DETERMINANTS OF ENROLMENT IN HOME SCIENCE SUBJECT IN SECONDARY SCHOOLS IN KENYA: A CASE OF ELGEYO MARAKWET COUNTY

BY

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DECLARATION

Declaration by the student

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DEDICATION

This thesis is dedicated to my husband, Dr. Hoseah Kiplagat for the great encouragement and support towards the completion of this work. Also, to our children Emmanuelah, Maryanne and Victoria so that one day they will emulate my steps; my parents and the entire family for the support and that outward push that I can make it. And finally, and greatest of all to the almighty God for the good health and strength He has bestowed upon my life.

ABSTRACT

This study sought to establish the determinants of enrolment in Home Science subject in secondary schools in Elgeyo Marakwet County. Home Science as a subject facilitates acquisition of knowledge, skills and attitudes meant to improve lives of everyone yet very few students choose to pursue it in secondary schools. This study was guided by the following objectives: To investigate how school policies on subject selection influence enrolment of Home Science subject in secondary schools, to determine how availability of teaching resources affects enrolment level of Home Science subject in secondary schools, to identify how teacher qualification affects students' enrolment in Home Science subject, to establish how students' attitude towards Home Science subject affects enrolment in Home Science in secondary schools and to examine how available career opportunities influence enrolment of Home Science subject in secondary schools. The descriptive survey design was adopted. Purposive sampling technique was used to select all the six (6) county secondary schools offering Home Science subject, one hundred and sixteen (116) form four students who studied Home Science subject and snowball sampling technique was used to select fifty (50) form four students who dropped Home Science subject. Six (6) Home Science teachers were also purposively selected together with the six (6) Principals of the sampled schools. This study had a sample of one hundred and seventy-eight (178) respondents. Data was collected by use of questionnaires, interview schedules and observation checklist. Data was analyzed descriptively by use of SPSS (Version 23) using frequencies, percentages and means. Findings are presented in tables and pie charts. The results revealed that some schools had streaming practices with a class being set aside specifically for Home Science subject thus limiting the number of students choosing the subject; the findings further revealed that half (50%) of the schools were not adequately equipped thus low enrolment. On the contrary few (33%) schools that were equipped had a slightly higher enrolment, respondents had a positive attitude towards Home Science subject thus it didn't influence enrolment, and that students were guided on career opportunities by teachers thus careers didn't influence enrolment. The study recommends that; students' positive attitude should be reinforced; Home Science related professionals should market the subject through career talks and curriculum planners to review the curriculum for the sake of re-introducing the subject at primary level. These interventions are likely to increase student enrollment in Home Science Subject in secondary schools.

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LIST OF ACRONYMS AND ABBREVIATIONS

CDE	County Director of Education
EMC	Elgeyo Marakwet County
FEMSA	Female Education in Science and Technology in Africa
KCSE	Kenya Certificate of Secondary School Examination
KICD	Kenya Institute of Curriculum Development
KIE	Kenya Institute of Education
KCPE	Kenya Certificate of Primary Education
KNEC	Kenya National Examination Council
MoE	Ministry of Education
MoEST	Ministry of Education Science and Technology
MoHEST	Ministry of Higher Education, Science and Technology
NACOSTI	National Commission for Science, Technology and Innovation
SCDE	Sub County Director of Education
SPSS	Statistical Package for the Social Sciences

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter presents the general introduction to the study; It looks at the background of the study, statement of the problem, purpose of the study, research objectives, research questions, justification and assumption of the study, scope and limitations of the study.

1.2 Background of the Study

Home Science is classified as one of the Technical and Vocational subjects offered in Kenya (Ministry of Education, 2003). The Ministry of Education in its Secondary Home Science Teacher's Handbook (2006) defines Home Science as an applied and an integrated science as it puts scientific principles in our daily lives. It was introduced in Kenya as a result of the influx of the Christian missionaries with the sole purpose of enabling them fit into their environment (Serem, 2011). Home Science Education is dedicated to helping individuals learn better the most desired behavior patterns and skills to enable them effectively fulfill their roles in their individual families.

Home Science subject focuses on providing knowledge and the development of skills aimed at promoting self-reliance to an individual (Gitobu, 1990; Uwameiye, 2015). Wandera cited in Serem (2011) reports that Home Science was specifically introduced as Home craft particularly to the African women with an aim of equipping them with skills to enhance their family lives; to house helps to acquire skills to be able to provide quality and professional services to the white settlers together with their bosses and to the young girls in preparation for marriage and consequent care for the family. As such it is evident

that initially Home Science was taught for the acquisition of practical skills meant for domestic purposes (Serem, 2011).

When Home Science was introduced in 1911 as Domestic Science it became part and parcel of the intermediate school curriculum for the Africans. The subject was then referred to as "science applied to the home and study of food values" (Wandera cited in Serem, 2011). Since the missionaries had introduced the subject to girls, it may have been perceived that it was a subject solely meant for girls to prepare the young women for their roles as house wives (Sigot, 1987; Migunde, Agak & Odiwuor, 2012).

Since the inception of Home Science, it was widely accepted and several girl schools were registered to offer examinations in Needlework and Foods and Nutrition and for the first time, it was examined in 1973 (Serem, 2011). Home Science subject areas are oriented towards giving one the technical information both for personal and professional use. Similarly, the Ministry of Education (2006) reiterated that Home Science integrates different areas such as Health Education, Clothing and Textiles, Foods and Nutrition, Consumer Education and Child Care. Tremendous improvement in Home Science was made in the year 1981 when it became a compulsory subject in Form 1 and 2 in all the girls and mixed schools (Sigot, 1987). All in all, Home Science Education is meant to prepare individuals to acquire skills and attitudes as family members simply because it covers different topics packaged into one major subject.

Since Home Science is a Technical and a Vocational subject, it has become one of the vital tools that can be used by an individual to develop oneself. Smith and de Zwart (2010) strongly state that Home Science is the only subject area that focuses on everyday

life and meeting basic needs. The authors further explained that students learn practical and critical thinking skills that equip them to handle the increasing complexities of life. Having this in mind, Home Science as a subject should be learnt by all students regardless of their career choices and genders as it is very essential in securing employment and taking part as active persons in a democratic society (Uwameiye, 2015).

In Kenya, Home Science has undergone different reviews for the sole purpose of making it relevant. Among the notable reviews was exemption in the Kenya Certificate of Primary Education (Mwiria, 2002). The review further brought clustering of subjects that occasioned most secondary schools to stop offering Home Science (Ministry of Education, 2008; Nyangara, Indoshi and Ethuon, 2010). This grouping did specify the optional subjects where students were free to choose or drop it all at their personal interests. The subject grouping was shown in Table 1.1.

Table 1.1: Secondary School Subject Grouping.

Group	Subject grouping
Group 1	English, Mathematics, Kiswahili
Group 2	Biology, Physics, Chemistry, Physical Science, Biological Sciences
Group 3	History and Government, Geography, Christian Religious Education, Islamic Religious Education, Hindu Religious Education
Group 4	Home Science, Art and Design, Agriculture, Woodwork, Metalwork, Building Construction, Power Mechanics, Electricity, Drawing and Design, Aviation Technology
Group 5	French, German, Arabic, Music, Business Studies, Computer Studies

(Source: Ministry of Education, 2008)

From the above subject groups, group one is compulsory to all students, and students can choose at least two subjects in group two and at least one subject in group three. In group four and five students can pick at most one subject and in some cases, a student may opt not to choose any in these groups. The selection of these subjects depends on what an individual school offers as a result of the endowed resources and teachers available in that particular school.

Kenya aims at being a highly industrialized nation by the year 2030 suggesting that subjects offered in group four (4) and five (5) would provide an impetus to this realization as it capitalizes on knowledge in technology and innovation (Kinuthia, 2009). This goal may not be realized in light of the fact that these subjects are optional.

Currently, Home Science subject experiences low enrollment (Table 1.2.) which may be attributed to being placed in a different group of subjects such that it faces a lot of competition from other subject groups or schools discourage students from pursuing it. Naoe and Toshio (2003) report that if a particular kind of curriculum is not made compulsory, students will not be attracted to it and may end up developing a negative attitude towards it. Nyangara *et al., (*2010) believe that a country that emphasizes on passing secondary schools examinations purposely for admission to the University may make Home Science subject to be less important by giving slots in middle level colleges for diplomas and certificates. This may then explain a reason why the optional subjects do not attract a large number of students.

According to the preliminary study done in Elgeyo Marakwet by the researcher, there is an indication that there is a reduction in the number of students who choose Home

Science subject. However, the reverse has been the case as clearly indicated in Table 1.2 whereby the trends in enrollment are coming down. From this observation, the need for the subject may have to go up if at all vision 2030 has to be realized.

Table 1.2: Percentage of Home Science Students against all the Form 2 Cohort

School	Year	No. of form 2 students	No. of Form 2 Home Science students	% of form 2 Home Science students
A	2010	200	40	20
	2011	200	20	10
	2012	230	36	15.7
	2013	240	20	8.3
	2014	250	21	8.4
B	2010	136	13	9.5
	2011	142	24	16.9
	2012	170	21	12.4
	2013	210	18	8.6
	2014	230	20	8.6

(Source: Field Data, 2015)

Nyangi (2012) revealed that the trend in student enrolment in Home Science subject was on the decline. Similarly, Werhan (2013) in the United States involving 50 states and District of Colombia indicates that student enrolment in secondary schools in Family and Consumer Science which is commonly referred to as Home Economics had gone down by 38%. Earlier, similar findings were reported by Fullarton & Ainley (2000) that enrolment in Home Economics had declined as compared to other subjects.

1.3 Statement of the Problem

Home Science forms part and parcel of our daily lives and equips learners with life skills necessary to make them adapt to the changing living conditions. It is the subject that directly focusses on everyday life, meeting the basic needs, revolves around the home and on an individual's life. For instance, the use of technology, management of time and

money, establishing and maintaining relationships, preparation of food for health and enjoyment, expression of one's creativity, understanding and accepting oneself, selection of personal and household goods, living a healthy lifestyle, interacting with the community etc. are all the essential things we do with our lives.

With all these daily practices forming part of our lives, Home Science subject should attract as many students as possible because of the tremendous benefits. The choice of the subject by few students may be due to the perception that Home Science requires a specialized kind of training and there is a strong feeling that even if one is at home, they may easily acquire the skill. In this regard, the problem at hand is why students opt not to take Home Science in Secondary school over other optional subjects leading to low enrollment in the subject at KCSE. Consequently, this phenomenon may lead to extinction of the subject which may in turn make teacher training institutions not to offer the subject in their institutions and in the end lead to scarcity of trained Home Science teachers. There is a strong conviction that there is a problem with the declining trends of enrolment in Home Science subject. Therefore, this study intends to explore the determinants of enrolment in Home Science subject in Elgeyo Marakwet County.

1.4 Purpose of the Study

The main purpose of this study was to establish the determinants of enrolment in Home Science subject in Kenya with focus on selected schools in Elgeyo Marakwet County.

1.5 Objectives of the Study

1.5.1 Main Research Objective

The main objective of this study was to investigate the determinants of enrolment in Home Science subject in Elgeyo Marakwet County schools.

1.5.2 Specific Research Objectives

This study was guided by the following specific objectives;

i. To establish the influence of school policies on subject selection on enrolment in Home Science subject.
ii. To determine the effect of teaching resources on enrolment in Home Science subject.
iii. To identify how teacher qualification affects students' enrolment in Home Science subject.
iv. To establish students' attitude towards Home Science subject and its effects on enrolment.
v. To examine how available career opportunities affect students' enrolment in Home Science subject.

1.6 Research Questions

This study had the following research questions:

i. How do school policies on subject selection influence enrolment in Home Science subject in Secondary Schools in Elgeyo Marakwet County?
ii. What is the effect of teaching resources on enrolment in Home Science subject?
iii. What is the effect of teacher qualification on students' enrolment in Home Science subject?

iv. How does students' attitude towards Home Science subject affect enrolment in Home Science subject?
v. How does available career opportunities influence students' enrolment in Home Science subject?

1.7 Justification of the Study

Since Home Science is one of the optional subjects that directly impact on a student's personal life both at home and in the chosen career, it ought to be among the most popular subjects. The skills, knowledge and attitudes learnt in Home Science can help in alleviating poverty through self-employment besides it being a hobby. Therefore, reports showing that most students are not taking Home Science subject justified the need to carry out this research. Also, research work on this topic is rather scanty in this county.

1.8 Significance of the Study

The findings from this study are useful to policy makers and stakeholders in the education fraternity to put up policies in place that may increase the number of students who choose Home Science subject in secondary schools. Also, the principals, teachers and students will benefit from this study by being enlightened on the possible deficiencies that demean the subject as they are the ones implementing. In addition, it is highly anticipated that the findings of this study will provide valuable information to fellow researchers who may be interested in further research in the same field.

1.9 Assumptions of the Study

This study had the following assumptions:

i. The respondents gave correct information at all times.

ii. That the respondents gave truthful representation of their views.

1.10 Scope and Limitations of the Study

1.10.1 Scope

This study focused on enrolment of Home Science subject which is offered at secondary school level. Specifically, this study looked at factors that influence enrolment in Home Science subject in Secondary schools in EMC.

1.10.2 Limitations

This study had the following limitations:

i. Accessing all the schools in the county offering Home Science was difficult because of the poor roads and the fact that the schools were far apart in the four Sub-Counties.

ii. The study was only confined to form four Home science students, form four students who dropped the subject, the Home Science teachers and the principals of the selected schools.

iii. All the sampled schools were girls' schools and all the respondents therefore were females hence findings of this study cannot be generalized.

1.11 Conceptual Framework

The framework underlying the selection of Home Science makes use of concepts and relationships in a broad spectrum. The framework focuses on how determinants can have an influence on the student's enrolling for Home Science subject. In this conceptual frame work (Figure 1.1) the independent variables namely: school policies on subject selection, availability of teaching resources, qualification of Home Science teachers,

students' attitude and available career opportunities are proposed as determinants likely to influence choice of Home Science subject. The dependent variable in the study which is choice of Home Science subject is an occurrence where enrolment level vary in different county schools depending on the independent variables. The interrelationships between the variables were intervened by curriculum reviews, pay structure and cultural beliefs.

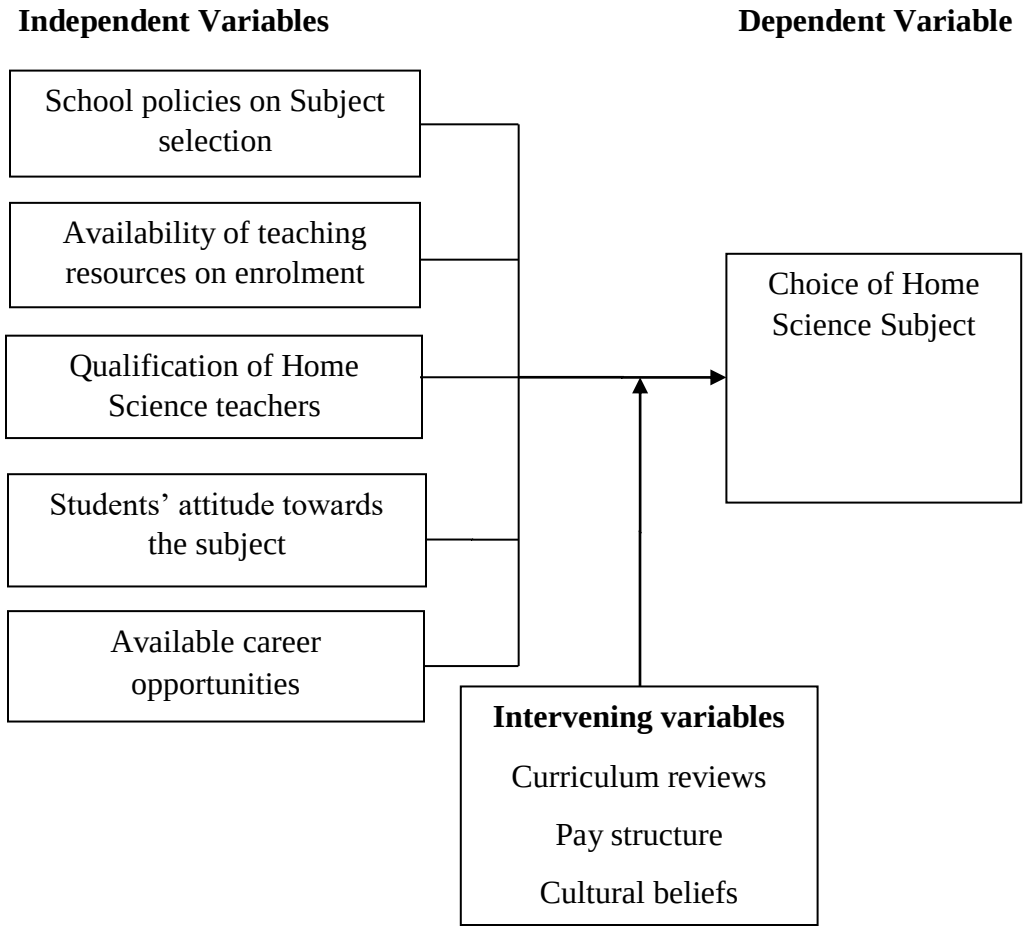

Figure 1.1. Conceptual Framework on the determinants of enrolment in Home Science subject

(Source: Adopted and modified from Mbithe, 2012)

The independent variables in this study included; school policies on subject selection which was measured by the availability of school polices in the school as reported by the principals. The independent variable on availability of teaching resources was measured by the total number of Home Science laboratories and how they were equipped and the frequency of doing practicals. This was reported by the respondents and also observation done by the researcher. The data was presented in form of tables and charts. Qualification of Home Science teachers was measured by their education level and experience. The data was reported in tables and a histogram.

