policies, objectives and practices of primary education so as to make it more relevant and effective.

The importance of the utilization of community resources to make learning experience relevant has been advocated through out the history of education. In classical Greek period Plato and his students left evidence indicating their ardent belief in the effectiveness of the use of community resources as a means of making learning relevant (Yanni, 1968). In the subsequent years, educationists such as Commenius, Rousseau, Pestalozzi, Froebel, Spencer, Harbert, Deway and Hart whose works have greatly influenced the development of education have all urged teachers to use community resources when teaching (Olsen, 1965). In the mid-twentieth century, Olsen (1965) emphasized the importance of community resources in teaching and the use of the community as a learning laboratory.

In Kenya, it is evident that community resources have been used to provide relevant learning experiences throughout the history of educational development. In the traditional

system, community resources have been used in imparting knowledge, develop skills and modify attitudes (Kenyatta (1938), Ominde (1952), and Odinga (1967). It is clearly indicated that learning experience was acquired through direct participation of the learners in the activities.

Despite conflicting interest of European Missionaries, settlers, colonial administrators and Africans on the nature and provision of education to African communities, there is evidence that resources in the communities were widely used to provide relevant learning experience. Outstanding education commissions that recommended use of community resources in teaching and learning include the Education Commission Report (1919), Education in African Commission (1922), 1925 Memorandum, Beechers Report (1948), Binns Report (1943) and Addis Ababa Conference Report (1962).

Even though the need to utilize community resources to provide relevant primary education has been advocated by the above reports, their actual use has not been effective. This is due to constrains according to Curtis (1966), which hinder their utilization. This study therefore aspires to investigate the utilization of community resources in teaching and learning by Nairobi District Public Primary schools with a view to establish constrains that hinders their utilization.

Studies carried out in Kenya have revealed the urgent need for utilization of community resources to provide relevant learning experience. This is evident in the findings and recommendations of the Vihiga case study (1976), Sifuna (1977), Digolo (1980), Ayot (1980), and Oure, (1985).

## 1.1 BACKGROUND OF THE STUDY

The importance of the utilization of community resources to make learning experience relevant has been advocated throughout the history of education. In classical Greek period Plato and his students left evidence indicating their ardent belief in the effectiveness of the use of the community resources as a means of making learning relevant.

In the mid-twentieth century, various publications emphasized the importance of community resources in teaching and the use of the community as a learning laboratory.

Consequently Educational innovations in post colonial era have indicated that developing countries particularly those in Africa were giving genuine consideration for the use of community resources to provide relevant learning experiences. Consequently, teachers were being mobilized to use community resources to make learning experience more meaningful to the learners.

In Tanzania, Nyerere (1976) reaffirmed that it was absolutely vital that primary schools and their pupils be thoroughly integrated into village life. Citing the case of school curriculum he recommended that as primary school children should be given the opportunity to investigate their natural surroundings.

In the case of Kenya, the evidence in this regard is contained in the various reports of education commissions of inquiry, conferences and researches. For example a close examination of the recommendations by the Kenya Education Commission (1964), the Kenya Curriculum Mission (1971), the International Labor Mission (1973) and the National Committee on

Unemployment (1983), all stressed on primary schools adjusting the teaching and learning to the local environment surrounding the schools. This study aims to identify, classify these resources found in the local environment surrounding the schools that can be used in teaching.

Similar sentiments regarding the use of environmental resources were given by an externally instituted mission of inquiry (The ILO Mission, 1972). The mission advocated for the adoption for a freer approach to teaching in which children are encouraged to be more spontaneous; drawing their experiences from the school environment. A further support for use of community resources by primary schools comes from the recommendations of the National Committee on Educational Objectives and Policies (NCEOP). The committee recommended that schools should be closely integrated with the systems of values and other useful traditional practices found in the communities in which they are located. Also, the need to utilize community resources in teaching has been cited also in education conferences held in the region. Significant among these is the Tanarive Conference held in 1962 which came to a conclusion that cultural emancipation which could allow learners to study things related to their own experience and provide vital knowledge of their own environment was a necessity.

The need to modify techniques of teaching and learning is the challenge of the provision of relevant learning experience facing primary schools in Kenya at present as Mbiti (1981) observes

the whole operation of teaching and learning critically with a view to making the learning experience meaningful, dynamic and relevant" (Mbiti, 1981, p.25).

This re-examination of the curriculum and teaching methods by curriculum developers and teachers would encompass among other things the constrains that hinder effective utilization of community resources in terms of teaching methods and curriculum contents to make learning experience dynamic and meaningful. This study aspires to establish the constrains that hinder effective utilization of community resources in teaching and learning in primary schools and in so doing add new knowledge to the existing one concerning utilization of community resources in teaching.

#### 1.2 PROBLEM STATEMENT

The need to utilize community resources for the provision of relevant learning experience in Kenya primary schools has been evident since independence in 1963. The situation in primary schools that call for the use of community resources has been aptly described in various education commission reports. For instance, the Kenya Commission (1971) recommended that primary schools adjust their teaching and learning to local environment to make primary education relevant to the learner and society. These resources in the local environment need to be identified and classified and the information disseminated to primary schools for use in teaching. This study focuses on investigating the utilization of community resources in teaching and learning in Nairobi district public schools with a view of establishing the constrains that hinder their effective use.

Literature available shows that little research has been carried out regarding utilization of community resources in Kenya. However, a study by Kariru (1976) has urged teachers to use local artifacts, tools and material in teaching art in primary schools. Similarly, Nguru et al (1983) reported that teachers were of the opinion that use of local environment in teaching and learning

enables pupils to understand the world around them. This study seeks to investigate the utilization of community resources in teaching and learning and determines to identify and classify them for use by primary schools with a view of establishing constrains that hinder their effective use, as this has not been done before.

Also the Presidential Committee on Unemployment (1983) strongly expressed that teaching aids in primary schools as far as possible should be based on local products and local environment which children are familiar with as it is common knowledge that teaching/learning events must be reinforced by use of learning materials if any learning is to take place.

Utilization of community resources in teaching has a motivating effect. Motivation refers to the drive or incentive that excites the learner to act in certain ways. Motivational variables energize and expedite the learning process by enhancing efforts, attention, persistence and immediate readiness for learning. Also utilization of community resources in teaching and learning mediates transfer of what is taught in school to new situations. Transfer of what is taught in school to new situations depends on the relevance of what is taught to the learner's life. Utilization of community resources in learning and teaching exposes the learner to experiences in the community which are real or life-like increasing chances for transfer. In addition utilization of community resources in teaching and learning links what is learnt in school to life in the society (adaptation). Adaptation always presupposes an interaction of the organism and its environment. Utilization of community resources in teaching and learning complements curricular areas through first hand observation and direct experience outside the classroom by the learner.

Unfortunately there is widespread inadequacy of learning materials in primary schools as noted by Malusu (1985) and which has been worsened by the introduction of the free primary education in 2003, overstretching the meagre resources for primary education in Kenya. This has forced primary schools to rely heavily on the use of text books and other published materials as sources of information for teaching. Learners carry out learning activities based on published materials like enlarging maps from atlases, drawing diagrams given in text books, reciting poems and singing from books.

This over reliance on the use of text books and published resources in teaching has distracted the primary schools from the unpublished community resources which otherwise have the highest potential for provision of a relevant learning experience. These resources are cheap to acquire and are readily available in the communities surrounding the primary schools. These community resources that have the highest potential for the provision of learning experience and are cheap to acquire need to be identified and classified and the information disseminated to primary schools for use as instructional materials in teaching and learning. This study determines to investigate the utilization of community resources by primary schools in teaching and learning and endeavors to identify the constraints that hinder their effective use in learning.

Primary schools rely for guidance in teaching and learning on the subject syllabi issued by the Ministry of Education Science and Technology (MOEST). The current one of 2003 reprinted in 2006 stipulates that "in each subject area, the resources required for implementation of the curriculum have been suggested. These resources can either be improvised or obtained from local environment" (Primary Education Syllabus Vol II p.iii). These resources that can either be improvised or obtained from the local environment need to be identified, classified and

information disseminated to primary schools. This study aspires to investigate how Nairobi public primary schools utilize community resources, identify and classify them as this has not been done before, with a view of establishing the constrains primary schools encounter when they strive to use them for teaching.

#### 1.3 RESEARCH QUESTIONS

The study will undertake to answer the following research questions:

- a) Do primary schools make adequate use of community resources that are available in their environment?
- b) What are the factors which hinder the effective utilization of community resources during teaching and learning in primary schools?
- c) What instructional strategies are being employed by teachers in primary schools to provide learning experience?
- d) How effective is the role played be primary teacher colleges in the preparation of student teachers for the utilization of community resources to provide learning experience in primary schools?
- e) How often do primary school, administrators carry out consultations with their teachers and provide guidance to them on the utilization of community resources to improve teaching and learning?
- f) The study will also seek to identify and classify community resources that are situated in the environment surrounding the school into categories

#### 1.4 OBJECTIVES

Specifically the study seeks to fulfill the following objectives:

- a) To identify and classify community resources that could be used by primary schools in teaching.
- b) To determine the extent to which community resources are being used in primary schools in teaching.
- c) To determine the factors which hinder the effective utilization of community resources in teaching.
- d) To find out the instructional strategies which are being used most often by primary schools to provide learning experience.
- e) To determine the frequency of consultation and guidance provided by primary school administrators to their teachers regarding the utilization of community resources in teaching.
- f) To establish the adequacy of teacher training education of the-would be teachers in the development of competency in the utilization of community resources in teaching and learning to provide learning experience in primary schools.

#### 1.5 SIGNIFICANCE OF THE STUDY

The Kenya commission (1971) recommended that primary schools adjust their learning and teaching to the local environment to make primary education relevant to the learner and the society. These resources need to be identified, classified and the information disseminated to primary schools. This study is important in that it sought to investigate the actual utilization of community resources by primary schools with a view to establish constrains that hinder effective use.

Kenyan primary schools are facing acute problem of the inadequacy of instrumental materials to reinforce learning in the primary schools. The study aspires to offer the other alternative from the published resources which are inexpensive to acquire.

The study would provide substantial data on the teaching methodology and the community resources utilization which would be found useful by scholars interested in learning resource development. It seeks to stimulate further research in this vital area of education practice. Finally, the study is expected to be found useful by teachers, learning resources specialists and curriculum developers.

#### 1.6 SCOPE

The study concerns an investigation into the utilization of community resources in teaching and learning in Nairobi District public primary schools with a view of establishing the constrains that hinder effective utilization of such resources. The study was carried out in such schools with the sole purpose of finding out whether primary schools use community resources in teaching to fulfill curricular purposes with a view to establish the constraints schools face when they strive to use them. The study did not delve into problems other than those of the utilization of community resources by primary schools. Hence findings and recommendations are restricted to the use of community resources as an instructional material and the constraints that hinder their effective use.

#### 1.7 LIMITATIONS

The study was limited to Nairobi District public primary schools and concerned only the utilization of community resources as instrumental materials. This limitation has a bearing when

it comes to generalization of findings to other parts of the country and to other sections of the educational system as findings are restricted to Nairobi District public primary schools and only to the utilization of community resources as instrumental materials by primary schools.

#### 1.8 DEFINITIONS

The following terms are defined as they are used in the context of this study:

Community resources: refers to people, places, objects (things) and activities in the environment of the classroom which can be used by teachers and learners to promote learning. Community resources may be collected and brought into the class for use or the learners may go out in order to reach them. Examples of community resources could be guest speakers, skilled people who may demonstrate processes of producing various items; natural living and non-living things, man-made things and any other local artifacts that may be deemed suitable for the lesson.

Relevant Education: refers to a type of education which is pertinent to a situation or an issue which for any reason is in the focus of attention and is significantly related to the problem at hand or to the problem with which people are struggling in a given period. Similarly, in the Kenyan setting relevant education implies education that helps children become fitting and contributing members of their community and nation, which is striving to develop and create conditions for better living.

Working experience: is also referred to as community activities. It is an aspect of community resources in which learners acquire worth while experiences by observing and participating in the activities of their community. As part of educational experience, it's a high practical situation

that allows learners to integrate book learning with life outside the classroom and contributes to the development of positive attitudes towards work.

Primary schools: this refers to the first eight years of education in Kenya. Originally, it referred to the first four years only with the next four years of the then eight cycles called intermediate. In 1964 the length of primary schooling was reduced to seven years. This continued upto 1985 when primary schooling was extended to eight years. Primary education is segmented into eight classes and pupils are promoted annually from class one up to class eight. This is a terminal education that culminates into a primary education certificate for the majority of the learner who do not proceed to secondary schools.

Schools administrators: refers to the head teachers and the deputy head teachers of primary schools.

Education: The act or process of imparting or acquiring general knowledge, developing the power of reasoning and judgment and generally of preparing oneself or other intellectually for mature life. The development of the special and general abilities of the mind (learning to know)

Educational and objectives: define the tasks of instructions broken down into smaller steps

Schools: The schools are an agency of society's needs and concerns at a given moment in history have always within limits, legitimately shaped the curriculum.

Curriculum: is all of the experience that individual learners have in a program of education whose purpose is to achieve broad goals and related specific objectives.

Learning experience: this is the interaction between the learner and the external conditions in the environment to which he can react.

## **CHAPTER TWO**

#### 2.0 LITERATURE REVIEW

#### 2.1 Introduction

This section of the study concerns literature review. The review is carried out in four main parts, viz: basis of utilization of community resources in teaching and learning, call for utilization of community resources in other countries, background factors which have influenced utilization of community resources in Kenya primary schools and the constrains that hinder effective utilization of such resources in teaching. Literature reviewed under these sub-headings provides vital information on theory and practice regarding the importance of utilization of community resources in by primary schools.

# 2.2 Basis for Utilization of Community Resources in Learning and Teaching

The use of community resources for the provision of learning experience is based on sound theory. Kneller (1971), reminds us of the pragmatists' assertion that we can only know what our senses experience: that is by seeing, hearing, smelling, feeling and tasting. The pragmatists insist that true knowledge is that which is created by a person's interaction with his environment. For this reason they stress that when teaching in schools, formal subject matter should be linked, wherever possible, to the immediate problems that the child faces and which the society is concerned to solve. Teachers are therefore urged by pragmatists to construct learning situations around problems whose solution should lead pupils to better understanding of the social and physical environment.

