FACTORS INFLUENCING FORM TWO BOYS AND GIRLS CHOICE OF KCSE SUBJECTS IN KIENE DIVISION, NYERI NORTH DISTRICT, KENYA

BY

GATHAIGA PENINAH NYARUAI

UNIVERSITY OF NAIROBI
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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF EDUCATION OF THE UNIVERSITY OF NAIROBI

MAY 2012
DECLARATION

This research project is my original work and has not been presented for any other degree in any other university.

Githaiga Peninah Nyaruai.

Reg. No. E56/78995/09

This research project has been submitted with my approval as the university supervisor.

Daniel K. Gakunga
DEDICATION

This work is dedicated to my husband Peter. Mum and Dad. Sisters and Brothers
ACKNOWLEDGEMENT

I wish to thank God Almighty for the gift and strength to go through the entire course and in particular this research project. It is because of his blessings among them perseverance, good health, mental capability, patience that enabled me overcome countless obstacles during my course.

I am grateful to my supervisor Mr. Daniel Gakunga who professionally and skillfully helped me refine this work. My appreciation also goes to my family members for their consistent encouragement and my colleagues for their support.
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LIST OF ABBREVIATIONS

K.C.S.E - Kenya Certificate of Secondary Education

K.N.E.C - Kenya National Examination Council

C.R.E - Christian Religious Education
The purpose of this study was to examine the factors that influence form two boys and girls in their selection of KCSE subjects in Kieni Division Nyeri North District.

Research questions were formulated to guide in the study and data collected from 120 student respondents out of a total of 130. Findings revealed the students were provided with the necessary information concerning KCSE subject choices. The information was given by the teachers. It was also found out that gender did influence boys and girls choice of subjects. Majority of the students agreed that there were subjects for girls and for boys. Students respondents in their response showed that they believed that art based subjects were for girls while science based subjects were for boys.

Further findings revealed that guardians level of education and occupation did not fully influence students choice of subjects though some guardians influenced their children on what subjects to take since they were educated hence more aware of the needs of the job market which mostly determines what subjects are required. Boys and girls aspired career and level of education influenced their choices of KCSE subjects. Teachers also influenced the boys and girls on their choices. This is in the subjects they taught.

In the light of the research findings it was recommended that boys and girls should be provided with adequate information on the importance of the subjects that they study in schools. That there should be professionally trained career teacher-counselor in all schools. It was recommended that there is need for involvement of parents in the education of their children.
CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Secondary school education in Kenya is designed to enable the youth to play an effective role in the life of the nation by impacting on them the necessary skills and knowledge and inculcating the right attitudes. According to Ayot and Patel (1992) this is achievable through the 8-4-4 system of education which provides a diversified education consisting of about twenty seven subjects in Secondary school curriculum.

The schools system should therefore play the key role of selecting, allocating, and directing students to different areas of specialization and levels of operation so that the society can make full use of the abilities and talents of its people. Decision to admit students and assign them particular subjects in form one is rather simple because most of the subjects are compulsory at this level and the teacher guides the students. However according to Meijin (1997) in form three, the classes become more singular tracked at this level and students are expected to select a choice of subjects up to a maximum of nine and a minimum of seven. Choice of subjects is a common feature of each national curriculum. Salisbury and Riddle (2000) assert that choice as a concept tends to be regarded highly in a democratic society because it gives students ownership of their curriculum and reduces the likelihood that they will be alienated by over-prescriptive curriculum.

The question therefore arises on who should offer guidance to the students on subjects choice. is it parents, subject teachers, administrators, peers or career teachers if any of them is not in a position to offer guidance towards subject choice then what criteria
should the students use to decide on which subjects to settle for. is it good performance like or dislike for a subject or the career opportunities that the subject opens for the particular student? Moon and Shelton (1994) assert that the whole humanity need to be fully guided and counseled, including students in secondary schools on important issues such as finding identity, relationships, vocational aspirations and academic endeavours. The common phenomena in our schools is the never ending rush to cover the syllabus with very little time, if any, given to assist the students in choosing subjects (Farrant 1997). Further Farrant (1997) asserts that where study options exist, the subjects chosen can be of critical importance to the boys and girls since the subjects tend to fix them to particular careers. There is therefore a pertinent need for a greater emphasis to be focused on students' choice of subjects in order to ensure that before choosing subject, there is a complete awareness of all the possible alternatives. Fred (1989), concurs with this view by asserting that there should be a complete and consistent system of preferences, which allows a choice among the alternatives. Most educational institutions mixed or single have the tendency to provide informal and sketchy information to students on choice of optional subjects. With the breakdown of the traditional set up, the education system in Kenya has not provided adequate information to students in decision making with regard to choice of optional subjects. According to Zsuzsa (1981) selection of educational programmes is made in direct ration to information and guidance available to the individual. The Koech commission in reviewing the 8-4-4 system of education noted that there was need to reduce examinable subject in secondary schools to a minimum of seven subjects and a maximum of nine in order to lessen the curriculum burden.
In the Kenyan context, the choice of optional subjects is mainly based on the interaction between the curriculum and the clientele. According to Kaundia and Inanga (2001) in their research on the advantages and opportunities of science and mathematics based careers for women, the secondary school education system in Kenya should endeavour to direct students to different areas of specialization and levels of operation through the subject taught in order to enable the society make full use of them. Apart from the average academic grade attained appropriateness of combination of subjects passed is an important factor considered in an enrolment of various courses (ZSUZSA, 1981). One alienable right granted to secondary school boys and girls in Kenya is the right to choose subjects at form two that they would like to pursue further and sit for at the form four examinations under the 8-4-4 system of education it is stipulated that a boy and a girl cannot, in all honesty, sit for all subjects offered at the end of secondary school course. The Kenyan education system comprises of twenty subjects at secondary school level, the current National examination council, guidelines has categorized the subjects into five major groups.

Group 1 - English. Kiswahili and mathematics

Group 2 - Biology, physics and Chemistry

Group 3 - History and Government, Geography, Christian religious Education and Hindu Religious Education.

Group 4 - Home science, Art and Design, Agriculture, Aviation Technology and Computer science.

Group 5 - French, German, Arabic, Music and Business studies.
However, the candidates must enter for at least seven subjects selected from the above
groups as follows:

All the three subjects in Group One

At least two subjects from Group Two

At least one subject from Group Three

At least one subject from the remaining groups 2, 3, 4 and 5.

Candidates can sit for a maximum of nine and the extra one or two subjects can be
selected from any of groups 2 and 5 (KNEC 2006).

From the above requirements it can be noted that only subjects in group one are
compulsory. The rest of the 4 groups involve subjects that must be selected and these
are the elective subjects. boys and girls require career guidance to be able to make
informed decisions.

