

**INFLUENCE OF CHOICE OF AGRICULTURE SUBJECT AMONG PUBLIC
SECONDARY SCHOOL STUDENTS IN KIBIRICHIA DIVISION BUURI SUB-
COUNTY, KENYA**

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DECLARATION

I declare that this research report is my original work and has not been presented for the award of degree in any other university.

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DEDICATION

This is dedicated to my Husband Mr. Amos Mwiti for his prayers ,financial and moral support he gave me and my children, Lyvia and Nivel who I would like to inspire and encourage to study more to serve mankind because the future is theirs. My dear parents Amos and Helen, for all the sacrifices they have made in my life whom the prospect of higher education would be a dream to me.

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LIST OF ABBREVIATIONS AND ACRONYMS

DEO	: District Education Officer
EFA	: Education for All
GOK	: Government of Kenya
JAB	: Joint Admissions Board
KCSE	: Kenya Certificate of Secondary Education
KNEC	: Kenya National Examination Council
KIE	: Kenya Institute of Education
MDC	: Millennium Development Goals
MED	: Master of Education
MOEST	: Ministry of Education Science and Technology
MSS	: Mean standard Score
OECD	: Organization for Economic Cooperation and Development
PIRLS	: Progress in Reading Literacy Study
PISA	: Programs for International Studies Assessment
TIMS	: Trends International Mathematics and Science Studies
UN	: United Nations
UNESCO	: United Nations Educational, Science and Cultural Organization
UNGEI	: United Nations Girls Education Initiative.

ABSTRACT

The purpose of the study was to investigate the influence of choice of Agriculture subject among public secondary school students in Kibirichia Division Buuri Sub-County. The objectives of the study was : To find out how guidance and counseling of subject choice by teachers influences choice of Agriculture subject among secondary school students, To identify how teaching methods employed by Agriculture teachers influences the choice of Agriculture subject, To access how career awareness influences choice of Agriculture subject and To find out how students home and social background influences choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri sub-county. Therefore the target population was 300 form four agriculture students in 10 secondary schools and all the agriculture teachers in the 10 schools. Simple random sampling was used to ensure unbiasedness among the respondents, as the respondents will be given equal chances of being selected to participate in the study. The study was purposively select 55% of 300 students form four students taking agriculture and 10 agriculture teachers. Therefore sample size will be 163 students and 10 teachers. The research instrument that was questionnaires with open ended and closed ended questions. A pilot study was done in one school which was randomly selected with five form four students taking agriculture. To test for the reliability of the questionnaire the researcher applied the test retest technique. Descriptive studies require meaningful description of a distribution of scores using a few indices or statistics. Data was analyzed using SPSS package version 20.0 and presented using frequencies, percentages. The study found that guidance and counselling of subject choice by teachers influence choice of Agriculture subject among secondary school students. There is little or no of Guidance and counselling sessions taking place in schools which leaves the students to selects agriculture subject on bases of their own experience. Guidance and counselling by other subject's teachers as well as curriculum masters leads to forcing student to take agriculture subject. Teaching methods employed by Agriculture teachers influence the choice of Agriculture subject. Continuous assessment tests, Group discussion, theory examination, practical's, discussion groups and field trips, Lectures and education visits, were the methods found most influencing the choice of the subject, mainly the way is taught and examined. Career awareness influence choice of Agriculture subject among secondary school students. The findings revealed that the respondents would want to be farm managers or directors, agriculture professors, agriculture teachers and others large scale farmers. Most teachers' talks to their students on the importance of the subjects they teach daily, monthly and also termly. The findings found that most of the respondents came from the rural compared from urban areas and therefore they choose agriculture because they come from rural. the following recommendations are hereby suggested: The government through the ministry of education should employ counselors who will guide and counsel the students on subject choice in secondary schools, The school head teacher, through the curriculum master should make sure the teaching methods employed by Agriculture teachers influence the choice of Agriculture subject among secondary school students and The school management should make sure that students are being given talks on career awareness so as to equip them with knowledge on how to make choice on selection of Agriculture subject.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Making choices is a vital part of life that is crowded with so many options. Education systems are characterized by several optional subjects that students have to choose from. The vocational education in other parts of the world, for example, the USA is characterized by students taking vocational courses with a substantially better understanding of general educational skills (Mustapha & Greenan, 2007). In Malaysia, vocational education, hence technical subjects is meant to produce educated, skilled and motivated workforce. Technical and vocational education is considered as an important measure for development of workforce (Syeda, 2010). In Bangladesh, technical subjects are highly recognized due to their contribution to national development in areas of man-power creation and running of industries (Gazi, 2008).

In Africa, Agriculture subject has received an unfair treatment in that it has not been made compulsory, except in South Africa. In other countries like Nigeria, agriculture is an optional subject chosen alongside others like Islamic Religious Education (Ajidagba, 2010). In Kenya, only three subjects are compulsory: Mathematics, English and Kiswahili, according to Kenya Institute of Education (KIE, 2002). There are other twenty three subjects, Agriculture included, to choose from. A study by Ngesa (2006) revealed that among the optional subjects, Agriculture was ranked fifth in terms of popularity hence there is an increase in the number of students in the recent past (Kenya National Examinations Council [KNEC], 2013). The critical factor therefore is to link these chosen subjects with Joint Admissions Board (JAB) requirements since admission to Kenyan universities is pegged on cluster subjects for particular courses.

Subject choice therefore is an integral part of education systems beyond post-secondary. Appropriate choice of subjects is a vital step in achieving the educational goals of the syllabus (Ajidagba, 2010). According to Hughes and Mechur (2004), young people have high ambitions, expecting to be highly educated and have professional careers, yet research has shown that many do not develop coherent plans that can help them achieve their goals.

Two thirds of high school graduates enter into tertiary institutions once they complete their studies to take courses they had chosen while at secondary school.

Agriculture as a subject has been offered in Kenyan schools for decades. Students in present schools experience a more complex schooling system characterized by many optional subjects. All these subjects are interconnected in one way or another with post-school and future life options. According to Atweh, Taylor and Singh (2005), the schooling years are meant to equip students with skills, knowledge and dispositions to meet their needs for the future citizenship and participation in economic life including employment and careers. Secondary schools must embrace the need to come up with guidelines that help students make informed choices concerning their future studies and work options during various stages of their educational journey Ohiwerei and Nwosu (2009).

Some of the possible contributors to choice of subjects are: school policy, parental guidance, peer influence, academic ability, intelligence, age, gender, ignorance and accidental choice (Owoyele & Toyobo, 2008) The relative contribution of each factor could be constrained by aspects both within and outside the school, resulting in using subject choice as a tool for selecting, particularly for the less able students. Berry (2004) shows that the key factors that are the major contributors in student selection of subjects include: interest in the subject, perceived usefulness or importance of the subject, ability or success of the subject, career preference, subject combination for further studies, teachers' advice and the teaching strategy. Bordet (2002) looked at the learners' personality as an important determinant in subject and career choices and further argues that personality encompasses student's mental ability and attitude towards the subject. Mental ability, verbal comprehension, word fluency, numerical ability, reasoning ability and memory must be put in consideration when choosing subjects (Wagfield, Battle, Keller & Eccles, 2002).

Teachers' role in subject choice is inevitable. If the teacher makes the subject enjoyable by use of appropriate teachings methods, students' interest is maintained (Taylor, 2008). A sound student-teacher relationship will help a great deal to build student's attitude towards Agriculture. This in the long run increases their likelihood of choosing the subject. A study by Ohiwerei and Nwosu (2009) revealed that a teacher is the central point of learning in

the classroom situation because it is the methods and styles of teaching that create motivation to students. Inappropriate methods and styles of delivery will drive students away from the subject. Interest on the other hand is a contributor to performance (Singh, 2005).

Students have misconceptions of Agriculture work-related careers because not only are they unaware of the types of jobs there are in this sector but they also have the impression that all jobs in this area have very low pay (Chee & Leong-Yong, 2011). The study by these scholars goes ahead to reveal that most parents will tell their children not to take careers in Agriculture because there is no future in this field. Improper linkage between trained skills and development needs is a major problem in Kenya. Career awareness is vital when individuals make choices of subjects because many students are not aware of the types of careers a particular subject prepares them for. There are many prospects in Agriculture such as veterinary medicine, farm management as well as teaching of Agriculture, which some students are not aware of (Chee & Leong-Yong, 2011).