Dale (1955) too urged that there should be an association between school learning and life outside the school room. He viewed this as very important in elementary schools because the

child's relation with the world at this stage is sensory-motor and he is interested in what he sees, touches, tastes, hears and smells. The child at this level cares very little about things that do not concern him immediately. Similarly, Olsen (1965) explained that community experience: first-hand learning through immediate sensory contacts with the environment is the basic psychological learning approach. Through these contacts the pupils uses the community as a learning laboratory. He explores studies and improves it.

Life outside the school has been advocated by various educators as useful in the education of learners in the community. Hart's very interesting essay on substance of life gives a very meaningful reason for using community resources in the education for the child. He stated that a community gives the child the substance of his life. He may hate his parents, neighbors and the ways of the world. He may hate the kind of life he is leading, but he continues living in the community. Whether good or bad the life of the community exists about him. He drowns himself in it, takes it, and absorbs it with all his senses. He gets up everyday to find it still about him. He cannot avoid belonging to it. It nurtures him, starves him or poisons him and later it takes all what he sees (Hart, 1945).

Expressing their special commitment to community as a necessary social base, Newman and Oliver (1967) declared that the most fundamental objective of education is the development of individual human dignity or self-realization in the context of a given society. They admitted that whatever definition attached to either human dignity of human fulfillment, the critical point is the nature of the society within which either develops. This makes the fact clear that the community is prior to the individual. The individual develops his qualities and self-realization

through continuous involvement with the society. Besides, the society itself gives sense to the idea of individuality.

Various educators have viewed community resources as an important experimental force in the life of the child. Tyler (1949) defines learning experience as an interaction between the learner and the external conditions in the environment to which he can interact. The definition implies that the learner is an active participant in the learning process and that features of his environment attract his attention and it is to this that he reacts. The question which remains disturbing, concerning the extent to which it is possible for a teacher to provide educational experience for the pupils since it is the learners themselves who must carry out the action which is basic to their experience. Tyler (1974) suggested that in order for learning experience to develop thinking ability, it should utilize various problems that are real to the students so as to stimulate their action and it is desirable that the problems be set up in the kind of environment in which such problems usually arise in life.

Bruner (1963) argued in a similar manner that in order to grasp the underlying structure of phenomenon learners should be provided with devices for vicarious experience. He rejected instructions confined to a steady diet of classroom recitation support and only by traditional methods and muddling textbooks since it makes lively subjects dull for students.

Emphasizing the importance of the use of community resources to make school learning relevant, Brown (1973) called for more planned contracts with adults of the community since such elderly people open new things about the community, how its work is carried out and the

roles of the individuals involved. Furthermore, children learn about requirements for successful participation in areas of work that are of most interest to them.

Utilization of community resources to provide relevant education is further based on sound pedagogical principles. After reviewing the major theories of learning, Lancaster (1974) summarized four requirements of: motivation, response, reinforcement and transfer. These requirements have implicated for use of community resources in primary schools to provide relevant education and each of them is discussed in this section.

Motivation refers to the drive or incentive that excites the learner to act in certain ways. According to Ausubel and Robinsons (1969) motivational variables energize and expedite the learning process by enhancing effort, attention, persistence and immediate readiness for learning. Stones (1966), however, viewed motivation as a tendency of the organism to reduce its needs: the need to know and understand, formulate and solve problems. Motivation is thus regarded as a factor which underlies the need for most children to manipulate and explore their environment during the learning process. According to Igaga (1980), utilization of community resources in teaching and learning has a motivating effect which can be enhanced by a curriculum that is designed to help children engage in pursuits which have relevance to everyday life. In his opinion the failure to use the local resources to relate on what is being taught in schools to everyday life and thus motivate the learner to go back to reality is one of the factors contributing to alienation and unemployment of school leavers.

Learning is more effective if the learners make responses during the learning process or when they are actively involved in the lesson, for example they may be answering questions or discussing or observing something. It is because of active practices that it is recommended that the learning process should ensure repetitive correct responses which imply need for practice and use of the most suitable learning resources (Lancaster, 1974). Research has established that subjects who respond actively during the learning process learn more effectively and retain learned materials longer; at the same time they learn more effectively in terms of learning time.

Repetition of desired performance is not sufficient for retention hence there should be reinforcement after appropriate responses (Hilgard and Bower, 1975). Reinforcement is a stimulus which increases the probability of occurrence of a response (Curzon, 1980). The nature of the reinforcement is the function of the level of the learner. In the case of the animals for instance the reinforcer can be in form of food, whereas with human being some other forms of satisfaction appear to be ample. The magnitude of the satisfaction (reward) may vary with situation; however internal satisfaction which the learner gives himself in such activities as solving a problem in a community setting may be an example (Lancaster, 1974). While focusing on education and community life, Olsen (1965) urged teachers to make every effort to maintain learning situations where children will achieve genuine success find personal satisfaction therein and thus grow intellectually, emotionally and socially.

Perhaps the most important function of learning is its application to new situations (transfer), whether in its original form or modified to fit the new situation (Tibbett, 1968). Bigge (1971) asserted that the assumption which underlies our entire educational system is that learning gained in school not only will be available in the future but also will be applied in some degree to the situation of new problems as they arise in the on-coming school and in life situations. He

pointed out that the relevance and the effectiveness of what is taught in schools depended largely on the amount and quality of transfer potential of materials that pupils learn.

What makes it possible to apply a limited amount of our learning to new situations? According to Loree (1970) the theory of identical elements explains how transfer of learning takes place. In this view, transfer of learning from one task to the learning of subsequent task occurs only to the extent that the two tasks have identical elements and that the greater the similarity between the elements the greater the transfer possibility. This theory leads to support those who assert that if education of the primary school pupils is to be relevant to their lives then they ought to be exposed to experiences in the community which are life-like in order to increase the chances of transfer. Another theory which seeks to explain how transfer of learning takes place is the theory of generalization. This theory underlies the utilization of community resources in primary schools. This is evident in the assertion that transfer of learning depends upon how well a student understands principles and concepts and how they are solved in new situation.

Views that have been expressed on education as a preparation for a career have advocated for the use of community resources since it would introduce learners to work experiences. As was observed by Olsen (1973), the elementary years are the most important in preparing the youth to make appropriate occupational decisions and related personal social adjustments. These are the years of curiosity and inquiry, trial and exploration; and relative freedom from justice.

Speaking about the education needed now in elementary schools, Gantt (1971) remarked that it should be a developmental system that introduces awareness which exists between schooling and work. He stressed that the main role of the elementary school is diagnostic and

prescriptive. It should provide the child with the experience that makes learning real. It should achieve through meaningful and continuous examination of the use of work by man to support him on how knowledge is employed in major occupations and how different abilities are related to productivity. As such it is the major objective of the elementary school to detect and realize talents of each child and demonstrate their relationship to the world of work.

The view which relates education to the world of work has received popularity among the leaders of the developing world. In China for instance Tung (1975), became fearful that education was becoming divorced from the practical needs of local regions and that this was true in the content of the academic texts that were centrally prepared in Peking. He directed that individual provinces were to take charge of textbooks compilation and that materials of instruction were to bear a local character. He also directed that more local or indigenous teaching materials were to be used in teaching. Learners in the rural areas were encouraged to work with the agricultural co-operatives and to take part in the production at least in some parts of the day. Urban learners were either to set up their own factories or work in the existing ones in order to complement conventional academic subjects with skill-training. This was to be universal for all schools and those with extra land were to set up farms where students and teachers could take part in agricultural related labor.

Nyerere (1967) similarly advocated the need to integrate school activities with work that goes on in the local community surrounding the school. At the back of his mind the purpose of education might have been to prepare young people for their future membership in the society and their active participation in its maintenance or development. He stressed that primary education therefore, had to inculcate a sense of commitment into the community, particularly co-

operative endeavor. It must prepare young people for life and service in the villages and rural areas of the community. Rejecting a type of education that divorced the pupils from the society, a type of education that perpetuated a belief that all knowledge which is worthwhile is acquired from book, or from educated people and a type of education that encouraged pupils to despise knowledge and wisdom from old people including parents, Nyerere (1967) asserted that we cannot integrate pupils into the future society simply by theoretical teaching however well designed it might be. He recommended a revolution in the curriculum and a change in the ways schools are run. He resolved that schools must in fact become communities in which pupils learn the meaning of living and working together for the benefits of all and also the value of working together with the local non-school community.

Striking a balance between theory and practice in the process of educating the child is yet one of the bases upon which teachers are encouraged to incorporate the use of community resources. Livingstone (1966) lamented that educators have overlooked a vital principle in education and that its neglect is largely responsible for the great problem of national education which will never be solved until it is taken into account. The principle is that of crossfertilization between theory and practice. Theory and practice illuminate each other. He cautioned that if education is to be really fruitful, it must recognize that it is not profitable to study theory without some practical experience of the fact to which it relates. The need to strike a balance between theory and practice is perhaps what influenced Wright (1982) when he wrote that curriculum developers in Zimbabwe were inclined to introduce a form of science which would demonstrate that universal principles of science were applicable in a practical manner to the specifics of any given local situation and have relevance within it.

The advocacy for balance between theory and practices in Kenya is evident in the work of Oluoch (1977). In order to create a desirable balance between theory and practice Oluoch advanced a curriculum model with four dimensions: formal, non-formal, informal and emerging. In this model the non-formal dimension refers to the out-of—class activities for example games, debates, dances, scouting and community work. These activities are seen to contribute to the practical experience of the learners and supplement the formal classroom learning. Oluoch stressed that since learning occurs as a result of interaction of students, materials and activities with the help of the teachers; then teachers should visualize different ways and means of bringing together these elements so as to provide powerful learning opportunities.

The need to utilize community resources to create balance between theory and practice was suggested by the Kenya Education Commission way back in 1964. After carrying an inquiry into the teaching of agriculture and science in primary schools the committee argued for amalgamation of these subjects on the ground that agricultural practice ought to be based on sound theory acquired in science. Such amalgamation was intended to create as much involvement in practical work as possible during the lessons; some of which would be in the school garden. The aims of such activities were to establish general principles rather than introduce specific farming practices. In other words the school garden would be an outdoor laboratory and the scene of practical experiments in science (Republic of Kenya, 1964).

Because of the importance which she attached to the use of resources in the environment to create balance in learning outcome, Montessori was very critical of the school. She writes:

"In our time and in the civilized environment our society children, however, live very far distance from nature and

have very few opportunities of entering into intimate contact with it or of having direct experience with it. We have all made ourselves prisoners voluntarily and have finished up by loving our prison and transferring our children to it."

(Montessoir, 1972; p.41)

Montessori added that it was not hard to understand that the child reared in such estrangement from natural life should grow into an adult who plunders, pollutes and destroys nature without even being conscious of what he is doing. She therefore, urged that in learning nature should not only be brought into the classroom but the child should be made to live in it.

Adaptation of what is learned in schools to life in the society is another area which has received widespread support. Piaget (1969) once wrote that to educate means to adapt an individual to the surrounding social environment.

However it is Wadsworth (1978) who linked adaptation directly to the use of community resources when he explained that adaptation always presupposes an interaction of the organism and the environment. He stated further that adaptation always requires activity on the part of the individual and stressed that one cannot adapt unless one acts.

In Kenya at present, it may be observed that education which is really adaptive and involves the community setting is found in the rural areas. In these communities education is typically informal and consists largely of children modeling their behavior after the adults (Kenyatta, 1968).

A recent innovation in primary schools curriculum which seeks to adapt learning to communities surrounding schools is the environmental education approach. The introduction of environmental education is seen as one approach that will inevitably incorporate utilization of community resources to provide desired learning outcome. Heiser (1972) defined environmental education as an approach to a more efficient and effective learning by enriching, vitalizing and complementing curricular areas through firsthand observation and direct experience outside the classroom. He noted that traditional instruction, which is highly verbal and limited to the classroom, provided knowledge which was merely read discussed and copied down but not experienced. The environmental education approach which extend the classroom beyond the four walls and out into the community, offer a suitable setting for maximum understanding, meaning and insight.

Brazzaville Meeting (1976) noted that at the primary school level the child should be assisted to discover the milieu of his environment and that the environment based policy on national education system be adopted by all regional member states including Kenya.

# 2.3 Call for Utilization of Community Resources in Africa and Parts of the World.

The emergency of African countries form the colonial yoke made them realize that the education they inherited, particularly, its process of provision needed overhaul as a matter of urgency. The compelling need for change because conspicuous problem of primary school leavers who drifted into the urban slums increased sharply while those who remained in the villages kept roaming about for long periods before settling down on any gainful activities. After recognition of the crucial need for reform most of these countries started to subscribe to the

growing realization that primary education should be related to and integrated with the communities surrounding primary schools.

In Uganda new programs are being designed to broaden primary education for life embracing local cultural and ethical value. The strategy for implementing education for life derives its policies and practice from the community oriented Namutamba Pilot project initiated in the country by UNESCO in 1967. The Namutamba approach seeks to:

- Integrate the children with the adult community by creating community primary schools thus stopping alienation of children from their parents.
- 2. Integrate traditional academic studies with work-oriented activities.
- Integrate the environment by introducing such species and specimens as will permit their study from close quarters; in essence, such integrated approach should enable us not only to control the environment but also to improve it.
- 4. To encourage integration of service through inter-ministerial co-operation (Republic of Uganda, 1984).

The promising achievement of Namutamba Pilot project that contributes to the improvements of instruction in primary schools through the use of community resources is the development of "out door approach" to rural primary education in which the learning activities are carried out in the communities during field trips, projects and outdoor experimentation.

In Tanzania, the spirit of independence and birth of a young nation gave rise to reforms in primary education which led to the emphasis on the provision of relevant education by use of community resources. The objective of the reforms was to liberate the ignorance and alienation

which was brought about by the inherited education system. Unlike the Namutamba Pilot project which was conceived outside Africa during a UNESCO Conference in Paris, the Kwamsisi Pilot project was initiated by Tanzania to implement the ideas propounded by president Nyerere in the Arusha declaration of (1967). The Kwamsisi project started near Korogwe in Tana in1971 and was concerned with the exploration of ways in which the life and curriculum of the school might be more effectively integrated with the life of the village. The curriculum of the school was defined in four areas: literacy and numeracy; citizenship or political education; self-help and cultural activities; and environment studies. Strategies of the initiation of the project included involvement of community people, for instance the villagers participated in all the stages of the design and implementation of school programs. The project aimed at complete integration of the school life and the Kwamsisi village (Mitande and Mwajombe, 1978).