The independent variable on students' attitudes was measured by opinions from both Home Science teachers and students. Data was then reported in tables and pie charts. Independent variable on available career opportunities was measured by the available career guidance in schools, the people involved in guiding them, opinions on whether the information they received was sufficient and whether respondents were aware of careers related to Home Science subject. Data was also presented in tables and pie charts.

The dependent variable was the choice of Home Science subject by the students. This variable was measured by the actual number of students who chose the subject.

1.12 Operational Definition of Terms

Attitude – Perception towards the Home Science subject.

Booster – Home Science subject offered in schools to improve both the overall school performance and that of the students.

Curriculum – Refers to all that is selected, Home Science subject included, organized, integrative, evaluative and innovative learning to achieve specific learning outcomes.

Choice of subject– An act of selecting Home Science subject from other optional subjects.

County schools – Refers to schools in Elgeyo Marakwet that were part of Provincial and District Schools and had boarding facilities and had been upgraded to county schools.

Enrolment – Refers to total number of students who have been registered for Home Science subject for examination at KCSE level.

Experience – The number of years one had been teaching Home Science subject.

Home Science –The study of household management including Applied and an integrated science

Socializers – Individuals who have influenced a student to take careers in Home Science.

Teacher Qualification – This refers to education level and experience of Home Science teacher

1.13 Chapter Summary

This chapter has presented the general introduction of the study and has specifically looked at; background of this study, statement of the problem, purpose of this study, study objectives and research questions. Also, justification of this study, significance of this study, assumptions of this study, the scope and limitations, conceptual framework and operational definition of terms have been presented.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses review of related literature for the study on determinants of enrolment in Home Science subject in secondary schools.

2.2 Objectives of Home Science Education in Kenya

Ministry of Education (2006) has outlined objectives of teaching Home Science which are derived from the National Goals of Education. It has clearly shown the process used to derive the Home Science specific objectives from National Goals of Education. The National goal states that education in Kenya should promote positive attitude towards good health and environmental protection. Secondary level objectives states that secondary education should provide the learner with opportunities to promote positive environmental and health practices. One of the general Home Science objectives state that by the end of the course, the learner should be able to practice principles of good health with respect to self, others and the environment. One specific Home Science objective state that by the end of the topic the learner should be able to; practice principles of good grooming, practice rules of food hygiene, plan and prepare meals to meet individual needs, practice proper care of feeding equipment, dispose refuse appropriately, and practice cleaning different areas in the home. The goals for the course are as depicted in the diagram below.

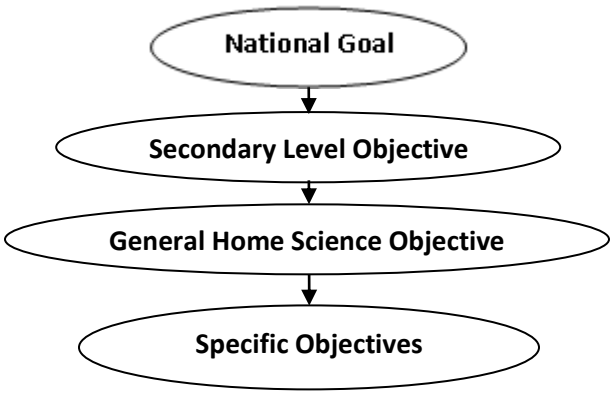

Figure 2.1: The process of Deriving Specific Objectives from a National Goal.

(Source: Ministry of Education, January 2006)

Ideally, students are expected to select subjects that best suit their interests and abilities without being coaxed to choose and that the chosen subjects will impact on their careers (Ndalichako and Komba, 2014). It's clear that a student will make a choice to take one subject over the other.

2.3 Determinants of Enrollment in Home Science Subject

2.3.1 School Policies on Subject Selection

As soon as the students are enrolled in a secondary school, they normally have high hopes that the schools will be able to accord them a conducive environment that bases on their learning abilities and interests. Interest remains one of the most motivating factors that make a student choose a particular subject over the other (Stefan & Ciomon, 2010). According to Olofunmilayo and Oluwaseun (2013), they assert that career selection is among many important choices that students make in the determination of their future

plans. They further attest that the chosen decision further imparts them throughout their lives.

Schools usually have guiding policies pertaining to the number and kind of subjects they offer especially among the group 4 and 5 as outlined in Table 1.1. Ndalichako and Komba (2014) point out that choice of subjects to take largely depends on the availability of that particular subject in the school. They further report that some optional subjects may be offered to a small group within a limited number of schools. Also, their study revealed that technical subjects and Home Science related subjects did have fewer students taking them.

Other works done by Indoshi, Wagah and Agak (2010) in Nyanza, Kenya revealed that school's environment factors strongly affect the choice of a subject to take. For instance, they found out that certain schools made a certain optional subject compulsory in a particular stream. They further explained that Art and Design as a subject is more demanding especially on the practicals especially in cases where the school administration is not supportive in terms of provision of learning resources and enabling learning conditions. This may translate to attitude formation whereby a number of schools offering the subject are few thus enroll very few students. Another study by Nyangara *et al.,* (2010) confirms that only one of a sampled school had a policy on paper for selection of students to partake Home Science and that there were set aside classes for the different subjects i.e. stream A takes Homes Science and stream B takes Agriculture and this imply that talented student in a particular subject is denied a chance to take a particular subject simply because they have been placed in another stream. Nyangara *et*

al., (2010) further report that some Home Science classes were registered pegged on a given number of students based on a first come first served basis and once the ideal number was reached, no more students were admitted.

Similar studies done by Roger and Duffield (2000) established that schools do have a great influence on the kind of subjects to take through their packaging of the optional subjects and such schools do encourage students to take particular type of subject. Contrary to this, a study done by Mbithe (2012) in Kangundo Kenya, established that school policy on the kind of subject offered does not influence choice of Physics. Therefore, school policies play a crucial role in determining the kind of subjects they offer in the school and this translates to selection of different subjects by the students.
This variable was measured by the availability of school polices in the school as reported by the principals.

2.3.2 Availability of Teaching Resources

Home Science subject needs to have equipment and materials (teaching resources) necessary for the learner to be able to practice and internalize the concepts they have been taught. In the event that there are no well-equipped Home Science laboratories, the subject teacher may end up teaching theoretically and this disadvantages the learners. Unavailability of resources plays a role in influencing student's attitude towards the subject (Ode, Babayeju & Obalowu, 2013). Nyangara *et al.,* (2010) further document that most of the sampled schools had adequate Home Science facilities as lack of the equipment has a direct impact on the learners' acquisition of practical skills. Their study further revealed that two schools had no Home Science laboratories while twelve had

inadequately equipped laboratories. Some of the reasons they came up with were, “too many students for the room provided, sharing of science laboratory and using rooms such as the dining room or empty classrooms that were not equipped as Home Science laboratories”.

Shiundu and Omulando (1992) argue that the school management should strive to provide all the necessary resources needed for that particular subject being offered. This is particularly true because it is evident that schools lacking particular resources meant for a particular subject greatly influence choice and performance of that subject. Also, Nyangara *et al.*, (2010) opined that a Home Science class size was dictated by the teaching resources for the Home Science subject. In this regard, the more the teaching resources in a subject, the higher the enrolment, and the lesser the teaching resources available, the lower the enrolment.

Ozioma (2011) in her study on influential factors affecting students attitude towards vocational/technical subjects in Nigeria revealed that student’s interests in the study of vocational subjects are high because their interests were aroused by the practicals carried out in the laboratories. This factor can only be possible in those schools endowed with the necessary learning resources. Availability of sewing tools and equipment greatly plays a role in the student’s liking of Home Science particularly in the clothing and textiles unit. In her study, Serem (2011) reiterates that the availability of sewing machines which must be in good working condition enables each and every student to adequately practice until they are able to internalize the skill. She further explains that in cases where the sewing machines are few and are not in good working conditions, students desire to learn were

greatly hampered especially where the classes were big with few machines. Also, Ode *et al.,* (2013) found that students had a feeling that Home Economics subject was costly as they were to purchase materials to be used in the practical sessions.

Students feelings and sentiments on the availability of teaching and learning resources greatly affect their choice of subjects as echoed by Ndalichako and Komba (2014). Some of their extracts were:

> "Sincerely speaking, we enjoy studying arts subjects. There is a serious shortage of science teachers and there are no textbooks in some subjects to the extent that even the teacher borrows a book from some of the students. The science laboratory lacks the facilities that would allow us to conduct experiments therefore we don't do practicals seriously" (FGD, Student, school P, 17/4/2014)

> "I don't like chemistry because our teacher was on study leave and we did not have any other chemistry teacher in school. So, having stayed for one year and a half without a teacher has made me lose interest in the subject. Although the teacher is back, he is still the only teacher in school and is supposed to teach all the classes from Form I to Form IV. So, it is really difficult for him to teach all of us effectively. The teacher cannot afford giving us sufficient exercises and assisting individual students who might need further assistance" (FGD, student, school K, 24/2/2014)

This study sought to find out whether similar sentiments could be felt in the teaching and learning of Home Science subject in secondary schools in Elgeyo Marakwet County as both the human resource and the teaching equipment and materials are very vital for learning to occur.

Muthui (1981) reported that the clothing and textile unit in Home Science was wide in relation to the time allocated, expensive for the students and performance standards demanded for the coursework were high although it is allocated few marks in relation to

the work and time involved. This aspect may be a contributing factor as to why most students will avoid Home Science for other subjects that take less time and one can easily get the desired grade in that subject.

Further works by Van der Berg (2002) found out that in some Latin American countries, the poor populations did receive an inferior quality of schooling. This study brought forth the idea that students from poorer backgrounds (schools) were generally less informed in comparison with other students. Negative factors like inaccessible schools, lack of resources and unqualified personnel do affect academic performance (Brock & Cammish, 1997). They further revealed that parents in some nations were reluctant to send their daughters to school because they did not have female teachers, accommodation and inadequate security.

A study by Sukovieff (1989) on students two years after their graduation revealed that lack of money may have moderately influenced student's career decision. They did strongly report that cost of the program is an important factor in choosing and completion of a particular career.

In summing up this factor, Ndalichako and Komba (2014), reveals that "teachers and school related factors are among key determining factors in eroding or developing students interests in particular subjects"

This independent variable was measured by the total number of Home Science laboratories and how they were equipped and the frequency of doing practicals. This was reported through responses from the respondents and also observation done by the researcher. The data was presented in form of tables and charts.

2.3.3 Qualification of Home Science Teachers

For one to be effective in their work place, they need to be educated. Usman (2012) defines a qualified teacher as one that has a certificate and who has a bachelor's degree. Over the years, experience has been said to be the best teacher. The teachers' level of education and teaching experience significantly have an effect on the academic achievement of learners in Home Science (Ofem, Iyam, & Bassey 2015). Colfater, Ladd and Vidgor (2006) and Adenji (2004) reported that there is a difference between performance of learners taught by qualified teachers and those taught by unqualified teachers. Furthermore, Adaramola and Obomanu (2011) established that the absence of qualified teachers led to consistent poor performance of learners. Therefore, a well trained and experienced teacher in a classroom set up may directly influence students to choose and do well in their subject.

Ladd and Sorensen (2015) report that the term experienced teachers refer to those teachers who have taught for not less than five years. However, most research studies suggest that teachers are considerably more effective after two years of being in the job (Peske & Haycock, 2006). Ofem *et al.,* (2015) reports that the more number of years a worker stays in the job makes them more productive.

The experience of teachers normally has a positive effect on the academic performance of a learner and the longer the teaching experience of the teacher the more effective and productive they become (Onuoha, 1999; Ofem *et al.,* (2015) and Iheanacho, 2002). However, Zuzovsky (2003) attest that it is challenging to interpret teachers experience and the achievement of students because the variable is affected by market situations or

motivation to work. Qualification of Home Science teachers was measured by their responses on education level and experience. The data was reported in tables and a histogram.

2.3.5 Students' Attitude Towards Home Science Subject

Students may develop an attitude towards a subject which may be positive or negative. Serem (2011) states that attitudes are likes and dislikes and state of mind for and in contrast to something. In general view, a negative attitude towards a subject may lead a student to have no interest in it and when it is made optional, many students would then avoid it. Contrary to this, when a student develops a positive attitude towards the subject, there is a tendency of liking it and this automatically makes them choose it. This view is in line with Simpson and Oliver (Cited in Oriahi *et al.*, 2010).

Several studies have been carried out to investigate the role played by personal goals. For instance, a study done by Rubin and Biekman (1999) found out that one's desire to be helpful to others did contribute to the choice of a chiropractic career. This was attributed to the fact that students had been made aware of the importance of defining their personal goals. A Similar study by Cooperstein and Schwartz (1992) revealed important factors like variety, challenge and the ability to define personal goals as leading factors in the choice of a career.

A study by Serem (2011) revealed that some Home Science students liked the subject because of the units being offered. For instance, Foods and Nutrition was the liked unit (47.2%) followed by Home Management (21%) and thirdly Clothing and Textiles.

Among the reasons given for liking, were that they were easy to understand and they enjoyed learning the subject. Risser and Laskin (1996) did some analysis on the factors which attracted women to a certain field. They did report that they had a strong excitement and enthusiasm for the chosen profession. In addition to this point, study by Kerka (2003) highlights enthusiasm, self- motivation and interest as being strong factor that affects their careers. Contrary to this, Ode *et al.,* (2013) found out that low enrolment in Home Economics programme was attributed to lack of interest in the subject by the students which may have been occasioned by lack of funds to run the subject.

A study by Young, Fraser and Woolnough (1997) showed that a person is more likely to select a career in science and engineering if they did strongly believe in themselves to have the personality for the particular courses. De Almeida, Leite and Woolnough (1998) reported that individuals who had classified themselves as intelligent aspired careers related to science and engineering. This study also reported that future scientists perceived themselves as being more sufficient in their future lives as engineers. This independent variable on students' attitudes was measured by opinions from both Home Science teachers and students. Data was then reported in tables and pie charts.

2.3.6 Career Opportunities

Choice of a career to pursue in the world of a student is always a nightmare since it determines the kind of jobs they will venture into later on in life. Solving such problem calls for careful subject selection which has to be in unison with their interests and capabilities. Many a times the society has had an impact on the careers students choose

since there is a strong feeling that there are some careers and jobs that bear much weight and that a student should not venture into just any type of career.

Students may be influenced by the availability of many job opportunities in a chosen field. For instance, a study by Jones and Larke (2005) established that students perceived opportunities for the viable, prosperous careers in an agriculture related field was limited. In such a case where there are limited options to choose from, they finally settle on other careers that are versatile. Despite the limited chances in courses perceived to be highly prestigious, students still demand for such courses. Liberal arts and environmental education were least preferred by the 2014 KCSE candidates as they opined that they had less openings in the job market (Ouma, 2016). Uwameiye (2015); Ode *et al.,* (2013) report that students were not aware of job prospects that Home Economics offers therefore resulted to low enrolment in the course in tertiary institutions.