In Buuri District there 33 public secondary schools inclusive of day secondary schools. According to the examinations officer in Buuri District the number of students taking agriculture has been on increase for the past five years. In the year 2010 the number of students who were tested in KCSE were 690, in 2012 they were 710, in 2013 they were 717, in 2014 they were,735 and in 2015 they are 790. This shows a significance increase in the number of students taking agriculture in Buuri Sub-county. These calls for an in-depth study on the influence of the choice of Agriculture among secondary school students in Kibirichia Division, Buuri Sub-county. A fundamental issue here was to find out if students make choices on their own knowledge of the careers, or the agriculture teachers play a major role through the various teaching methods employed, student's home background and guidance and counselling by teachers.

1.2 Statement of the Problem

Agriculture is one of the key drivers of the Kenyan economy therefore the need to have people enter into Agriculture related careers. The subject is prominent based on the fact that it is endowed with many facilities and it is also manned by qualified teachers, therefore the number of students taking it is on the increase. The problem of agriculture

selection has been brought by ineffective or inappropriate Guidance and counselling: inadequate availability of school counselors, teachers, and parents, variety of classes, inadequate assistance and guidance in selection. Teaching methods: group discussion, practical's, lectures, attendance and arrangements on field trips educational visits, participation in science congress/demonstrations, instructor's lecturing style, projects, question and answers, class assignments. Career awareness: career choices, special training, gender-related attitudes, mass media, urban or rural place of residence. Home & social background: Parents' characteristics, family environment, social environment, parental advice, time parents spend with children, family income, family background, performance in school. The available literature is however inconclusive on the major factors contributing towards increased choice of Agriculture among secondary school students. This study therefore has investigated influence of choice of agriculture subject among public secondary school students in Kibirichia Division, Buuri Sub-county.

1.3 Purpose of the Study

The purpose of the study was to investigate influence of choice of agriculture subject among public secondary school students in Kibirichia Division, Buuri Sub-county.

1.4 Objectives of the Study

The objectives of the study were:-

1. To find out how guidance and counselling of subject choice by teachers influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-County.
2. To identify how teaching methods employed by Agriculture teachers influence the choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-County.
3. To access how career awareness influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county.
4. To find out how students Home and social background influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county.

1.5 Research Questions

The study was guided by the following questions;-

1. How does the guidance and counselling of subject choice by teachers influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county?
2. How does teaching methods employed by Agriculture teachers influence the choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county?
3. To what extent does career awareness influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county?
4. How does student's home and social background influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county?

1.6 Significance of the Study

The findings of this study was useful in the following ways; first the study provided data on the teaching and learning of agriculture for example, number of students taking agriculture and number of teachers teaching agriculture in secondary schools. This information was helpful in the evaluation of teaching and learning of Agriculture thus helping in putting in place the strategies aimed at improving teaching and learning of Agriculture in schools. Second, findings were of value to teaching learning strategies and teaching learning resources in implementation of agriculture curriculum. Third, the schools teaching agriculture may use the findings in the attempts to make secondary agricultural education more relevant and effective. Fourth, the ministry of Education may use the findings of this study to design pre service and in-service courses for teachers of Agriculture. Fifth, the Kenya institute of Education may find them beneficial for curricular/syllabi development, according to the country's needs in the labor market demands and entrepreneurships.

1.7 Limitation of the Study

The study limitations included; - the information gathered may often not be comparable, so it may not give the same results when conducted in a different area of the same terrain and environmental conditions. The study used descriptive survey design which tends to be unpopular for studies that are too detailed to be fully explained by description. The researcher had a clear perception of what the study intends to cover, failure to which the results may have led to inappropriate data collection. The respondents in descriptive survey design tend not to be truthful and give inappropriate answers and the assumption is that the respondents are knowledgeable and can give answers that answer the research questions. There are other intervening variables like school environment and moderating variables like government policy that affect the relationship between the influences of choice of agriculture subject among secondary school students.

1.8 Delimitation of the study

The study investigated some of the factors which influence the choice of agriculture among secondary school students in Kibirichia Division, Buuri Sub-county and the main variables investigated were; Guidance and counselling, Teaching methods, Career awareness and Home & social background. It had geographically limited to Kibirichia Division, thus the researcher was able to save on time and financial resources that would be used for the study. All other factors were held constant and only the Guidance and counselling by teachers, teaching methods employed by Agriculture teachers, career awareness and students home background factors studied as influencing choice of Agriculture among secondary school students in Kibirichia Division, Buuri Sub-county

1.9 Assumptions for the Study

The assumption of the study was that the respondent's answered all questions honestly and objectively according to their knowledge and that the information collected was correct and truthful. Also the assumption of the study was that the sample selected was representative of the larger population.

1.10 Definitions of significant Terms

Agriculture subject: This is a subject taught in secondary schools. It is among the Optional subject in the applied subjects' category.

Career awareness: The ways learners get access information on agriculture careers

Secondary school: This is an education level in Kenya that precedes primary education in the Kenya's curriculum system which follows 8.4.4 systems where students sit for the KCSE to signify transition to the next level after four years.

Subject choice: Refers to the students' preference over one technical subject as compared to the other technical subjects, the study focused on identifying the critical factors that Influenced students' choice on the subjects. The choice of subject can either be to great Extent or to low extent.

Teaching methods: techniques used by instructors to deliver information to the learners

Student's social background: learners home social and way they interact with parents, siblings and friends

Guidance and counselling: refers to provision of meeting sessions where students do discuss with their counselors and teachers on which subject they can select depending on many factors.

1.11 Organization of the Study

This document is organized in chapters: chapter one, two, three, four and five. Chapter one comprises of introduction and background of the study, statement problem, purpose of the study, objectives of the study, research questions, significance of the study, assumptions for study, definitions of significant terms, and organizations. Chapter two: This chapter presents a review of related literature under the following subheadings; the status of teaching and learning of agriculture in secondary schools worldwide, guidance and counselling, agriculture teaching methods, career awareness in agriculture, students' social background and the choice of agriculture and lastly conceptual framework. Chapter three is composed of research methodology for the study. The chapter describes the research

design, the target population, the sampling techniques and sample size, the research instruments, data collection procedures and data analysis. Chapter four presented data analysis, interpretation and presentation as per the research objectives while chapter five discussed the research findings and conclusions while giving recommendations and areas of future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of related literature under the following subheadings; the status of teaching and learning of agriculture in secondary schools worldwide, guidance and counselling on subject choice, teaching methods and student subject choice, career awareness on choice of agriculture as a subject, students home and social background on choice of agriculture, theoretical framework, and lastly conceptual framework

2.2 The Status of Agricultural Education in Secondary Schools Worldwide

Agriculture education is instruction about crop production, livestock management, soil and water conservation and various other aspects of agriculture (Schultz, Wiekert, Howard and Dickson 2008). Agricultural education also includes instruction in food education, such as nutrition which improves the quality of life for all people by helping farmers increase production, conserve resources and provide nutritious foods. The purpose of agricultural education in high schools in the United States is to provide students with the personal academic and career experiences essential for success in the fields of science, business and technology (Schultz Wiekert, Oison, Howard and Dickson 2008). High school agricultural education programme consists of three components namely classroom/ laboratory instruction, supervised agricultural experience (SAE) and future farmers in America (FFA).

Classroom curriculum and laboratory exercises provide students with foundation knowledge in agricultural practices, preparing them for careers in food, fiber and natural resource industries. Supervised agricultural experiences provide students the opportunity to experience ownership of their own agricultural enterprises or work in the industry. Examples of SAE projects would be a student raising a crop or an animal, working on a farm or employment at an agriculture business such as machinery dealer. These projects offer “real world” experiences to students as well as practical application of concepts learned in the classroom. Supervised agricultural experience also enables students to develop skills in agriculture related career areas (Schultz, Wiekert Howard, Dickson, 2008). Future farmers in America (FFA) are a national organization that develops student’s

potential for premier leadership, personal growth and career success. Students grow as individuals and leaders through their involvement in competitions, degree programs community service projects and state and national leadership conventions. The combination of the three components of agricultural education, classroom laboratory, SAE and FFA develop well rounded individuals who will become future leaders of the agriculture industry (Schultz, Wiekert, Oison, Howard, Dickson, 2008).

In China during the past decade, agriculture schools have started to take actions systems and to strengthen their vocational programs (Ministry of Education, 1998). There are 360 agricultural schools distributed among the provinces, autonomous regions and municipalities throughout China. Agricultural schools are typically resident schools that require students to pass standardized admission examinations (Chen, 2000). These schools enroll graduates from junior secondary schools and each program lasts for three or four years. The Ministry of Agriculture undertakes the function of guidance and macro-management for all agricultural schools. Unlike in Kenya, Agriculture is an option subject during the subject selection at form two. Thus, its selection is influenced by different factors which are either availability of guidance and counselling, agriculture teachers teaching methods, career awareness or students social background.