Botswana too came to the conclusion that the inherited colonial system of education was an insufficient instrument of national development. The emergency of the brigade program at Serowe was regarded as a major initiative in the search for alternative approaches to the inherited education. The innovative educational program at Serowe laid greater emphasis on the use of community resources to provide relevant learning experience through a variety of learning methods. This was evident in cultural studies which were taught in a way that aimed at giving the brigades pride in what is their own; an interest in and appreciation of the achievements of others. The brigade's courses that covers regional, ethics, artistic expression, history, and philosophy is taught following a wide variety of approaches. In some of these approaches local elders, artists and craftsmen are invited to explain procedures and demonstrate techniques of making various articles. In these approaches visual aids such as pictures or films, slides and photographs are used; where necessary the visuals are accompanied by sound records on tapes. Practical

orientation to the courses is given by bands, choir, dancing, concerts, drama, painting, drawing and crafts, as popular activities. Local design is encouraged in the teaching of textile design, pottery and leather work which are productive activities. Classroom activities include reading from selected literature during library periods and maximum use of expertise in the community. Traditional productive activities are often compared with production in the brigades and the social factors relating to them can be analyzed and contrasted.

Suggestions to improve the learning provided by the brigade program pivoted on the use of local language as a medium of instruction. Besides, use of mother tongue as a strategy, team teaching and group learning which made it possible to integrate aspects of various disciplines in particular lessons were used. In such integrations effective use of teaching aids which maximized involvement of all the senses was encouraged (Ronsburg, 1978).

In Sierra Leone it was realized that primary education was deficient; oriented directed towards secondary school education, took very little account of the child's social-cultural background and also had very little link with the community where most of the children lived. This realization led to the search for a broad education which could bring schooling and traditional life into a co-operative and mutually beneficial relationship with each other. The Bunumbu Project was started against this background of Bunumbu Teachers College and 20 pilot primary schools within 32km. radius were selected to serve as community education centers in addition to their normal role of providing education for children. The teachers college was to provide teachers through pre-service and in-service education and also serve as a growth center for community development.

The Bunumbu primary school's project was initiated to provide meaningful education to the pupils so that they could adapt themselves to their environment and improve conditions of life of the people in the rural areas. In order to achieve this task, the college and the pilot schools utilized resources in the community by serving as testing laboratories for new ideas on community development. Teaching methods embraced the use of local chiefs, elders, extension workers and skilled craftsmen from various professions. Learning was carried out on family farms (as extension farms) and periodic educational visits were made to the farms in the communities thus the school was continually ceasing to be an agent of alienation and becoming a functional part of the community (Melba, 1978).

In Benin educational reforms have brought into a fresh focus the use of community resources to provide relevant education. In the new program the objective is to help put into practice the principle of linking the school with practical life by encouraging the study and transformation of the environment. The method used in the schools after the reforms were directed towards profound transformations of the attitudes of the teachers. They had to cease to consider themselves as the only keeper of knowledge, become advisors and help to foster environmental awareness. In the reformed programs it was recommended further that the organization of the timetable had to take into account pupils' psychological and physiological capabilities, link the school with life and ensure a balance between practical and intellectual activities and modify the school calendar in accordance with the seasonal activities in the country (Pliya, 1978).

In an effort to initiate changes in Togolese education to stress the study of the environment and integrated teaching so that the school can play its proper leadership role in the locality, it was recommended that education should be adapted to meet the demands of life by use of community resources. The teacher in the reformed system is expected to be, a leader, ensuring rational and effective organization of team work in the interest of groups. The reformed school is expected to call upon other specialists according to their competence and even illustrate peasants who have something to teach the pupils on the subject of African pharmacopoeia, traditions and customs, music and dancing will come to the school just as the pupils will go to the privileged, but will be opened to the whole locality, indeed to the whole region. The study of the environment will be conceived as the educational basis of all teaching, as a means of training pupils with a view to transforming the environment (Atignon, 1978).

In Nigeria it's being argued that if schools are to meet the aspiration needs of the pupils and the community the curriculum must originate from community studies. This implies that if schools are to relate learning experiences to local needs and conditions, community situation must be understood. This is what Atignon (1978) refers to when he said that schools ought to use the community as a laboratory if teaching were to be stimulated by direct observation and experience. Instead of limiting learning activities to mere reading and listening, education excursions made for the purpose of making direct contact with the actual phenomena could present rewarding opportunities for learning. Similarly, schools could utilize the community's human resources for their education purposes. For instance interesting discussion could emerge between the local experts from various fields and the students, if schools invited the former to share their knowledge and skills with the latter.

Atignon (1978) noted further that promotion of good community relationships is essential in the attempt to maximum teaching and learning. The importance of the parent-teacher association in contributing to the effective school-community relationship which is essential in optimum teaching and learning process need re-emphasis. He stated that the association could be used to upgrade teaching and learning quality as follows:

- It could serve as a forum in which parents and teachers could exchange useful ideas for the improvement of the learning ability of the children.
  - Schools could enlist the co-operation of parents in the organization of some school events
    such as open days needed to be in close relationship with religious organizations, mass
    media, and other agencies which normally participated in the socialization of the child
    (Dubey, 1979).

Soon after the 1974 revolution Ethiopia made a declaration that man must work and support himself and his community. In order to equip young children to achieve this objective emphasis was laid on utilization of community resources in both primary education and teacher training. Radical changes were advocated for teacher education for instance more emphasis was laid on enabling student teachers to adopt more creative and imaginative approaches to production of teaching materials. This encourages them to learn to be self reliant in order to overcome constraints they were likely to meet in remote rural areas. An essential part of the training of the teachers in the field had to be introduces to the use and development of teaching units based on the resources of the local environment. In order to bring primary education closer to the community it was urged that though teachers were competent in imparting the elements of literacy and numeracy, they were less able to deal with the educational aspects of community life such as health, agriculture, water resources and trade. It was recognized further that problem of this nature in the village societies differed from one place to another while teachers kept being posted or transferred to schools whose community set-ups were outside their experience. Since community resources and the extent of their utilization could not be documented adequate in

textbooks to depict all that happens in village life, Ethiopia found the answer in what was termed the shift of emphasis from teachers to the people themselves, to use them as instructors. It was considered essential that training had to be given to the peasants so that they could help in giving instruction particularly in the key areas of agriculture, health and technology (Getahun, 1978).

With special reference to India, Madhyastha (1982) advocated for the utilization of the environment inn teaching and learning because:

- 1. It bridges the reality gap between education and life
- 2. Its bridges about qualitative change in the content to make it more functional, relative and meaningful to life
- 3. It is in consonance with the principle of social relevance which requires that the curriculum should bring harsh realities of the world into the classrooms to train people to play their role in the society as thinking and participating citizens
- 4. Its adopts holistic (synthetic) approach of teaching, deeply rooted I an broad interdisciplinary base because it creates an overall perspective which acknowledges the fact that natural and man-made environment are interdependent and helps to reveal the enduring continuity which links the acts of today to the consequences of tomorrow
- 5. It is essentially an approach for learning through organized exploration
- 6. It encourages the evolution of school based curriculum, school- based in-service teacher education and community based-resource utilization.

In Canada the natives of that country, the Red Indians, are advocating vigorously for adaptation of primary education to their community need through utilization of community resource.

He stressed further that the philosophy is to utilize the community and its people as resources to the fullest extent possible. In the process of teaching he felt that native children should be given the opportunity to use their own language as a medium of learning, particularly in their early years and to introduce them to the English Language through thee approach of being taught English as a second language, to build up learning experience at every stage upon that which is familiar to the children through the experience and moving to related areas that would broaden their outlook. Children should be taught skills in speaking, reading, and writing which is relevant and meaningful, they must learn these skills through contexts familiar to them, and not through unfamiliar concepts presented in textbooks. He stressed that it was important to involve people from the community in the education process by actual participation; community people are the school's most valuable resources and can provide the base for learning in most if not all, subject areas. He concluded that in such a system the community must become the classroom and its members its teachers, the classroom must become the community reflecting the lives of all the members.

In the USA, Tickton (1971) urges that the current disconnection between schools and community must be altered. In other words the community must be brought into the classroom or must become the classroom if the classroom is to connect with the real world; if it is to be relevant. The laboratory approach has been restricted primarily to science, but a factory is a lab, a television studio is a lab if it is viewed as one and if it becomes available to students for learning.

# 2.4 Background Factors which have Influence Utilization of Community Resources by Kenyan Primary Schools.

A review of teaching and learning in the pre-colonial and colonial era reveals that resources in the community have been used in both non-formal and formal education systems to enhance the provision of relevant learning experience. In the pre-colonial period the philosophy of education which treated learning and living as an inseparable whole promoted the use of community resources. During the colonial period, however, reliance on community resources when teaching was reduced considerably and in dome cases it was completely absent because of the apparent lack of a coherent policy to guide formal education in this regard. This part of literature review delves into the factors that affected utilization of community resources in these periods with a view to providing insight into the background of this problematic situation.

Utilization of community resources to provide relevant learning experiences during the pre-colonial period was boosted by the fact that traditional education could not be separated from society: both were interwoven within the same cultural fabric (Sheffield, 1973). A scrutiny into literature related to instruction in this period evince that resources in the community were used to impart knowledge, develop skills and modify attitude. For instance, Kenyatta (1962) noted that in order for a son to acquire knowledge and skills in Kikuyu community if his father was an agriculturalist had to take him to the garden for practical training, show him how to handle the digging stick and acquaint him with the name of plants that were found in the place. Giving a vivid account of a traditional education he underwent in his youth days, Odinga (1967) also affirmed that knowledge was acquired listening to stories told by elders and songs sang by harpists. Desired attitudes were formed through direct involvement of the learners in the learning

activities carried out in the village and also through organized participation in work, ceremonies and ritual of the community.

Even though in the colonial era the use of community resources for the provision of relevant learning experience in primary schools was advocated by various missionary societies, commissions of inquiry, government white papers and individuals, the actual utilization appeared sporadic and disjointed. The provision of education of Africans in that period can be conveniently presented as education in the partnership era. Education in the early missionary period was characterized by integration of what was taught in schools with the physical environment in which such early primary schools as Rabai established in 1846 and Freetown in 1875. In theses schools the emphasis was on vocational courses which would provide shills necessary for building self sustaining Christian communities. The curriculum not only focused on the acquisition of literacy skills but also on rudimentary skills in agriculture (Herskovits, 1962). The emphasis which was laid on practical education meant that teaching had to be carried out inside the classroom as well as in the environment of the school utilizing community resources such as land, manure, crops and local resources persons.

Even though evidence on utilization of community resources especially the use of the physical environment revealed a major effort on the part of the missionaries, they seemed to have worked under intense contradictory pressures when it came to the use of cultural environment. For instance Bacchus (1982) pointed out that there was an assumption among the missionaries that the knowledge which the schools in the region attempted to pass on was superior to that shared by the local communities since it was part of the knowledge system of the so called superior culture or civilization (Sheffield, 1973). The essence of the position taken by the early

missionaries who influenced their decision on what system of knowledge and beliefs was good for the people of Kenya was based on the view that the inferior community knowledge should eventually be superseded by the superior school knowledge (Bacchus, 1982). This attitude contributed to the rejection of local knowledge accumulated by the communities surrounding the schools.

Besides the myth of superiority that swayed early missionary educators when considering selection and use of learning resources from the community there was the added racial bias which prevailed at the time. This was evident in the report of the Education Committee of the Privy Council (1847) in which it was stated that: assuming that the mental capacity of the negroes was different of that of the Europeans, a plan of education designed for local and racial inferiors be formulated, stressing the importance of industrial and agricultural education in the interest of providing a docile and uncomplaining working class (Curtis, 1964). This biased assumption subscribed to the three tire education system in Kenya that was developed in racial lines for Europeans, Asians and Africans, through out the partnership period.

The point which is conspicuous from the review of the previous attempts to integrate school and community learning during the three tier education system was the strong class overtones that developed. For instance the early period of colonial rule there was a sharp distinction between the education provided and that given to those who were being prepared to copy some what higher level positions in the society. The masses were to be socialized to accept their position at the lower echelons of the occupational hierarchy and the schools attempted to give them those skills, knowledge and values which would not only keep the productively, occupied at that level but also help them to accept the inevitability of their position. So far this

group (African masses), integrating school and community learning meant equipping them with knowledge, skills and attitudes which required filling their virtually pre-destined positions in the community. Hence African education had to lay emphasis on vocational training and the inevitable heavy reliance on local resources. For the others (Asians and Europeans) who were being prepared for middle and higher positions in the public and private sector the content of their formal education was insulted rather than integrated with community learning.

As education moved into partnership between government and missionaries in the early part of the 20<sup>th</sup> century and the three tier system got entrenched, education for the African masses became sharply focused on the utilization of community resources in the vocational and even non-vocational courses to adapt learning outcome in the local communities. This is noticeable in The Educational Commission Report (1919) which urged that African education should aim at the provision of vocational training utilizing local materials and facilities (Sheffield, 1973). It is also recognizable from the report of the Phelps-Stokes Education in Africa Community (1922) that adaptation of education provided to Africans in their segregated schools was greatly emphasized.

The Commission recommended that adaptation should be carried out through vocationalising the curriculum and community resources in teaching even the usual literacy subject (Jones, 1922). It was recommended by the commission that every pupil should be taught special forms of hand skill required in their community so that they may be able to use materials available to make conditions of life healthful and comfortable. For instance the teaching of handcraft required every teacher to go out into the little villages and to teach people to make

better use of wood, clay, cane, hides, iron and other materials which were available in sufficient quantities.

The Commission pointed out further that as regards the teaching of literacy subjects, the content of such subjects as arithmetic and reading were to be concerned with the problems and interest in native villages and African life. The teachings of history courses were to help pupils to understand that the essential features of human development were rooted in the economic, social, and spiritual development of the people as a whole and wherever possible the African youth to have the opportunity to learn achievements of men of African origin and to realize the wealth and beauty of their native land. It was felt important that the schools had to be recognized so that their activities could extend out into the home and institutions of the communities. However, critics of the commission have observed that its emphasis on the adaptation assumed a static peasant society in a permanent inferior position.