Similar results were found by a study by Mbithe (2012) that had 83% of the respondents indicating that they chose physics as their career goals had a strong linkage with physics. This fact may have been as a result of perceived importance of physics in technology which has more employment opportunities compared to other fields.

Indoshi *et al.,* (2010) had a similar concept where they established that students had dropped Art and Design subject because they had a strong belief that other careers were much better than Art and Design. Also, their teachers confirmed that students felt that other careers were more paying in comparison to Art and Design. Sang (2002) had similar findings which did indicate that Home Science is not marketable when it comes to job opportunities in comparison with other subjects that are optional. Study by Ososki,

Morago and van Sickle (2006) showed that learners viewed teaching as a career that had limited job opportunities, poor career progression and limited promotion opportunities and the idea that teachers are not well enumerated for good performance.

Study by Singaravelu, White and Bringaze (2005) cross examined factors that influenced student's choice of major subjects and they were able to establish that status and prestige of a career are more important considerations for the intermediate students in comparison to that of the domestic students. This factor is far more pronounced in the choice of some optional subjects as they may be prestigious to study them simply because they lead to prestigious careers that they would so wish to attain.

Further works by Ososki *et al.,* (2006) did report that some students, who had not enrolled in teaching as a career, saw teaching as a low status job, negatively perceived in the community. In addition to this, it was evident that some parents within the study approved that the low university entrance requirements had lowered the status of teaching profession which then resulted in lower teaching force and low remunerations. This aspect is so common with the young adults as they choose university degrees and most of them do apply for teaching as the last option because of the low status teachers have been placed in the society yet they play a major role in the same society. In a study conducted by Wangah (1985), reported that previous studies indicated that few students did not take Home Science because they saw it as less prestigious.

In addition to prestige of a career, lifestyle preference does strongly stand out. In a study done by Harris *et al.,* (2005) on doctors at the children's hospital, it was reported that lifestyle preference was the most important determinant for career choice. Therefore,

choice of a subject to pursue is mostly guided on the career aspiration of an individual. Also, works by Wangah (1985) report that Home Science is not pursued by many students because they view it as less important, less prestigious and lacks a vocational future. Home Science subject may be viewed by many as being unmarketable possibly due to less value attached to it. Also, works by Olufunmilayo and Oluwaseun (2013) did summarize that parents do look for prestigious career for their offspring. Parental influence may negatively affect students' choice of a subject that is in line with their most preferred career.

A study by Singaravelu *et al.,* (2005) report that certain factors dealing with interaction with students, staff, career planning and participation does influence student's career choice. A similar study by Sukovieff (1989) established that career education influence students' career selection. This is because students get exposed to the outside world and they get an idea of what career they can venture into.

In Kenya, Universities holds exhibitions annually meant to enlighten students about the various courses and careers they can venture into. When students are exposed to such exhibitions, they do form interests in certain subjects which may compel them to choose that subject that directly leads to their identified careers.

Other works conducted by Hughes and Karp (2004) showed that career guidance interventions like career days positively influence the students career development. This is attributed to the fact that students will decide and understand their chosen career. In a different study, students revealed that the key factor that influenced them to pursue a teaching career was voluntary work and an involvement in school activities during career

days (Ososki *et al.,* 2006). Similar findings were reported by Jones and Larke (2005) that prior work experience and exposure to careers through internship, cooperative work programs and career fairs play a role in enlightening students on kind of careers they could venture into as a result of their practical approach in the job.

Socializers are individuals who have influenced a student to take a particular career (Baboolal and Hutchinson, 2007). Examples of the socializers could range from teachers, guidance counselors, parents, peers and mass media. Serem (2011) believes that a person that receives positive view and expectation from the socializer ends up in acquiring a positive self-concept that in turn influences motivation and achievement. The author further elaborates that role models may influence the attitude of a student towards a particular area. The author strongly affirms that teachers do have a great influence on the direction the students take concerning Home Science particularly the clothing and Textile Unit. In her recommendations, she proposes that teachers of Home Science can be role models by essentially designing and making personal, family clothing and household articles.

In her sentiments, Mbithe (2012) says that teachers failed to inspire students on the physics subject which resulted in dropping of the subject by the students. Also, teachers may have contributed to the students not liking and subsequently dropping physics because 62% of the students did indicate that teachers missed lessons in junior classes which made students feel that their teachers lacked commitment. Study by Torongey 1996 as cited by (Mbithe, 2012) had similar sentiments that frequency of teachers missing lessons contributed negatively on the students. Forty nine (49 %) of respondents

in Mbithe (2012) did indicate that teachers were the major source of career information. Teachers tend to be more influential in choice of careers in comparison to career counselors since students feel more at ease with them than career counselors, (Migunde *et al.,* 2012). This sentiment was also echoed by Ndalachiko and Komba (2014) who noted that teachers do play a very significant role on whether a student liked or disliked a particular subject. They report that teachers who are prompt, devoted and sensitive to the needs of students enhancing the interest of students towards the subject. From the above studies, it comes out clearly that teachers do play a key role in shaping the lives of children especially on the subjects they teach.

Guidance and counselling may also play a key role in influencing students on the kind of subjects and careers they can venture into. A study by Singaravelu *et al.,* (2005) revealed that school guidance counselors had a significant influence on careers students choose. They did report that there was a disparity among international students who had no guidance counselors in their institutions.

Similarly, Mbithe (2012) reports that 90% of respondents indicated that they received career guidance from the careers department. Further studies indicated that professional guidance and counseling should be offered to students if at all they want to choose subjects in accordance to their cognitive abilities, interests and relationship to their future careers (Owoyele & Toyobo, 2008). An analysis study by Hughes and Karp (2004) showed that guidance at school influenced students positively on the choice of their careers. Also, Ozioma (2011) revealed that absence of guidance counselors in schools negatively contributes to the choice of vocational/technical subjects especially on the

students who are endowed with abilities and skills. This in turn makes students shun away from such subjects because they lack encouragement and the push from the counselors.

Also, the summary remarks by Olufunmilayo and Oluwaseun (2013) that all the selected secondary schools did not benefit from the service of a career counselor hence the one-sided shift on the students towards a particular career path. However, reports by Weiler 1977 in Borchet (2002) differed by pointing out that counselors can draw preference to the forefront but they should not do an evaluation. It is believed that counselors should not influence students on careers to pursue.

Parents greatly have an influence on the kind of subjects and careers their children venture into. Ndalachiko and Komba (2014) in their study confirmed that most parents in the community schools had never made it to the secondary school education therefore they had no major influence on the kind of education their children had and most likely did not play a role in the kind of subjects they chose. A Study by Young *et al.,* (1997) indicated that family members in the lives of students' mothers in particular significantly influenced careers. Contrary to this finding, Olufunmilayo and Oluwaseun (2013) mentioned that parents were eagerly looking forward for a prestigious career for their children.

Also, Serem (2011) indicated that parents have an influence on the kind of subjects their children take, for instance their perception of clothing and textiles unit may make students avoid Home Science altogether as the two are inseparable. In a study conducted

by Otunga (1993) it was revealed that girls who had pursued Home Science had a strong backing by their parents who considered the subject as feminine.

Ozioma (2011) also agrees that the socio-economic status of a parent may influence a student not to take a vocational subject. Parents of educated children would not wish their children to take certain subjects due to the perceived opinion of subjects. She further points out that parent's placement in society does influence the interests of a student towards the study of a particular subject. Also, Ferry (2006) backs this idea by reporting that parental encouragement does contribute to learning and choice of a career. Also, Fleming, Engerman and Grifin (2005) reports that having a parent who is an engineer does create an idea that being an engineer makes one have a realistic goal which had a liking towards that field. The author reiterates that parents should not dictate to their offspring about the kind of subjects and careers to venture it. The author further believed that each and every individual in their time has freedom to explore various subjects until they come to terms with their most preferred career.

Peers may also influence students to choose certain subjects over the other. Mbithe (2012) reports that 3% of students chose physics since they were influenced by their friends whereas 5% indicated that they did not choose physics because their friends did not also choose. Also, teachers in the same study responded that 83% of students were not influenced by peer pressure whereas 17% were influenced by peer pressure. From this finding, it was concluded that peer pressure does not influence choice of physics simply because of the availability of the careers department.

Type of school one attends greatly has an impact on the choice of the optional subjects. Works of Chuenyane (1983) did propose that schooling does play a very important role in career choice. He did report that the white schools had resources and did maintain awareness and understanding of most careers whereas government funded schools did not. His study further brought out the idea that traditionally African schools had difficulties on decision making in relation to their career choice on the account of their limited career choices available to them.

Another study done in Nigeria by Olufunmilayo and Oluwaseun (2013) revealed that students who had envisioned their career early in life are much higher than those students who had postponed their ambitions until when a decision was required. They further affirm that previous research does confirm that many students are still not aware of not only the subjects' combinations leading to their careers but also not conversant about careers that are in unison with their personalities. This idea may pin point the fact that students will end up choosing careers that are not in harmony with their personality types. Also in this study, students revealed that personality mostly does affect their choice. Work done by Onoyase and Onoyase (2009) further reveals that a higher percentage of students had indicated their interests in prestigious careers instead of those careers that match their personalities. In any chosen subject/career, students need to be knowledgeable as they search for their career interests (Borchet, 2002).

The independent variable on available career opportunities was measured by the available career guidance in schools, the people involved in guiding them, opinions on whether the

information they received was sufficient and whether respondents were aware of careers related to Home Science subject. Data was also presented in tables and pie charts.

2.4 Summary of Literature and Gaps in Knowledge

This literature review creates the impression that there are a lot of perspectives and studies to do with career choices all over the world stemming from choice of subjects to partake at secondary school. Factors that have been looked at include; school policies on subject selection, teaching resources, qualification of Home Science teachers, students' attitudes towards Home Science subject and career opportunities. From the studies reviewed, it is evident that none of the studies has looked at reasons why many students don't take Home Science in EMC yet Home Science is a subject that equips one with life skills that do form part and parcel of our daily lives both at home and in our places of work. It is quite evident that most studies in the subject have looked at the attitudes of teachers and students towards the teaching and learning of Home Science subject while others have specifically narrowed down to certain major topics covered in Home Science. The researcher therefore intends to fill this knowledge gap by trying to establish factors which influence the choice of Home Science subject in secondary schools in EMC.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the research design, study area, population, sample and sampling techniques, research instruments, ethical consideration, data collection procedures and data analysis.

3.2 Research Design

This study used the descriptive survey design, employing both quantitative and qualitative approaches. Creswell and Plano Clark (2011) argue that quantitative and qualitative approaches enable a greater degree of understanding to be formulated than if a single approach were adopted to specific studies. Descriptive survey design involves the identification of the characteristics of observed phenomena (Leedy & Ormrod, 2001). This is because it does not change or modify the situation being investigated. In support of this design, Kothari (2004) believes that descriptive surveys are concerned with describing the characteristics of a certain individual or phenomena. According to Mouton (1996) a survey is used to collect data for describing a population too large to observe directly. Also, Gall, Gall and Borg (2005) notes that a survey research involves collection of information about respondents' beliefs, attitudes, interests or behavior.

3.3 Study Area

This study was conducted in Elgeyo Marakwet County which is found in the Rift Valley region of Kenya. The county, among other counties were formed after the dispensation of

the 2010 constitution. According to the County Government of Elgeyo Marakwet (2013) the county covers a total area of 3,029.9Km^2. It borders West Pokot County to the North, Baringo County to the East, Trans Nzoia County to the Northwest and Uasin Gishu County to the West. The County is divided into three topographical zones; The Highlands, Kerio Valley and the Escarpment where they are all divided by the Elgeyo Escarpment. Administratively, the county is split into four sub-counties namely, Keiyo South, Keiyo North, Marakwet East and Marakwet West. The County encompasses a variety of geographical features and the Rift Valley is the striking feature that stands out. Climatic conditions vary according to the altitude. Whereas in the Valley, the temperatures are very hot, as one moves upward, the temperature becomes very cool. The predominant communities in the county are the *Keiyos* and *Marakwets* from the Kalenjin sub-tribe. Elgeyo Marakwet County was selected for this study because according to the KCSE results analysis of 2013, out of the 91 secondary schools in the county only 12 secondary schools offer Home Science subject.

3.4 Study Population

The study population comprised eight (8) County schools offering Home Science subject in Elgeyo Marakwet County. The criteria for selecting the county schools was based on the fact that county schools were many thus the possibility of having many students who may be affected by the determinants under the study. It also included all the form four students taking Home Science subject and some form four students who had dropped Home Science subject. In addition, the school Principals and the Home Science teachers

in the County schools were included in the study as they held valuable information. The distribution of study population is shown in Table 3.1.

Table 3.1: Study Population

Study population	**Total number**
Principals	8
Home Science Teachers	8
Form Four Students	116
Form four students who dropped Home Science subject	50
TOTAL	**182**

3.5 Sampling Techniques

Non-probability sampling methods were utilized to obtain the sample. First, purposive sampling was used to select all county secondary schools in EMC, all Principals and all Home Science teachers in schools offering Home Science subject up to form four. Purposive sampling was also used to select all form four students taking Home Science subject. Purposive sampling is selecting a sample on the basis of knowledge of the population, its elements, and the nature of research aims (Babbie, 1990; Voicu, 2011). Secondly, snowball sampling was used to select some of the students who had dropped Home Science subject as they were also a viable group with information pertaining to the study. According to Henry (1990) and Kurant, Markopoulou, and Thiran (2011) snowball sampling technique relies on identified group of members who identify others who may share the same characteristics. These two non-probability sampling techniques allowed the researcher to use cases which had the required information.

3.6 Sample Size Determination

Purposive sampling technique was used to select one hundred and sixteen (116) form four students taking Home Science subject and snowball sampling technique was used to select fifty (50) form four students who had dropped Home Science subject after form one. Six (6) Home Science teachers were also purposively selected together with the six (6) Principals of the sampled schools offering Home Science subject up to form four. However, the other two schools were not sampled since they offered Home Science subject up to form two. This gave the actual sample size of 178. The total sample size that took part in the study is shown in Table 3.2.

Table 3. 2: Sample size determination

Respondents	**Total number**	**Sample size**	**Percentage**
Principals	8	6	75%
Home Science Teachers	8	6	75%
Form Four Students	116	116	100%
Form four students who dropped Home Science subject	50	50	100%
TOTAL	**182**	**178**	

3.7 Study Variables

In this study, the independent variables were the determinants of choice of Home Science subject which include; the school policies on subject selection, availability of teaching resources, education level and experience of Home Science teachers, attitude towards the subject and career opportunities. The choice of Home Science subject was the dependent

variable. The study took into consideration the following intervening variables; curriculum reviews, pay structure and cultural beliefs.

3.8 Research Instruments

This study used a questionnaire, interview schedule and observation schedule. The use of the three instruments assisted in gathering both quantitative and qualitative data.

3.8.1 Questionnaire

This study employed two sets of questionnaires for both the teachers and the students. These were preferred because they are capable of eliciting information from a large number of respondents. According to Kombo and Tromp (2006), questionnaires can be used to cover a wide area and there is no bias on the side of the researcher and respondents. The questionnaire included both open-ended and closed-ended items. Questionnaires were used because they were able to measure many variables (Gall *et al.*, 2005). The closed-ended items are easy to fill, relatively objective and easy to tabulate whereas the open-ended allowed respondents to express themselves freely without restrictions (Colten & Covert, 2007). The questionnaire for the teacher had five sections while that of the students had four sections; where one section in each case aimed at acquiring demographic information and the other sections were concerned with the determinants of enrolment in Home Science subject as per the objectives of the study.

3.8.2 Interview Schedule

The interview sessions were organized for all the Principals of all the county secondary schools that offer Home Science subject in EMC. This was done after the administration

of the questionnaire so as to gain more insight into the study. The interview schedule entailed the use of structured questions. Gillin (2015) states that, in structured questions, same questions are asked to all respondents. Corbetta (2003, p.269) further says that, structured interviews are "… interviews in which all respondents are asked the same questions with the same wording and in the same sequence."

3.8.3 Observation Checklist

Mcneil and Chapman (2005) state that, observation overcomes one of the key disadvantages of interviews and questionnaires, that is, the responses provided may not be accurate. Such inaccuracies occur due to the respondent's lack of awareness of their own behavior, lack of an accurate memory of what they did, deliberate lies to make them appear better than they are and the desire to tell the researcher what they think the researcher wants to hear (Cohen, Manion, & Morrison, 2007).