Miller and Dlamini (2007) established that at the secondary education level in Swaziland, the goal of junior – level agricultural education is to develop in students an appreciation for and a positive attitude towards agriculture, while the goal of the senior – level agricultural education programme is to prepare interested youth to gain entry to the college of agriculture at the university of Swaziland. According to Dlamini and Ngwenya (2004) girls choose to study agriculture in high school in Swaziland because of economic, personal, educational, family and social reasons. Apori, Zinnah and Anor (2003) in reference to Ghana established that a student's decision to choose agricultural science subjects is influenced by gender and socio-economic background of student, the level of knowledge about prospects in choosing agriculture as vocation, the terminal nature at agricultural colleges, where trainees are awarded certificates in agriculture, the influence of parents, guardians and peers who accord agriculture low recognition compared to other professions. Despite having workable educational objectives of post – primary agricultural education

and training in sub – Saharan African countries, there is an increased trend of food insecurity, rural- urban migration and high poverty levels. The countries are meant to be in the group of underdeveloped countries in the world, Poor infrastructures and low levels in technology among others Owelee and yoboto, (2014).

In Kenya agriculture is offered at all levels of the formal education system. The primary level has 8 years of compulsory universal education system and agriculture is integrated in the science subject. The secondary schools level lasts for four years and agriculture is offered as an optional subject. There are 3 categories of tertiary education levels, that is, certificate, diploma, and degree, and agriculture is offered in the three levels (Kironchi & Mwangombe, 2007).

The teaching of agriculture in Kenya is expected to promote the acquisition of skills for self – reliance in farming (Mwiria, 2002). It is viewed as particularly critical for the development of Kenya as agriculture is the main economic activity in most parts of the country. The overall objective of the course is the development of basic agricultural skills relevant to Kenya and the learners’ home environment. The subject is meant to have a large practical component to enable learners acquire useful agricultural practice skills Mwiria (2002). Identifies the goals of teaching agriculture aims at reinforcing interest and awareness of opportunities existing in agriculture by demonstrating that farming is a dignified and profitable occupation. A second aim is to expand the student’s knowledge on basic principles and practices in agriculture. The third aim is to develop students understanding of the value of agriculture to the family and community with a view to promoting self reliance, resourcefulness, problem solving abilities and an occupation outlook in agriculture. Fourth, students who take the course are expected to be active participants in rural development activities while in school. Mwiria, (2002).

The content of the agriculture syllabus includes crop and livestock production, farm machinery, farm structures and agricultural economics. Key areas of coverage include soils and soil fertilities, water conservation supply and irrigation, land reclamation, farm layout, principles of crop production, crop parts and diseases, crop production practices, crop types; principles of livestock production, farm power tools, equipment and machinery, farm records, land tenure and land reform, production economics, farm accounts,

agricultural marketing and agricultural organizations Mwiria, (2002). Ngesa (2006) notes that while agriculture is an optional subject at the secondary school level in Kenya all public secondary school offer the subject. Comparative data on candidature by subjects, the KSCE examination for 2005 shows that agriculture at the secondary level attracts over 40% of the high school students (106,437 students out of a total of 260,665 have chosen agriculture as a subject) apart from the three compulsory subjects (mathematics, English and Kiswahili) there are 29 other subjects from which students are expected to choose an additional four to six subjects. Among these 29 subjects agriculture was ranked fifth in popularity. Ngesa further established that professional agricultural education graduates are estimated at less than 50% of the teachers currently teaching agriculture in secondary schools. This indicates that the number of students taking agriculture is large number and still increasing. This study will investigate the factors that influence choice of agriculture subject in secondary school. The agriculture curriculum formulators expected graduates of the subject in secondary schools to be able to plan their farms keep relevant records and employ the best agricultural practices in their farms (Mwangi,(2010). However, the effective teaching and learning of agriculture in secondary schools needs review and probably, overhaul to accommodate emerging issues in modern day economies that Kenya proudly finds itself in over the years. The teaching of the subject has been hampered by lack of suitable teaching and learning materials. Agriculture is a skill oriented subject where theory forms an entry point and learners get initiated to the practical experience.

Secondary school agriculture teachers are trained at Egerton University and Kagumo Teachers College. Egerton University offers Diploma in Agricultural Education and extension, BSc in Agricultural Education and extension. It also offers masters and doctoral degrees in agricultural education. Kagumo Teachers college together with Kenya Technical Teachers College offers a Teachers Education Diploma with various specializations. Egerton University also provides a post graduate Diploma in Education to professionals who have university degrees in agriculture, but lack professional education training. The University of Nairobi has also recently started a Degree programme in Agricultural Education and Extension (Vandenbosch, 2006). Training of agriculture teachers is currently done at Kenya Methodist University.

2.3 Guidance and Counselling on subject Choice

Guidance and counselling as a movement was started in America at the beginning of 20th Century as a reaction to change process in an industrialized society. Guidance and counselling services were set up within the department of education in September 1968 when the recommendations made by Louis, a consultant sent over to Malta by United Nation's Educational Scientific and Cultural Organization (UNESCO), were taken up, Summit (1997). Globally, guidance and counselling services are essential elements in discipline management of people in all societies. It could be difficult for any society to function well without the exercise of discipline.

School guidance and counselling programmes have therefore been introduced to assist students overcome the number of challenges they experience at home and at school. Nziramasanga (1999) states that because of many pressures imposed on the family, parents tend to have little time with their children to give them the necessary guidance. The parents expect the school to provide solutions to the indiscipline in secondary schools caused by their children. UNESCO (2002:2) adds that "African adults have become more concerned with earning money and are less occupied with many traditional practices that formerly contributed to the upbringing of young people". Rapid sociological changes emanating from modernization and urbanization stress student's .Ubana, (2008).

Career advice, guidance and counselling by parents and teachers can influence students' choice of agriculture subject especially in Africa. In a related investigation Okeke (2010) revealed that parents have significant effect on students' choice of career and subjects. If we want to encourage more young students into agriculture, then students need rich opportunities to find out about the many ways agriculture can be used in interesting careers, most of the students have not been helped by their parents when making their study choices. Furthermore, the school has a great role to play in influencing students' choice of agriculture subject particularly in Africa. Okeke, (2010).

The school management should support subjects and careers decision making. This will go a long way to encourage students' choice of agriculture subjects. In addition, students need information about the structure and content of the agriculture subject they want to study. This will help to influence their choice of the subject Republic of Kenya (2008).

According to (Magwi et al 2005) Parents are more likely to influence students' decisions than guidance counselors or teachers. Students are likely to enroll in more classes if they talk with their parents first, which implies that parents do have an effect on their child's decisions ((Tenenbaum, 2008). Parents look forward to their children having new teachers and classes with the end result of them getting good grades, Smith et al., (2006). Therefore, parents will encourage their students to take a variety of classes where they think they can excel. Tenenbaum (2008) further argued that fathers are more likely to discourage their children from taking certain difficult classes, especially with daughters.

Teachers in the schools are supposed to provide assistance and guidance to their students on subject, but research indicates that teachers are not as influential as family or peers in a student's choice of courses (Magwi et al, 2005) Consequently, teachers do have more influence over a student's decision than guidance counselors (Magwi et al, (2005). Either way, teachers and guidance counselors are not likely to discourage students from enrolling in classes, but to encourage the enrollment in certain classes (Anderson et al., 2008)

2.3.1 Guidance and Counselling by Teachers

There is no firm consensus within the field as to exactly what constitutes high-quality teaching or a quality teacher. A quality teacher is one who has a positive effect on student learning and development through a combination of content mastery, command of a broad set of pedagogic skills, and communications/interpersonal skills. Quality teachers are life-long learners in their subject areas, teach with commitment, and are reflective upon their teaching practice. They transfer knowledge of their subject matter and the learning process through good communication, diagnostic skills, understanding of different learning styles and cultural influences, knowledge about child development, and the ability to marshal a broad array of techniques to meet student needs. They set high expectations and support students in achieving them. They establish an environment conducive to learning, and leverage available resources outside as well as inside the classroom (Kisirikoi, Wachira and Malusu 2008).

Mitzel (1960) introduced the concept of presage variables. The term denotes dimensions of teacher personality and teacher experiences in teacher education programs that are considered to be potential predictors or presages of teaching effectiveness. Their relevance

depends on an assumed or conjectured relationship to other criteria that is process or product. The presage variable describes the teacher in four distinct areas (a) Teacher personality attributes (b) Characteristics of teacher training (c) Teacher knowledge and achievement and (d) In-service teacher status characteristics.