In an apparent approval of the Phelps-Strokes recommendations, the British Government issued a white paper often referred to as the 1925 Memorandum which influenced education of African in Kenya throughout the colonial period. Regarding the adaptation of the education to the traditions and realities of tribal life the 1925 Memorandum stressed that education should be adapted to the mentality, aptitudes, occupations and traditions of the various peoples, conserving as far as possible all sound and health elements in the fabric of their social life; it should render the individual more efficient in his or her condition of life to promote the advancement of the community as a whole through the improvement of agriculture, the development of native industries, the improvement of their own affairs and the circulation of true ideas of citizenship and service. In keeping with the general objective of fitting education to the community need by

the use of resources in the locality of the school, the Memorandum further stated that African vernaculars be used in early stages of primary education, textbooks and methodology be adapted to the African situation and specially trained visiting teachers for village schools be provided.

The rather unpopular aspect of the 1925 Memorandum was its advocacy of vocational bias in educations for Africans. Right from the start educated Africans had been opposed from any departure from the existing conventionalized school systems. Past experience had convinced that the departures from the white man's methods had too frequently meant inferior provisions for the black people. Assumptions which made Africans to reject the vocational education and its accompaniments were evident in statement concerning African's intellectual potential.

The attempt to incorporate community resources in the provision of learning experience suffered in the period because its application was emphasized mainly in the already unpopular vocational education such as agriculture, handicrafts, and masonry.

The other reason why use of community resources was not successful in teaching and learning was because of the contempt with which European missionaries looked at African Culture and its educational worth in the upbringing of children.

Even though African activities had rejected vocational education and rightfully demanded respect for African culture and went as far as establishing independent schools to cater for African literacy and cultural needs, the policy of education for the Africans did not change. The missionaries who dominated African education struck to the usual general idea that the occupational destination of the Africans would remain relatively fixed and that school-

years after the 1925 Memorandum was established, Beecher report recommended that the curriculum at any given stage of education be so designed as to ensure that those who do not pass on to further education were able to pass out into the active life of the community better fitted to take their part in it as a result of the education which they have received.

The Binn's Report noted the rather unfortunate poverty of equipment in the primary phase of education which often led to dullness and lack of interest and which explained in part the unawareness of children of the world around them. The report urged that there should be material for children's work such as clay, gum, paste, paint and all scrap material for learning: all of these implied utilization of community resources. The report maintained that primary education should become the means whereby children received training to live in a society both as individuals and as members of the community and recommended further that it was in the schools, that they had to be encouraged to observe their own environment and develop a curiosity leading to a desire for knowledge about the outside world (The Nuffield Foundation, 1953).

Just before Kenya attained political independence the renowned Conference of Ministers of Education held in Addis Ababa in 1961 had observed that since African education was modeled on those of the metropolitan countries and were not in line with the existing African conditions, such education allowed no room for the African child's intelligent powers of observation and creative imagination to develop freely or even help him to find his bearings in the world (UNESCO 1961: UNESCO/ED/181.) This coupled with the concern over the problem posed by the uprooting of young people too abruptly from their rural and family surroundings,

producing individuals suspended between two world, the conference resolved that increased emphasis had to be places on adapting educational programs at all levels and in most places to the needs or rural life, thus the schools and the countryside had to be interrelated, curriculum had to be in line with rural needs and interest and efforts had to be made to bring the school to the countryside physically.

The Conference also observed that a persistent need for the reforms of teaching materials at all levels existed and urged African education authorities to revise and reform the content of education in the areas of curricula, text-books and methods, so as to take account of the African environment, culture heritage and demands of technological and economic progress. It is evident in the report that the participants recognized the fact the community resources available in the school environment could be used to provide relevant learning experience, particularly in adapting in the teaching of such subject as history, literary and social subjects to African conditions.

# 2.5 Factors that Hinder Effective use of Community Resources in Teaching and Learning

Even though the need to utilize community resources to provide relevant learning experience has been advocated by psychologists, educationalists, researchers, commissions of inquiry and various conferences, their use has not been effective due to several constrains (Curtis, 1966).

The current situation in the Kenya educational scene is affected by contradictions which undermine effective utilization of community resources by primary schools in teaching and learning (Anderson, 1966). He attributed the origin of this problematic situation to the

incompatible dual standards the country pursued in her educational policy for a long time. In this view Kenya on one hand pursued a policy of modernization where by the objective was to provide specialist training for small but critical commercial and industrial manpower and to maintain the national educational standard in the world setting: all tend to emphasize high level education, good academic grounding and the necessity to follow western techniques. On the other hand, the large agricultural base of the economy, the rural existence of most of the population, the need to substitute labor for capital in productive process, all these factors require special attention in primary education.

Curtis (1966) however viewed the dual standards ambivalence and its effect on utilization of community resources in Kenya primary schools from more than one angle. From curriculum point of view, he noted that a contradiction existed and that the challenge was to device a primary education course which not only kept up with, but was some what in advance of peoples' expressed desire for change. From the teaching method point of view, he stated that school learners were handicapped at the time by the fact that the view of the world which they got from primary school education was not altogether a coherent one because of conflicts which arose from time to time between what some text books contained and what local peoples actually did. Even teachers and pupils themselves tended to acquiesce in dual standard reality: class room reality and real life.

Similarly the Kenya Education Commission (1964) after making an inquiry into primary education in the country, remarked that the greatest problem which adversely affected the efforts of the schools to adjust the teaching and learning to local environment were the dual objectives of this level of education. On the one hand, it's the only formal education available for 85% of

the children, on the other hand 15% (minority) for whom it was a preparation for secondary school. The commission noted that the urgency to get into the secondary school became so great that it was not to be wondered that most primary schools concentrated on the second objective that was geared towards the minority instead of the second one that focused on the majority (Kenya Commission, 1964).

The nature of the Kenyan primary school curriculum has been seen as a stabling block in the utilization of community resources in teaching and learning. For instance in the Kericho Conference Report (1966), Griffith appropriately described the situation that prevails in most Kenyan primary schools as: a kind which on the whole tends to stress learning for repetition (e.g. for examinations) rather than learning for understanding and adaptable use. The criteria of good learning here is reproduction in the examination (Griffith, 1967).

The Kenya Curriculum Mission (1971) reported of having been made aware of the widespread concern about the inadequacy and irrelevance of much that was taught and learned in the primary schools. The mission stated that the areas of main concern were: the narrow scope of the curriculum, its emphasis on rote learning, its neglect of practical and creative activities especially in agriculture and basic manual skills, its indifference to Kenya's cultural heritage and to the environment in which children grow up, its being geared to the minority who pass the examination while ignoring the needs of the majority whose formal schooling end with primary education.

Focusing her attention on some of the critical issues concerning our education in recent times Raju (1973) said that in the first place the missionaries and the colonial administration did

not make any real attempt to link African education to African problem and cultural heritage. She pointed out that the burning issues which were rampant in Kenyan primary schools were symptoms of the irrelevance of what was taught and the way that it was taught in primary schools in the country.

In the view of the educational situation desired in the Development Plan (1974), the Kenyan Government instituted the National Committee on educational objectives and policies in 1976 to study the curriculum and methods of teaching being practiced at that time and to initiate reforms which would make primary school education more relevant to the country's need. The committee observed that there was little linkage between formal education system and the real life situations under which majority of people lived and worked while at the same time there was little or no exposure within the educational system to the realities of work. Above all the committee felt that the cause of the problems lay in the theoretical nature of the curriculum and emphasis on book work (Republic of Kenya, 1976).

Also the apparent inability of primary schools to explore and utilize community resources has been attributed to the inadequacy of teacher training in this regard. The research carried out separately by Sifuna (1980) determined that pre-service training of teachers did not focus adequately on the production and use of community resources in classroom teaching. Ayot (1980) similarly found out that even in-service education for teachers was inadequate and that the isolated cases where in-service education was carried out, the methodology was predominantly lectures and discussions carried out in the four walls. Mbiti (1981) similarly remarked that teacher training has been bookish in approach and examination oriented.

#### 2.6 Concluding Remarks

Evidence which have emerged from the literature review shows that utilization of community resources in teaching and learning is based on sound theories. The need to intensify utilization of community resources in teaching and learning have been argued from philosophical, psychological, curriculum and pedagogical points of view. It is provided by literature that primary education can be made more relevant, challenging and life centered by use of community resources.

A scrutiny into the literature on education innovation in Africa unveils that there is greater emphasis on the need for the utilization of community resources, to provide relevant learning experience. Significantly the educational project have been geared towards greater integration of the school with the community life, including work oriented activities, active participation in learning and use of local language for instruction.

Literature on the development of school education in Kenya showed that the need to utilize community resources for teaching and learning has existed from its inception and has been voiced throughout the period. In the current times it is evident from literature that the urge to utilize community resources is increasing strength and suggestions that primary schools should turn to their environment for resources is prevalent, particularly from recent research studies and reports on education inquiries. However literature on the constrains that hinder effective use of the community resources in teaching reveal that there are pertinent constrains that hinder effective utilization of these resources in teaching by primary schools.

However, despite the advocacy for the utilization of community resources by primary schools in teaching, these community resources have neither been identified nor classified for use by primary schools. Literature review shows that very little research has been carried out on this study on the utilization of community resources by primary schools in Kenya (Sifuna (1979), Digola (1980), Ayoti (1980), and Obure (1985). However this study aspires to investigate the utilization of community resources in Nairobi District Public Primary schools in teaching and learning and determines to identify and classify such resources fund in the vicinity of the primary schools with a view of establishing the constrains that hinder the effective use of such resources.

# 2.7 THEORETICAL FRAMEWORK

Theory is an essential feature of sociological inquiry and any empirical study should be grounded on theory (Singleton, 1988). Theory helps to understand and explain our social experience and it also helps us to determine ways in which to resolve the problems we encounter. The purpose of this section is to link theories with proposed study. The study is going to be guided by the following theories:

# A. Connectionism/behaviorism theory (E. Thorndike)

Learning is based on stimulus-response theory. The learning theory of Thorndike represents the original stimulus-response (S-R) framework of behavioral psychology. Learning is the result of associations forming between stimuli and responses. Such associations or habits become strengthened or weakened by the nature and frequency of the S-R pairings.

Thorndike acknowledged the association between the response and the stimuli, which becomes the bond or the connection. When the connection between stimuli and response is made followed by a satisfier the connection is strengthened, if it is followed by an annoying state, the bond is weakened. Rewards or satisfiers strengthen or reinforce a desired behavior. Thorndike was especially interested in the application of his theory to education (Thorndike (1922), Thorndike (1921), Thorndike (1927) and Thorndike (1928).

Thus learning is a connecting process and the learner responds mechanically to stimuli. Elements of the learning experience must be ordered and evaluated by someone who is more knowledgeable than the learner. The total obligation for the organization of the experiences falls on the shoulders of the teachers. This study attempts to investigate the utilization of community resources by the teachers in teaching and learning to provide a learning experience with a view to establishing the constrains that hinder the effective use of such resources.

However for effective teaching and learning to take place, learning resources must be adequate for both the teacher and the pupil. Therefore the researcher is going to use this framework to investigate the utilization of community resources in teaching and learning with a view of establishing the constraints that hinder their effective use

## B. Learning Theory

Learning theory is a body of principles advocated by psychologist and educators to describe how people learn to acquire skills, knowledge and attitudes. Various branches of learning theory are used in formal education to improve and accelerate the learning process. For them, learning is something that occurs as a result of certain experiences and precedes changes in behaviour. Here learning is given the status of an intervening variable. An intervening reliable is a theoretical process that is assumed to take place between observed stimuli and responds. The independent variables cause a change in the dependent variable (behaviour).

The study is going to be guided by the following Principles of Learning Theory:

#### i) Principle of Motivation

Utilization of community resources in teaching and learning has a motivating effect.

Motivation refers to the drive or incentive that excites the learner to act in certain ways.

Motivational variables energize and expedite the learning process by enhancing efforts, attention, persistence and immediate readiness for learning.

### ii) Principle of transfer

The most important function of education is its application to new situations (transfer). This is the assumption which underlies the entire educational system that learning gained in school not only will be available in the future but also will be applied in some degree to the solution of new problems as they arise in life. Transfer of what is taught in school depends on its relevance to the life of the learner. Utilization of community in teaching and learning exposes the learner to experiences in the community which are real or life-like hence increasing chances of transfer.

# ill) Principle of adaptation.

Adaptation is the linkage of what is learned in school to life in the society. Adaptation always pre-supposes an interaction of the organism and its environment. Utilization of community resources in teaching and learning compliments curricular areas through first hand observation and direct experience outside the classroom by the learner.

#### 2.8 CONCEPTUAL FRAME WORK

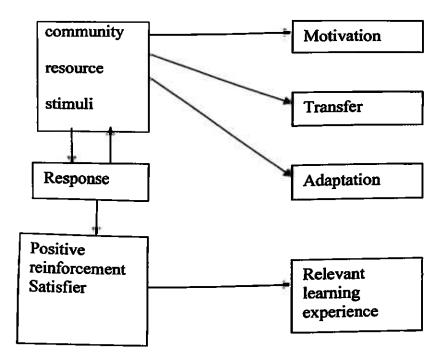


Figure 2.1 conceptual model

Community resource when used as an instructional material acts as a stimuli. Through the S-R pairing associations between stimuli and response is made forming the connection or the bond. When the connection is made followed by a reward or satisfier the bond is strengthened enhancing efforts, attention and readiness to learn (motivation) and mediates transfer and adoption of what is learned to new situations.

#### **CHAPTER THREE**

#### 3.0 METHODOLOGY

#### 3.1 Introduction

This section of methodology concerns site selection, drawing of the sample, development of research instruments, administration of the instrument, and data analysis.

#### 3.2 Site Selection

The study was carried out in Nairobi district public primary schools. Nairobi which is considered as both district and a province and occupies an area of 473.98 km<sup>2</sup>, is also the capital city of Kenya.

As a capital city, its affairs including the running of the public primary schools are administered by Nairobi City Council. For administrative purposes, Nairobi is divided into eight Divisions which also act as political constituencies.

- Starehe Division 10.6 km²
- Makadara Division 20.1 km²
- Kasarani Division 85.7 km²
- Embakasi Division 208.3 km²
- Kamukunji Division 11.7 km²
- Westlands Division 11.7 km<sup>2</sup>
- Dagoretti Division 38.7 km²
- Langatta Division 1.284 km²

Embakasi, Makadara, Kasarani, Kamukunji are densely populated while Westlands and Langata are less populated.