The non-participatory observation was used. This was used to observe and verify the status of the resources in the schools. Mutai (2000) notes that, observation does not only rely on what people say they do or what they say they think. It is more direct than that. Instead it draws on the direct evidence of the eye to witness events at hand. This technique was used to determine the existence and maintenance level of teaching resources which included; Clothing and Textiles equipment and Foods and Nutrition equipment. The researcher used this method to eliminate subjective bias and get the right picture on the availability of teaching resources.

3.9 Validity and Reliability

3.9.1 Validity

Validity is the accuracy and meaning of inferences that are based on the research results. According to Perri and Lichtenwald (2010) validity of the instruments means the degree to which the instruments are used to measure what they intended to measure. Bashir, Afzal and Azeem (2008) further state that validity clarifies whether the research instrument accurately measures that which it was intended to measure or how correct the research findings are. The researcher consulted with the experts in the area of Home Science in the School of Education, University of Eldoret, who critiqued, made corrections and put some inputs to ascertain face, content and construct validity in the questionnaires.

Several methods were adopted to enhance validity for qualitative data. These included well-documented audit trail of materials and processes (Kahn, 2000; Carcary, 2009) and respondent verification (George & Apter, 2004). Here individual viewpoints and experiences were verified against others and, ultimately, a rich picture of the attitudes, needs or behavior of those under scrutiny constructed based on the contributions of a range of people. All these led to appropriateness of the research instruments.

3.9.2 Reliability

Reliability refers to the extent to which a research instrument yields measures that are consistent each time it is administered to the same individual (Cohen *et al.,* 2007; Kothari, 2004). A minimum requirement for an evaluation instrument should be that the

respondent gives the same answer to the same question or the same measurement if the circumstances have not changed (Saunders, Philip & Thornhill, 2009). Test-retest method was used to test the reliability of the questionnaire (Mugenda & Mugenda, 1999). This was obtained by administering the questionnaires twice in two schools in Elgeyo Marakwet County, which had similar characteristics with the selected six secondary schools in Elgeyo Marakwet County. The researcher then calculated the coefficient of the two scores using Cronbach alpha and established the reliability of the research instruments.

On the other hand, the essence of reliability for qualitative data lies with consistency of results (Grossoehme, 2014). Silverman (2009) proposed two approaches in enhancing the reliability of qualitative data that, the researcher utilized. These were constant data comparison and comprehensive data use. As data were extracted from the original sources, the researcher verified their accuracy in terms of form and context with constant comparison with colleagues in in each of department at the university (George & Apter, 2004). The scope and analysis of data was also comprehensive and inclusive (Patton, 1999).

The research instruments were piloted with an aim of determining how effective or reliable the questionnaire would be during the actual field research and were able to identify any item that was ambiguous or unclear to the respondent so as to adjust accordingly (Malcolm, 2006). Kothari (2004) points out that piloting brings to light any weaknesses. Also, it does assess whether the questions have been designed in a manner to elicit the required information from respondents and whether the items will be understood

(Mugenda & Mugenda, 1999; Babbie, 2010; McNabb, 2008). Piloting was done in two secondary schools in Elgeyo Marakwet County which had similar characteristics to those of the targeted group. The sample was obtained by purposively selecting form four students taking Home Science subject together with their Home Science teachers. A total of 24 Home Science students took part in the piloting.

Since the co-efficient of correlation obtained was 0.825 the research instruments were considered reliable for the study. This is acceptable as Cozby (2004) puts that, for most measures the correlation should be at least 0.80.

The pilot showed that certain questions in the students' questionnaire could not elicit the required information in line with the research objective. Therefore, an observation checklist (Appendix 6) was added to include equipment and their availability whereas question 10 on the teacher's questionnaire was changed to a close-ended question asking teachers to tick against the four options provided, that is, strongly positive, fairly positive, fairly negative and strongly negative.

3.10 Data Collection Procedures

The data collection entailed several procedures. The authorization to collect data and permission for the research was sought from the National Commission for Science, Technology and Innovation (NACOSTI) Appendix 8. Upon receiving the permit, the researcher reported to the County Commissioner and the County Director of Education office for letters of permission and introduction to the schools.

Primary data for this study was collected by the researcher from the respondents. Primary data are collected for specific research problem at hand (Hox & Boeije, 2005). The researcher visited the schools with an aim of familiarizing oneself to the schools and finding the best approach to use when administering the instruments to the respondents. Meetings were held with the principals and also the Home Science teachers where discussions pertaining to time and date for data collection modalities were agreed upon. The researcher then visited the schools as per the agreed upon appointments to administer the instruments. The researcher then interacted with the respondents explaining what the study was about then sought their consent to participate in the study. Once the respondents signed the consent form, the researcher administered the questionnaire first followed by in-depth interviews with the principals to get more insights on the study. Thereafter, the researcher carried out observation to ascertain the availability of the teaching resources.

3.11 Data Analysis

Data was analyzed quantitatively and qualitatively after it was collected, examined for completeness, cleaned and then coded appropriately. This helped to put responses to a limited category and further promoted efficiency in analysis as several responses were reduced to small groups containing very important information (Kothari, 2004; Nigatu, 2009).

Quantitative data was analyzed using descriptive statistics whereby frequencies, percentages and means were used to analyze data that was obtained from closed-ended items in the questionnaire and the observation checklist. According to Kothari (2004),

descriptive statistics provides meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution. Quantitative data included responses that were obtained in relation to the number of laboratories, adequacy and maintenance of equipment, number of students taking Home Science subject and number of people involved in guidance and counselling. Quantitative data was coded as per the questions and entered as per the various labels by the aid of the Statistical Package for Social Sciences (SPSS), version 23.

Qualitative data derived from open ended questions in the questionnaire and interview schedule that included information on the attitude towards the subject was organized, sorted and analyzed into themes. Blaxter, Hughes, and Tight (2006) noted that qualitative analysis entails coding and classifying data (also referred to as categorizing and indexing) with the aim of making sense of the data collected and to highlight important message. Qualitative data was used to compliment quantitative data. It helped in contextualizing the opinions provided leading to further interpretation of the findings (Kothari, 2004). Data was reported in tables, bar charts and bar graphs.

3.12 Ethical Considerations

Research authorization and permit was sought and granted by the National Commission for Science, Technology and Innovation (Appendix 8). Further, the County Director of Education approved permission to collect information from the County secondary schools offering Home Science subject (Appendix 9). The researcher provided the credentials to indicate that he/she is a researcher and would adhere to the ethical position with respect to the conducted research.

Consent of the respondents was sought and they were made aware of the purpose of the research (Appendix 2). The researcher also ensured the confidentiality of respondents when dealing with their responses and this was done by having a cover letter to the respondents in each questionnaire (Appendix 1).

3.13 Chapter Summary

This chapter has discussed the research design, study area, population, sample and sampling techniques, research instruments, instrument validation, pilot study, ethical consideration, data collection procedures, data analysis and ethical considerations.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter deals with data presentation, analysis, interpretation and discussions of the results.

4.2 Response Rate

All the one hundred and seventy-two (172) issued questionnaires were returned by both the teachers and the students which resulted to 100% response rate. This was possible since the researcher administered and collected them immediately. In some cases, where it was difficult to get them back the same day, the researcher got in touch with the teachers who ensured they were all returned.

4.3 Demographic Information of the Respondents

4.3.1 Student`s Gender

The sampled respondents comprised of 166 female students in form four. This comprised all the student respondents that the researcher had purposively selected to participate in the study.

4.3.2 Age Distribution of Students Involved in the Study

This study revealed that out of the sampled 166 students, 78 (47%) were eighteen years, 53 (32%) were seventeen years and 35 (21%) were sixteen years.

4.3.3 Teachers' Gender

The researcher sought to establish the gender of the teachers with an intention of finding whether both male and females teachers teach the Home Science subject. This is because of the notion that Home Science is a feminine subject. The study established that all the six teachers in the selected secondary schools in Elgeyo Marakwet County were females implying that there were no male teachers teaching Home Science subject in the sampled secondary schools. Findings from this study also showed that all the principals from the sampled schools were female.

4.3.4 Age Distribution of Home Science Teachers Involved in the Study

This study revealed that out of the sampled 6, 3 (50%) were between 37 and 42 years, 1 (16.7%) was between 19 and 24 years, 1 (16.7%) was between 25 and 30 years and another 1 (16.7%) was between 43 and 48 years. The findings of this study show that the teachers were generally mature and therefore had a wide experience. Hence, they were in a better position to mould and nurture the students who were much younger than them. Table 4. 1

Table 4.1. Age distribution of Home Science Teachers

Age Bracket	Frequency	Percent
19-24 years	1	16.7
25-30 years	1	16.7
37-42 years	3	50.0
43-48 years	1	16.7
Total	6	100

4.3.5 Academic Qualification of Students' Parents

The researcher intended to identify parents' educational attainment whether it was a determinant on enrolment of Home Science subject in secondary schools in Elgeyo Marakwet County. This is because, parents would want their children to pursue careers that surpass their own highest academic qualifications. The study findings revealed that fathers who attained a Diploma formed were 60 (39.4%), graduates, 37 (24.3%) and 33 (21.7%) had both KCPE and KCSE certificates. The fathers who attained a post graduate certificate were 22 (14.5%). The study further revealed that mothers who attained KCSE/KCPE formed the majority with a total of 56 (36.1%) and closely followed by diploma holders 48 (31.0%), post graduate 28 (18%) and the least were graduates, 23 (14.8%). Results from this study indicated that parents of the respondents were generally educated as most parents had attained basic education as the least level. Figure 4.1

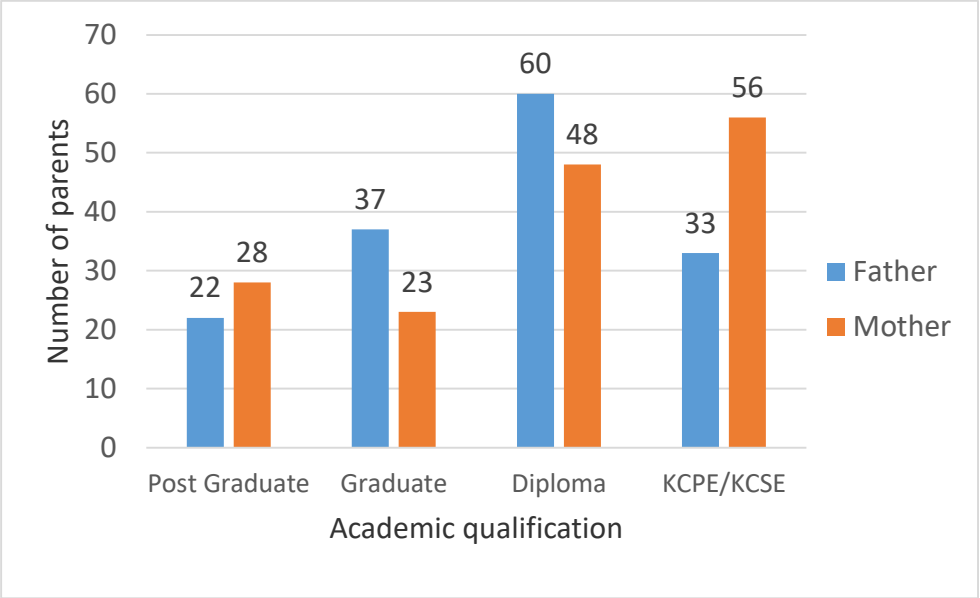

Figure 4.1. Academic Qualification of Students' Parents

4.4 School Policies on Subject Selection

Objective one was to establish the influence of school policies on subject selection on enrolment in Home Science subject. This study established that schools normally follow the guidelines provided by the Ministry of Education pertaining to the number and type of subjects as per the clusters. Interviews conducted with the school Principals revealed that the subjects offered in the sampled schools from group four and five were four in number, that is, Home Science, Business Studies, Agriculture and Computer Studies. In most cases, Agriculture and Home Science were blocked such that a student was to choose one of them. Business Studies was mostly compulsory in form one and upon entry to form three, a student would make one choice of the subject to pursue.

It was also revealed that most of the sampled schools had no prerequisites for choosing Home Science except two schools whereby, in one school choice of Home Science was determined by good performance by the students and their ability to pay the extra fee to fund the subject, and in another, there was one stream specifically set aside for Home Science subject. The results from this study show that school policies may demand that certain subjects in group four and five could only be offered in one stream out of the other streams. This could be attributed to inadequacy of both human and material resources.

This practice was also noted by Wagah (2009) cited in Indoshi *et al.,* 2010 as Art and Design in Nyanza Province was only offered in one stream. Therefore, students in different streams missed certain subjects because it was not offered in their stream. This established that certain schools in the county had streaming practices where one

particular class in form one was specifically set aside for Home Science subject. It was felt that students who are not good in that particular chosen class would be denied the golden opportunity to get life skills offered in Home Science subject that are very essential to an individual for self-reliance and solving unemployment problem among the youths today. Therefore, selection of Home Science subject may be determined by the available school policies.

Through the interview with the principals, it was established that the school administration fully supported the Home Science subject. It was reported that Home Science was the best performing subject and in most of the schools it was among the top in the KCSE subject ranking within the school in comparison to other subjects, and therefore viewed as a very essential subject. This finding contradicts that of Etherington (2013) in London Secondary school Art department who remarked that school organization was unsupportive and obstructive towards Art where it became very difficult for the department to solve.

Also, principals of the sampled schools indicated that the presence of Home Science subject in the school ensures a smooth running of the school as it improves standards of living within the school especially in terms of good grooming, personal hygiene, environmental hygiene and safety measures

Schools that offer Home Science subject do this with an aim of boosting the school's results and that of the students. The study also revealed that teachers of Home Science who participated in this study felt that Home Science was a very important subject that should be pursued by all the students. This is because Home Science subject imparts one

with essential life skills to face the realities of life. Regardless of the chosen career, students with Home Science knowledge are able to fit wholly as they make use of the knowledge gained to improve their livelihoods. Principals who took part in this study strongly felt that all students should be encouraged to take Home Science if resources are available.

Despite the fact that the teachers were of the opinion that the subject is a booster and that should be pursued by all students, they felt that Home Science subject consumed a lot of time especially on practicals. This study concurs with that of Indoshi *et al.,* (2010) where they reported that 79 (26.9%) of the respondents ranked Art and Design in first position as the curriculum that consumes a lot of time. Nyangara *et al.,* (2010) opinioned that Home Science being a vocational subject, there is need to practice the learnt concepts as it is very crucial for the attainment of required Home Science competencies. Similar sentiments were echoed by Serem, Mukwa, and Kafu (2010) where, six (22.2%) of the respondents felt that the clothing and construction unit is practical oriented and for learning to take place more time is required. They further stated that the unit needs to be separated and offered individually as a subject at KCSE level.

Paper three is another practical paper which deals with foods and nutrition. Here, learners are also expected to put into practice concepts learnt theoretically into practice. It may be concluded that majority of the teachers felt that Home Science is time consuming simply because in this paper, students are put into shifts to be able to carry out the practical individually from preparation, cooking, presentation and clearing up for the next shift to come in. This process usually takes a lot of time especially where there is a large class

with limited resources as they wait for one another. Despite the fact that Home Science subject may be an expensive subject on the part of the resources, sampled teachers reported that they had to be highly innovative by improvising resources from the locally available materials to be able to teach Home Science concepts well.

4.5 Availability of Teaching Resources

Objective two was to determine the effect of teaching resources on enrolment in Home Science subject. In particular, information was sought from the respondents on availability of Home Science laboratories and how equipped they were, frequency of doing the practicals and their views on effects of availability of resources on enrolment.

4.5.1 Number of Home Science Laboratories and how Equipped they were

A higher number of respondents 106 (64.2%), indicated that there was one (1) laboratory, 47 (28.5%) respondents mentioned two (2) laboratories and 13 (7.9%) indicated that they had no laboratory. This implies that majority of the schools had at least one laboratory. Table 4.2

Table 4.2 Number of Home Science Laboratories

No. of Home Science Laboratories	Frequency	Percent
0	13	7.9
1	106	64.2
2	47	28.5
Total	166	100

Therefore, the few schools that offered Home Science could lead to a large number of students either dropping or doing Home Science. From those without a laboratory, they had a multipurpose room they used whenever need arose. This finding concurred with that of Nyangara *et al.,* (2010) who also reported that two of their sampled schools did

not have a lab and twelve others had inadequate laboratories. They further noted that one of the reasons was that they had a particular room which at one time was a dining room and the other time could be a Home Science laboratory. Ideally, in a normal set up Home Science subject requires two laboratories, one for Foods and Nutrition and the other for Clothing and Textiles. Due to limited resources, most schools will have one room meant to cater for all the practicals done in Home Science and this may eventually limit the number of students to be enrolled in the subject.