In the year 2009 - 337,404 students had registered for K.C.S.E while 2010 - 357,488
students were registered. However disparities were noted in the number of students
who had registered for optional subjects. This is reflected in the table below.
Table 1: Students' enrolment in optional subjects in 2009/2010

<table>
<thead>
<tr>
<th>Subject</th>
<th>2009 Female %</th>
<th>2009 Male %</th>
<th>2010 Female %</th>
<th>2010 Male %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>25.15</td>
<td>29.08</td>
<td>26.99</td>
<td>31.24</td>
</tr>
<tr>
<td>Physics</td>
<td>29.93</td>
<td>31.88</td>
<td>33.46</td>
<td>35.46</td>
</tr>
<tr>
<td>Chemistry</td>
<td>17.56</td>
<td>20.43</td>
<td>22.80</td>
<td>26.62</td>
</tr>
<tr>
<td>History &amp; government</td>
<td>42.03</td>
<td>48.87</td>
<td>41.73</td>
<td>48.95</td>
</tr>
<tr>
<td>Geography</td>
<td>34.04</td>
<td>40.52</td>
<td>33.86</td>
<td>39.95</td>
</tr>
<tr>
<td>C.R.E.</td>
<td>42.97</td>
<td>46.23</td>
<td>46.05</td>
<td>46.22</td>
</tr>
</tbody>
</table>

Source: Essential KCSE examination statistics given during the release of 2010 KCSE examination results.

This report suggests that there are fewer students opting for the humanities as compared to the sciences yet even in the sciences fewer students opt for physics. This report also suggests great disparities exist between male and female in subject choice. It is in view of this that this study seeks to find out the factors that influence form two boys and girls in their choices of KCSE subjects.

In addition to preparing students for national Examinations, the school is expected to create orientation among students towards career thoughts to be of highest priority to
development (KELLER 1982). The school is also expected to acquaint students with information on the world of work and on themselves. Today employment is largely depended on possession of skills required by the job market. Acquisition of these skills is a process that starts in secondary schools.

Students need career guidance to enable them choose subjects which lead not only to skills required by the job market, but also which lead to their desired careers. Okumbe (1998) stated that the efficiency of school is judged by how well it is able to prepare pupils for their expected roles in the society. Should school leavers fail to fit in their new environment after the school then it should share the blame (Mbatia 1987). The school is therefore responsible for students welfare while in and after school.

An individual student can fit well in his role if he or she finds a suitable career and this depends on how well the school prepares him or her for this. Career guidance services help students relate their situation to their future roles. Guidance services in school helps a student achieve a life role in harmony with his aspiration and abilities (Jacob son 1963). Secondary school level of education is the transition between elementary and higher education training and the world of work (Republic of Kenya 1981). This is also the level when students are in the transition period between childhood and adulthood. It is a major selection point in life. It is at this level that the student makes decisions that have a strong bearing on their future. Students are required to make subject and career choices at this stage. Study of subjects enables a student to enter an occupation hence the need for making correct choice. Students require career guidance to help them understand the relationship between subject combinations and various careers. Students need information on various careers and about themselves to make informed choices.
Students need career guidance early in their education preferably in form one or two to make them focused in education (Daily Nation March 5th 2004). Career choices inspire students by imbuing focus in them.

Females normally choose or prefer to join occupations "Traditionally preserved for women such as those of teachers, nurses, secretaries, business women, air hostess, farmers, house related chores and services oriented jobs (Kibaera, 2002; Gaskell 1994 and Bullock 1994). Males too desire these occupations for their female counterparts. The study will hence focus into investigating into the various factors that influence both boys and girls in what influences them in choosing the carriers they would want to be in.

1.1 Purpose of the study

The purpose of the study is to determine the various factors that influence form two boys and girls in their choice of KCSE subjects. The study is aimed at investigating the role played by the following factors: individual factors, school factors and socio-economic factors.

1.2 Statement of the problem

The decision on the choice of optional subjects are often made with little information and awareness. Boys and girls approach choice of optional subjects with considerable ambiguity, uncertainty and stress. This study hence seeks to research on factors influencing form two boys and girls in their choice of optional subjects. The factors to be considered will include; individual factors, school factors and socio-economic factors which may affect the performance of the students if wrong choices are made.
1.3 Objectives of the study

a) To establish the influence of individual factors on form two boys and girls subject choice.

b) To determine how school factors influence form two boys and girls choice of optional subjects.

c) To establish the influence of social economic factors on form two boys and girls choice of optional subjects.

1.4 Research questions

a) How do individual factors influence choice of subjects of form two boys and girls?

b) How does school factors influence form two boys and girls in their choice of subjects?

c) To what extent does social economic factors influence form two boys and girls choice of subjects?

1.5 Significance of the study.

It is hoped that the study will be useful to the following stake holders. First to teachers, they will understand the importance of continually pointing out the relationship between what they teach and its use to the students also to Curriculum developers intending to produce guidelines for the students on choice of optional subjects. they will find this research useful because it will highlight the limitations experienced by boys and girls in subjects choice. Further findings would be incorporated into seminars and workshops for parents, teachers and educational administrators to understand their role in guiding students’ choices. The study will also act as an ignition to the career teacher to develop more interest in searching for
further relevant materials and training for them to be effective in guiding students on subject choices. The findings are also expected to inspire subject teachers to explore the relationship between their subjects and career opportunities in order for them to inspire boys and girls to make wise and informed decisions when choosing optional subjects.

1.6 Limitations of the study

There is a dearth of literature on the guidelines provided to secondary school students on how to choose optional subjects. The study is also limited to the fact that the decision made at form two will not change as students proceed to form three up to form four.

1.7 Delimitations of the study

The delimitations of the study are that the research will make effort to use available literature for purpose of the study and that the decision made at form two will not vary at form four hence that the decision made in form two will hold up to form four.

1.8 Basic assumptions

The following assumptions are made

a) Assumption that the choices of the students in form two will hold up to form four level.

b) Assumption that the limited materials to be used will give the required information.

c) That the respondents will cooperate and give honest and an influenced answers.
1.9 Definition of Operational terms

In this study, the following terms mean:

**Aspirations** - refers to ambitions and expectations of form two boys and girls in Kieni division.

**Attitude** - refers to the way of feeling, thinking and behaviors in form two boys and girls in Kieni division.

**Career** - refers to a profession or an occupation with opportunities for advancement or promotion.

**Career teacher** - refers to a duly certified member of staff appointed by the Teachers Service Commission or School Management to teach and guide Students in a secondary school.

**Choice** - refers to a decision made against many other alternative / preferences by a form two girl or boy in Kieni Division.

**Curriculum** - refers to a set of broad decisions about what is taught and how it is taught, that determines the general framework within which lessons are planned and learning takes place.

**Education System** - refers to an organized plan, method or process of imparting or acquiring skills for a particular discipline which has sequence and progression.