Teacher formative experiences are both historical and contemporaneous (Goliath, 2008). Teachers may have grown up in lower or higher socio-economic communities, gone to more and less desirable schools and learned to speak one or more languages. These factors are likely to influence their professional personas and their own development as teachers once they are enrolled.

During their program tenure by virtue of their participation in all aspects of university life or any other college they acquire knowledge that is likely to influence their professional practice. Academic and pedagogical coursework, field experience, technology use, participation in volunteer activities and the attitudes and abilities of those whom they study, among other factors can be expected to shape or form teachers planning and teaching behavior (Goliath, 2008). Research on teacher's gender, physical characteristics dispositions and cultural or ethnic backgrounds has been thought to influence life in classrooms. Studies of teacher properties such as psychological traits and states, motives, abilities, propensities, beliefs and attitude are plentiful (Dunkin and Biddle, 1974). This is an indication that teacher characteristics has a bearing on the teaching and learning of Agriculture in secondary schools. The presage variables are relevant for what they might reveal about teacher's capacities to demonstrate particular teaching processes. Therefore, factors such as academic and professional components of teacher education programs can be expected to shape teachers abilities to behave in ways that encourage pupil teaching (Goliath, 2008). Good teacher training equips its clients with good curriculum management skills. The pre-service education prepares student teachers by equipping them with necessary academic and professional competencies. Other than professional and academic competencies, it's the role of pre-service teacher training programmes to produce all round teachers equipped with a body of knowledge attitude and skills to enable them correctly interpret the intended curriculum (Oluoch, 1982).

Lesley (1976) says that, at all levels of teaching agriculture; the major constraint is the quality of teaching. Unless a teacher can achieve personal relationship with his students or an extension worker with his farmers; unless students can be inspired to seek further knowledge themselves; unless enthusiasm can be brought to bear on the teaching, the teaching will be lifeless and the frames of inspiration remain lifeless.

Kivuva (2001) reaffirmed this by saying that the quality of teachers is important aspect in determining the level of education performance and achievement in examination. To fulfill their role, the teachers must first know their teaching subjects well. Ngau (1987) highlights on the quality credential of the teachers. He puts it that credential of teachers both in pre-service education attainment and the type of professional attainment given to them may be a major determinant of the quality of Kenyan schools. GOK Report (1999) recommended that in-service programmes be regularly organized for teachers to improve their pedagogical skills in order to enhance quality. It's important to have a well-qualified and highly motivated teaching force capable of understanding the needs of learners and curriculum in order to implement it effectively. Such teachers would have the interest necessary in teaching agriculture as well as to create the urge to learn in the students.

A trained teacher is an asset to the institution in which he/she is an instructor (Onguti, 1987) since a teacher has learnt the tricks of handling individual differences in classroom situation; he is well placed to ensure effective learning takes place. The interest of this study is therefore to find out how guidance and counseling by teachers influence the choice of agriculture among secondary school students which entails teacher characteristics such as qualifications, teaching experiences, teacher's attitude towards the students and student teacher relationships.

2.4 Teaching Methods and Student Subjects' Choice

Although research has indicated that students have a larger preference for the knowledge that they can receive from a class rather than the instructor, it is the instructor who has a significant impact on how useful the subject can be (Wilhelm, 2004). Also, the preference of an instructor's lecturing style is very close to being as important as the quality of the value of the content (Babad and Taybe, 2003). A student's attitude about an instructor has a large impact on their attitude toward a class (Curran and Rosen, 2006). Students prefer

subjects that are taught by teachers who are enthusiastic, well spoken, knowledgeable, caring, and helpful as opposed to instructors, who are dry, inflexible, and unclear (Curran and Rosen, 2003). If instructors are inflexible and unclear, they are much more likely to be difficult to learn from, which is a major concern for students (Smith et al., 2006). If students are concerned about a teacher they are less likely to enroll in that class, and vice versa.

Subject teachers play a crucial role in taming students choices over the technical subject to go for some teachers are perceived by the students to be good teachers and this will influence students into his class while students perceive other teachers not to be the right teachers for such subjects this will reduce the rate of the subject by the students and vice versa, according to the research done by Wilhelm (2004: 23).

Agriculture education and training is special in comparison with other forms of education and training in that agriculture cannot be learned solely in the field or solely in the classroom (Vandenbosch, 2006). Practical training such as traditional apprenticeship training should ideally be complemented by more formal learning to enable many aspects of agriculture and rural development to be seen in their true perspective (Vandenbosch, 2006).

Teaching learning strategies are traditionally referred to as methods of teaching (Kisirikoi, Wachira and Malusu, 2008). Modern trends in teaching emphasize certain approaches which determine the strategy to be used. These approaches include; interaction approach, collaborative approach, transmission approach, experiential approach and facilitation approach. Interaction approach is where there is exchange of ideas between the teacher and the learner or among learners themselves as in group work. Collaborative approach is where learners share ideas in groups or projects. Transmission approach, the teacher dominates the lesson by use of lecture. From the above approaches the agriculture teacher determines the strategy to use depending on the content he is teaching the learners.

The most used strategies in teaching agriculture are, lectures, demonstrations, discussion, educational visits, projects, question and answers, assignments and practical (Vandenbosch, 2006). Lecture as a method of teaching involves transmission of information from the teacher to the learner. The teacher reads out the notes to the learners

as he explains to them. The method is mainly teacher – centered and the learners activity is listening and taking notes. Demonstration is a practical way of explaining or describing a process or an activity. The teacher demonstrates an activity before engaging the class in the same. The teacher may also use one of the learners to demonstrate the activity. Discussion is a form of interaction which involves learners’ participation through talking or writing in which merits and demerits of a process or object are considered it encourages an open exchange of ideas. Educational visits provide learners with an opportunity to explore other environments and make school life more interesting it provides the learners with exciting experiences that bring joy and satisfaction that would not have been experience in the normal classroom interaction (Kisirikoi, Wachira and Malusu 2008). However a number of instructors are of the opinion that field trips are not well – planned and scheduled (Alemayehu, 2006).

This study has investigated how use of these teaching methods by the teachers influence choice of agriculture in secondary schools in Kibirichia Division, Buuri Sub-County.

2.5 Career Awareness on Choice of Agriculture as a subject.

Choices made by young people-what courses to take in high school, whether to attend college, what to study once there-affect who they are and what they do (Adelman, 1994). Making the wrong choices, particularly those that limit educational attainment, will reduce an individual’s possibilities for job success and/or upward mobility over the course of a lifetime (Topel and Ward, (1992) by limiting the career-line paths which emerge from the initial job placement (Spilerman, 1977). This educational limitation impacts not only the evolution of earnings and status, but also the ability to network, maximize job satisfaction, and exercise voluntary job mobility.

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 Ihang 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).

According to Super and Bohn (1970), a child develops ideas about what he/she can do, likes to do, and what others expect him/her to do at a very young age. Hatter, (1990) stated that an adolescent's sense of self based upon performance in domains where success is important such as the school environment. Parents' education and occupations are indices of social class but evolution of a vocational identity depends upon experiences within the family Erickson (1963). The higher socioeconomic family provides a career frame-of reference based on values associated with the states of the family Blau,(1992)and Duncan(1967), found that sons in non intact families identified with the mother's occupation which is likely to be service or clerical in nature (Conroy, (1996).

Whitehead, (1996) studied gender-related attitudes toward career choice in a study conducted in England and Wales. She found that males were more likely to choose sex-stereotyped careers than females, and that males were much more biased in their subject choices toward masculine subjects and supported traditional sex roles for themselves. No such pattern was found for females. "Females therefore are not avoiding masculine subjects to the same degree as males are avoiding feminine ones, nor are they concentrated

in subjects thought ‘appropriate’ for them, again unlike males” Whitehead made an interesting comment that it is not so much that “females are under-represented in mathematics and the physical science, but that males are greatly over-represented’ due to males’ choices away from feminine subjects.

These results supported prior research by Donelan, (1992) and Lokan and Fleming (1994) concluded that an overwhelmingly negative opinion of pursuing an agricultural career is really an expression of pursuing a career in farming and ranching. Students have not been exposed to factual information about the industry of agriculture and corresponding careers (Orthel et al., 1989). There is evidence to show that students’ perceptions about agriculture are formed and subsequently influence enrollment decisions at or before the junior high level. Scanlon, Yoder and Hoover, (1989)

Today’s young adults are strongly influenced by expected economic rewards associated with career alternatives. Society’s macro issues, changing lifestyles, and occupational images projected by the mass media have a major impact on career decisions of students. Therefore, food and agriculture information and recruitment issues must deal with these mega forces Miller and Dlamini (2007).