The respondents were further asked to indicate how equipped the laboratories were from the given categories. A fairly equipped Home Science laboratory is one that is equipped with basic equipment whereas a fully equipped Home Science laboratory has all the equipment and materials needed to effectively teach the Home Science syllabus. Most of the laboratories were fairly equipped as indicated by 73 % of the respondents and a small percentage 14% did indicate that they were fully equipped. Therefore, it can be concluded that the laboratories were not well equipped (Figure 4.2).

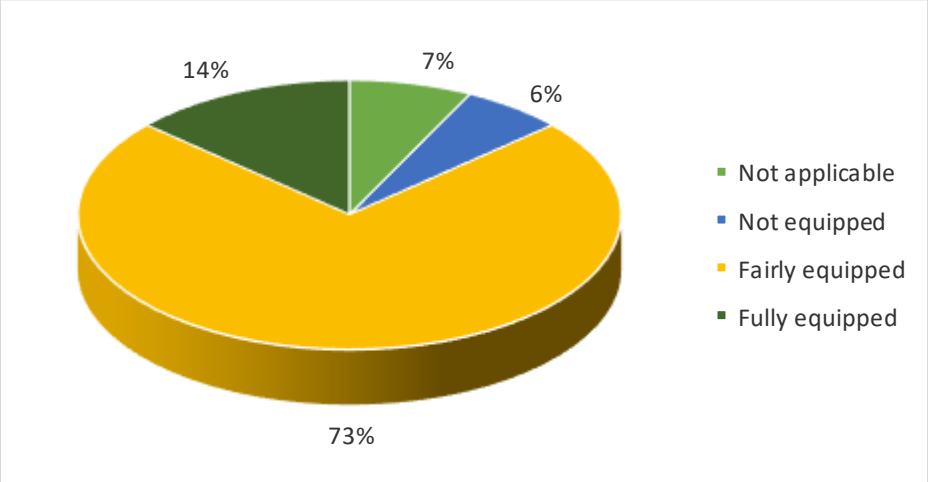

Figure 4.2. How equipped were Home Science Laboratories as indicated by the students

Responses from 33% of the Home Science teachers indicated that the laboratories were not equipped while 16.7% indicated that they were fully and fairly equipped. However, 33% of the Home Science teachers did not respond to this item. Table 4.3

Table 4. 3 How equipped are the laboratories as indicated by teachers

	Statement	Frequency	Percent
	Fully equipped	1	16.7
	Fairly equipped	1	16.7
	Not equipped	2	33.3
	Total	4	66.7
Missing		2	33.3
Total		6	100.0

The researcher further carried out an observation to complement responses from the questionnaires on the availability of the teaching resources and confirmed the availability of these equipment from the schools. To get valid responses, the researcher looked at the adequacy of the equipment from the six (6) schools where adequate signified that they had enough while inadequate meant that they did not have enough equipment. Table 4.4 Researchers own observation showed that some schools had equipment that had broken down due to wear and tear. The intentions were to establish whether they impacted on low enrolment.

It can be argued from the table that majority of the schools sampled had meagre equipment necessary for the Home Science class. There was notable absence in relation to the charts, cupboards, working surfaces and sewing machines. The observations further indicated inadequacy in the equipment. Majority of the schools had a count of 3 in the areas observed such as irons, cooking equipment and food storage equipment. This

implies that schools may discourage potential students wishing to select Home Science subject because of inadequate resources.

Table 4.4. Availability of Equipment in the Home Science Laboratory

		ADEQUACY		
Rooms	**Equipment**	Adequate	Inadequate	Total
Clothing and Textile room	Sewing machines	1	5	6
	Ironing surfaces	1	5	6
	Irons	1	5	6
	Dressing mirror	3	3	6
	Small sewing tools an equipment	1	5	6
	Working surfaces	2	4	6
	Cupboards	1	5	6
Food and nutrition	Cooking equipment	1	5	6
	Work centers	2	4	6
	Food storage equipment	1	5	6
	Sinks	1	5	6
Class area	Text books	3	3	6
	Charts	1	5	6
	Sample garments	3	3	6
	Folders	3	3	6
Offices	Chairs	1	5	6
	Lockers	1	5	6

An observation of the sampled school depicted that majority of the schools did not have adequate Home Science equipment. These findings are similar to a study by Mbithe (2012) where she reported that 9 (75%) of the laboratories in Kangundo District were not well equipped, which resulted to smaller number of students choosing the subject.

Results from a study by Nyangara *et al.,* (2010) and Mbaabu, Gatumu and Kinai (2011) published different results from this study where they established that most schools had adequate facilities. For instance, Nyangara *et al.,* (2011) indicated that Home Science laboratory had adequate facilities and their greatest inadequacy was on fire extinguishers

and refrigerators as most of their sample was drawn from rural schools that had no electricity to run the refrigerators. Mbaabu *et al.,* (2011) did report that 93 (77.5%) of the respondents considered their school laboratories to be well equipped.

Results of this study imply that most schools in this county don't offer Home Science due to the limited resources in the Home Science laboratories and in the event that they offer, there is a high likelihood of restricting students from choosing, hence the low enrolment in the subject. Also, lack of facilities may have arisen from the fact that the sampled schools were county schools which were initially district schools and had introduced the subject recently and may not be financially stable. Further information sought from observation schedule showed the maintenance level of the equipment. It can therefore be argued that the physical state of the equipment has a link on the enrolment level because poorly maintained equipment has a high chance on lowering the enrolment level and vice versa.

Further information on the adequacy of the equipment was sought from the Principals' interview schedule which reported that some schools have Home Science equipment but lacked a room to call their own as the purported Home Science room was a multipurpose room hence they had to keep shifting the equipment now and then for the room to suit the intended purpose at hand.

4.5.2 Frequency of Doing Practicals

This study sought to investigate the frequency with which Home Science practicals were done in the sampled schools. The study established that 57 (35%) of the respondents did the practicals during exams only while 56 (34 %) of them did practical after every topic.

Another set of student respondents, 27 (16 %) did the practicals during every double lesson while 23 (14%) did practical once a term. From the findings of this study, it can be concluded that the Home Science practicals were done during exams and at the end of every topic. Figure 4.3

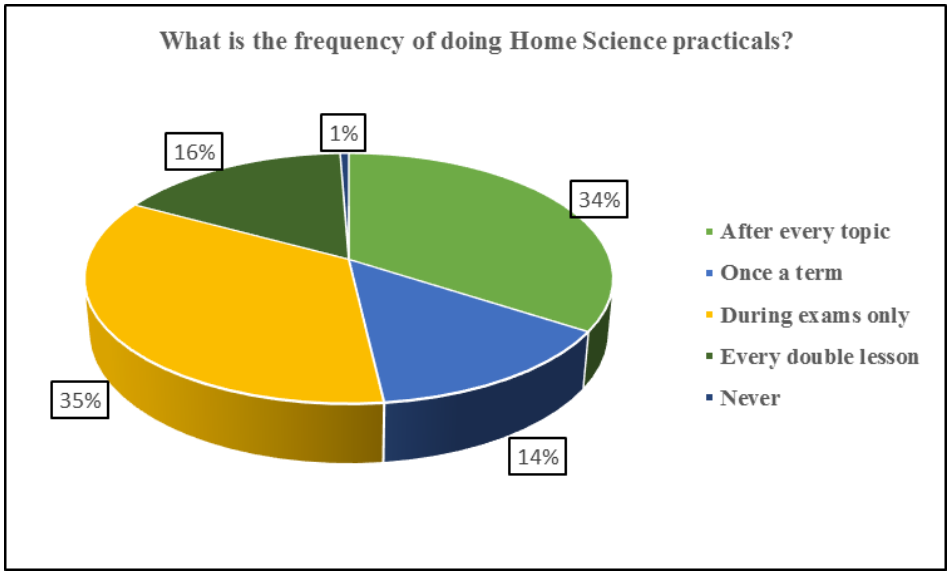

Figure 4.3. Frequency of Doing Home Science Practicals

Responses from the teachers pertaining the frequency of doing practicals showed that 66.7% did their practicals after every topic whereas 33.3% indicated they did practicals during every double lesson. Table 4.5

Table 4.5. Frequency of doing practicals as indicated by the Teachers

Statement	Frequency	Percent
After every topic	4	66.7
Every double lesson	2	33.3
Total	6	100.0

From the findings of this study, there is an indication that Home Science practicals in Elgeyo Marakwet County were rarely done. Hence, the students could end up missing important concepts of the subject to be learnt.

A similar finding was obtained by Nyangara *et al.,* (2010) where they reported that 10.3% teachers carried out practicals and majority of them, 89.7% decided on the amount of time for practicals as it was a feeling that when less time was accorded for the practicals, they had a high chance of completing the syllabus on time. This finding contradicts a study by Mbithe (2012) who reported that 64% of the respondents used the lab during the double lesson. This could be attributed to the fact that since the Home Science laboratories in Elgeyo Marakwet County are fairly equipped with limited resources, there is a high likelihood that the Home Science teachers opted to do the practicals at the end of the topic and during exams. There seems to be some strong belief that the school administration facilitates this through provision of finances to purchase the requirements for the Home Science practicals only during exams and in limited cases at the end of a lesson that could have a practical. Therefore, there is a strong feeling that students may not be exposed to Home Science practical more often as they should.

In addition, the school administration facilitates the practicals through provision of finances to purchase the requirements only during exams and in limited cases at the end of a possible lesson. Therefore, students are not exposed to Home Science practicals as more often as they should. Views were also sought on funding of the Home Science subject in the school. From some of the sampled schools, the principals confirmed that they funded Home Science practicals. The item on funding appeared on the teachers'

questionnaires and 4 (66.7%) indicated that the parents of Home Science students are asked to pay extra fees to help in the financing of the subject while the rest indicated that the school fully funds. From the principals, it was revealed that indeed parents of Home Science pay an extra fee and in most cases students are expected to come with some materials for Clothing and Textiles like fabric and small sewing equipment for their practicals. As earlier noted from the sampled schools, one prerequisite for enrolment into the subject was the ability of the student to pay the extra fee, therefore students who did not comply with the directive were not permitted to choose Home Science subject.

This extra fee charged on students taking Home Science may have been a contributing factor to enrolment of the Home Science subject even though that extra fee was minimal. This concurs with Indoshi *et al.,* (2010) who established that extra fees charged for Art and Design subject and that it was an expensive subject making students to drop. They ranked the extra levies to first position and the art subject being expensive to second position. Also, Aina and Adedo (2013) in their concluding remarks said that high cost of financing science was a contributing factor to low enrolment in sciences.

The low enrolment in the subject may have arisen due to the subject grouping by Ministry of Education where respondents may have felt that if something is placed as optional, it does not bear much weight therefore they could as well do without it altogether.

4.5.3 Effects of Availability of Resources on Enrolment

The respondents were asked to give their opinions on effects of the availability of resources based on seven statements. Table 4.6 and Table 4.7 from the students and

teachers' questionnaires show that availability of instructional materials are very important in teaching and learning of Home Science as this scored the highest mean, 4.34±0.983 and on teachers questionnaire, 4.00±1.549 this concept was emphasized by the statement pertaining to adequacy or inadequacy of teaching and learning Home Science facilities in the school in comparison with enrolment, majority of the students were undecided, they posted a mean of 3.28±1.291 and 3.26±1.271 respectively. The scale used to interpret the mean values obtained was 1-5 where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Undecided (U), 4-Agree (A), and 5-Strongly Agree (SA).

Statements with least mean signifying that the respondent had a strong disagreement with were those of encouraging and discouraging students from taking Home Science because of the limited resources meant for a certain number and that more were encouraged to choose other options because they did not require specialized resources that can influence enrolment. These statements got a mean of 1.88±3.276 and 2.1±1.253 respectively. But from the teacher's response, most of them were of the opinion that they did not discourage students on the basis of available resources they scored a mean of 1.67±1.633.

The interview with the principals did shed some light into whether majority felt that Home Science as a subject should be able to attract more students and that availability of more resources greatly contributes to higher enrolment besides other factors. Another point from the teacher's questionnaire worth noting is that regarding ability of teaching and learning Home Science resources can be improvised from the available resources scored a very high mean (4.33±0.516) signifying that Home Science teachers strongly agreed to this point.

Table 4.6. Students' Responses on Effects of Availability of Resources on Enrolment

Statement	Mean	SD
Most students are encouraged to choose other options because they do not require specialized kinds of resources	2.1	1.253
My Home Science teacher discouraged me from taking Home Science subject because the available resources are only meant for certain number of students	1.88	3.276
Adequacy or inadequacy of teaching and learning resources are responsible for the enrolment in Home Science subject	3.26	1.271
There are adequate teaching and learning Home Science facilities in my school	3.28	1.291
Instructional materials are very important in teaching and learning of Home Science subject	4.34	0.983
Mean	**2.89**	**1.53**

It therefore implies that in cases where resources are not available, those that can easily be sourced from within the school may make the financing of the subject more bearable other than buying them. From this perspective, it may be the feeling of school administrators that teachers of Home Science usually present very huge unnecessary budgets to their advantage that makes the subject expensive.

Table 4.7. Teachers' Responses on the Effects of Availability of resources

Statement	Mean	SD
Adequacy or inadequacy of teaching and learning resources are responsible for the enrolment in Home Science subject	4.00	1.095
Instructional materials are very important in teaching and learning of Home Science subject	4.00	1.549
Teaching and learning Home Science resources can easily be improvised from available resources	4.33	.516
Mean	**4.11**	**1.053**

Respondents were further asked to indicate who funds Home Science subject in the school. It was established that most of the schools (67%) ask parents to pay extra fee

whereas 33% of the respondents indicated that the school fully funded the subject. Therefore, it can be concluded that enrolment of the subject may be affected by the fact that parents may not wish to pay an extra fee besides the normal school fees. Figure 4.4

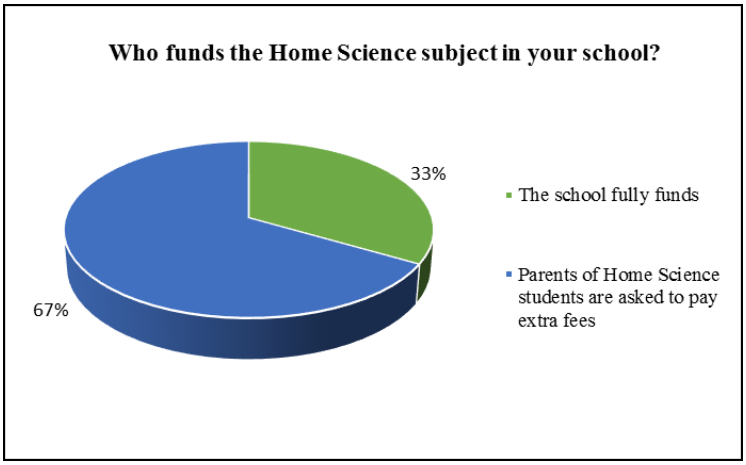

Figure 4.4. Funding of Home Science Subject in Schools

Respondents were asked to give their personal opinion on the effects of availability of resources. The study revealed that respondents felt that availability of instructional materials and resources were very vital in the teaching and learning of Home Science subject.

Aina cited in Aina and Adedo (2013) that to ensure that learners learn effectively with a lot of interest, science subjects need to be taught using very good instructional materials. Also, Miller 1990 in Serem (2011) noted that instructional materials captivate learners' interest, attention and challenges the learner to recall and internalize that which has been taught. In another study by Kamau and Orodho (2014) it was reported that most students 72 (23.7%) and 68 (22.4%) were strongly satisfied and satisfied respectively that the number of Home science learning resources were enough. In this regard, it is clear that

with adequate teaching and learning resources, there is a high chance on improving the results of Home Science as a subject in schools. Also, students attitude on perception of the subject is enhanced therefore a high chance of recruiting a large number of students in the subject.

4.6 Qualification of Home Science Teachers

Objective three was to identify how teacher qualification affects students' enrolment in Home Science subject.