**Gender** - refers to the socially determined personal and Psychological characteristics associated with being male or female namely “masculinity and feminity”. (Garrett
1992) or continuing process concerned with determining and providing for
developmental needs of boys and girls in Kieni Division.

Guidance - refers to the process of helping an individual to understand himself and
his world.

Subject – Branch of knowledge studied in a school for example Biology.

Subject choices - refers to an opportunity provided by the school in the course of
study where boys and girls carefully select subjects taught by the school for the
purpose of their study.

Subject Guidance and Counseling - refers to a process of assisting boys and girls to
choose a subject to prepare for it and progress in it later in a career.

1.10 Organization of the study

The study will be organized into five chapters, chapter one deals with the background
to the study, statement of the problem, purpose of the study, objectives of the study,
research questions and significance of the study, the limitations and delimitations of
the study are stated, basic assumption definition of operational terms and organization
of study. Chapter two, deals with detailed review of related literature. Chapter three
covers research methodology, research design, target population, research
instruments, instruments validity and reliability. It also describes the method of data
collection. Chapter four deals with data analysis, and interpretation of the findings.
Chapter five focuses on summary, conclusion and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter contains a review of literature that is related to the determinants of the choices of optional subjects in secondary school and a specific focus on theoretical and conceptual framework.

2.1 Review of related Research studies

Many research studies have been undertaken in different countries locally and internationally. They have revealed that everyone makes decision daily and some are more important than others depending on how they impact on an individual’s life. Some decisions in fact require thought and investigation before they are made while others are automatic. Kilonzo (1986) points out that practically there is no aspect of people’s life, which is not guided by preferences for one thing over another.

For students, the choice of optional subjects involves difficult decisions that could result in either misery or happiness. This is because the decision to admit students and assign them a particular stream in Form one is rather simple because it is mostly guided by the teacher but in Form two, the classes are more singular tracked and the choice of subjects at this point is not a simple decision as in the former. In fact Glasser (1969) stressed the importance of teaching children to make decisions. He stressed on enabling the child to make value judgment to choose a better way and to commit himself to his choice. For boys and girls the choice of subjects, courses and vocations cannot be underestimated because it determines to a large extent, how time
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will be spent, who will be chosen as friends and in general the lifestyle of an individual. These choices determine an individual's identity and purpose in life.

Gallat (1962) and Tyler (1958), agree that a person shapes the pattern of his life by the choices and decisions he makes at successive stages. They therefore recommend that a client needs to be counseled on acceptance of limitations, explorations and commitments. In fact, it is common for boys and girls to keep changing from one class to another in an endeavor to try and decide where to settle finally. Choice of subjects is characterized by floundering and unplanned changes possibly because the boys and girls receive a little direction from the career teachers in their schools.

2.3 Historical and socio-economic context of study

One of man's everyday decisions, entails being able to make choices in life. This is based on the fact that human behaviour is goal directed. (Shaan. 1996). According to Dodos (2004), in the African set up, elderly persons were counselors by virtue of age, education and experience. They equipped the client with the clarity to solve problems and make independent decisions. Traditional education was comprehensive in its orientation to the youth on what tasks to undertake in this set up. The client was directed through the advice of his or her superiors. This was successful because a guide can always take one over a strange terrain much more swiftly and easily than one can take oneself. (Mallory, 1941). Secondary school education in Kenya is designed to enable the youth to play an effective role in the life of the nation by impacting to them the necessary skills and knowledge and inculcating the right attitudes. The Koech commission in reviewing the 8-4-4 system of education noted that there was need to reduce examinable subjects in secondary schools to a minimum of seven and a maximum of nine in order to lessen the curriculum burden. In all
honesty this was necessary because a student cannot sit for all subjects offered at the examination after completion of secondary school curriculum. Therefore one alienable right granted to students at form two is the right to choose subjects they would like to pursue further and sit for at the terminal examination. As the country strives to attain a higher level of socio-economic development, it is imperative that the education training sector properly play its role of developing the necessary human resource. (Eshiwani. 2001) science and mathematics need to be strengthened at secondary school level to form a strong foundation for subsequent development. Wanyama (1996) states that due to labour market demands for specific skills in potential candidates, students prefer to choose science oriented subjects which are marketable.

Socialization of children is the prime role of the family and the environment. Family background has an impact on subject choices and future careers. This is because students need mentors. Mentorship has been known as the best way of passing important skills from generation to another D’Souza (1999). Mentorship therefore affects students in their optional subjects.

2.4 Social economic factors; family background

It has been postulated that the family environment impinges on curriculum and influences the quality of school practices. This is possibly because the family is represented in school organizations and they influence the curriculum and practices through ideas and financial support. Further the family background provides the social environment that the children first and closely interact with. According to Meijnen (1977), the number of contact hours between parents and children is important for the scholastic achievements of children. This is because seeing their
parents only occasionally children benefit too little from their skills and knowledge. Coleman and Hoffer (1987) further asserts that some parents raise their children with certain principles in mind and such can influence and direct the learners on the choice of subjects they can undertake in order to meet the parental expectations. According to Tony, Will and Mary (1997), they agree that it is increasingly recognized that parents play an important role in their children’s education but these parents need more knowledge about particular schools and education in the broadest sense. This assumption points to the fact that parents may not advice their children on subject choice due to their limited information and awareness. Chambliss (1996) argues that parents and guardians want schools to satisfy the culture of real life interests and needs of children as well as to prepare them for success later in life. The students’ decision on choice of subject is determined by such facts of their parents. Achieng (2003), in her research on low student enrolment in the applied subjects found out that many secondary schools have been opting not to offer Home science as a subject due to the expenses associated with it. This is because many parents have found it difficult to contribute towards Home science expenses and only students who can afford opt for the subject, while others enroll in other optional subjects. This finding implies that choice for certain subjects is limited by the extra expense that is included in the subject. This implies that the aspect of home background becomes the course of unfulfilled potential and unequal changes in education.

This condition is further supported by Winslow (1993), in which he asserts that the level of the family income is one of the most powerful influences on demand on secondary and higher education and even primary school enrolment rates in developing countries. The family background also orientates the learner towards certain thinking that determines what the learner thinks of him/herself. According to
certain conditions within the home or the family can expose children to experiences, which may render them more vulnerable to onset of learning and behavior problems socially. Disadvantaged children who grow up in large or single parent families and have low family incomes are pre-disposed to lower education chances. At birth, such a child already faces substantially diminished prospects of normal development and progress through childhood experiences like more health problems, behaving less acceptably, as well as performing academically less well in school, leaving school earlier, and holding lower aspirations for further education (Ainscow 1993). but even parents in otherwise healthy families can also act in ways, which can generate emotional problems for their children.