Nairobi public primary schools are located in the residential estates and draw their pupils from the same residential estates. The public primary schools are divided according to the eight administrative Divisions of Nairobi and are run by the Education Department of Nairobi City Council of Nairobi. Nairobi was chosen by the researcher as site for the study because of ease of access since the researcher lived in Nairobi.

#### 3.3 Sampling Design

Selection of the study sample was carried out systematically in three stages: Firstly by determining the divisions of the study, secondly by choosing schools for the study and thirdly by selecting the respondents for the study.

Nairobi district is segmented into eight administrative divisions. To obtain division sample, simple random sampling technique was employed and five divisions were selected. These were: Langata, Kasarani, Westlands, Dagoretti and Starehe.

Secondly, through simple random sampling technique, two schools were selected from each of the five selected divisions totaling to ten study schools. The selected schools were: Kongoni primary school, Khalsa South primary school, Toi primary school, Joseph kangethe primary school, westlands primary schools, City primary schools, Muthaiga primary schools, Githurai primary schools, St. Peters clevers primary school and Khalsa Racecource primary schools. (Appendix 5)

Thirdly, through simple random sampling technique three classroom teachers and fifteen STD six pupils were selected from each of the ten study schools as respondents. Also all the head teachers and deputy head teachers of the study schools were all included in the study without further sampling as respondents.

Standard six class level was selected as respondents on the following grounds: that it was a stable class not yet influenced by the K.C.P.E national examination like class seven and eight, also that pupils in this class had acquired reasonable competence in English and were able to respond to the questions without much difficulty.

Table 3.1 Categories of respondents in the sample.

Selected No of Respondents
30
20
150
200

#### 3.4 Unit of analysis

The unit of Analysis for this study was utilization of community resources in teaching and learning by primary schools.

#### 3.5 Units of Observation.

The units of observation for the study were the classroom teachers, head-teachers and pupils.

## 3.6 Development of Research Instruments

The following tools were developed: a questionnaire for classroom teachers, a questionnaire for school administrators, and a questionnaire for pupils. In addition to these tools a profoma was used to enter observed data from the community surrounding the study school.

The questionnaires were designed to cover background of respondents, primary schools, acquisition and utilization of community resources. All the questionnaires were administered to the would-be respondents during trial period and necessary modifications were made so that each of them could be effective in collecting the desired data.

The modified instruments were tested for content validity. The representativeness of the content is the subject matter and topics of a measuring instrument. Content validation is basically judgmental. This means that each item must be judged for its presumed relevance to the property being measured. In most cases, other competent "judges" must also assess the content of items and pass judgment on their adequacies. In the case of the instruments of this study, two competent "judges" were selected and presented with the questionnaires so that they could scrutinize the items and pass judgment on their adequacy. The judges were educationalists conversant with the teaching in Kenyan primary schools. It was specified to them that they should try as much as possible to determining whether the instrument items were designed in such a way that they could measure what they were supposed to measure.

All their comments and views were considered by the researcher and only the question items that received unanimity of agreement among the two "judges" were included in the study.

Content validation was thought to be appropriate because of its non-statistical nature which was in conformity with the non-statistical outlook of this study.

#### 3.7 Procedure for Collection of Data

Data from individuals were gathered by use of questionnaires. The non-human sources were collected by recording them in the proforma designed for that purpose.

In the initial stages of the study research permission was sought from the Director of City Education to enable the researcher to visit schools to conduct the study. Permission was granted and the researcher visited the study schools and collected the data personally.

Primary schools were the main source of data. These schools were visited in the morning hours mostly at 10.00 am during morning break time which teachers were able to come together. Soon after arrival in the school, the head teacher was approached in the office and the purpose of the visit explained. The Head teacher and their deputies greatly co-operated during the study and often arranged for a large room where the researcher administered the questionnaires to the respondents. Care was taken not to interpret question items for any of them. Soon after completion the questionnaires were collected, labeled and packed by the researcher.

A proforma was used to collect data that were observed around the primary schools, their neighbourhood and recorded in the proforma that could be used for teaching and learning.

## 3.8 Problems encountered during data collection

The researcher encountered the following problems which were solved paving way for the collection of the data. The schools were visited at 11am during teachers' tea break which was thirty minutes. The thirty minutes break was too short for the teachers to complete filling the questionnaires effectively. To overcome this problem, the school administration allowed extra time for those teachers who had not completed filling their questionnaires. Thus all teachers and schools administrators ended up completing their questionnaires and handed them in to the researcher. This accounts for 100% return rate. Also at first the head-teachers and teachers considered the exercise as an inspection which made them suspicious and nervous but after assurances by the researcher that the information was confidential and would not be used for any other purpose, they filed the questionnaires willingly.

#### 3.9 Data Analysis

The data collected by the questionnaires were analyzed using frequencies and percentages. Data collected through the proforma were used to compile a list of the identified community resources from the community surrounding the schools that could be used in teaching and learning. All the data collected through the instruments are analyzed in chapter four of the study.

#### **CHAPTER FOUR**

#### 4.0 DATA ANALYSIS

#### 4.1 Introduction

This chapter deals with the analysis of the data collected from classroom teachers, school administrators, class six pupils and observed data collected using a proforma

The analysis aimed at addressing the purpose of the study which was to investigate the utilization of community resources by Nairobi district public primary schools in teaching and learning with a view to establish the constrains that hinder the effective use of such resources.

#### 4.2. Questionnaire Return Rate

Out of the 30 questionnaires administered to classroom teachers, 30 were returned, out of 20 questionnaires administered to school administrators, 20 were returned and out of the 150 questionnaires administered to school pupils, 150 were returned. Therefore the questionnaire return rate was 100%

# 4.3 Identified Community Resources

The first objective of the study was to identify and classify community resources available in the communities surrounding the primary schools of the study. The identification was focused mainly on community resources which could be used in the learning and teaching process to enrich learning experience. The data collected by the profoma for fulfillment of this objective are presented in the table 4.1 and 4.2

Table 4.1 List of community resources identified from communities surrounding the ten study schools.

#### Schools of study

Kongoni	Supper markets, Museum, National park, sports centre, factories, petrol		
primary school	stations, police station, chief's camp, post office, mass communication,		
	institute, hospital, health centre, churches, mosque, temple, river, air strip,		
	shopping centre, vegetation, tree nursery, highway road, monuments		
Khalsa South	Electricity station, construction site, shopping centre national park,		
primary school	factories, police station, chief's camp, mass communication, institute,		
	hospital, health centre, churches, mosque, church, temple, air strip, sports		
	centre, bus stops vegetation, construction sites, highway road, river,		
	archives		
Khalsa Race	Bus-stations, railway station, TV/broad casting station, museum,		
Course primary	parliament, law courts, supper markets, police stations, market		
school	educational college, river, vegetation, various training institutions, theatre,		
	shopping centre, church temple construction site, art galleries		
St. Peters	Market, bus station, railway station, TV broad casting station, theatres,		
Clevers	shopping centre, museum, training institution, law court, police station,		
primary school	church, temple, hotels, parliament, construction site, educational college,		
	parks		
Toi primary	Forest, slum, supermarket, national park, prison, police station, secondary		
school	school, chief's camp, law courts, churches, mosque, district officer office,		
	sports ground, vegetation, construction site, post office, workshops,		
	Khalsa South primary school  Khalsa Race Course primary school  St. Peters Clevers primary school  Toi primary		

		shopping centre, railway		
6	Joseph	Shopping centre, post office, supermarkets, sports ground, workshop,		
	Kangethe	churches, mosque, law courts, police station, vegetation, district officer's		
	primary school	office, construction site, secondary school, national park, airport		
7	City primary	Kenya Institute of Education, church, temple, sports centre, police station,		
	school	university, chief's camp, museum, secondary school, Kenya power		
		headquarters, bus-stops, vegetation, market, tree nurseries, industrial		
		center, airport, art gallery, health center		
8	Githurai	Police station, chief's camp, market, churches, mosque, factory, slaughter		
	primary school	house, sports centre, army barracks, construction site, secondary school,		
		university, shopping centre, factory, vegetation, bus-stops, health centre,		
		post office, banks, national park		
9	Muthaiga	Police station, slums, mental hospital, forest, golf course, river, shopping		
	primary school	centre, workshop, bus-stop, highway road, post office, chief's camp		
10	Westlands	Highway road, churches, mosque, temple, universities, hospital, shopping		
primary school malls, tree nurseries, training institute		malls, tree nurseries, training institutes, museum, cinema halls, vegetation,		
post office, national park, airport, art gallery		post office, national park, airport, art gallery		

Source: Survey data

The above data was analyzed and classified in table 4.2. The data were in fulfillment of the objective to identify community resources found in the communities surrounding the primary schools which can be used in teaching.

**Table 4.2 Classified Community resources** 

Resources identified from the	Category	School
community		
1. Plants, animals, rivers,	Physical setting world of	Found around all study schools
soil, water, hills topography,	nature	1,2,3,,4,5,6,7,8,9,10
vegetation forests parks,		
climate, minerals		
2. Factories, local	Industrial centers	Found around all study schools
craftsman's workshop,		1,2,3,4,5,6,7,8,9,10
industries, factories.		
3. Markets, shops,	Commercial centers	Found around all study schools
supermarkets, Shopping		1,2,3,4,5,6,7,8,9,10
center.		
4. Community projects, sites,	Community projects	Found around all study schools
social clubs, harambee		1,2,3,4,5,6,7,8,9,10
projects etc.		
5. Clinics dispensaries,	Health	Found around all study schools
health centers, hospitals,		1,2,3,4,5,6,7,8,9,10
chemists.		
6. Construction sites around	Homestead	Found around all study schools
the school		1,2,3,4,5,6,7,8,9,10
7. Law courts, police	Administration centers	Found around all study schools
stations, chief's camp		1,2,3,4,5,6,7,8,9,10
8. Monuments, museum,	Places of historical	Found around all study schools
settlement sites, and old	importance	1,2,3,4,5,6,7,8,9,10
buildings, archieves, artifacts,		
sites.		
9. Bus parks railway stations,	Transport	Found around all study schools
airport, bus stops, roads	_	1,2,3,4,5,6,7,8,9,10
10. Schools, colleges,	Educational centres,	Found around all study schools
universities, library, art	polytechnic	1,2,3,4,5,6,7,8,9,10
gallery, training centres		
ganciy, uannig condes	<u> </u>	<u> </u>

11. Road, air Telephone,	Communication	Found around all study schools
posta, Radio stations,		1,2,3,4,5,6,7,8,9,10
Television stations, mobile services		
12. Shrines, mosque,	Religion	Found around all study schools
churches temples religious festivals		1,2,3,4,5,6,7,8,9,10
13. Parks, Stadiums, National	Recreation	Found around all study schools
park		1,2,3,4,5,6,7,8,9,10
14. Parliament, government	Government	Found around all study schools
administration stations e.g.		1,2,3,4,5,6,7,8,9,10
chief's camp.		

#### Source: Survey data

As may be seen in table 4.2 community resources collected by profoma were analyzed and classified into fourteen categories namely; physical setting, historical aspect, health, religion, recreation, government, industry and occupations, communication, education, transport, community projects, homesteads, industrial centers. It is shown further that all the fourteen categories of community resources presented in the table were available in all the communities surrounding the ten study schools. The data were in fulfillment of the objective to identify and classify community resources found in the communities surrounding the primary schools which can be used in teaching.

#### 4.4. TEACHERS AS RESPONDENTS

Effective utilization of community resources by primary schools in teaching and learning depend largely on the ability of classroom teachers to incorporate then in teaching. The part they play is crucial because it is they who plan lessons, teach, and evaluate learning outcomes.

#### 4.4.1 Demographic characteristics of teachers

#### 4.4.1.1 Age of teachers

Age of teachers in this study was considered essential because of the relationship between it and experience acquired by each respondent both in the community and as a professional. Data collected regarding age are presented in table 4.3

TABLE 4.3 Age distribution of teachers

Ages	Frequency	Percentage
26- 35 Years	4	13.3
36 – 45 Years	16	53.3
Above 45 Years	10	33.3
Total	30	100.0

The majority (53.3%) of the teachers were between 36-45 years of age. Approximately 33.3% of the respondents were above 45 years while those between 26-35 years were 13.3%. As can be observed from table 4.3, that majority of the teachers were middle aged. Thus the age distribution of the respondents indicate the experience in the community and school life that reflect on the utilization of community resources in teaching and learning.

#### 4.4.1.2 Gender

Gender differences among teachers were considered significant in this study because amongst most of the Kenyan communities, societal and domestic roles are still performed along gender lines. Even in schools certain activities are played along gender lines. For instance female teacher would be involved in net ball and girl guides will males would be coaching football and in scouting. Because of these differences in the role each gender group plays; it was felt necessary to find out the distribution of each group in the sample. The data collected were analyzed and presented in table 4.4

Table 4.4 Gender distribution of classroom teachers

Gender	Frequency	Percentage
Female	22	73.3
Male	8	26.7
Totals	30	100

Source: Survey data

Results from the above table indicate that 73.3% of teachers are female while 26.7% are male. The researcher sought an explanation to this gender phenomenon and was informed that male teachers have moved out of the city because of high cost of living while the female teachers have moved in to join their working husbands. Gender interaction with their environment in accordance to their roles has a positive effect to the utilization of community resources in teaching.

## 4.4.1.3 Professional qualification of teachers

Teachers in Kenya primary schools are categorized according to their professional levels. These professional categories are primary school teacher grade (P1). Majority of primary school teachers

belong to P1 category however some have been promoted on merit to (AT) status. Some other teachers in primary schools are holders of Diploma DIP. Ed while others are graduates teachers from the university.

Thus a primary school in Kenya has a teaching force with each member of staff having a background which is quite different from the others. The difference in professional upbringing is a factor that affects teaching effectiveness in incorporating resources from the community for teaching. This study sought to determine professional levels of respondents. The data collected were analyzed and presented in table 4.5

Table 4.5 Professional qualifications of teachers

Frequency	Percentage
2	6.7
17	56.7
5	16.7
1	3.3
1	3.3
3	10.0
1	3.3
30	100.0
	2 17 5 1 1 3

Source: Survey data

Half of the teachers were P1 teachers who were 56.7%, approximately 6.7% were ATS IV teachers. The rest were ATS 1, ATS 111, graduate and Diploma holders as shown on table 4.5. As can be observed from table 4.5 the teachers were of high academic qualifications and

were professionally qualified. According to the information in table 4.5, it can be said that the different professional up brining of teachers is a factor that affects teaching effectiveness and flexibility with which teachers would incorporate resources from the community in teaching.