4.6.1 Education level of Home Science Teachers

This study established that majority of the teachers 5(83.3%) attained formal training to teach Home Science subject whereas 1(16.7%) had not undergone any professional training as she was a form four leaver and had been requested to assist the candidates to alleviate the shortage of trained Home Science teacher in the school. The study also established that of the six respondents, 5 (83.3%) were graduates while 1 (16.7%) had not received any professional training Table 4.8.

Table 4.8. Education Level of Home Science Teachers

Teachers' Training			Highest Academic Qualification		
	Frequency	**Percent**		**Frequency**	**Percer**
Yes	5	83.3	Graduate	5	83.3
No	1	16.7	Form 4 Leaver	1	16.7
Total	6	100	Total	6	100

Majority of the teachers who took part in this study had undergone training and therefore were qualified to teach the Home Science subject. Musau and Migosi (2015) found that

majority of teachers were trained graduates (51.7%). However, this study also revealed that there were non-professionals in secondary schools teaching Home Science subject. This finding is in line with that of Ofem *et al.,* (2015), and Obomanu and Adaramola (2011) who established presence of non-professionals teaching in secondary schools. Mahulo (2012) observed that teachers' training influenced their level of productivity. The author further argued that there was a high turnover of trained teachers necessitating the engagement of untrained teachers to curb the shortage of teachers.

4.6.2 Experience of Home Science Teachers

The present study categorized work experience into three different levels of Home Science teachers from 0 – 20 years. Those who had taught from 0 -5 years were 3 (50%) 6 -10 years were 2 (33.3%) and 16 -20 years was 1 (16.7%). This implied that Home Science teachers in this study had experience. Figure 4.5

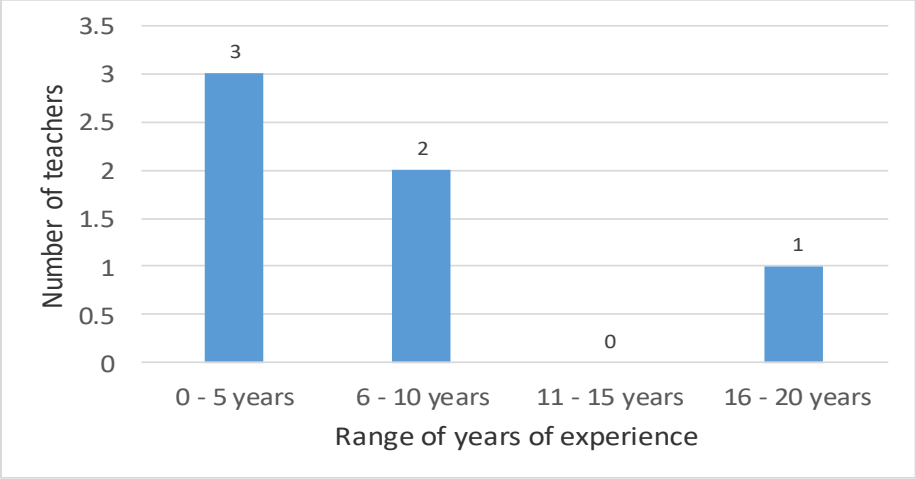

Figure 4.5. Experience of Home Science teachers

Results from this study had three different levels of experience of Home Science teachers ranging from 0-20 years. Similar results were documented by Nyangara *et al.,* (2010)

who found that majority of their respondents had an experience of above 10 years and Musau and Migosi (2015) found a greater percentage (51.7%) of the respondents had served more than five years in their stations.

Murage and Kibera (2014) concluded in their study that years of experience and age of teachers were significantly related therefore could be used to predict job satisfaction. Also, Ofem *et al.*, (2015) concluded that qualification and experience of teachers play a very important role in improving lives of students. Musau and Migosi (2015) found contrary results where their study found that teacher qualification and experience had no significance to low academic achievement of students.

4.7 Students' Attitude towards Home Science Subject

Objective four sought to determine the respondents' attitude towards Home Science subject. The areas of interest were; number of students taking Home Science subject, how they were introduced to the subject and their attitude towards Home Science subject.

4.7.1 Number of Students Taking Home Science Subject

This study found that out of the 166 student respondents, 116 (69.9%) were taking Home Science subject and the rest 50 (30.1%) had dropped it at the end of Form one. Table 4.9

Table 4.9. Those taking and not taking Home Science

	Frequency	Percent
Yes	116	69.9
No	50	30.1
Total	166	100.0

The next item was to find out how the respondents were introduced to Home Science while in form one and their responses were as follows; well introduced 143 (86.1%); Fairly introduced 22 (13.3%) and not introduced 1 (0.6%). Well introduced signifies that the students were well taken through the objectives of the subject and were made to understand it in depth. Fairly introduced signifies that the respondents were not taken through the objectives to their full understanding whereas not introduced signified that they were not taken through at all. Table 4.10

Table 4.10. How the students were introduced to Home Science in Form One

Statement	Frequency	Percent
Not introduced	1	0.6
Fairly introduced	22	13.3
Well introduced	143	86.1
Total	166	100.0

From the results, it clearly indicates that most of the students were well introduced to the subject in form one therefore had knowledge of the subject. Also, Home Science teachers together with their principals did confirm that their Home Science students were interested in studying Home Science subject therefore this implied that they liked the subject.

From this study, most of the students were taking Home Science and had been well introduced to the subject while in form one therefore had basic knowledge. Their choice of the subject also indicated that they liked the subject.

4.7.2 Respondents Attitude towards Home Science Subject

Several statements pertaining to Home Science were given to determine attitudes of the respondents towards the subject. From the study findings, it was noted that both teachers and students had a very positive attitude towards Home Science as shown in Table 4.11. For instance, all the students (166) strongly agreed to the statement "Positive attitude towards Home Science makes me more focused on the subject" scored a mean of 4.75±4.275 and that of "Home Science is a very interesting subject" also had a very high mean of 4.52±0.801. Also, from this study majority of the students (4.53 ±2.421 indicated that "it is very easy to study and pass Home Science" yet very few students choose the subject. The scale used to interpret the mean values obtained was 1-5 where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Undecided (U), 4-Agree (A), and 5-Strongly Agree (SA). This study found that students and teachers had a very positive attitude towards Home Science Subject and therefore concurs with that of Ozioma (2011); Bekleyen 2012 in Ongang'a, Nkurumwa, and Koyanga (2014) and Ndalichako and Komba (2014) that revealed that level of interest in the study of vocational subjects were high because interests of the students were aroused through practicals done in the laboratories. They further echoed their sentiments that teachers play a role in ensuring that students have positive attitude as a result of their positive attitude towards them.

Oriahi *et al.,* (2010) opined that attitude of students to sciences affects their choice and with a negative attitude, disinterest sets in and eventually students drop the subject when a chance is accorded to them. They further affirm that there is need to put measures to improve students' attitudes towards sciences. Also, Kamau and Orodho (2014) in their

study revealed that 80% of their student respondents affirmed that learning Agriculture was not difficult as good results could easily be achieved; thus, implied that students taking Agriculture subject had a positive attitude. Also, Mwangi, Gongera, and Thinguri (2013) in their study confirmed that girls had a positive attitude towards Physics especially girls in single sex schools and that low enrolment had nothing to do with attitude factor. Serem *et al.,* (2010) and Serem (2011) also found similar results as they established that majority of students had a positive attitude towards clothing and textiles unit in Home Science since they felt that the unit was useful later on in life. Mbaabu *et al.,* (2011) also had similar results where they established that secondary school students in Imenti South District had a positive attitude towards physics, where 52.5% of their sample indicated so.

It can therefore be concluded that despite the fact that a higher number of students had a positive attitude towards Home Science subject and they had no commitment towards studying the subject. This may have been due to the wide scope of Home Science subject and the fact that the subject was more demanding in terms of time.

Table 4.11. Students' Attitude Towards Home Science

Statement	Mean	SD
Home Science subject is one of the most useful subjects	4.47	0.932
Everybody should have the basic Home Science knowledge	3.96	1.103
My attitude about my Home Science teacher has a potential for developing an open-minded attitude about the subject	4.3	0.99
Positive attitude towards Home Science subject makes me more focused on the subject	4.75	4.275
It is very easy to study and pass Home Science subject	4.53	2.421
Home Science is a very interesting subject	4.52	0.801
Mean	**4.42**	**1.754**

In addition, 4(67%) teachers did rate their students as having a strong positive attitude towards Home Science subject. Fairly positive means having a positive attitude to a moderate extent whereas strong positive means having a very positive attitude. This study therefore found out that students had a positive attitude towards Home Science subject. Figure 4.6

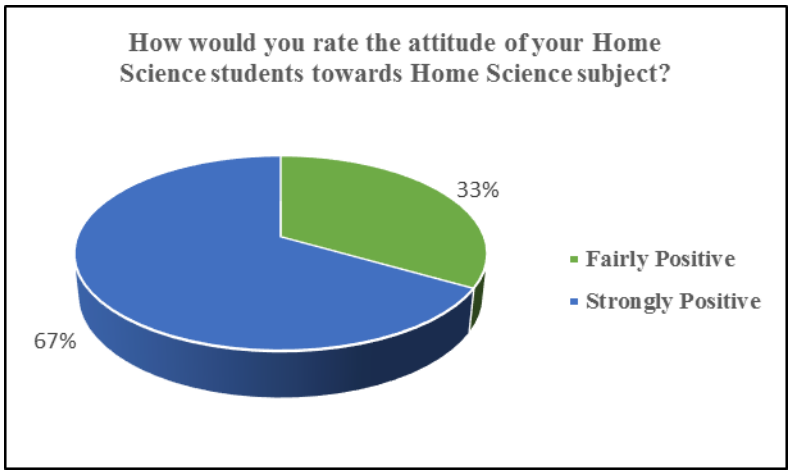

Figure 4.6. Attitude of students on Home Science subject as rated by Teachers

On teachers' responses, a statement was asked to determine the kind of study habits the Home Science students exhibited in studying Home Science. This is because if a student has positive attitude towards a subject, they tend to spend more time studying it therefore, this can make a student to choose or avoid it. This study found out that majority of the teachers 4 (67%) felt that their Home Science students lacked commitment; 1 (16%) students spend little time studying Home Science and another 1 (17%) felt that students dedicate most of their time to studying Home Science. Figure 4.7

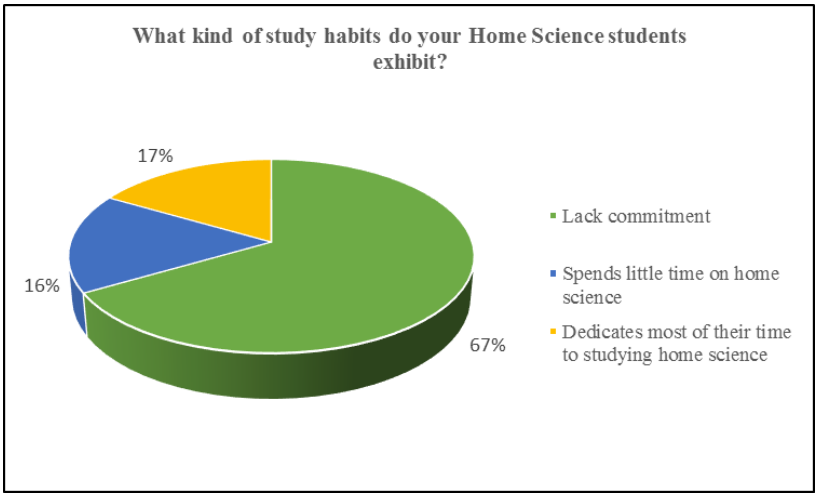

Figure 4.7. Study habits exhibited by students as rated by teachers

This study differs with that by Mbithe (2012) who found out that 6 (50%) of the teachers rated their students to have a poor attitude towards Physics subject simply because they were not inspired by their teachers. When teachers employ poor teaching methods and they couple it with attitude towards their students, they end up influencing their students whether to choose a subject or not (Akintade, 2012). In comparison to that of Mbithe (2012), this study found out that students 263 (30%) in Kangundo district perceived physics to be more difficult than other subjects making a small number of students to choose Physics. Aina and Adedo (2013) also had dissimilar results in their study where they established that 77.5% of students had no interest in science and 50% of the students lacked motivation and they therefore concluded that interest and motivation had an effect on enrolment in Science.

4.8 Career Opportunities

Objective five examined career opportunities available and their influence on enrolment in Home Science subject. This study sought information on whether students received

appropriate guidance on careers before choosing their subjects and who guided them, whether information they got was sufficient, whether they were aware of career opportunities they could venture into after studying Home Science subject.

4.8.1 Guidance on Career Choice

The respondents were asked to indicate whether they received guidance on careers before they chose their subjects. This study established that 152 (91.6%) of the students indicated they were guided on careers before they chose their subjects while 14 (8.4%) were not guided. Table 4.12

Table 4.12. Guidance on Careers before Choice of Subjects

	Frequency	Percent
Yes	152	91.6
No	14	8.4
Total	166	100.0

Majority (83.3%) of the teachers confirmed that students were guided before choosing their subjects while 16.7% indicated that students were not guided before choosing their subjects. Table 4.13

Table 4.13. Teachers' Responses on whether students were guided on careers

Statement	Frequency	Percent
Yes	5	83.3
No	1	16.7
Total	6	100.0

This study found out that students in Elgeyo Marakwet County received guidance on careers before choosing their subject which was similar to that of Mbithe (2012) who

found out that 792 (90%) of her respondents were guided before they chose their subjects and 88 (10%) were not guided.

Also, through the interview schedule with the principals, they confirmed that students were guided in form one when they enroll and at the end of form two. Therefore, this implies that students choose their subjects after being guided.

4.8.2 People Involved in Career Guidance

The respondents who had received career guidance were further asked to indicate the people who had been involved in guiding them in the choice of their careers. This study found out that majority of the respondents 80 (52.6%) received career guidance from their teachers; 32 (21.1%) from parents, 24 (15.8%) career guidance counsellors; 12 (7.9%) from professionals such as lawyers, teachers and journalists and 4 (2.6%) from their friends. Table 4.14. Further, the principals confirmed that the school played the role through the careers department, heads of department and occasionally invited speakers to speak to the students.

Table 4.14. People Involved in Guiding Students on Careers

	Frequency	Percent
Guidance counsellors	24	15.8
Teachers	80	52.6
Parents	32	21.1
Friends	4	2.6
Professionals	12	7.9
Total	152	100.0

From this study, it is also evident that the services of guidance counselors also play a role in guiding students to choose their careers as it ranked third after parents and teachers.

From this study, it can be concluded that majority of the students in Elgeyo Marakwet County received information on careers from their teachers therefore, can be inferred that they received right information pertaining their career preference. Similar findings were documented by Mbithe (2012) where she established that 388 (49%) were guided by teachers; 174 (22%) by parents; 153 (17%) by career advisors and 95 (12%) by friends. Also, Migunde *et al.,* (2012) also concluded that family members were the most influential persons followed by teachers in informing students on their career choices and Ongang'a *et al.,* (2014) who affirmed that students make teachers their major source of information basing on variety of teaching methods employed by their Agriculture teachers. Adeyemi 2010 in Akintade (2012) believes that teachers do have a great role pertaining to the careers their students venture into as they act as role models where they will opt to choose those subjects taught by the same teachers whom they would like to emulate. In this regard, when teachers employ learner friendly techniques when teaching, learners will reciprocate by liking the subject and they will retain interest of many students and especially girls who will eventually choose their careers in that path.

When parents are involved, they can influence their children towards a certain career. Okeke 2000 in Oriahi *et al.,* (2010) revealed that indeed parents play a very important role in student's subject choice and their careers yet many of these students had not been privileged to get parental assistance. Abdu-Raheem (2012) also believes that poor performance of girls in the study could have arisen as a result of lack of encouragement from parents, teachers and the government.

Akintade (2012) established that career counselors had a very positive impact on students as they select their subjects and more so if the identified teacher was trained career counselor as the study revealed that 146 (73.0%) of the students concurred that their career teacher had enormous influence on their choice of Geography subject. Olufunmilayo and Oluwaseun (2013) and Ozioma (2011) had differing results in their study as they revealed that in all their selected schools in their study area, students did not benefit from the services of career counselors thus students relied on one side for the choice of their subjects and that as a result shun away from vocational subjects yet might be gifted in them. On the contrary, their parents expect them to go for prestigious careers. Ndalichako and Komba (2014) also opined that parents of students in their study had no major influence on their children due to the fact that most of them had not reached secondary education therefore had left their roles entirely to the schools and in particular the teachers. Aina and Adedo (2013) also noted that 44 (55%) of their respondents did not have the influence of a parent in their subject choice leading to low enrolment in science subject simply because they did not motivate them. Also, a study by Odia (2014) established that parents did not encourage their students to choose social studies simply because they felt that it was not a promising course. She further documents that 119 (68%) disagreed that their parents encouraged them to choose social studies. On the other hand, Etherington (2013) in her study indicated that parents were very decisive on the kind of careers they expected their children to venture into; not any career.