This happens because such parents hold unrealistic expectations about their offspring performance in school and habitually telling them that they should do better. Under such circumstances, they may precipitate fear and anxieties within them, which cause untold misery and happiness. This is further supported by Young (1985), who argue that students see their parents as role models and that parental encouragement or discouragement influences non-traditional career choices. A learner's family background can either limit or foster him/her into what he or she wants to do.

2.5 School factors

a) Quality and practice

At independence in 1963, Kenya inherited administrative, social and economic structures which concentrated on the development of urban areas at the expense of rural ones. Thus the Kenyan economy was extremely influenced by foreign economic values. To date there has not been serious attempt to transform the economy or the social structure through an ideological and political revolution. There is evidence to
confirm that schools that are better equipped and staffed produce boys and girls with higher education and occupational aspirations and expectations. These students have been found to be more likely to aspire for and expect to take on prestigious salaried employment than students from poorly equipped and staffed schools.

Somerset (1974) undertook a survey of career and education aspirations among secondary school students in Kenya to determine whether boys and girls attending schools of different quality had different career and educational aspirations. His findings revealed that two thirds of students from well staffed and equipped schools had high occupational aspirations followed by students from medium staffed and equipped ones. Three quarters of boys and girls from poorly staffed and equipped schools did not hope to pursue further beyond secondary level. He concluded that boys and girls attending such schools were aware that they would not perform well in the examination at the end of the secondary cycle of the education on which further academic education depended. This study revealed that boys and girls from well staffed and equipped schools had higher occupational aspirations and expectations than their colleagues in poorly staffed and equipped schools.

Chambliss (1996) asserts that academic expertise is highly relevant to the selection of texts for a curriculum as well as the selection of subjects to be offered. Citizens expect schools to conform to ever changing perception of what is in the national interest. This implies that school teachers and counselors need to be well informed with regard to children needs. Career development theory and ways in which needs may be met and desires implemented. The counselors and teachers provide unique and meaningful developmental guidance opportunities. Nelson and Rinehart (1972) asset that this guided exploration of educational opportunities may help the child to
gain a clearer concept of his/her own potential and his/her personal worthwhile ness. It is assumed to be advantageous for individuals to have a broadened base from which to make selections in careers in lifestyle and in Educational opportunities. It is expected that school counselors and teachers should extend the child's horizons so that he/she may begin to envision a wide range of ways to find satisfaction and meaning in life.

Eshiwani (2001); in his research on enhancing female participation and performance in mathematics, science, and information technology in university education. Found out that most schools do not have adequate facilities and equipment for the effective teaching of science subjects. He further observed that girls' schools are relatively less endowed with the facilities needed for teaching science subjects. This denies girls' access to a wide choice of science based fields as they are concentrated in art based subjects.

This research points to the direction that the provision and improvement of facilities for teaching science in schools is an impotent fact in increasing student's participation in science. Kaudia and Hangs (2001), revealed that good results of a school in a particular subject are a motivation in itself because in a school where boys and girls always do well in a subject, even weaker students will be motivated to choose it in order to excel like their predecessors. In fact Krebs (1972) asserts that some optional subjects have never effectively existed as a real choice for the majority of students. Rather they have been something that students can settle for when what they regard as more desirable choices appear closed to them. This situation arises due to:

i) The problem of unavailability of quality education in these subjects.
ii) Lack of educational motivational for the subjects

iii) Lack of adequate provision of adequate information regarding these subjects.

iv) Lack of help to individuals to make and implement decisions regarding these subjects.

Krebs therefore points to the fact that before choosing of subjects there is need for a complete and consistent system of preferences which allow a choice among the alternative because the learning environment is critical on how boys and girls can view a subject.

According to Zsuzsa (1981), the choice of educational programmes is made in direct ratio to information and guidance available to the individual and the breadth of educational opportunities available. The school should therefore ensure that learners make informed choices. TIQET (1999), revealed that good performance in internal and external examinations in any subject creates an academic discipline commitment and desire to pursue the subject. Average performance in any subject will be detrimental to boys and girls from opting for it in the subject choices. The school setting should therefore be a motivation to the learner in the choice of subjects. Jones et al (1980), concurs with this influence on subject choice because she assets that selection of a course has a direct relationship with its achievement.

b) Curriculum and subject choice.

Curriculum is a major determinant of student’s choice of subjects because the school curriculum consists of knowledge, skills and attitude. By the time a boy and girl goes through primary and partly secondary levels of education she/he will have gone
through a curriculum and other school practices that will have imparted knowledge, skills and attitudes.

The Kenya certificate of secondary education is offered to all candidates who fulfill all the requirements. For examination, candidates must sit for at least seven subjects selected from group. 2, 3, 4 and 5. English, Kiswahili and Mathematics in-group are all compulsory. Group 2 are Biology, Physics and Chemistry: the student must take at least 2 group 3 includes History and Government, Geography, Christian religious education, Islamic religious education; a boy and girl must take at least one subject. Group IV, the candidate can only take one among Home science, power, mechanics, electricity drawing and design, aviation technology and computer studies. The candidate has another option instead or that of group IV whereby he/she can choose one subject in group V that includes French, German and Commerce. After selecting one subject from either group IV or Group V, the candidate can also take at least one additional subject selected from either group II or group III. According to Ainscow (1993) the quality and relevance of these subjects has now emerged as a major concern of educational authorities so that subjects are provided for their social good and utilitarian attribute. In fact Farrant (1997) argues that young school products that had passed an external examination in subjects, which had little or no relevance to the present, hold the attitude that the world owes them a living. A crisis in the schools of some countries is being caused by irrelevant curricular, inadequately trained teachers, a lack of teaching materials and confusion over differing values and philosophies. He further argues that where study options exist the subject chosen can be of critical importance to the pupil. Therefore, the teacher needs to know their pupils intimately and also to have knowledge of careers and the job market so that they can get the pupils to the right track as early as possible.
According to Booth, Swann and Potts (1997), many school leavers come out of education deeply wounded by the experience because of a sense of failure, frustration and powerlessness over what is taught combined to create quite negative self-images and impressions of school. In many cases there is a bias towards academic subjects in school while technically based subjects are somehow viewed as inferior. The school curriculum should not reduce young people to bored, repressed and frustrated kids. Groene wager (1993) argues that Christian religious education is said to be less prominent than it used to be because of the drastic changes of 8.4.4 systems of education, which made the subject an elective in Form Three (Wanyama, 1996), supports this by saying that due to labour market demands for specific skills in potential candidates, some subject like Christian religious education seem to be rated lowly by students. Thus students would prefer to choose science oriented subject which are marketable. Achieng (2003) asserts that home science is considered to be too broad a subject and time consuming for the students who are required to cope with seven examinable subjects.