## 4.4.1.4 Duration of Service in the School of Study

Duration of service each teacher has spent in a given school has provided opportunity for development on his/her interest on the utilization of community resources in teaching and learning. The length of time a teacher has spend in a school has given him or her an opportunity to be exposed to such variety of community resources as people, objects, places of learning importance and activities that can provide educational experience. In this case a teacher with longer period of service in a given school is expected to have acquired experience in terms of the culture of the community surrounding the school and the resources in the environment than those who have served less period because of this apparent significance of duration a teacher has spend in the schools of study it was included in the study. The data collected are presented in table 4.6

TABLE 4.6 Length of service in current school

Frequency	Percentage
3	10
5	16.7
5	16.7%
13	43.3
4	13.3
30	100.0
	3 5 5 13 4

Source: survey data

The majority of teachers 43.3% had taught in their current school for between 5-10 years followed by those who had taught for between 2 - 5 years and above 5 years at 16.7% each while those who had taught for less than 2 years were 10% only. It can be further noted from table 4.6

that majority of respondents had taught in their current school for above two years. From the information in table 4.6 concerning length of service by the teachers in the current schools has effects on the utilization of community resources in teaching in that a teacher with long service in a school is expected to have acquired experience in terms of resources in the environment that can be used in teaching and learning than a teacher who has recently joined the school.

## 4.4.2 Objectives of Primary Education

The nature of the learning experience provided by primary education, the selection and utilization of learning resources from the community surrounding the schools are determined by the objectives stated for that level of education. Similarly the success in the utilization of community resources in the primary school is determined by the objectives and interpretation of such objectives by the teachers. The data which were analyzed and presented showed first the importance which respondents attached to each statement of the objectives which were related to the utilization of community resources. The data collected is presented in table 4.7

Table 4.7 Objectives of primary education as ranked by teachers

Objective	Frequency	Rank
To develop literacy and numeracy	28	1
To develop environmental awareness	24	2
To develop good character and positive attitude	25	3
To introduce problem solving activities in the community	23	4
To develop good citizenship	20	5
To develop appreciation of cultural heritage	5	6
To pass examinations	3	7
To prepare pupils for secondary school	3	7

As shown in table 4.7, teachers rated the objective to develop literacy and numeracy as first in rank, the objective to develop environmental awareness was placed second while to develop good character and positive attitude in pupils was placed third in rank. It may be seen from the table that the objective to introduce problem solving activities in the community became fourth while to develop good citizenship was ranked fifth. The objective to develop appreciation of cultural heritage was placed sixth, the objective to pass examinations became seventh and to prepare pupils for secondary education was ranked in a similar position. From the interaction in table 4.7, it can be noted that the respondents were aware of the primary education objectives of education which encouraged the utilization of community resources by ranking in second position the objective to develop environmental awareness and the objective to introduce problem solving activities in the community.

Table 4.8 Strategies used by primary schools to attain educational objectives as ranked by teachers

Strategy	Frequency	Rank
Combination of the use of text books, the	6	1
environment and teachers as resource		
Use of resources in environment	12	2
Use of text books and other published	14	3
sources		
Teachers as sole source of knowledge	19	4

As shown in the above table, teachers rated in first place in the rank the teaching strategy which incorporates the use of text books, the environment and teachers as resources and in the second place, they put the teaching strategy which relied mainly on the use of environment. The teaching strategy which encouraged the use of text books and other published sources was placed third by respondents while the one which involved teachers mainly as resources was placed forth and last in the rank. The data analyzed in table 4.8 sought to find out the main instrumental strategies being used by primary schools to provide learning experience as one of the study objectives.

# 4.4.2.2 Teaching methods used by primary schools in teaching.

The frequent use of community resources depends to great extent on the nature of teaching methods being used in primary schools. Indeed some methods lend themselves to greater demand for local resources than others. This was found crucial and was included in the study. The finding were analyzed in table 4.9

Table 4.9 Teaching methods used by teachers in teaching

Methods of teaching	Frequency	percentage
Lectures given in classroom	27	90
Demonstrations to learners.	23	76.7
Using invited speakers	12	40
Using visual aids	20	66.7
Dramatizing	8	26.7
Using real objects	10	33.3
Carrying out experiments	24	80

From the above table, it can be observed that majority of the teachers, used lecture method (90%), while 80% carried out experiments, 76.7% used demonstrations and further 66.7% used visual aids, 33.3% used real objects while 26.7% used dramatization. As can be observed in table 4.9, it can be said that teachers used expository methods like lectures and demonstrations which do not lent themselves to the utilization of community resources thus having a negative impact to the utilization of community resources in teaching. The data in table 4.9 sought to fulfill two objectives from the study. These are: the teaching strategies primary schools use to attain primary objectives and constrains that hinder effective use of community resources in teaching.

## Characteristics of Primary schools.

In Kenya, primary education is characterized by length of time pupils undergo this formal education from age of six when they enter standard one up to age fourteen when they complete standard eight. The eight year primary education is segmented into grades ranging from standard

one to eight and pupils get promoted to higher grades annually. The primary schools are further characterized by their location, size, day schools or boarding and whether mixed or whether for girls or boys.

#### 4.4.2.3 Class enrollment

The size of a class influences the methodology and types of resources that can be adopted for presentation of lesson in primary schools. For example teachers of large classes may adapt classroom lecture method for teaching just because such a method is suitable for teaching large audience in a given period and also it is cumbersome to take large classes on field trips. On the other hand, teachers of small classes may adapt such methods as surveys, field trips and group project methods since their fewness suits the adaptation of activity teaching method. In this section respondents showed the size of classes they taught in their schools. The data is presented in table 4.10

TABLE 4.10 Average Class enrollment

Number of Students per class	Frequency	Percentage
Below 35	4	13.3
36 – 40	7	23.3
41 – 45	10	33.3
46 – 50	9	30
51-55	2	(#)
Total	30	100

Data presented in table 4.10 shows that 70% of the teachers, taught classes with enrolment of 41 and above pupils, 30% taught classes with 46-50 pupils were 30%. From the information in table 4.10 it can be noted that classrooms were large in terms of enrolment. This has a negative effect to the utilization of community resources in teaching and learning as teachers with large classes would hesitate to involve their pupils in field trips, surveys on the ground and their resultant constraints like transport, security measures would render educational value to marginal levels. The above data sought to fulfill the study objective: constrains that hinder effective utilization of community resources.

## 4.4.2.4 Community and its Resources

Every community is endowed with a wide variety of resources that can be utilized by primary schools to provide learning experience whether these resources are natural artificial or a mixture of both. Their utilization in teaching and learning depends very much on whether teachers perceive them as learning resources. In this section it was considered essential to

determine how respondents viewed the communities around their schools and the learning resources they contained. The results are presented in table 4.11

TABLE 4.11 Teachers' View about community surrounding the school and its learning resources.

View about community Resources	Frequency	Percentage
It is very rich in resources	13	43.3
It is rich in resources	11	36.7
It has little to be noticed	3	10
Poor in resources	2	6.7
Hardly any resources	1	3.3
Total	30	100

Source: Survey data

From the table above, majority of the teachers 43.3% and 36.7% viewed the communities surrounding their schools as very rich and rich in resources respectively. It is also shown that 10% viewed the communities as having little learning resources be noticed while only 6.7% noted that the communities surrounding their schools were poor in resources while very few respondents 3.3% agreed that the community surrounding their schools had hardly any learning resources. From the information derived from the above table, respondents agreed that the communities surrounding the schools have plenty of resources that can be used in teaching and learning to achieve a learning experience. The above table seeks to fulfill the objective that sought to identify and classify the community resources that are found around the communities surrounding the primary schools which can be used in teaching and learning.

## 4.4.2.5 Selection of resources from the community

Selection of learning resources from the community requires guidelines and guidance in order to procure the appropriate materials. These factors were probed into and the results are given on tables 4.12, 4.13, 4.14 and 4.15

Table 4.12 Availability of guidelines for selection of community resources for teaching

Guidelines	Frequencies	Percentage
Available	2	6.7
Not available	28	93.3
Total	30	100

Source: Survey data

It is observed from the table above that 93.3% of the teachers were not aware that they had any guidelines for the selection of community resources and only 6.7% were aware that such criteria was available in their schools. When the researcher requested to be furnished with the copies of the guidelines, teachers availed the official subject syllabus prepared by the Kenya Institute of education. Also from the information in table 4.12, it can be deduced that since the majority of the teachers had no guidelines for selection of community resources for teaching, this could have made most of them to abstain from collection and use of such materials in teaching. The data from the above table sought to fulfill the objective concerning the constrains that hinder effective use of community resources in teaching by primary schools.

# 4.4.2.6 Criteria used by individual teachers to select community resources for teaching.

It became apparent that in the absence of a policy guideline, it was possible that at individual level teachers might have based their selection on some criteria. Data regarding this was sought and analyzed in table 4.13

Table 4.13 Criterion used by individual teachers to select community resources for teaching.

Guidelines	Frequencies	Percentage
Suitable for fulfilling learning objectives	18	60
Relevance to life situation	12	40
Economical to acquire	10	33.3
Appropriate to teaching methods	9	30
Related to learners previous experience	8	26.7

Source: Survey data

It may be seen from the table that 60% of the teachers used community resources because of their suitability in fulfilling learning objectives. It is further observable that 40% selected community resources for their appropriateness to teaching methods adopted for conducting the lessons. The other guidelines which were used by teachers when selecting community resources were relevance to life situation which was used by 40% relatedness to learner's previous experience was a criterion used by 26.7% of the teachers and economical to acquire was used as a basis for acquiring community resources by 33.3% of the teachers. From the discussion in table 4.13, it can be observed that teachers had developed some criteria which they used when selecting community resources during teaching on the basis of their suitability in fulfilling learning objectives properly contained in the syllabus.

TABLE 4.14 Guidance provided by school administrators on selection of community resources for teaching

Head Teacher's Guidance	Frequency	Percentage
Very often	173	8
Often	1	5
Cannot say	3	15
Occasionally	2	10
Note at all	14	70
Total	20	100

As may be seen from the table above that, a large portion of the teachers 70% of the teachers noted that provision for guidance to them by the head teachers did not occur at all, 10% indicated that there was occasional guidance provided by head teachers regarding the use of community resources in the community. The 15% could not say whether their head teachers provided guidance or not. The remaining respondents 5% thought that their head teachers provided guidance on the use of community resources often while 5% believed that it happened often. There was no response for very often. It may be concluded from the results in table 4.14 that the guidance by school administration utilization of community resources was inadequate. This lack of guidance has negative effects to the utilization of community resources by teachers. This information further seeks to fulfill two objectives of the study: constrains that hinder effective utilization of community resources by primary schools and the objective that determine the frequency of consultation and guidance provided by schools administrators to their teachers regarding the utilization of community resources in teaching.

# 4.4.3 Sources of teaching materials in primary schools

Primary schools require constant supply of learning resources in order to provide effective learning experience. Kenyan primary schools receive these from various sources. This part of the study focused on the resources and the results obtained are presented in table 4.15

Table 4.15 Sources of teaching materials in primary schools

Sources of teaching materials	Frequency	Percentage
Buy from shops	14	70
Collect from local community	16	80
Purchased from government funding	18	90
Received from individual donors	8	40
Received from as donations from	5	25
organizations		

Source: Survey data

As can be observed from the table above that 80% of learning materials are collected from the local community. 90% are purchased through government funding while 70% are bought from the shops by schools. It can also be observed that schools receive donations from organization 25% while 40% are donations from individuals. Information from the above table indicates that teaching materials are inadequate. It can be observed further that respondents collected materials for teaching and learning from the local community which has a major impact of their use in teaching and learning. This information analyzed in the above table answers to the objective which determines to show the extend to which community resources are being used by primary schools in teaching.

# 4.4.4 Actual Utilization of community resources by primary schools.

Utilization of community resources by primary schools in teaching and learning process to enhance achievement of educational goals and objectives is central in this study. In the following table data regarding these factors were presented. It should be noted that each sut-item of the question could be responded to by all the respondents hence frequency for each sub-item is reported out of 360 as a percentage.

Table 4.16 Utilization of community resources by primary school in the teaching/learning process

Community resources	Frequency	Percentage
Physical features	58	16.1
Industrial centers	100	27.8
Commercial centers	96	26.7
Participation in community	14	0.8
projects		
Health centers	50	13.9
Homesteads	24	6.7
Administrative centers	40	11.1
Historical sites	145	40.8
Transportation system	80	22.2
Educational centers	30	6.7
Recreation centers	90	25.0
Work experience	10	2.7
Total	360	

Source: Survey data

N=360 each teachers reacted to as many answers as possible.

Each sub-item of the question could be responded to by all the teachers hence frequency is presented out of 360.

According to the information given in table 4.16 above 40% of the teachers indicated that they used places of historical importance such as achieves, and museums to provide learning experience, 27.85 of respondents used industrial centers such as local craft workshops and factories to provide learning experience, while 26.7% of respondents used commercial centers such as markets, shopping centers to provide learning experience. It is also indicated that 25.0% of respondents used recreation centers such s stadiums, show grounds, festivals, games and sports meetings to provide learning experience. The use of transport system such as roads, airports, bus stops, railways stations, service stations were accepted by 22.2% of respondents. Other respondents 16.1% agreed that they used a physical feature which includes visits to rivers, hills, forests, national parks in their teaching. It is also shown that 13.9% of respondents used health centers such as hospitals, water supply sites and road. Safety demonstration. The use of administrative centre offices such as police stations, law courts, chief's baraza were carried out by 11.1% of respondents. The remaining community resources which involve participation in actual work was used 2.7% of respondents while involving learners in community resources which involving learners in community projects such as harambee work for example soil conservation was accepted by 0.8% of the respondents. From the information presented in table 4.16 it can be observed that community resources were not adequately used by primary schools in teaching and learning. From the information derived from the table 4.16 results show the actual utilization of community resources was carried out by very few respondents. The frequency of utilization of each category of community resources was very low. The information From table 4.16 seeks to fulfill the objective which determines to seek the extend to which community resources are being used by primary schools in teaching.