Mbaabu *et al.,* (2011) and Mwangi *et al.,* (2013) believe that students in their area of study had positive attitude towards Physics may have lacked adequate career advice as they chose their subjects, therefore avoided physics altogether. Mwangi *et al.,* (2013)

further concluded that majority of the career counselors were not highly knowledgeable on “current trends in job market, careers associated with different science combinations, remunerations expected in various careers, working conditions and terms of employment in different careers”. It is believed that with proper guidance, students with a positive attitude towards a given subject will venture into careers of their choice as they will be well furnished with the right information pertaining the chosen field. Egun (2008) affirms that services of counselors should be made available in schools to give insights to students on their expectations, study period and prospects for industry and for self-reliance. The school has a role of influencing student’s choice of a subject by supporting the subjects and career decision making (Oriahi *et al.,* 2010).

4.8.3 Sufficiency of Information on Career Choice

Teachers were asked to indicate whether the information the students got on career choice was sufficient for them to make their choices. This study revealed that the students do get sufficient information to help them make their choices as indicated by 5 (83%) and 1 (17%) who felt that the students did not get sufficient information. Similar results to this study were established by Mbithe (2012) who found that 697 (88%) of her student respondents indicated that they had received sufficient information whereas 95 (12%) indicated that the information they received was not sufficient at all. Interview with the principals yielded similar findings as they agreed that students indeed were well informed on careers they could venture into as they made their subject selection. Therefore, from the results it is evident that students receive adequate information on career choice. Figure 4.8

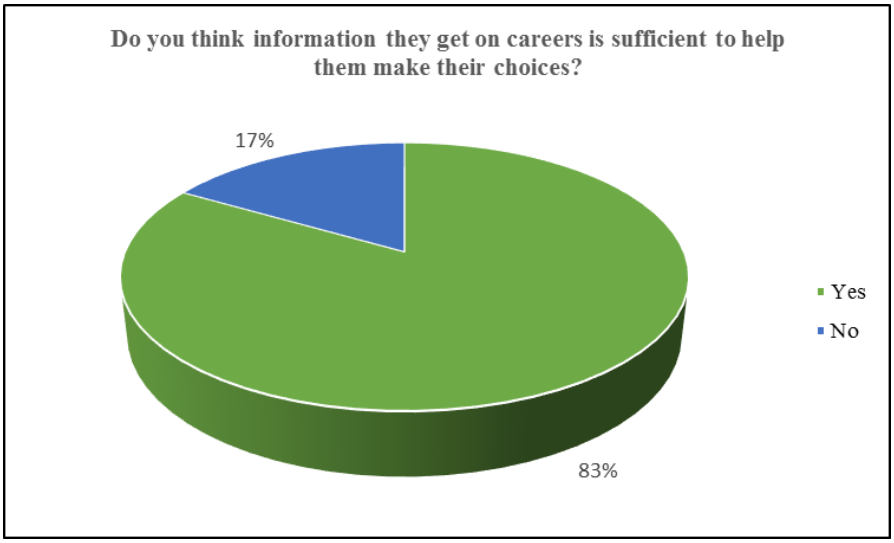

Figure 4.8. Sufficiency of Information from Career Guidance

It can therefore be concluded that students indeed got the right information to warrant them choose their subjects leading to their preferred careers simply because most of the information they got was from reliable sources.

4.8.4 Career Opportunities Related to Home Science subject

To be able to rate the students understanding on the information they got on career choice, they were further asked to indicate whether they were aware of the careers one could venture into after studying Home Science. It is worth noting that indeed they were very much aware as 154 (93.3%) indicated they were aware and only 11(6.7%) were not aware. Table 4.15

Table 4.15. Awareness on Career Opportunities Related to Home Science

Statement	Frequency	Percent
Yes	154	93.3
No	11	6.7
Total	165	100.0

More information was also sought from the teachers and the principals pertaining to Home Science students after completing their form four whether they ventured into Home Science related careers. From the interview with the principals, they reported that majority of the Home Science students ventured into Home Science related careers at all levels ranging from degrees, diplomas to certificates and in some cases, others opted to self-employment as they could make use of the skills they had acquired to earn a living. More information from the teachers indicated that 33% of the students ventured into Home Science related careers whereas another 33% responded that their Home Science students ventured into Home Science related careers. Of the six teachers, 2 (33%) did not respond to this item in the questionnaire. Table 4.16

Table 4.16. Teachers' responses on whether Home Science Students Ventured into Home Science Related careers

	Statement	Frequency	Percent
	Yes	2	33.3
	No	2	33.3
	Total	4	66.7
Missing	System	2	33.3
Total		6	100.0

Results from this study showed that students were aware of the career opportunities they could venture into after studying Home Science subject simply because they received the right information particularly from their teachers.

4.9 Chapter Summary

This chapter has presented, analyzed, interpreted and discussed results of this study based on its objectives. The objectives focused on the influence of school policies on enrolment

in Home Science subject, effect of teaching resources on enrolment in Home Science subject, and qualification of Home Science teachers. Further, the objectives examined students' attitude towards Home Science subject and its effects on enrolment in Home Science subject, and how available career opportunities affect students' enrolment in Home Science subject.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, conclusion and recommendations of the study.

5.2. School Policies on Subject Selection

The findings of this study pertaining to the choice of Home Science subject revealed that most of the sampled schools had no prerequisites for choosing Home Science subject. The schools adopted the Ministry of Education guidelines and students chose their subjects at will depending on their preference with a few cases where they were affected by the streaming of subjects and a minimal extra fee Home Science students pay to support the subject. This study further established that the school administration fully supported the Home Science subject as it was reported that the subject performed well in the KCSE subject ranking within the schools in comparison to other subjects therefore viewed as a very essential subject.

5.3. Availability of Teaching Resources

The findings of this study indicate that most of the Home Science laboratories in Elgeyo Marakwet County were not adequately equipped and can be concluded that the Home Science laboratories were mainly used during examinations and at the end of every topic due to limited resources. Students may not be exposed to Home Science practicals more often as they should. Extra fee charged to supplement the running of the subject may be

a contributing factor to low enrolment of the Home Science subject. From this study, it can be concluded that availability of resources has an influence on enrolment of Home Science subject where there is an increase of resources, the enrolment increases and vice versa.

5.4. Qualification of Home Science Teachers

Findings from this study revealed that presence of qualified and experienced teachers play a crucial role in the teaching and learning of Home Science subject in secondary schools. Presence of qualified and experienced teachers in a school affects enrollment of students in a particular subject.

5.5. Students' Attitude Towards Home Science Subject.

The findings of this study established that the respondents had a positive attitude towards Home Science subject in secondary schools which could be attributed to the interest depicted by the students in the practicals and the usefulness of the subject in equipping one with life skills thus had nothing to do with enrolment. If students can be accorded a chance to enroll in the subject and motivated, enrollment level would go up.

5.6. Available Career Opportunities

Findings from this study showed that students within the county received information on careers when choosing their subjects. The people who are mostly the source of the information are their teachers who doubled up as the Heads of Departments and career masters within the school. Guidance and counseling plays a role and with the right attitude and the availability of job opportunities, students will choose their subjects in line

with preferred careers. Therefore, this study concludes that there is a strong link between Home Science and student's future occupation.

The element of having an opportunity to self-employment after studying Home Science subject is a lived reality as it can help one to engage in income generating activities. This is possible since Home Science subject has a wide scope and one can choose a sector depending on interests, preference and ease of working. Despite the high rating of the subject by the respondents in this study, it is quite evident that the society may not appreciate the benefits of the subject because of their "just fair" attitude and they would rather have their children pursue other careers other than the one they term as a "cooking subject"

5.7. Conclusion

In the light of the results above the following conclusions can be made:

i. Majority of the schools do not have prerequisites policies for choosing Home Science making them to adopt the Ministry of Education guidelines on subject groupings. Therefore, school policies on subject selection on Home Science had no influence on enrolment.
ii. Inadequate resources make it impossible to have practicals often as they should which tend to influence student's choice of the subject. Therefore, inadequate teaching resources affect enrolment in Home Science subject.
iii. Majority of Home Science teachers in this study had received formal training, were graduates and had enormous experience.

iv. Respondents had a positive attitude towards Home Science subject in secondary schools.

v. Students received information on careers before choosing their subjects from their teachers.

5.8. Recommendations

Based on these conclusions, the following recommendations are suggested: -

i. Curriculum planners should review the curriculum so that Home Science subject can be re-introduced and made examinable in primary schools so that pupils can be oriented in the subject early enough for them to have a glimpse of a bigger picture of what the subject has to offer.

   All schools should be provided with teaching and learning resources to help start up and also support the existing ones so as to boost enrolment. Schools should be aided by both the public and private sectors in equipping and maintaining the available teaching resources.

ii. Both Male Home Science teachers and professionals should visit boys and mixed schools with an aim of sensitizing the boys on the importance of the subject to encourage them to develop interest in Home Science subject.

   Students' positive attitude can be reinforced by offering the necessary learning resources so that more practicals can be done. The attitude towards Clothing and Textiles unit can be enhanced when the learners are exposed more to the practicals which will make the student be at ease with it which in turn will not affect the enrolment of the subject.

iii. Home Science related professionals should market the subject through career talks which informs potential students on the benefits of the subject.

5.9 Suggestions for Further Research

The fact that this study was only limited to County schools in Elgeyo Marakwet County which were purely girls' schools, the results of this study limits generalization. Therefore, areas of further research include;

i. A follow up study needs to be done at post-secondary education to determine the courses taken by students who did Home Science subject in secondary schools.

ii. Studies to be done in schools not offering the subject to establish factors making them not to.

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APPENDICES

APPENDIX I: Letter of Transmittal

Kapkenda Girls High School
P.O. BOX 5 -30129
CHEPKORIO.
Date: ……

TO WHOM IT MAY CONCERN

Dear sir/Madam,

RE: DATA COLLECTION

This is to inform you that I am a student currently pursuing a Master of Education degree in Home Science and Technology at the School of Education, University of Eldoret.

I am conducting a study on determinants of enrollment in Home Science subject in secondary schools in Kenya. A case of Elgeyo Marakwet County. It is hoped that the results of this study will provide education planners at the county and the national levels, Home Science teachers and potential Home Science students with the necessary information in formulating policies that will increase student enrollment in Home Science Subject. The findings of this study will be shared with the respondents.

Attached herein, is a questionnaire that seeks your views on determinants of enrollment in Home Science subject.

Kindly provide information by responding to the questions honestly and sincerely. The information provided will be used only for academic purpose and will be treated with utmost confidentiality. You are not expected to record your name or initials anywhere.

Thank you.

Yours faithfully,

Abigael Chelagat Mokaya
MEd Student – EDU/PGH/1001/13
University of Eldoret.

APPENDIX II: Informed Consent

Title of the study: Determinants of enrollment in Home Science subject in secondary schools in Kenya: A case of Elgeyo Marakwet County.

Researchers Name: Abigael Chelagat Mokaya,
School of Education,
University of Eldoret
Mob: 0721410670

Dear sir/Madam,

You have been invited to take part in this research study, and before you make a decision to participate, it is very important you understand the purpose. Carefully read and understand the information and should there be any thing that needs to be clarified, kindly ask the researcher.

The purpose of the study is to explore the determinants of enrollment in Home Science Subject in secondary schools in Kenya: A case of Elgeyo Marakwet County.

There are no foreseen risks from your participation and you may decline to answer any or all questions and you may terminate your involvement if you wish to do so.

It is hoped that the results of this study will provide education planners at the county and the national levels, Home Science teachers and potential Home Science students with the necessary information in formulating policies that will increase student enrollment in Home Science Subject.

Kindly, do not write any particulars pertaining to your identity like your name or initials on the questionnaire. Your responses will be treated with utmost confidentiality. Should you have any questions in relation to this study, kindly contact the researcher.

CONSENT

By signing this consent form, I confirm that I have read and understood the information. I understand that my participation is voluntary and that I am free to withdraw at will without giving my reasons. I also do understand that I will be given a copy of this consent form. I therefore voluntarily accept to take part in this study.

Respondent's signature: …… Date: …….

Researchers Signature: …… Date: …….

APPENDIX III: Student's Questionnaire

The questionnaire is meant to collect data purely for academics. This study seeks to determine the determinants of enrolment in Home Science subject in secondary schools in Kenya: A case of Elgeyo Marakwet County.

Answer all questions as indicated in the various sections by either filling in blank spaces or ticking the option or giving the statement that applies.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: Male ( ) Female ( )

2. How old are you? ……..

3. What is the highest academic qualification of your parents/ guardian? Tick (√) where appropriate

Parent	Post Graduate	Graduate	Diploma	Any other: specify
Father				
Mother				
Guardian				

SECTION B: AVAILABILITY OF TEACHING RESOURCES

4.(a) How many laboratories of Home Science do you have?

i. 0 ( )
ii. 1 ( )
iii. 2 ( )

(b) How are they equipped?

i. Fully equipped ( )
ii. Fairly equipped ( )
iii. Not equipped ( )
iv. Not applicable ( )

5. How often do you do practicals in Home Science?

i. After every topic ( )
ii. Once a term ( )
iii. During exams only ( )
iv. In every double lesson ( )
v. Never ( )
vi. Any other. Specify ……

6. Kindly indicate your level of agreement or disagreement with the statements as regard to the effects of availability of resources on enrollment of Home Science. Use a tick (√) where 1- Strongly Disagree (SD), 2- Disagree (D), 3-Undecided (U), 4- Agree (A), and 5- Strongly Agree (SA)

Statement	**SD**	**D**	**U**	**A**	**SA**
More students are encouraged to choose Home Science subject because of the available resources					
Most students are encouraged to choose other options because they do not require specialized kinds of resources					
My Home Science teacher discouraged me from taking Home Science subject because the available resources are only meant for certain number of students					
Adequacy or inadequacy of teaching and learning resources are responsible for the enrolment in Home Science subject					
There are adequate teaching and learning Home Science facilities in my school					
High cost of financing Home Science subject directly influence enrolment level in Home Science					
Instructional materials are very important in teaching and learning of Home Science subject					

SECTION C: ATTITUDE TOWARDS HOME SCIENCE SUBJECT

7. Do you take Home Science subject?

YES ( ) NO ( )

8. How were you introduced to Home Science subject in form one?

i. Well introduced ( )
ii. Fairly introduced ( )
iii. Not introduced ( )

9. Kindly indicate your level of agreement or disagreement with the statements as regard to your attitude towards Home Science subject. Use a tick (√) where 1- Strongly Disagree (SD), 2- Disagree (D), 3-Undecided (U), 4- Agree (A), and 5- Strongly Agree (SA).

Statement	SD	D	U	A	SA
Home Science is one of the most useful subjects					
Everybody should have the basic Home Science knowledge					
Home Science teachers are very supportive in solving Home Science related problems					
My attitude about my Home Science teacher has a potential for developing an open-minded attitude about the subject					
Positive attitude towards Home Science subject makes me more focused on the subject					
There are many Home Science related careers where one can venture into					
It is very easy to study and pass Home Science subject					
Home Science is a very interesting subject					
I like the diversity of Home Science subject					
I like Home Science as it has a wide scope					
Home Science is more demanding in terms of time and money					
Other students look down on those taking Home Science					
Generally people look down on students taking Home Science					
My personal interest in Home Science subject influences my career choice					
Attractiveness and relevance of Home Science subject was not presented in primary education					
There are role models from the community/surrounding that influence student's choice of Home Science subject					
Students drop Home Science subject after form 1 or 2 as it was not their personal choice					

SECTION D: CAREER OPPORTUNITIES

10. Were you guided on careers before choosing your subjects?
    YES ( ) NO ( )

    If yes, who are the people involved in guiding you?

    i. Guidance counsellors ( )
    ii. Teachers ( )
    iii. Parents ( )
    iv. Friends ( )
    v. Professionals ( )

11. Are you aware of career opportunities one can venture into after studying Home Science subject? YES ( ) NO ( )

Thank you for the information provided

APPENDIX IV: Home Science Teachers Questionnaire

The questionnaire is meant to collect data for purely academic work. This study seeks to determine determinants of enrollment in Home Science subject in secondary schools in Kenya: A case of Elgeyo Marakwet County.