Krebs (1972) argues that the education system should provide a structure whereby all individuals will have a freedom of choice in securing and pursuing additional education, learning is a personal choice-making process. i.e. the learner through his own experience and use of one’s own motivation decides for himself what one is to believe and what one is to do with one’s life. Education should have many subjects providing multiple choices for each individual in order to accommodate individual needs. Further, Krebs (1972) argues that opportunities should be incorporated in the curriculum for students to better understand themselves. This incorporation should take the form of integrating such opportunities into the casing course and not
separating them. Blum (1977) asserts that a rigid education system with no offer for choice of subject cannot inspire and sustain that diversity of thought.

Tiget (1999) argues that not only does the individual child have an inalienable right to education and all the opportunities that are concomitant to this, but also they are entitled to openings that could expand their individual personal actualization and opportunities to play a role in the expansion of knowledge one alienable right granted to students is the right to choose subjects that they would like to pursue since it is accepted that a student cannot in all honesty be able to sit for all subjects offered at this examination.

2.6 Individual factors

a) Gender and subject choices.

In real sense, there is no major natural barrier to equality between the sexes in matters of education since differentiation in learning is dependent on the social environment, which can be changed. However, the school system permits and fosters great differences in the choices of subject of study although research shows that the school system does its best. Coun and Wendy (2000) assert that boys choose mathematics and science with excitement and anticipation because science offers practical hands on learning connecting to many of the things that excite the imagination such as space, cars and airplanes. The prospect of messing around with chemicals, Bunsen burners and experiments is very seductive to many boys.

The main attraction of mathematics for boys is that it constantly posse's short term challenges which appeal to their sense of competitiveness and satisfaction of attaining time limited goals. Girls on the other hand learn science with a degree of practicality.
building on their everyday experiences and suggesting how these could be improved by science. This means there is a link between enjoyment of a lesson and success in the subject. Pratt et all (1984), argues that where choice is available, girls tend to prefer the humanities: languages and social science while boys prefer sciences, mathematics and technological subjects. Students tend to be directed into conventionally male and female subjects.

Further, Wasanga (1997). reported that male students have positive attitudes towards all aspects of science while female students towards science is influenced by their perception of the subject being difficult as well as their teachers and books. The masculine image of science as presented in schools made it particularly a difficult choice. For adolescent girls who were striving to achieve a feminine identity hence they are concentrated in art based subjects. She further asserts that girls perceive science subjects to be more useful to boys. At tertiary level women are generally under – represented compared to men especially in science and mathematics and Kenyan women have under participated in the fields of mathematics. Girls fail in science and mathematics generally because of three things: the way the subjects are taught; their attitude towards the subjects; and social cultural factors

This implies that girls may need to have opportunities to observe role models in science and mathematics in order for them to change their attitude towards the subject. Eshiwani (2001), concurs with this view in asserting that there are very few role models and mentors for girls in science related areas. Stereotyped attitudes by teachers about what subjects are appropriate and proper for males and females lead to the channeling of girls and boys into specific and often limited fields of study. This view is supported by List and Dweck (1983), in which they assert that perception of
success are influenced by the feedback that pupils typically receive in school. This is because it seems democratically reasonable in a decentralized system in which important decisions are made at school and class levels, that those with a stake in a school should influence the nature of choice made.

According to Kelly (1981), the stereotyped attitudes can overly influence an individual responsible for making choices. For example, it leads to many girls choosing to study “girls’ subjects” and thereby limiting their choices future careers. This Kelly call channeling and not choosing as students are landed into pre-determined paths. Salisbury & Ruddel (2000), assert that teachers’ attitude and behavior affect pupils’ subject choices in different ways. Some students will choose a subject just because they like the teachers and this may or may not have significance of gender differences.

Further, according to those two editors, some teachers may have their own attitude about the suitability of their subject for boys and girls, which they express in number of overt and covert ways. Experiences of different areas of the curriculum may still differ for boys and girls because of the attitudes and behavior of teachers. Gender imbalance among teachers could have a bearing in sex differentiation of subject choice. Statistics from Equal Opportunity Commission (1987) showed that teachers subject qualifications tend to reinforce sex stereotyping in curriculum choice because of the absence of non-stereotypical role models. The Koech report (Republic of Kenya, 1999) says that the commission received evidence that many Kenyans preferred to separate boys from girls and that girls perform better than they are on their own thus justifying the continuation of single – sex schools and streaming by gender in some subjects of the curriculum. Further, Sadker and Sadkjer (1991)
observed that most females tend to be less aggressive and assertive in asking and responding to questions or expressing their views or taking the lead in practical activities unlike boys. Therefore girls tend to be sidelined which leads to dropping some science subjects because of minimal participation.

b) Careers and subject choices.

Farrant (1997) asserts that today's society is much more complex and the tendency is for there to be much more specialization hence the place for the person without any special training is very much reduced. Education should provide each child with the basic skills for surviving in the modern world and help him develop some useful marketable skill that will be of use to others hence ensuring employment. He further asserts that large numbers of young people remain unemployed after school partly because the schools do not provide the range of qualification that match employment needs. Eyken (1973), concurs with this view by asserting that education fails a child if it has little to do with his real life education must relate to learners lives as they have been, as they are and as they will. hence giving purpose to the process. Education should not reduce young people to bored, repressed and frustrated kids. Eshiwani (2001) argues that as the country strives to attain a higher level of social economic development. It is imperative that the education and training sector properly play its role of developing the necessary human resource, in fact sciences and mathematics need to be strengthened to form a firm foundation for subsequent development. This is so because in situations where people have access to education, the subjects they study tend to fix them to particular careers.

According to Ihanga and Kaundia (2001), different subjects are rated differently for specific jobs. Different subjects are weighed differently for specific jobs. This
implies that there is need by teachers to continually point out that the relationship between what is being taught and its use in occupations. Further teachers can also provide opportunities for students to take part in a variety of experiences that relate to the subject matter being taught to occupations, according to Moon and Mayes (1995).

2.7 Conceptual Framework

Below is framework of the factors that influence students' choice of optional subjects at secondary school level. The models focus on the determinants of the choice of optional subjects by students in secondary schools. The variables considered are individual factors, school factors and social economic factors.

Each variable affects the students' choice and awareness of optional subject and each interacts with most of other variables.
2.8 Summary of literature review

This chapter has reviewed how various factors influence boys and girls in their choices of optional subjects in secondary schools. These factors include the individual factors, social-economic factors and school factors. Humanity subjects are less prominent among students because of drastic changes of the 8-4-4 system of education which made them elective in Form three Wanyama (1996) supports this by saying that the labour market is in demand for specific skills that are related to science subjects. This makes boys and girls to rate the humanities subjects lowly. In some
cases boys and girls are not given much of a choice to choose on subject. For example, when it comes to chemistry many boys and girls take it as a must not by choice. This is because Universities and medium level colleges offer courses with a cluster consisting of chemistry. This makes it almost compulsory in most of the schools. This is channeling boys and girls because their choices are already predetermined. Society also believes that education is a vital asset that brings important benefits to an individual and in the long run to the society. This has therefore detracted learners from pursuing what the society views as marginal subjects.
3.0 Introduction

This chapter deals with research design, location target population, sample and sampling procedure, research instruments, validity and reliability of instruments, data collection and data analysis procedures.