In summary, an identification of factors that influence student’s career choice can be a tool to assist program design in secondary agriculture, Tech-Prep, and School-To-Work Transition initiatives. Understanding these environmental and background factors which help shape how students view themselves in the “world of work” is a key to understanding their motivation for selection of programming options at the secondary level

2.6 Students Home and Social Background on Choice of Agriculture

Okeke, (2000) parents had a significant effect on students’ choice of career and subjects. Parents’ characteristics played a vital role in students’ choice of technical subjects. Parents had a crucial task of preparing the child for education. In their task of socializing the child's parents had a greater influence on the child’s development and future life choices (Mabunda, 2002).

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 Hotter, (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, 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 Ainscow, (1993), 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, but even parents in otherwise healthy families can also act in ways, which can generate emotional problems for their children. Ainscow, (1993).

This happens because such parents hold unrealistic expectations about their off spring 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 back ground can either limit or foster him/her into what he or she wants to do, Kanka et al., (2009).

Langat et al.,(2014) observe that students were more likely to be enrolled in Economics and Business, and Home Science if they came from lower socioeconomic status backgrounds. Mohd, Salleh and Mustapha (2010) also affirms that family members can provide information and guidance, directly or indirectly to influence a young person's choice of career. Family members' career choices influence students' career decision and form a strong belief in what kinds of career are the best for the students. This is supported by Langat et al.,(2014) who stated that knowledge about engineering was correlated to having an engineer in the family.

Rayne (1982) observed that, there must be some credible role models in the community who imparted in the mind of individuals the benefits of self- employment as a career. Hardy (1984) also observed that, lack of role models was a limiting factor in the career choices of young people; and that business ownership emerges more readily in the presence of strong entrepreneurial role models. The abundance of successful independent businesses acted as role models in the community and a contributing factor in students' choice of technical subjects in schools.

According to Whitelaw (2000), gender was probably the most important variable related to pupils' attitudes to science and technology subjects. Many studies, for instance, Francis et

al., 2009 reported that males had more positive attitudes toward science and technology subjects than females. Peer group effects on pupils' achievement in school had been widely reported (Hoxbynet al., 2003). These effects on achievement may have spillover effects on subject choice. In addition, a student's choice of subject may be influenced by the aspirations of their peer group or through the expectations that schools had for that peer group. School managers believed that certain subjects were more appropriate for the type of pupils that attended their school (Davies, Adnett& Turnbull, 2003).

Hoxbynet al., (2003) observed that the level of interest in students and the position of the parent in the society sometimes influenced student's interest in the study of vocational subjects. Students whose parents were educated did not want to study vocational or technical subjects. The study observed that the family into which a child was born exerted a profound influence on the child's career. Ozioma further observed that shortage or absence of guidance counselors in some schools influenced the study of vocational subject in secondary schools. As a result most students, who were skilled and had the ability to study vocational or technical subjects, were not counseled to enroll in subjects that they would do better.

Kanka et al., (2009) found that: schools lacked materials, equipment and facilities; the subject was expensive to implement and the time allocated for Art and Design was too short to handle the practical aspect of the subject. Many schools were not willing to offer the subject because most learners seemed to be uninterested in it.

A study by Langat et al., (2014) points out that parental will, peer pressure and academic ability- when combined significantly predicted students' choice of school subjects at the senior secondary school level. In their analysis they further revealed that, peer pressure was the most potent predictor, followed by parental will, while academic ability was the least predictor of students' choice of school subject. This study seeks to investigate how students home background influence the choice of agriculture in secondary schools which entails parent characteristics such as occupation, academic level, social economic status of the family, and past experiences on agriculture in their families.

2.7 Theoretical Frame Work

This work was supported by Instructional theory by Benjamin Bloom (1956), a University of Chicago professor, and the results of his Taxonomy of Education Objectives — one of the first modern codifications of the learning process. An Instructional theory is "a theory that offers explicit guidance on how to better help people learn and develop." This involves getting helps on subject selection in schools. Instructional theories focus on how to structure material for promoting the education of human beings, particularly high school students. Instruction theory tries to explain on how to select certain subjects based on certain conditions. Originating in the United States in the late 1970s, instructional theory is typically influenced by three general influences in educational thought: the behaviorist, the cognitive, and the constructivist schools of thought. Instructional theory is heavily influenced by the 1956 work of Benjamin Bloom, a University of Chicago professor, and the results of his Taxonomy of Education Objectives — one of the first modern codifications of the learning process. One of the first instructional theorists was Robert M. Gagne, who in 1965 published Conditions of Learning.

Principles and methods of instruction can be described on many levels of precision (Reigeluth&Carr- Chellman, 2009). For example, on the least precise level, Merrill states that instruction should provide coaching by school counselors or subject teachers. On a highly precise level, one could state, “when teaching a procedure, if a learner skips a step during a performance of the procedure, the learner should be reminded of the step by asking the learner a question that prompts the learner to recognize the omission.” When counselors or teachers provide more precision in a principle or method of instruction, they usually find that it needs to be different for different situations. Reigeluth (1999) referred to the contextual factors that influence the effects of methods as “situational ties. If a student does not perform well in a subject, he or she is supposed to change to avoid failing an examination. Different subjects they provide different knowledge and skills and therefore

Every school institution wants to be successful and have desire to get constant progress in students’ performance. The current era is highly competitive and learning institutions are not spared as the enrolment of form four graduates into higher institutions of learning and the pursuant of courses thereof depend on their subject combinations from secondary

schools. Agriculture is one of the key drivers of the Kenyan economy therefore the need to have people enter into Agriculture related careers. The subject is prominent based on the fact that it is endowed with many facilities and it is also manned by qualified teachers, therefore the number of students taking it is on the increase compared to the past, there is a need to do an analysis of the root causes of increase in the agriculture subject choice among the learners in secondary schools a gap that many writers have not since explored adequately. It is in this light that the researcher is aiming to fill this gap by carrying out a research on the factors that influence the choice of agriculture subject in Secondary Schools.

2.8 Conceptual Framework

Conceptual framework is a diagrammatic presentation of the relationship between dependent and independent variables. In this study, the dependent variable is the choice of science subjects while independent variables are: guidance and counselling by teachers, teaching methods employed by Agriculture teachers, career awareness, and students home and social background. These variables are presented in figure 1-conceptual Framework.