Answer all questions as indicated in various sections by either filling in the blank spaces or ticking the options or giving the statement that applies.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: MALE ( ) FEMALE ( )

2. Indicate your age bracket.
   i. 19-24 years ( )
   ii. 25-30 years ( )
   iii. 31-36 years ( )
   iv. 37-42 years ( )
   v. 43-48 years ( )
   vi. 49-54 years ( )
   vii. 55 years and above ( )

SECTION B: QUALIFICATION OF HOME SCIENCE TEACHERS

3. Are you trained to teach Home Science subject?
   YES ( ) NO ( )

4. Kindly indicate your highest academic qualifications.
   i. Post Graduate ( )
   ii. Graduate ( )
   iii. Diploma ( )
   iv. Any other. Specify ……
5. Indicate the range of years of experience in your current position.
   i. 0-5 years ( )
   ii. 6-10 years ( )
   iii. 11-15 years ( )
   iv. 16-20 years ( )
   v. Above 21 years ( )

SECTION C: AVAILABILITY OF TEACHING RESOURCES

6. How many laboratories of Home Science do you have?
   i. 0 ( )
   ii. 1 ( )
   iii. 2 ( )

   How are they equipped?
   i. Fully equipped ( )
   ii. Fairly equipped ( )
   iii. Not equipped ( )

7. How often do you do practicals in Home Science?
   i. After every topic ( )
   ii. Once a term ( )
   iii. During exams only ( )
   iv. Every double lesson ( )
   v. Never ( )
   vi. Any other. Specify ……

8. Who funds the Home Science subject in your school?
   i. The school fully funds ( )
   ii. Parents of Home Science students are asked to pay extra fees ( )
   iii. Any other. Specify ……

9. Kindly indicate your level of agreement or disagreement with the statements as regard to the effects of availability of resources on enrollment of Home Science subject. Use a tick (√) where 1- Strongly Disagree (SD), 2- Disagree (D), 3-Undecided (U), 4- Agree (A), and 5- Strongly Agree (SA)

Statement	**SD**	**D**	**U**	**A**	**SA**
More students are encouraged to choose Home Science subject because of the available resources					
Most students are encouraged to choose other options because they do not require specialized kinds of resources					
I discourage some students from taking Home Science subject because the available resources are only meant for certain number of students					
Adequacy or inadequacy of teaching and learning resources are responsible for the enrolment in Home Science subject					
High cost of financing Home Science subject directly influence enrolment level in Home Science					
Instructional materials are very important in teaching and learning of Home Science subject					
Teaching and learning Home Science resources can easily be improvised from available resources					

SECTION D: STUDENTS' ATTITUDE TOWARDS HOME SCIENCE SUBJECT

10. How would you rate the attitude of your Home Science students towards Home Science subject?

i. Strongly Positive ( )
ii. Fairly Positive ( )
iii. Fairly Negative ( )
iv. Strongly Negative ( )

11. What perception do you have to Home Science subject? Use a tick (√) where 1- Strongly Disagree (SD), 2- Disagree (D), 3-Undecided (U), 4- Agree (A), and 5- Strongly Agree (SA).

Statement	**SD**	**D**	**U**	**A**	**SA**
Home Science subject is more demanding in terms of time and money					
Positive attitude towards Home Science makes students more focused on the subject					
Home Science is meant for those who are academically challenged					
Home Science has many careers where one can venture into					
It is very easy to study and pass Home Science subject					
One can easily learn the concepts outside class					
Everybody should have the basic Home Science knowledge					
Home Science is a very interesting subject					
Home Science subject has a wide scope					
Home Science subject is diverse in nature					
Other students look down on those taking Home Science					
Generally people look down on students taking Home Science subject					
Personal interests in Home Science subject influences students career choices					
Attractiveness and relevance of Home Science subject is not presented in primary education					
There are role models from the community/surrounding that influence students' choice of Home Science					
Students drop Home Science subject after form 1 or 2 as it was not their personal choice					

12. What kind of study habits do your Home Science students exhibit?

i. Dedicates most of their time to studying Home Science ( )
ii. Spends little time on Home Science ( )
iii. Lack commitment ( )
iv. Study only during exams ( )
v. Any other. Specify……

SECTION E: AVAILABLE CAREER OPPORTUNITIES

13. (a) Are students guided on careers before choosing their subjects?

YES ( ) NO ( )

(b) If yes, who are the people involved in guiding them?

i. Guidance counsellors ( )
ii. Parents ( )
iii. Teachers ( )
iv. Career days ( )
v. Friends ( )
vi. Professionals ( )

14. Do you think the information they get on careers is sufficient to help them make their choices?

YES ( ) NO ( )

15. At the end of the form four, do your Home Science students venture into Home Science related careers?

YES ( ) NO ( )

Thank you for the information provided

APPENDIX V: Interview Schedule for Principals

SECTION A: PRELIMINARIES

1. Introductions
2. Researcher's and respondent's background information
3. Study objectives

SECTION B: SCHOOL POLICIES ON SUBJECT SELECTION

1. Which group four and five subjects are offered in your school?
2. Elaborate on the school policy concerning choice of group four and five subjects?
3. What role do you play as a school administrator in curriculum implementation pertaining subject selection by the students?
4. What are the set prerequisites for taking Home Science?
5. Do you support Home Science subject as the school administration? Kindly give reasons for your answer.

SECTION C: AVAILABILITY OF TEACHING RESOURCES

6. How many Home Science laboratories do you have in the school?
7. How equipped are they?
8. Who funds Home Science subject in your school?

SECTION D: STUDENTS' ATTITUDE TOWARDS THE SUBJECT

9. Kindly, comment on what you think about Home Science subject.
10. What reasons would you give for your students who choose Home Science over other group four subjects?

SECTION E: AVAILABLE CAREER OPPORTUNITIES

11. How are students guided on careers before they choose their subjects?
12. Do you think the information they get on careers is sufficient for them to make their choices?
13. At the end of form four, do Home Science students venture into Home Science related careers?
14. Kindly comment on the society's take on Home Science subject.

Thank you for your time and the information provided

APPENDIX VI: Observation Checklist

Below is a list of equipment that a Home Science laboratory is expected to have. These equipment are likely to enhance enrolment amongst student taking Home Science subject. The aspects that were observed were; the availability of the Home Science laboratory and whether they are adequately equipped for the students during participation in Home Science lessons.

Schedule 1: Physical Resources (Home Science laboratory**)**

Physical Resources	**AVAILABILITY**			
	0	**1**	**2**	**3**
Home Science room				

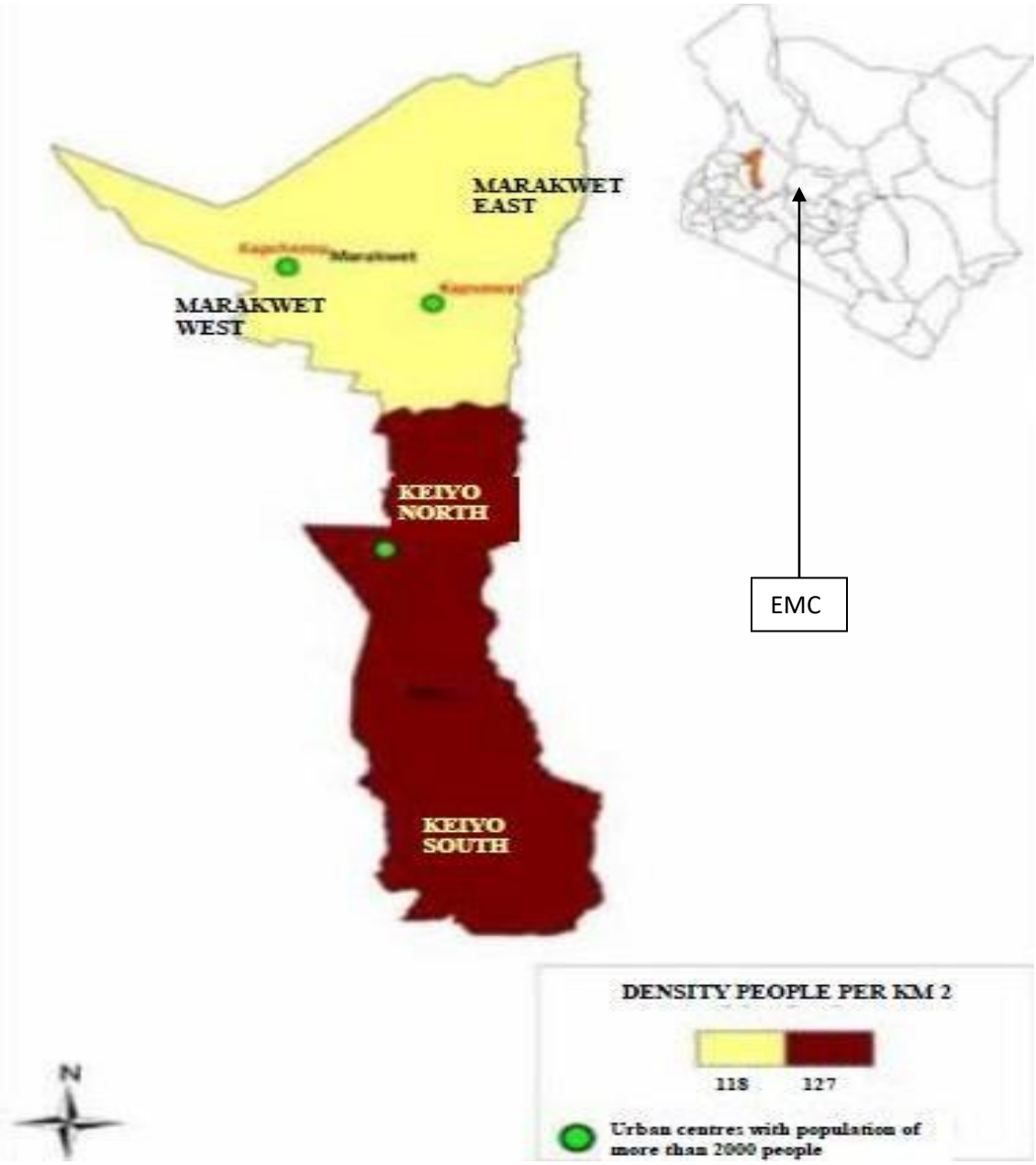
Observers comment on the laboratory size

……..……

Schedule 2: Equipment and Accessories

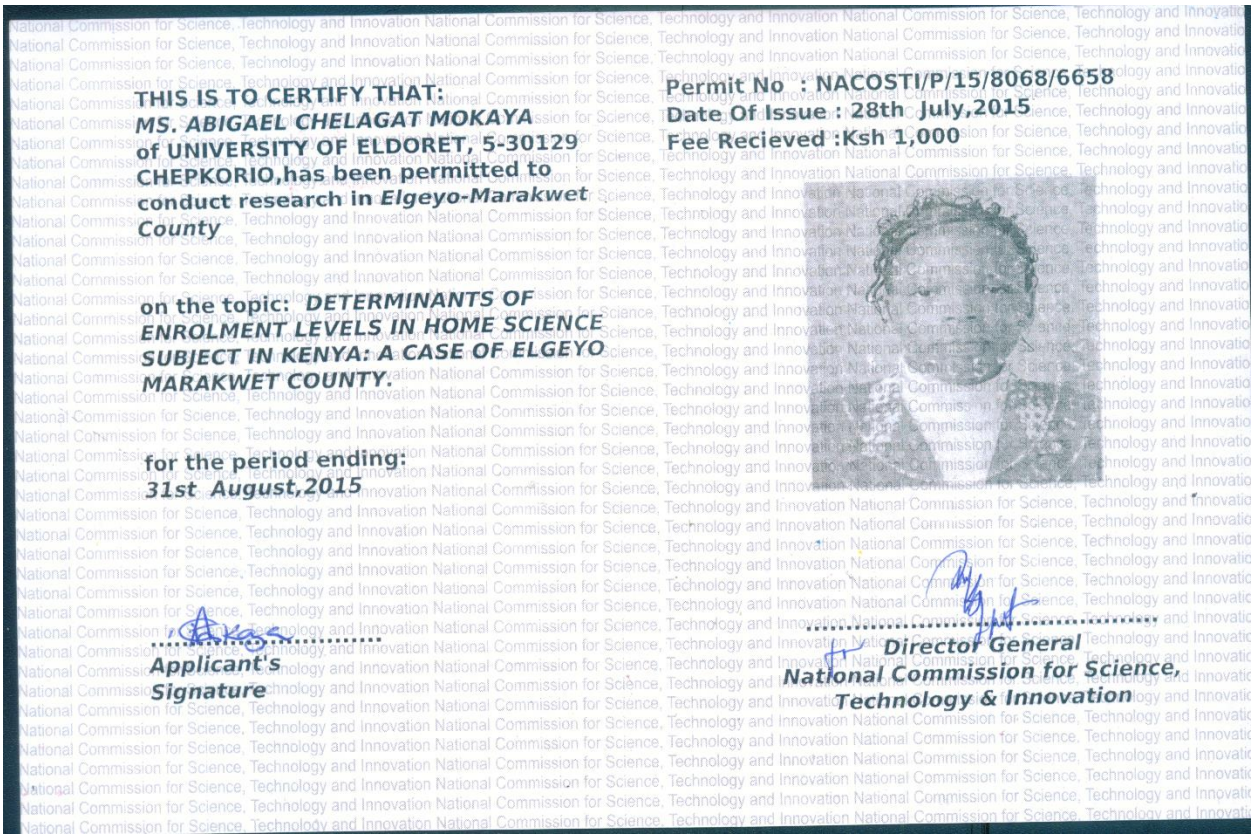
		ADEQUACY		
Rooms	**Equipment**	Adequate	Inadequate	Total
Clothing and Textile room	Sewing machines			
	Ironing surfaces			
	Irons			
	Dressing mirror			
	Small sewing tools an equipment			
	Working surfaces			
	Cupboards			
Food and nutrition	Cooking equipment			
	Work centers			
	storage equipment			
	Sinks			
Class area	Text books Charts Sample garments Folders			
Offices	Chairs			
	Lockers			

APPENDIX VII: Map of Elgeyo Marakwet County



Source: www.kenyampya.com/index.php?county=Elgeiyo Marakwet.

APPENDIX VIII: Research Clearance Permit



THIS IS TO CERTIFY THAT:
MS. ABIGAEL CHELAGAT MOKAYA
of UNIVERSITY OF ELDORET, 5-30129
CHEPKORIO,has been permitted to
conduct research in *Elgeyo-Marakwet County*

on the topic: *DETERMINANTS OF ENROLMENT LEVELS IN HOME SCIENCE SUBJECT IN KENYA: A CASE OF ELGEYO MARAKWET COUNTY.*

for the period ending:
31st August,2015

.....
Applicant's Signature

Permit No : NACOSTI/P/15/8068/6658
Date Of Issue : 28th July,2015
Fee Recieved :Ksh 1,000

APPENDIX IX: County Research Authorization

REPUBLIC OF KENYA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
STATE DEPARTMENT OF EDUCATION

TELEGRAM:.....
TELEPHONE NO: 0534142207
WHEN REPYLING PLEASE QUOTE OUR REFERENCE
EMAIL: cdeelgeyomarakwet@gmail.com

COUNTY DIRECTOR OF EDUCATION,
ELGEYO MARAKWET COUNTY,
P.O. BOX 214-30700,
ITEN.

DATE: 26th March, 2015

REF NO: CDE/EMC/R/26/VOL.I/92

The Principal of Schools,
Elgeyo Marakwet County.

RE: ABIGAEL M. CHELAGAT EDC/PGH/1001/13

The above is a Masters Programme student of University of Eldoret and has been authorized by Head, Technology Education Department for Home Science and Technology to carry out a research in Elgeyo Marakwet County vide Authority letter **Ref.No.UOE/SOE/TED/13** dated 20TH **March, 2015.**

She will research on "**Factors governing the choice of Home Science subject in secondary schools in Kenya: A case study of Elgeyo Marakwet County".**

Accord her the necessary assistance.

Richard O. Basweti,
For: County Director of Education
Elgeyo Marakwet