3.1 Research Design

The overall objective of this study was to investigate the factors that influence boys and girls choice of optional subjects. To achieve this objective the researcher will carry out a survey research which is a systematic method for studying behavior that cannot be observed or experimented on directly. Data is gathered about people’s beliefs, attitudes, values and behaviours.

This design is suitable as it will investigate the beliefs, attitudes, values and behaviours of boys and girls, teachers, parents and other stake holders in education influence boys and girls in form two in their selection of subjects. This design will allow generalization of findings from a sample to a wider representation of the population.

3.2 Research location

The research will be carried out in Kieni East Division of Nyeri North District to find out the factors that influence students in their choices of optional subjects. Nyeri
North District is found central highlands of Kenya. It has cotton soil suitable for farming and dairy farming among other activities.

3.3 Target Population

Target population according to Brinkeiet (1988) is a large population from which a sample population is to be selected. The target population for this study will include a total of 320 students from 19 public secondary schools in Kieni Division, Nyeri-North District. The schools will be sampled further and eight schools with forty students in a class hence a total of three hundred and twenty (320) students. This includes one hundred and sixty (160) boys and the same number of girls. The main subjects in this study will be form two boys and girls and their views on various issues concerning choice of optional subjects will be considered.

3.4 Sample and sampling procedures

Sampling is the method of selecting subjects in a way that the individual selected represents the large group from which they are selected. Eight schools will be chosen from a class of forty students hence 160 boys and 160 girls so a total of 320 students will be used. Choosing form two students is appropriate on the basis that they will make choices of subjects hence they will give their reasons on how they will make the choices of subjects they will pursue. In a school where they will be more than one stream of form two boys and girls, one stream will be chosen and will be assumed to be a representatives of form two classes in that school.
3.5 Research Instruments

Data pertaining to the factors that influence students in their choices of optional subjects will be gathered by use of one questionnaire for the form three students. The questionnaire items and design will be arrived at after extensive review of literature on the problem topic. The questions will be designed to elicit responses on the background information of the respondents and what factors influence them to opt for certain subjects. Some questions will use rickets scale questions from which one response can be given. The rickets scale questions restrain respondents from giving vague answers where precision is required. For example, on their gender, type of school and place of residence. Open ended questions will also be included to take care of cases where the respondent's personal view will be required.

3.6 Pilot study

The pilot study will be conducted as a pretest of the questionnaire instrument. It will be administered to determine.

a) Whether there will be ambiguities in any of the items.

b) Whether the instruments will elicit the type of data anticipated

c) Any communication problems highlighted by the pre-test sample, such as any ambiguous questions as well as any valid criticism adjusted in the final questionnaire on the basis of the pre-test results.
3.7 Validity of the instruments

According to Mugenda and Mugenda, 1999, validity refers to accuracy and meaningfulness of inferences which are based on research results. To enhance validity, piloting will be carried out to help the researcher in identifying items in research instrument that may be ambiguous to elicit relevant information. During piloting five students will be randomly selected and questionnaires administered. Their responses to research questions will help the researcher to identify those items that may be difficult and ambiguous. Items found to be extremely ambiguous will be modified accordingly. Pretesting also necessitates addition of more items and reduction of others to improve the quality of instrument.

3.8 Reliability of the instrument

Degree to which, the score are free from measurement errors. Pretest will be done in secondary schools which will not participate in the main study.

3.9 Data collection procedures

The researcher will seek permission from the Ministry of Education, Science and technology to visit the sampled schools to administer the questionnaires to the respondents. The questionnaires will be administered personally by the researcher to the respondents to ensure full and prompt responses. Information collected will be treated with confidentiality.
3.10 Data analysis and presentation procedures

Descriptive statistics will be used in data analysis. It will entail the use of frequency distribution tables and percentages to summarize data on the closed ended items in the questionnaire. Data obtained in the open-ended items in the questionnaire will be categorized according to the theme relevant to the study and will be presented in narrative form using description and quotations.
4.0 Introduction

This chapter contains: demographic information of the respondents, presentations, interpretation and discussions of research findings. The presentation was done based on the research questions.

4.1 Response rate

The researcher distributed 130 questionnaires for completion. However, only 120 of the total were completed and returned to the researcher. Hence the return rate is equal to \( \frac{120}{130} \times 100 = 92 \%

4.2 Demographic Information of the Respondents

Demographic information was based on type of school, gender of the respondents, and guardian's level of education and guardians occupation on. In order to find out the type of school the respondents were from, they were asked to indicate the same. Their findings are presented in table
Table 2: Type of School of the Respondents

<table>
<thead>
<tr>
<th>TYPE OF SCHOOL</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROVINCIAL</td>
<td>36</td>
<td>30%</td>
</tr>
<tr>
<td>DISTRICT DAY</td>
<td>49</td>
<td>41%</td>
</tr>
<tr>
<td>DISTRICT BOARDING</td>
<td>35</td>
<td>29%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>

Data presented in table 4.1 shows that most students were from district day schools followed by district boarding and a few from provincial schools. This shows that majority of the students respondents were from district day schools an aspect in most rural setting which the researcher ventured in.

Table 3: Gender Distribution of Respondents

<table>
<thead>
<tr>
<th>GENDER</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>55</td>
<td>46%</td>
</tr>
<tr>
<td>Female</td>
<td>65</td>
<td>54%</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>
The respondents were asked to indicate their gender. Their responses revealed that most were females. This shows that there was a relatively higher number of females than male respondents.