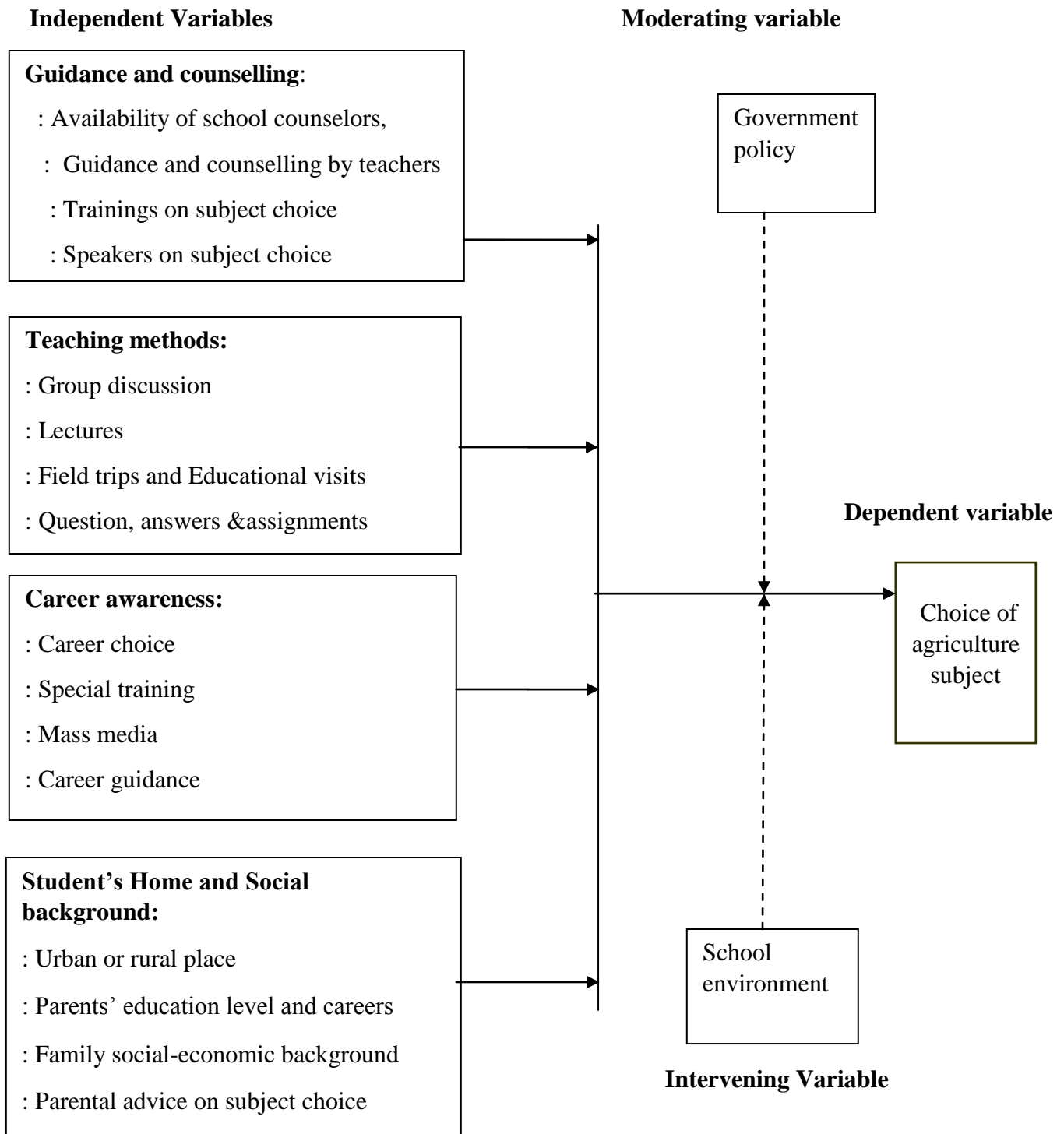


Fig. 1: Conceptual Frame Work

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research methodology for the study. The chapter describes the research design, the target population, the sampling techniques and sample size, the research instruments, piloting, data collection procedures and data analysis

3.2 Research Design

The study adopted a descriptive survey design and targeted 300 agriculture students and 15 agriculture teachers in Kibirichia Division, Buuri Sub-County. Questionnaires were administered to both students and teachers. Both open ended and closed ended questions were formulated so as to allow flexibility and accommodate responses from respondents. A descriptive study design was considered the best design for the objectives of this study as it ensured that large amount of data was collected within a short time. This method does not offer a researcher control over the data collected in terms of manipulation of the variables of the study.

3.3 Target Population

The population for this study was all form four students and teachers from 10 secondary schools in Kibirichia Division, Buuri sub-county. Target population is the specific population about which information is desired. The target population of interest in this study consists of agriculture students in four as they are the one who make choices for the subjects to be taken from form three onwards and all the agriculture teachers. The target populations from which the respondent was drawn include 300 agriculture students in form four and 15 agriculture teachers in all the secondary schools in Kibirichia division as presented in Table 3.1

Table 3.1 Target population

School	Population of Agriculture students	Population of Agriculture Teachers
Gakando Girls	30	2
Kibirichia Girls	40	2
Kibirichia Boys	65	2
Murinya Mixed	30	1
Mucheene Mixed	12	1
Mburugiti Mixed	35	1
Ntugi Mixed	38	2
Ntumburi Mixed	28	2
Ntiritimi Mixed	12	1
Ruibi Mixed	10	1
Total	300	15

Source: D.E.O Buuri Sub-county

3.4 Sampling Design and Procedure

Table 3.2a sample size of 163 students taking agriculture was selected and 10 agriculture teachers making a total sample of 173 represented 55 percent of the target population. According to Mugenda and Mugenda(2003), for descriptive studies 10% or above of the accessible population is adequate for study. Therefore the desired sample size of 163 students taking agriculture and 14 agriculture teachers which formed 55% of the total agriculture student's and agriculture teachers' population in Kibirichia division, Buuri sub-county which was appropriate for the study. Stratified random sampling was adopted to give the appropriate and representative sample for each school. Each school was used as strata for sampling. According to (Fraenkel et al., 2008), on occasion, based on previous knowledge of population and the specific purpose of the research investigators use personal judgment to select a sample. Stratified random sampling was used as it gives each sampling element equal chance of selection and it also avoids clustering of selected elements in one point. The selected number in each stratum was arrived at depending on

the stratum population in relation to the target population and sample size as presented in Table 3.2

Table 3:2 Sample Size.

	Target population	students 55%(sample size)	Target population	teachers 55%(sample size)
Gakando Girls	30	17	2	2
Kibirichia Girls	40	22	2	1
Kibirichia Boys	65	35	2	1
Murinya Mixed	30	16	1	1
Mucheene Mixed	12	6	1	1
Mburugiti Mixed	35	20	1	1
Ntugi Mixed	38	21	2	1
Ntumburi Mixed	28	15	2	1
Ntirimiti Mixed	12	6	1	1
Ruibi Mixed	10	5	1	1
Total	300	163	15	10

3.5 Data Collection method and Procedures

Data was collected by use of questionnaires. The researcher administered the instruments to the respondents who were given ample time to respond to the items before the researcher collects the questionnaires. This was to ensure that there achievement of a good return ratio and help respondents to get a chance to seek clarification on items which might have proved difficult to understand.

3.6 Instrument Validity

Kerlinger (1986) states that, validity is the extent to which an instrument measures what it's supposed to measure according to the researcher's subjective assessment. Orodho (2009) noted that validity is concerned with the degree to which an empirical measure or several measures of a concept accurately represent that concept. To ensure the validity of the instruments, the researcher sought the opinion of her supervisors on the ability of the instrument to collect the required information for the study.

Questionnaires were used to collect raw data from the respondents in both the pilot study and the actual research work. A questionnaire had the ability to cover a wide area and tend to avoid bias on both the researcher and the respondents.

The questionnaire had both open and close ended questions which were derived from the research questions. After piloting the questionnaires, necessary appropriate changes and corrections were carried out in order to incorporate ideas generated from the try out. The head teachers and the agriculture subject teachers were informed of the intended research by the researcher and the date for administering the questionnaires was arranged.

The questionnaires were distributed to secondary school teachers from schools in Kibirichia division Buuri Sub County teaching agriculture. The researcher left the questionnaires with the respondents for one week and the filled questionnaires were collected for data analysis. For the purpose of this study the content validity was obtained through piloting of research instrument.

The researcher seeks to obtain the maximum possible cooperation from all the correspondents by establishing a friendly relationship prior to conducting the interviews. All the respondents were made to appreciate the purpose of the study, confidence was inspired into them and they were being put at ease by establishing some rapport before the actual interviews.

3.7 Reliability of the Instruments

According to Kombo and Tromp (2006) reliability is a measure of degree to which research instruments were yield constant results after repeated trials. Orodho (2009) observes that reliability of an instrument is the consistence in producing similar results over a period of repeated trials. To test the reliability of the instruments, the researcher used the split-half technique. Aiming at determining the consistency or reliability coefficient. The value for this ranged between 0.8 hence (perfect reliability). The instrument was broken into halves after administering. Each subject was treated separately and scored accordingly. The scores were computed and the two halves were correlated using person's correlation coefficient.

3.8 Data Analysis and Presentation

The study generated both qualitative and quantitative data. Quantitative data was coded and entered into Statistical Packages for Social Sciences (SPSS Version 16.0) and analyzed using descriptive statistics. Qualitative data was analyzed based on the content matter of the responses. Responses with common themes or patterns were grouped together into coherent categories. Descriptive statistics involves the use of absolute and relative (percentages) frequencies. Quantitative data was presented in tables while the explanation to the same was presented in prose form.