# 4.4.5 Factors that hinder the effort by schools to use community resources in teaching.

The need to utilize community resources in teaching has received increasing support in Kenya. However several factors hinder the effort by schools to use them teaching. This

information regarding these constrains were sought from the respondents. The data collected were analyzed and presented in table 4.17

TABLE 4.17 Constraints faced by teachers when using community resources in teaching

Challenges	Frequencies	Percentages
Lack of support of parents	16	80
Shortage of funds	18	90
Difficulty posed by timetable	15	75
Worries about exams/pressure from	17	85
Little interest shown by teachers in local resources	4	20
Lack of emphasis on the use of community resources	3	15

Source: Survey data

Approximately 90% of the teachers mentioned shortage of funds as their main obstacle as they strive to use community resources for teaching. A similar 85% mentioned worries about examinations and pressure to complete the syllabus as their major challenge. About 80% mentioned lack of support from parents and 75% of the teachers mentioned a rigid timetable as their hindrance. The rest few mentioned little interest shown by teachers in using local resources 20%, and lack of emphasis on use of community resources accounted from the information in table 4.17. It can be observed that there are constraints that hinder effective use of community resources in teaching. This information from the above table seeks to fulfill the objective concerning the constraints that hinder effective use of the community resources by primary schools in teaching.

# 4.4.6 Rating of Teacher training on use of community resources in teaching

In Kenya since teacher training for primary school teachers takes place in primary teacher collages. It was found important to find out if they were exposed to the use of community

resources while undergoing the training. Data collected were regarding the role of the colleges in preparing teachers to be on the use of community resources are presented in table 4.18.

TABLE 4.18 Rating of Teacher training on utilization of community resources in teaching

Rating	Frequency	Percentage
Very intensive	5	16.7
Intensive	5	16.7
Less intensive	4	13.3
Least intensive	16	53.3
Cannot say		(2)
Totals	30	100.0

Source: Survey data

Majority of teachers 53.3% said that introduction to the use of community resources in teaching during teacher training was least intensive, 16.7% indicated it was very intensive while another 16.7% indicated it was intensive, 13.3% indicated it was less intensive, cannot say had no responses. Thus from the discussion on the above table it can be said that the teacher education on the utilization of community resources in teaching and learning was not adequate. This then suggests that most teachers might have left teachers, college when they had not acquired competency in the utilization of community resources in teaching. The above table seeks to fulfill two objective: first concerning the constrains that hinder effective use of community resources by primary schools in teaching and the other objective to establish the adequacy of teacher training education to the would-be teachers in development of competency in utilization of community resources in teaching.

Table 4.19 Subject that lent themselves to the use of community resources

Subject taught in Primary	Frequencies	Percentage
Schools		
Mathematics	6	20
Motor tongue	2	6.7
Writing	3	10
Kiswahili	3	10
Art and Craft	7	23.3
Music	3	10
History	6	20
Civics	1	3.3
Geography	7	23.3
Religious Education	3	10
Home science	6	20
Physical education	4	13.3
Science	8	26.7

As can be observed from table 4.19, all the subjects in primary education lent themselves to the utilization of community resources in teaching/learning process although it can be observed further that some subjects like Art and Craft 23.3%, Geography 23.3%, science 26.7%, Mathematics 20%, History 20%, Home Science 20% seem to have a high demand for community resources than others. The above data seeks to fulfill the objective concerning the strategies teachers employ to provide learning experience.

## 4.5 School Administrators as Respondents

The extend to which primary schools are able to incorporate community resources in order to provide learning experience is greatly influenced by their administrators. Such administrators who are the head teachers and deputy head teachers are in a position to mobilize their schools to intensify utilization of community resources during teaching and learning.

They have at their disposal several avenues for such mobilizations for such mobilization, for example: through direct communication with individual teachers, during staff meetings, school based in-services meetings, school based curricular meetings and through supervisory routines established by the school. They can further influence utilization of community resources by making deliberate school policies that encourage reliance on local resources when teaching.

#### 4.5.1. Demographic characteristics of school administrators

#### 4.5.2 Age

Age refers to the period respondents have lived since birth. The age of school administrators is important in this study in that it indicates the life span the respondent has lived in the community as a citizen, teacher and administrator. Age then indicates the extent to the exposure to life experiences. Because of this exposure and experience to both community and school life, made possible by age of respondents. It was included in the study.

TABLE 4.20 Age distribution of school administrators

Ages	Frequency	Percentage
26- 35 Years	8	40
36 – 45 Years	7	35
Above 45 Years	5	25
Total	20	100.0

As can be observed from table 4.20, 75% of the school administrators are middle aged while 25% are above 45 years old. From the above table, the administrators are middle age. This factor on age is related to the experience of the individual in the community and school life which reflects on the utilization of community resources in teaching.

#### 4.5.3 Gender

In most Kenyan communities, adults play their roles according to gender. Female tend to play greater role in the up bring of children while the male tend to engage themselves in occupations that generate income to support family. These varying responsibilities in the home and in the communities provide experiences unique to each gender such differential gender experience has a basing on the way male or female primary school administrators view life both in schools and communities. Because of this gender differences in roles and views gender was included in the study. Data analyzed and presented in table 4.21

Table 4.21 Gender distribution of school administrators

Gender	Frequency	Percentage	
Male	4	20	
Female	16	80	
Total	20	100	

From table 4.21, 80% of the school administrators are female while 20% are male. The researcher sought and explanation to this gender phenomenon and was informed that male teachers have moved out of the city due to high cost of living while the female have moved into the city to join their working husbands. Gender interaction with environment has positive effect in the utilization of community resources in teaching.

### 4.5.4 Professional Qualification of school Administrators

Primary school administrators have been appointed to their positions from any of the teachers' professional grades that exist in schools. However in recent times there is a tendency to recruit them from higher professional level on the assumption that the higher the grade the more efficient the administrators are likely to be in their duties. It was felt necessary to identify classify respondents in the study according to their professional levels so as to describe the study sample. Data analyzed were presented on table 4.22

Table 4.22 Professional qualifications of school administrators

	Frequency	Percentage	
ATS	5	25.0	
PI	4	20.0	
DIPLOMA	4	20.0	
ATS II	2	10.0	
ATS III	2	10.0	
SAT	1	5.0	
GRADUATE	2	10.0	_
TOTAL	20	100.0	

Results from table 4.22 shows that 25% of the school teachers were ATS, 20% and were P1 and diploma of education holders respectively, others ATS II and graduate teachers were 10% each. It can be noted further that the respondents are highly educated and professionally qualified. From the above table, it can be said that the difference in professional upbringing is a factor that affects teaching effectiveness and flexibility with which teachers would incorporate resources from the community.

## 4.6 Duration of services in the study school

Duration of service by the school administrators in any given primary school provide the vital opportunity for acquiring knowledge about the various aspects of the community life around the school and resources that would be used in teaching and learning to enrich learning experience. In this section respondents were required to indicate how long they have

administered the schools in which they were found serving at the time of the study. Data analyzed is presented in table 4.23

Table 4.23 Duration of service as school administrators in current school of study

Duration	Frequency	Percentage	
Below 2 years	2	10	
2-5 years	14	70	
Above 5 years	4	20	
Total	20	100	_

Source: Survey data

It is shown in table 4.23 that 70% of school administrators had served in the school of study for a period ranging between 2-5 years; others 20% had served for a period exceeding five years while the remaining 10% indicated they had served for less than two years. From the above table, it can be deduced that majority of the respondents have served in their particular school fro several years meaning that they had ample time to acquaint themselves with communities surrounding their schools. At the same time it provides valuable opportunity to establish a working relationship between the schools and the communities which could promote the use of community resources during instruction.

Table 4.24 Sources of teaching materials in primary schools

Sources	Frequency	Percentage
Purchased through government funding	20	100
Buy from shops	11	55
Collect from the community	15	75
Donations from individuals	7	-
Donations from organizations and	6	30
companies		

As is observable from the above table that 100% of school administrators indicated that their schools obtained most of their teaching resources through government funding to schools, while 75% indicated that their school obtained teaching materials by collecting from the community. It is also shown from the table that 55% bought their learning materials from the shops, while 30% indicated that they received them as donations from individual, organizations or companies and none received donations from individuals.

Table 4.25 Availability of guideline for selection of teaching resources from the community.

	Frequency	Percentage
Have	5	25
Do not have	15	75
Total	20	100

Source: survey data

Majority 75% of the school administrators indicated that their schools did not have a guideline on how to select resources from the community for teaching, while 25% had a guideline. From the findings it can be said that most of the schools did not have a guideline. The

researcher sought to be shown the guideline by the 25% who indicated that they had guidelines which turned out to be the subject syllabus issued by the Ministry of Education Science and Technology.

Table 4.26 Criteria for selection of community resources for teaching by individuals

Criteria	Frequency	Percentage
Suitability of fulfilling learning objectives	18	60
Appropriate for motivating learners	12	40
Useful in revision exercise	3	10
Relevant to life problems	10	40
Economical to acquire	9	30
Appropriate to teaching methods	9	30
Related to previous experience of learners	4	13.3

Source: Survey data

lt is observed from the table above that 60% of school administrators indicate that they based selection of community resources for teaching on the suitability of such resources in fulfilling learning objective while 40% agreed that they based their selection appropriation to motivate learners, and relevance to life respectively; others 30% selected community resources on the basis of their being economical to acquire while another 30% selected them on the basis of their being appropriate to teaching methods and their usability for revision while teaching. From above table, majority of the respondents selected community resources for teaching on the basis of suitability in fulfilling learning objectives from the syllabus which do not encompass utilization of community resources in teaching.

Table 4.27 Consultation between the school administrators and their teaching staff regarding the use of community resources.

Frequency of guidance	Frequency	Percentage
Very often	1	5
Often	1	5
Can't say	2	10
Occasionally	1	5
Hardly	15	75
Total	20	100

As shown from the table above, 75% of the school administrators indicated that consultation between them and their teacher regarding utilization of community resources when teaching hardly occurred. It may be observed that 10% could not say whether consolation between them and their teachers on the use of community resources in teaching occurred and only 5% of the respondents agreed that it occurred very often in their case, while 5% responded to occasionally.

It can be deduced from the information that the guidance provided by the administrators to the teaching staff was not adequate and contributed to the constrains teaching staff faced when striving to use community resources for teaching. From the above table, it can be concluded that the consultation between the respondents and their teaching staff was not adequate. This had a negative effect on utilization of community resources in teaching and learning. The data in table 4.27 sought to fulfill the objectives which sought to determine the frequency of consultation and guidance provided by primary school administrators to their teachers regarding the utilization of community resources in teaching.

# 4.7 Rating of teacher training in utilization of community resources in teaching

The administrators were asked to rate their teacher training on utilization of community resources. Did you get introduced to the use of community resources in teaching various subjects in primary school during their teacher training in the college. The data collected was analyzed and presented in table 4.28

Table 4.28 Administrators' teacher training rating on utilization of community resources in teaching. Rating of teacher training on utilization of community resources in teaching by administrators

Rating teache	er education in utilization of	of Frequency	Percentage
<u> </u>	Very intensive	1	5
<del></del>	Intensive	1	5
	Less intensive	1	5
	Least intensive	17	85
	Cannot say	(e)	•
Total		20	100.0

Source: Survey data

As seen from the above table, 85% of the admistrators indicated that induction of student teachers into the use of community resources by primary teachers colleges is least intensive while 5% felt it was less intensive. However another 5% felt that it was intensive. It can be noted from the above table, that the induction of student teachers by teacher training colleges into the use of community resources was not adequate and was a contributing factor to the constrains primary schools teachers faced while striving to use such resources in teaching. This suggests that most respondents might have left teachers' colleges when they had not acquired competency in the utilization of community resources in teaching which has a negative effect on the utilization of such resources in teaching. The above table seeks to fulfill two objectives: constrains that hinder effective use of community resources by primary schools in teaching and

the objective which seeks to establish the adequacy of teacher training education to the would-be teachers in development of competency in utilization of community resources in teaching.

#### **4.8 PUPILS AS RESPONDENTS**

## 4.8.1 Demographic characteristics of the pupils

#### 4.8.2 Gender

Table 4.29 Gender distribution of pupils

	Frequency	Percentage
Male	83	55.0
Female	67	45.0
Total	150	100.
10		

Source: Survey data

Results from the above table indicate that 55% of the pupils are male while 45% of pupils interviewed were female. It can be noted that there was gender equality among the pupils.

4.8.3 AGE

Table 4.30 Age distribution of pupils

AGE	<del>_</del>	Frequency	Percentage
	10yrs	3	2.0
<del></del>	11yrs	22	14.7
	12yrs	59	39.3
	13yrs	38	25.3
	14yrs	17	11.3
	15yrs	11	7.3
Total	+	150	100.0

Source: Survey data

From table 4.30, it can be observed that of the pupils were aged between 10-15 years. Majority of the pupils were 12 years of age while about 25% are 13 years of age and 14.7% were 11 years. Another 11.3% are 14 years of age while 7.5% were 14 years while 7.3% were 15 years of age. Only 2.0% were 10 years old. The age of the respondents imply that they were old enough to explore the environment and collect community resources for teaching and learning at school.

## 4.8.4 Learning Activities

Learning experiences in primary schools take place through lesson activities. In this section the focus is on lesson activities that sought to involve the learner in the utilization of community resources. The data regarding learning activities in which the learners as respondents had been involved were collected and presented on table 4.31

Table 4.31 Learning activities carried out by pupils in primary schools

Learning activities	Frequency	Percentage
Participated in field trips to the locality	49	32.7
Listed to speakers	63	42
Observed demonstrations given by experts	57	38
Carried out field surveys in the community	38	25.3
Participated in development projects	10	6.7

Source: Survey data

As may be observed 42% of the pupils listened to invited speakers while 38% observed demonstrations given by experts. 32.7% participated in field trips while 25.3% carried out field

surveys in the community. While only 6.7% participation in development projects did not seem to be very much used by primary school pupils. It can be observed that utilization of community resources in teaching and learning was not adequate. The data analyzed above seeks to fulfill the objective which seeks to determine the extend to which community resources are being used by the primary schools in teaching.

### 4.8.5 Learning Materials

The Kenya syllabus issued in 1967, 1976 and 1984 required the teaching process to be conducted by use of collected community resources. The three major procedures identified for acquiring relia from the community were:

- 1. Collection by the class teachers.
- 2. Gifts by members of the community and
- 3. Collection carried out by pupils themselves.