Table 4: Place of Residence

<table>
<thead>
<tr>
<th>RESIDENCE</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>45</td>
<td>38%</td>
</tr>
<tr>
<td>RURAL</td>
<td>75</td>
<td>62%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table above indicates that most of the respondents were from the rural areas. This reflects the area of study which is a rural setting hence many students will have come from the surroundings.
Table 5: Guardians’ Level of Education

<table>
<thead>
<tr>
<th>GUARDINS LEVEL OF EDUCATION</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary level</td>
<td>20</td>
<td>16%</td>
</tr>
<tr>
<td>Form four</td>
<td>25</td>
<td>20%</td>
</tr>
<tr>
<td>Form six</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>Tertiary college</td>
<td>25</td>
<td>20%</td>
</tr>
<tr>
<td>University Degree</td>
<td>15</td>
<td>13%</td>
</tr>
<tr>
<td>Never went to school</td>
<td>15</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The findings in this table shows that a considerable number of guardians had acquired education both basic and even higher education only a few had not. Parents or guardians who had been to school are more interested in what careers their children want to venture in hence will play a part and influence them in decision making on subject choices.
Table 6: Occupation of the Guardian

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>30</td>
<td>25%</td>
</tr>
<tr>
<td>Teacher</td>
<td>25</td>
<td>21%</td>
</tr>
<tr>
<td>Civil servant</td>
<td>15</td>
<td>13%</td>
</tr>
<tr>
<td>Business person</td>
<td>30</td>
<td>25%</td>
</tr>
<tr>
<td>Others</td>
<td>20</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Data on the guardian's occupation presented in the table above shows that most of the guardians were farmers and business people. The fact that majority were farmers is in line with the previous findings on the area that the students come from a rural area. In most of the rural areas in Kenya agriculture is a major occupation though some other people will indulge in other forms of income generating activities such as business and in civil service. This explains why most of the guardians in the study are farmers.
<table>
<thead>
<tr>
<th>CAREER</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td>Nurse</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>Engineer</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Lawyer</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Accountant</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>Journalist</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>Pilot</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Mechanical engineer</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Army</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Teacher</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>Architect</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Air hostess</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>Nun</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>CAREER</td>
<td>FREQUENCY</td>
<td>PERCENTAGE</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Manager</td>
<td>9</td>
<td>7%</td>
</tr>
<tr>
<td>Information technologist</td>
<td>11</td>
<td>9%</td>
</tr>
<tr>
<td>Tour guide</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Banker</td>
<td>15</td>
<td>12%</td>
</tr>
<tr>
<td>Neurosurgeon</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Preacher</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Clinical officer</td>
<td>8</td>
<td>9%</td>
</tr>
<tr>
<td>Farmer</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Agricultural officer</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>Aviation</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>

Data revealed in this table indicates that the most aspired careers are in banking, airhostess, information technologists, clinical officers, doctors and accountancy these rank the highest this shows the diversity of students aspirations in the job market others like farming, the army are ranked lowly this could be as a result of what is
going on in the country farming for example does not seem to be bringing much returns and hence the students developing an attitude in it.

**Table 8: Gender Influence on Choice of Subjects**

<table>
<thead>
<tr>
<th>REASONS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>65</td>
<td>54%</td>
</tr>
<tr>
<td>NO</td>
<td>55</td>
<td>46%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table above shows that most students are influenced by their gender that is a girl child will choose differently from the boy child.
Table 9: Subjects taken to be for Girls

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>38</td>
<td>32%</td>
</tr>
<tr>
<td>HOMESCIENCE</td>
<td>28</td>
<td>23%</td>
</tr>
<tr>
<td>KISWAHILI</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>MATHS</td>
<td>15</td>
<td>13%</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>7</td>
<td>6%</td>
</tr>
<tr>
<td>BUSINESSSTUDIES</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>CRE</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>AGRICULTURE</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>

Data presented in the table above indicate that the respondents felt that girls were best suited for subjects such as English, homescince and Kiswahili, this is in line with the traditional attitude that girls are best suited for Arts based subjects.
### Table 10: Subjects taken to be for Boys

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS</td>
<td>30</td>
<td>25%</td>
</tr>
<tr>
<td>MATHS</td>
<td>25</td>
<td>21%</td>
</tr>
<tr>
<td>SCIENCES</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>GEOGRAPHY</td>
<td>15</td>
<td>13%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>

Data presented in this table suggests that contrary to the responses on the subjects for girls, respondents felt that boys are good in subjects like physics, maths and other science based subjects even the humanity subject like Geography which is sometimes taken as a science due to its wide content coverage.

#### 4.3 Students aspired level of Education and Career and its Influence on Subjects

To answer this research question student were asked to indicate the highest level of education that they aspired. Data is represented in the table below.
Table 11: Students Aspired level of Education

<table>
<thead>
<tr>
<th>HIGHEST LEVEL OF EDUCATION</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIVERSITY DEGREE</td>
<td>50</td>
<td>42%</td>
</tr>
<tr>
<td>TERTIARY LEVEL COLLEGE</td>
<td>40</td>
<td>33%</td>
</tr>
<tr>
<td>FORM FOUR</td>
<td>30</td>
<td>25%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>120%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

This shows that majority aspired to get to the university and these kind of students have high future plans of getting good jobs which will make them choose subjects that will lead them to the degree that they want to take at the university.
Table 12: Challenges experienced by Students in Subject Choices

<table>
<thead>
<tr>
<th>DIFFICULTIES</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT ABLE TO IDENTIFY OPTIONAL SUBJECTS</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>LACK OF GUIDANCE</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>DISCOURAGEMENT FROM FRIENDS</td>
<td>25</td>
<td>21%</td>
</tr>
<tr>
<td>SOME OPTIONAL SUBJECTS ARE DIFFICULT</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td>NOT ABLE TO DECIDE ON THE CORRECT SUBJECTS</td>
<td>25</td>
<td>21%</td>
</tr>
<tr>
<td>INABILITY TO CHOOSE SINCE THEY HAVE SAME DIFFICULTY</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td>TEACHERS CHOOSE FOR US ON PAST PERFORMANCE</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>NOT SURE OF FUTURE CAREER</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>TAKING COMPULSORY SUBJECT</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>NO DIFFICULT ENCOUNTERED</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td>100%</td>
</tr>
</tbody>
</table>
Data in the table above indicates that most students experience difficulties in selection of subjects in areas pertaining their friends that being influenced by them and also not able to make decisions on their own which could have been contributed by not able to identify optional subjects, taking some optional subjects as being difficult and other difficulties brought about by lack of advice on how to go about in selection of the subjects. Difficult others still had difficulties on discouragement from friends and all this indicates that students undergo difficulties even on deciding which subjects to choose from.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the findings of the study and present conclusions and recommendations.