3.9 Operational definition of Variables

The independent and dependent variables were operationalized according to the objectives of the research, the adopted study design, techniques of data analysis, operational definitions and measurable indicators

Table 3:3Operational definition of Variables

Objective	Variables	Indicators	Data collection method	Measurement Scale	Type of analysis	Level of analysis
To find out how guidance and counselling of subject choice by teachers influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county.	Independent variable : how guidance and counselling Dependent variable Choice of agriculture subject	: Availability of school counselors : guidance & counselling by teachers : training on subject choice :speakers on subject choice	Questionnaire Questionnaire Questionnaire Questionnaire	Nominal Interval Nominal interval	Qualitative quantitative	Descriptive
To identify how teaching methods employed by Agriculture teachers influence the choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county.	Independent variable teaching methods Dependent variable Choice of agriculture subject	:Group discussion :Lectures :Field trips and education visits :Question & answers class assignments	Questionnaire Questionnaire Questionnaire Questionnaire	Nominal Nominal Interval Nominal Interval	Qualitative quantitative	Descriptive

<p>To access how career awareness influence choice of agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county.</p>	<p>Independent variable career awareness</p> <p>Dependent variable Choice of agriculture subject</p>	<p>: Career choice :career guidance : Special training : Mass media</p>	<p>Questionnaire Questionnaire Questionnaire Questionnaire</p>	<p>Nominal Interval Interval Interval</p>	<p>Qualitative quantitative</p>	<p>Descriptive</p>
<p>To find out how students social background influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county</p>	<p>Independent variable students home and social background</p> <p>Dependent variable Choice of agriculture subject</p>	<p>:urban or rural place : Parents' education level : family social economic background Family background : parental advice :parent careers</p>	<p>Questionnaire Questionnaire Questionnaire Questionnaire</p>	<p>Nominal Interval Nominal Interval</p>	<p>Qualitative quantitative</p>	<p>Descriptive</p>

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF THE FINDINGS.

4.1 Introduction

This chapter contains data analysis, interpretation and presentation of then findings. The purpose of the study was to analyze influence of choice of agriculture subject among public secondary school students in Kibirichia Division, Buuri Sub-county. The data was analyzed according to research objectives which include; how guidance and counselling, teaching methods, career awareness and Home and social background influence choice of Agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-county

4.2. Response Rate

The study targeted 173 respondents. From the study, 173 respondents, filled-in and returned the questionnaires making a response rate 100%. According to Mugenda and Mugenda (1999) a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent; therefore, this response rate is excellent for analysis and reporting.

4.3Demographic Information

To understand the background of the respondents participating in the study, the researcher required the respondents to indicate their age, academic qualifications, and gender.

4.3.1Age of the respondents

The respondents were asked to indicate their age bracket and they responded as shown in Table 4.1

Table 4.1 Age of the respondents

Age	Frequency	Percentage
13-15 years	20	11.56
16 and above	153	88.43
Total	173	100

From Table 4.1, 11.56% of the respondents indicate they were aged between 13-15years 88.43% indicate they were aged between 16 years and above.

4.3.2 Academic qualifications

The respondents were further asked to indicate their academic qualifications and they responded as shown in Table 4, 2

Table 4.2 Academic qualifications

Level of education	Frequency	Percentage
Diploma	3	1.73
Degree	6	3.46
High school	163	94.22
Masters	1	0.57
Total	173	100.0

From Table 4.2, 94.22% of the respondents had high school qualifications, 1.73% diploma, 3.47% degree and 0.57 masters.

4.3.3 Gender

The respondents were further asked to indicate their gender. Their responses were as shown in Table 4.3

Table 4.3 Gender of the respondents

Gender	Frequency	Percentage
Male	72	41.61
Female	101	58.38
Total	173	100

From Table 4.3, 58.38% of the respondents were female and 41.61% were males.

4.4 Guidance and counselling on choice of Agriculture subject

The study sought to find out how guidance and counselling on choice of agriculture subject influence the choice of agriculture subject. The respondents were asked to answer various questions.

4.4.1 Presence of counselor in the school

The study sought to find out whether there were school counselors. Their responses were as shown in Table 4.4

Table 4.4 Presence of counselor in the school

	Frequency	Percent
No	170	98.27
Yes	3	1.73
Total	173	100.0

Data tabulated on Table 4.4 shows that majority 170(98.27%) of the respondents had no counselor in the school while minority 3(1.73%) had.

4.4.2 Provision of subject choice information by counselor

Further, the study sought to find out whether there was provision of subject choice information by counselor. The findings are presented on Table 4.5

Table 4.5 Subject choice information by counselor

	Frequency	Percent
Strongly disagree	80	46.24
Disagree	50	34.01
Unaware	2	1.16
strongly agree	41	23.70
Total	173	100.0

Table 4.5 below shows that a higher number 130(80.25%) of the respondents strongly disagreed that there is provision of subject choice information by counselor, 2(1.16%) were unaware and 41(23.70%) strongly agreed that there is provision of subject choice information by counselor.

4.4.3 Information on subject choice

The study sought to find out whether there is sufficient information on subject choice information through guidance and counselling. The findings are on Table 4.6

Table 4.6 Subject choice information

	Frequency	Percent
Yes	45	26.01
No	128	73.99
Total	173	100.0

Table 4.6 tabulates information on information on subject choice. Majority 128(73.99%) indicated that there is insufficient information on subject choice while 45(26.01%) indicated they do have.

4.4.4 Guidance and counselling sessions taking place in schools.

The study sought to find out whether there was availability of guidance and counselling sessions taking place in schools. Their responses were as shown on Table 4.7.

Table 4.7 Guidance and counselling sessions

	Frequency	Percent
Yes	45	26.01
No	128	73.99
Total	173	100.0

Table 4.7 presents information on Guidance and counselling sessions taking place in schools. Majority 128(73.99%) indicated that there is Guidance and counselling sessions taking place in their schools while 45(26.01%) indicated they do have. The findings reviewed that there is little or no of Guidance and counselling sessions taking place in schools, concerning agriculture choice as subject.

4.4.5 Availability of career guidance and subject selection

Further, the study sought to find out whether the counselors are available to offer career guidance and subject selection. Their responses were as shown in Table 4.8

Table 4.8 Availability of career guidance and subject selection

	Frequency	Percent
Yes	30	17.34
No	98	82.66
Total	128	100.0

Table 4.8 shows that majority 98(82.66%) of the respondents indicated that the process of career guidance and subject selection did not take place while 30(17.34%) do take place. The findings reviewed that there is no or little of career Guidance and counselling sessions taking place in schools.

4.4.6 Other category of people offering guidance and counseling.

The study sought to find out other categories of people providing guidance and counseling in schools. Their responses were as shown in Table 4.9

Table 4.9 Other category of people offering guidance and counselling in schools

	Frequency	Percent
Other Teachers	60	46.24
Curriculum master	50	34.01
Guidance and counselling teacher	43	1.16
Total	173	100.0

Table 4.9 indicates other categories of people offering guidance and counselling apart from school counselors. Majority 60(46.24%) of the respondents indicates that other teachers were assigned the duties do give guidance and counselling, 50(34.01%) curriculum masters give guidance and counselling services and also 43(24.86%) of teachers trained to give guidance and counselling services too.

4.4.7 Teachers encourage respondents to take agriculture.

The study sought to find out whether teachers encourage respondents to take agriculture. Their responses were as shown in Table 4.10

Table 4.10 Teachers encouraged respondents to take agriculture

	Frequency	Percent
No	45	26.01
Yes	128	73.99
Total	173	100.0

Table 4.10 presents information on whether the teachers do encourage students to take agriculture. Majority 128(73.99%) indicated that teachers do encourage students to take agriculture while 45(26.01%) indicated that there is no encouragement.

4.4.8 Teacher trained to offer training on subject choice

Further, the researcher wanted to find out whether trainings held in schools have offered training on subject choice. The findings are presented on Table 4.11.

Table 4.11 Trainings held to teachers to offer training on subject choice

	Frequency	Percent
No	8	80
Yes	2	2
Total	10	100.0

Table 4.11 presents information on whether trainings held to the teachers to offer training on subject choice. Majority 8(80%) of teachers indicated they have never been trained to offer training while 2(20%) indicated they were trained. The findings concluded that most of the teachers were not trained specifically for counselling student on how to select the subject but they do the way they understand it best.

4.4.9 Speakers mentors invited in schools

In addition, the study sought to find out whether speakers, mentors, are invited in school to offer seminars on subject choice. The findings are presented on Table 4.12.

Table 4.12 Speakers, mentors, invitations in school to offer seminars on subject choice

	Frequency	Percent
Yes	20	11.56
No	153	88.44
Total	173	100.0

Data on Table 4.13 indicates whether speakers, mentors are invited school to offer seminars on subject choice. Most of the respondents 153(88.44%) indicated that no

speakers, mentors has ever been invited specifically for subject choice seminar while 20(11.56%) indicates that guests were invited to talk about subject selection.

4.4.10 Guidance and counselling of subject choice by teacher’s influences choice of Agriculture subject

The study sought to find out whether guidance and counseling of subject choice by teachers influences choice of agriculture subject. Their responses were as shown in Table 4.13

Table 4.13 Guidance and counselling of subject choice by teacher’s influences choice of Agriculture subject

	Frequency	Percent
No	45	26.01
Yes	128	73.99
Total	173	100.0

Table 4.13 tabulates information on whether Guidance and counselling of subject choice by teacher’s influences choice of Agriculture subject. Majority 128(73.99%) of the respondents indicated that guidance and counselling of subject choice by teacher’s influences choice of Agriculture subject while 45(26.01%) indicated they do not.