Since the latter procedure was found to be crucial because it involves the learner, the researcher found it necessary to delve into it. The table below shows responses of pupils regarding whether they were ever asked to collect materials and bring them to school for learning.

Table 4.32 Agreement on the bringing of learning resources by pupils

Response	Frequency	Percentage
Yes	150	100
No	-	•
Total	150	100

Source: Survey data

Unanimity of agreement by pupils to bring resources from the communities surrounding the school shows that the pupils were ready to explore, select and take to school community items for use for teaching and learning. As shown in table above, all the respondents indicated they had in the past brought learning materials from the community to their schools for learning. The unanimity of agreement observed in the table above probed a question which sought to determine specific learning materials brought by pupils for learning.

Table 4.33 Types of materials brought from home for learning.

Resources Materials	Frequency	Percentage
Plants and plant products (seeds,	104	69.3
wood etc) Animals	•	25.3
Insects	38	6
Metal scraps	9	4.7
Stones	7	4.6
Soil: clay, sand, gravel etc	99	66
Artifacts	825	-
Fish		-
Reptiles	-	-
Industrial products	•	•
Written documents	•	-
Any other	-	*
Total	257	

Source: survey data

Pupils could react to more than one item. As may be observed from the above table, 69.3% of pupils brought plants and plant products from their environment. 25.3% brought insects while 66.0% brought soil types. It may also be seen further those resources such as

artifacts, stones, animals, reptiles, fish industrial products and written documents received no responses. Information from the table above show that the schools provided opportunity for the learner to acquire experience during selection of community resources and in some cases through preparing them before transporting them to school. The objective being fulfilled by the information in table 4.33 is the one which determines to establish to what extend community resources are being used by primary schools in teaching and one to identify and classify community resources found in the community surrounding the primary schools.

# 4.8.5 Oral items brought from home for learning.

TABLE 4.34 Oral items brought for learning

ral items	Frequency	Percentage
Oral stories	95	63.3
Riddles	87	58
Vise sayings	87	58
ongue twisting words	87	58
otal	356	

Source: Survey data

As observed from table 4.34, most of the pupils, 63.3% brought oral stories, 58% brought riddles and another 58% brought wise sayings while the rest 58% brought tongue twisters. From the table above, shows those learners were involved in collection and supply of verbal learning materials from their homes. The data in the above table seeks to fulfill the objectives that determine to show how primary schools use community resources in teaching.

#### 4.8.6 Learning subjects

The frequent use of community resources depends on the subject being taught. Some subjects lend themselves to greater demand for local resources than others. Subjects being taught in primary schools were presented to the pupils to indicate the ones for which they often brought community resources. The pupils were required to mark any of the listed subjects for which they brought materials for. The data were analyzed in table 4.35

Table 4.35 subjects for which pupils brought learning materials from the community

SUBJECT	FREQUENCY	PERCENTAGE
Mathematics	80	53.3
Geography	60	40
English	10	6.7
Religious Studies	5	3.3
Art and Craft	120	80
Physical Education	70	46.7
Music	68	45.3
Science	100	66.7
History and Civics	40	26.7
Kiswahili	50	33.3
Home Science	90	60

Source: Survey data

As shown in the above table, 80% of pupils brought materials for Art and Craft, 66.7% brought materials for Science, 60% brought materials for Home Science, 53.3% brought materials for mathematics, 46.7% brought materials for Physical Education, 45.3% brought

materials for Music, 40% brought materials for Geography, 33.3% brought materials for Kiswahili, 26.7% brought materials for History and Civics while 6.7% brought materials for English and 3.3% brought materials for Religious studies. The data at table 4.35 shows that all primary school subjects lend themselves to the utilization of community resources in teaching. The data also seeks to fulfill the objective which sought to determine the extend to which community resources are being used by primary schools to provide relevant learning experience.

#### **CHAPTER FIVE**

## 5.0 CONCLUSION AND RECCOMMENDATIONS

## 5.1 Findings that have emerged from the study

From the for-going, the following were the findings of the study: that every community has sufficient resources that can be used in teaching and learning, fourteen specific types of resources found in the communities surrounding the schools of study were identified and classified, also the study established the following constrains that hinder effective utilization of community recourses in teaching: Lack of articulation of the need for utilization of community resources in the educational objectives and policies at national, curricular and instructional levels, adoption of expository teaching methods such as lectures, demonstrations by teachers which do not lent themselves to the use of community resources in teaching and learning, lack of funds to purchase the resources, examinations pressure especially the national examination KCPE, lack of parental support for learning activities that do not seem to prepare pupils for better performance in examinations, inflexibility of teaching time tables where time allocated for lessons are considered too short to incorporate community oriented teaching and learning methods like field trips, surveys or nature walks, inadequate training of teachers in utilization of community resources during teacher training.

Outstanding recommendations from the study were that: all the suitable community resources in the environment of the primary schools should be identified by school subject panels, catalogued in detail and recorded for use by the primary schools in teaching and learning, guidelines and criteria for selection of suitable community resources for primary schools should be developed and an education policy should be developed to encourage the utilization of community resources.

# 5.2 Suggestions for further study

In order to provide insight into the utilization of community resources, it is suggested that a further study be conducted to investigate into the effect of such variables as attitudes and

perceptions of teachers, head teachers and pupils on the use of these resources in teaching and learning.

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# **APPENDIXES**

## **APPENDIX 1**

### **QUESTIONNAIRE FOR TEACHERS**

Respond to every question as required. Be assured that the answers will be confiden
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1.0.	How old are you?
	(a) Below 25 years
	(b) 26-35 years
	(c) 36-45 years
	(d) Above 46 years
1.2.	Are you male or female?
	(a) Male
	(b) Female
1.3.	Indicate your professional grade
1.4.	How long have you taught in this particular school?
	(a) Below 2 years
	(b) 2-5 years
	(c) Above 5 years
2.0. \$	School and teaching experience
Fill i	n the blank spaces with the appropriate answers in questions 2.1 - 2.2
2.1. \	What is the name of your school?
2.2. I	n which division is your school?

2.3. What is the average number of pupils in the classes you teach? Circle the right answer		
(a) Below 35 years		
(b) 36-45		
(c) 46-50		
(d) 51-65		
(e) Above 66		
2.4. Which of the following methods do you use when teaching? Circle the right answer		
(a) Lecturer given in the class room		
(b) Demonstrations to learners		
(c) Using invited speaker		
(d) Using visual aids		
(e) Dramatizing		
(f) Using real objects		
(g) Carrying out experiments		
2.5. The following are some of the objectives of primary educations in Kenya. Write numbers 1-		
8 against each statement according to order of importance		
To develop basic skills in literacy and numeracy		
· · · · · · · · · · · · · · · · · · ·		
To develop awareness and understanding of the environment		
To develop appreciation of cultural heritage		
L		

•	To enable pupils to develop good character and positive attitudes	
•	To introduce problem solving activities in the community	
•	To develop good citizenship	
•	To pass examinations	
•	To prepare pupils for secondary school	
2.6	6. Which of the following strategies do you employ to attain the above objectives? Pr	ut in a
rar	nk order.	
(a)	Teaching methods involving the use of text books and other published references	
<b>(b</b> )	) Teaching methods involving the use of resources in the school environment	
(c)	Teaching methods involving the teacher as source of information	
(d)	Teaching methods which combine text books, environmental resources and the	
	teacher's experience	
3.0.	School and Community	
Re	spond to Question 3.1 by drawing a circle around the appropriate answer.	

3.1. What is your view about community surrounding the school concerning teaching resources?
(a) It is very rich in resources
(b) It is rich in resources
(c) It is poor in resources
(d) It has hardly any resources
4.0 Sources of teaching resources
4.1. Where do your classes get teaching materials from? Circle the right answer
(a) Buy from shops
(b) Collect from local communities
(c) Bought by the school from government funding
5.0. Selection and utilization of community resources from the community for teaching
5.1. Does your school have guidelines for selection of resources in the community for teaching?
Circle the right answer
(a) Yes
(b) No
5.2. The following are possible criteria that could be used when selecting community resources
for teaching. Which ones do you use when selecting such materials? Circle the right answer.
(a) Suitable to fulfill learning objectives
(b) Appropriate for motivating learners
(c) Useful in revision exercises
(d) Relevant to life problems
(e) Economical to acquire
(f) Appropriate to teaching method

- (g) Related to previous experience of learners
- 5.3. How often do you receive consultation and guidance from your head teacher regarding the use of resources in the community for teaching? Circle the right answer.
  - (a) Very often
  - (b) Often
  - (c) Cannot say
  - (d) Occasionally
  - (e) Not at all
- 5.4. The following is a list of resources; draw a circle around the ones you often use for teaching. You may circle more than one number.
  - (a) Visits to local physical features: rivers, hills, lakes, seas, forests, parks etc
  - (b) Industrial centers: factories, local craftsman's workshop or industrial estate
  - (c) Commercial centers: markets, towns
  - (d) Community projects sites: social clubs, harambee projects etc
    - (e) Health: Health centers, hospitals, water supply, road safety, food supply, etc.
    - (f) Homesteads around the school
  - (g) Administration around centers: chief's baraza, law courts, police stations, county council etc
  - (h) Places of historical importance e.g. a cave, monuments, museum, settlement site, etc
  - (i) Transportation: Bus Park, road, railway, airport, harbor, bus stop etc
  - (j) Education centers: School, colleges, university, library, art gallery, training centers, polytechnic
  - (k) Recreation centers: Games meeting, stadium, hobbies, shows, displays, festivals etc
  - (1) Work: Working in groups during holiday or school days e.g. help old people, church,

society, etc

5.5. What problems do your classes face when they strive to use community resources for
teaching? You may circle more than one number
(a) Lack of support from parents
(b) Shortage of funds
(c) Difficulty posed by timetable
(d) Worries about examination/pressure to complete the syllabus
(e) Little interest shown by teachers' in local resources
(f) Lack of emphasis on the use of educational policy
(g) Pupils are rarely interested
5.6. The following is a list of subjects taught in the primary schools. Which ones do you often
find require the use of community resources?
(a) Mathematics
(b) Mother tongue
(c) English
(d) Kiswahili
(e) Home science

(f) Science
(g) Agriculture
(h) Physical education
(i) Christian Religious Studies
(j) Islamic Religion Studies
(k) Hindu Religious Studies
(l) Art and Craft
(m) Music
(n) History
(o) Civics
(p) Geography
5.7. Did you get introduced to the use of the community resources in teaching various subjects in
primary schools during your training in the teachers training college?
(a) Very often
(b) Often
(c) Some times
(d) Not very often
(e) None at all

#### QUESTIONNAIRE FOR PRIMARY SCHOOL ADMINISTRATORS

Respond to all questions and be assured that your answers will be confidential

1.0	Backgrou	ınd of j	participant.
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Respond to Questions 1.1- 1.4 by drawing a circle around the app	propriate answers
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1.1. I	How old are you?
(a) I	Below 25 years
(b) 2	26-35 years
(c) 3	36-45 years
(d) <sup>4</sup>	45-50 years
(e) A	Above 50 years
1.2. A	Are you male or female?
(a) I	Male
(b) I	Female
1.3. I	How many years have you been an administrator in this school?
(a) F	Below 2 years
(b) 2	2-5 years
(c) A	Above 5 years
1.4 Indica	ate your professional grade
2.0. School and	the community

Respond to questions 2.1 by drawing a circle around the appropriate answer

2.1 What is your view about the community surrounding the school and its teaching resources?
(a) It is very rich in resources
(b) It is rich in resources
(c) It has little to be noticed
(d) It is poor in resources
(e) It has hardly any resources
3.0 Utilization of teaching resources
3.1 Does your school have guidance on how to select resources from the community for
teaching? Circle the appropriate answer
(a) Have
(b) Do not have
3.2. The following are possible guidelines that could be used when selecting community
resources for teaching which ones are used by your school? Circle the appropriate answer
(a) Suitable to fulfill leasing objectives
(b) Appropriate for motivating learners
(c) Useful in revision exercise
(d) Relevant to life issues
(e) Economical to acquire
(f) Appropriate to teaching methods
(g) Appropriate to teaching method
3.3 How often do teachers in your school approach you for guidance regarding the use of
resources in the community for teaching
(a) Very often
(b) Often

- (c) Can not say
- (d) Occasionally
- (e) Hardly
- 4.0. Did you get introduced to the use of community resources in teaching during your teacher training in the college?
- (a) Very intensive
- (b) Intensive
- (c) Less intensive
- (d) Cannot say
- (e) Least Intensive

### **PUPILS' QUESTIONNAIRE**

Respond to all questions as required and be assured your answers will be confidential

1. What is your name?		
2. What is your age?		
3. Which of the following activities have been carried out by your class this year?		
a) Participated in field trip to the locality		
b) Listened to speakers (invited or visiting)		
c) Observed demonstrations given by experts		
d) Carried out field surveys in the community		
e) Participated in development projects in the community		
4. Have you been asked to bring things from home to the school to be used for learning?		
a) Yes		
b) No		
5. If the above answer is yes: what type of materials did you bring?		
a) Plants (wood, seeds, grass etc)		
b) Animals		
c) Insects		
d) Metal scraps		
e) Stones		
f) Soil (Clay, sand, gravels etc)		
g) Artifacts (stools, tools, weapons etc)		

h)	Fish
i)	Reptiles
j)	Industrial products
k)	Written documents, book, magazines etc
l)	Any others
6. Wh	ich of the following have you brought to school for learning?
a)	Oral stories
b)	Riddles
c)	Wise sayings
d)	Tongue twisting words
7. Fo	r which of the following subjects do teachers ask you to bring learning materials from
home'	?
a)	Mathematics
b)	Geography
c)	English
d)	Religious Studies
e)	Art and Craft
f)	Physical Education
g)	Music
h)	Science
i)	History and Civics
j)	Kiswahili
k)	Home Science

#### PROFOMA FOR COLLECTION OF OBSERVED DATA

Resource	Category	School
N		

### List of Divisions and their Schools of Study

DIVISION	SCHOOLS OF STUDY
1. Langata	(1) Kongoni Primary School
	(2) Khalsa South Primary School
2. Starehe	(1) Khalsa Rescource Primary School
	(2) St. Peter Clavers Primary School
3. West Lands	(1) City Primary School
	(2) Kilimani Primary School
4. Kasarani	(1) Muthaiga Primary School
	(2) Githurai Primary School
5. Dagoretti	(1) Joseph Kangethe Primary School
	(2) Toi Primary School.