5.1 Summary

The purpose of the study was to examine factors that influenced form two boys and girls in their selection of KCSE subjects in Kieni East Division of Nyeri North District. Eight research questions were formulated to guide in the study. Research question one sought to find out what information was provided to students to guide them in their choices of KCSE subjects; Research question two wanted to establish the extent to which gender of the students influence him/her in the choice of KCSE subjects; Research question three aimed at establishing how the parents/guardians level of education and occupation influence students; Research question four wanted to establish if there was a relationship between guardians occupation and selection of subjects of their children; Research five investigated the challenges faced by boys and girls in the selection of KCSE subjects; Research question six sought to establish whether family background influences boys and girls in their selection of KCSE subjects; Research question seven wanted to establish how peer socialization influences boys and girls in their choices of KCSE subjects and finally research question eight wanted to establish if the boys and girls are influenced in their selection of KCSE subjects by their performances in the subjects.
5.2 Conclusion of the study

The study concludes that

i) The boys and girls were provided with the necessary information concerning KCSE subject choices.

ii) Gender did not influence boys and girls selection of KCSE subjects. Majority of the boys and girls refuted that there were subjects for girls and those for boys. however some boys and girls respondents said that Art based subjects were for girls while science based for boys.

iii) Guardian's level of education and occupation did not influence boys and girls in their KCSE subjects selection. However, some guardians influenced their children on what subject to take since they were educated more aware of the needs of the job market which mostly determines what subjects are required.

iv) Boys and girls aspired career and level of education influenced their choice of KCSE subjects. Most of the boys and girls said that they choose subjects that would prepare them for the aspired career. Further findings revealed that teachers influenced boys and girls on what subjects to take they also influenced them to take on subjects that they taught.

v) Boys and girls faced some problems in their choice of KCSE subjects such challenges included inability to identify KCSE subjects, lack of guidance on subject selection, discouragement from friends and peers and difficulty of the optional subjects.
5.3 Conclusion

The purpose of this study was to examine factors that influenced form two boys and girls in the selection of KCSE subjects in Kieni Division of Nyeri North District. The literature review showed that there existed a gap in the factors that influenced boys and girls in subject choices. The findings revealed that there were facts that influenced boys and girls choice of subjects. Such factors included boys and girls career aspirations and aspired level of education, gender, guardians level of education and occupation, teachers who taught them, family background and peer socialization. It was also found out that there were challenges that boys and girls faced in the selection of subjects. Based on the finding it was concluded that form two boys and girls choice of subjects had too many factors influencing them.

5.4 Recommendations

In the light of the research findings the study wishes to make the following recommendations.

i) Boys and girls should be provided with adequate information on the importance of the subject that they take in schools.

ii) There should be professionally trained career teacher counselor in all schools. Since career counseling has been found to be most effective in career guidance of students.

iii) There is need for involvement of parents in the education of their children.
5.5 Suggestion for further Research

Taking the limitation and delimitation of the study, the researcher makes the following suggestions for further research:

i) The role of career teacher counselor in assisting boys and girls career choices.

ii) Role of the parents in career development of their children.
REFERENCES


Alfred H.K. (1972), The individual and His Education. The American Vocational Association, U.S.A.


Kilonzo C.K. (1986), Career Awareness Survey of Primary 5, 6, 7 (Kera Research Report No.18) Bureau of Education Research Nairobi: Kenyatta University


Form Three Students Questionnaire is to find out how optional subjects are chosen in a school you have been selected for this study and any information that you give will be treated with confidentiality. Two types of questions are given in this questionnaire, structured and unstructured questions. In the structured questions several answers are given. Please tick one [ ] on the choices you have made. For the unstructured questions write your response on the blank spaces provided.

Section A Demographic Information

Q1 please indicate the category of your school?

Provincial [ ]

Provincial day [ ]

District boarding [ ]

District day [ ]

Q2. Please indicate your gender?

Male [ ]

Female [ ]
Q3. Please indicate your place of residence?

Urban [ ]

Rural [ ]

Q4. Please indicate your guardian's highest level of education?

Never went to school [ ]

Primary school [ ]

Form four [ ]

Form six [ ]

Tertiary level college [ ]

University degree [ ]

Q5. Please indicate your guardian's major occupation?

Farmer [ ]

Teacher [ ]

Civil Servant [ ]

Business person [ ]

Others(Specify)
Q 6. Apart from English, Kiswahili and mathematics, indicate the other subjects you have chosen for K.C.S.E.

__________________________________________  ________________________________________

__________________________________________  ________________________________________

__________________________________________  ________________________________________

Q 7 (a). Did you choose the subjects you are doing for K.C.S.E. freely?

Yes [ ]

No [ ]

(b) If No in [7] above, who influenced you most on your choices of optional choices?

My guardian [ ]

My teachers [ ]

My friends [ ]

Others [ ] (specify)

Q 8 (a) Do you believe that there are subjects for either boys or girls?

Yes [ ]

No. [ ]
(b) If yes, which subjects do you think are for girls? Indicate.

Q9. Please indicate your highest aspired level of education?

i) Form Four [ ]

ii) Tertiary college [ ]

iii) University degree [ ]

Q10. Please indicate the career you aspire to pursue after school?

Q11 (a) Do you feel that the subjects you are studying will prepare you for your future career?

Yes [ ]

No [ ]

(b) If yes, which are these subjects?

Q12 (a) Do teachers explain the importance of the subjects they teach to you?

Yes [ ]

No [ ]
(b) If yes How often?

 i) Every Lesson [ ]

 ii) Monthly [ ]

 iii) Termly [ ]

Q13. Do teachers encourage you to opt for their subjects in your choices in form two?

 i) Yes [ ]

 ii) No [ ]

What reasons do they give? __________________________________________

Q14. Do teachers discourage you to opt for their subjects in your choices in form two?

 i) Yes [ ]

 ii) No [ ]

What reasons do they give?

________________________________________

________________________________________
Q15 (a) Does your school have a head of department for curriculum?

Yes [  ]

No. [  ]

(b) Does he/she provide information on the careers that one can pursue in reference to specific Subjects?

i) Yes [  ]

ii) No. [  ]

Q16. What difficulties did you encounter in your choice of optional subjects as form two?

____________________________________________________________________

____________________________________________________________________

Q17 (a) Do you feel your school provided you with adequate information to guide you in your choice of optional subjects?

i) Yes [  ]

ii) No [  ]

(b) If no above, what do you think can be done to guide students in future?

____________________________________________________________________

____________________________________________________________________
Q18. (a) Do you have subjects you take as being difficult?

i) Yes [ ]

ii) No [ ]

b) If yes in 18 (a) above, which are they?


Thank you for your co-operation
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<th>ITEM</th>
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</thead>
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<tr>
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## Research Work Plan Schedule

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</tr>
</tbody>
</table>
THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss PENINAH NYARUAI GITHAIGA

of (Address) UNIVERSITY OF NAIROBI

P.O BOX 92, KIKUYU

has been permitted to conduct research in ............... Location,

NYERI NORTH District,

CENTRAL Province,
on the topic FACTORS INFLUENCING FORM TWO BOYS & GIRLS CHOICE OF KCSE SUBJECTS IN KIENI DIVISION, NYERI NORTH DISTRICT, KENYA

for a period ending 28TH FEBRUARY 2012.
NCST/RCD/14/011/1661/4

Research Permit No...................................................

Date of issue..............................................................
28TH DECEMBER, 2011

Fee received..............................................................
KSH. 1,000

Applicant.................................................................

Signature.................................................................

Secretary
National Council for
Science and Technology