4.4 .11 how guidance and counseling of subjects choice by teacher's influences choice of Agriculture subject

The study sought to find out whether guidance and counseling of subjects choice by teacher's influences choice of Agriculture subject. Their responses were as shown in Table 4.14

Table 4.14 Own opinion on how guidance and counseling of subjects choice by teacher's influences choice of Agriculture subject

	Frequency	Percent
Students selects agriculture and they pass exams well	30	17.34
Increased towards liking the subject	40	23.12
Improved main grade	55	31.79
Improved farming skills	21	12.14
More students getting university entry	27	36.99
Total	173	100.0

Information on Table 4.14 shows respondents own opinion on how guidance and counseling of subjects choice by teacher's influences choice of Agriculture subject. Majority 55(31.79%) of the respondents indicated that they improved main grade, 40(23.12%) increased towards liking the subject, 30(17.34%) Students selects agriculture and they pass exams well, 27(36.99%) More students getting university entry and 21(12.14%) improved farming skills. The findings reviewed that guidance and counseling of taking agriculture subject has a lot of influence on the subjects' selection including performance.

4.4.12 Influence of teaching Methods employed by agriculture teachers on subject choice

4.5.1 Teaching methods employed by agriculture teachers.

The study sought to find out whether the teaching methods employed by agriculture teacher influences choice of agriculture subject. Their responses were as shown in Table 4.15

Table 4.15 Teaching methods used by agriculture teachers

Teaching methods	Frequency	Percentages
CATs	173	100
Theory examination	173	100
Practical's	120	69.36
Discussion groups	30	17.34
Field trips	24	13.87

Table 4.15 Describes teaching methods used by teacher who teach agriculture subject. The only identified methods of teaching agriculture include; continuous assessment tests 173(100%), theory examination 173(100%), practical's 120(69.36%), discussion groups 30(17.34%) and field trips 24(13.87%).

4.5.2 Teaching method employed by agriculture teachers

Further, the investigator wanted to find out the methods used by the agriculture teacher in teaching the subject. The respondents were asked to award the marks to the methods identified. The results are showed in Table 4.16

Table 4.16 Most influential method used that influences the choice of agriculture

Teaching Methods	Percentages
group discussion	10
Lectures	40
Field trips and education visits	3
Question answers and assignments	40
Demonstrations	7
Total	100

Table 4.16 describes most influential method used that influences the choice of agriculture. Lecture was presented by 40%, Question answers and assignments methods 40%, group discussion 10% demonstrations 7% and field trips and education trips.

4.5.3 Teachers characteristics

The study sought to find out whether teachers characteristics has influence on subject choice. Their responses were as shown in Table 4.17

Table 4.17 Teacher characteristics on influencing choice of subject.

Teacher characteristics	1	2	3	4	5
Teachers encourage me to ask question	0%	3(1.73%)	35(20.23%)	75(43.35%)	60(34.68%)
Teachers are sufficient in teaching	5(6.85%)	60(34.68%)	20(11.56%)	12(6.94%)	75(43.35%)
Teachers use variety of teaching methods	5(6.85%)	10(13.70%)	23(13.29%)	60(34.68%)	75(43.35%)
Teachers pay attention to me	1(0.57%)	5(6.85%)	25(14.45%)	60(34.68%)	83(47.98%)
Teacher accepts students ideas	10(13.70%)	18(10.40%)	35(20.23%)	50(28.90%)	60(34.68%)

Data on Table 4.17 indicates teacher characteristics on influencing choice of subject. Teachers encouraged students to ask questions to a very large extent, Teachers are sufficient in teaching, Teachers use variety of teaching methods, and Teachers pay attention to students and Teacher accepts student's ideas. All these kind of teachers characteristic were rated above average; three, four and five points translating to more than 75% percent.

4.6 Career awareness influences subject choice.

4.6.1 Career after school

The study sought to find out whether the respondents liked agriculture related careers after form four. Their responses were as shown in Table 4.18

Table 4.18 Respondents Career after school

Respondents Career	Frequency	Percentages
Farm manager	58	33.52
fruits vendor/large scale farmers	5	2.89
farming company director	60	34.68
Agriculture teacher	20	11.56
Agriculture professor	30	17.34
Total	173	100

Data on Table 4.18 indicates the career the respondents would aspire to pursue after school. Majority 60(34.68%) of the respondents indicated they would like to be farming company directors, 58(33.52) farm managers, agriculture teachers 20(11.56%), 5(2.89%) fruit vendor /large scale farmers and 30(17.4 %) agriculture professors.

4.6.2 Subjects studied

The study sought to find out whether the subject studied prepared respondents for future careers. Their responses were as shown in Table 4.19

Table 4.19 Subjects studied whether prepare respondents for future career

	Frequency	Percent
Yes	170	98.27
No	3	1.73
Total	173	100.0

Data tabulated on Table 4.19 Shows subjects studied whether prepare respondents for future career. Majority 170(98.27%) of the respondents indicated that subject studied has prepared respondents for future career while minority 3(1.73%) indicated it does not. The findings reviewed that the selection of these subjects has enabled preparedness of the student for the career.

4.6.3 Teachers explain the importance of subject they teach

To promote the importance of the subjects the teachers teach, the study sought to find out whether teachers explain the importance of the subjects they teach to the students. The findings are presented on Table 4.20

Table 4.20 Teachers explain the importance of the subjects they teach

	Frequency	Percent
Yes	160	98.27
No	17	1.73
Total	173	100.0

Data on Table 4.20 Indicates whether teachers explain the importance of the subjects they teach. Majority 160(98.27%) indicated the teachers explains the importance of the subjects they teach while 17(1.73%) indicated teachers do not explain.

4.6.4 How often teachers talk to the students on the importance of subjects

On top of teachers explaining the importance of the subjects they teach, the investigator wanted to know how often the teachers talk to the students about the importance of the subjects they are teaching. The findings are presented on Table 4.21.

Table 4.21How often the teachers talk to the students about the importance of the subjects

	Frequency	Percent
Every lesson	60	46.24
Monthly	50	34.01
Termly	43	1.16
Total	173	100.0

Data on Table 4.21 indicates how often the teachers talk to the students about the importance of the subjects. Majority 60(46.24%) of the respondents indicates that teachers talk to the students about the importance of the subjects daily, 50(34.01%) monthly and also 43(24.86%) Termly.

4.6.5 Teachers encourage respondents.

The study sought to find out whether teachers encourage respondents to choose their subjects. Their responses were as shown in Table 4.22

Table 4.22Teachers encourage respondents to opt for their subjects during the choices of subjects in form two

	Frequency	Percent
Yes	110	80.25
No	43	1.16
Total	173	100.0

Data on Table 4.22 indicates whether teachers encourage respondents to opt for their subjects in their choices in form two. Majority 110(80.25%) of the respondents indicates that teachers do encourage while 43(1.16%) discourage

4.6.6 Schools head of department

The study sought to find out whether schools have head of departments. Their responses were as shown in Table 4.23

Table 4.23 whether schools have a head of department

Curriculum department	Frequency	Percentage
Yes	103	59.54
No	47	27.17
Not known	23	13.29
Total	173	100.0

Information on Table 4.23, describes whether schools have a head of department for curriculum. Majority 103 (59.54%) of the respondents indicated they have school head of department for curriculum while 47(27.1%) indicated they don't have school have and 23(13.29%) were not familiar with the department allocation.

4.6.7 Provision of information on careers

The study sought to find out whether there was provision of information on the careers that they can pursue in reference to specific subject. Their responses were as shown on Table 4.24

Table 4.24 Provide information on the careers that one can pursue in reference to specific Subjects

	Frequency	Percent
Yes	45	26.01
No	128	73.99
Total	173	100.0

Table 4.24 presents information on the careers that one can pursue in reference to specific Subjects. Majority 128(26.01%) indicated that there is no provision of information on the

careers that one can pursue in reference to specific Subjects while 45(26.01%) indicated they do have. The findings reviewed that there is little provision of information on the careers that one can pursue in reference to specific Subjects where agriculture was the focus subject.

4.6.7 Awareness of agricultural careers

The researcher wanted to find out whether the respondents were aware of agricultural careers. The obtained results are found on Table 4.25

Table 4.25 Awareness of agricultural careers

	Frequency	Percent
No	45	26.01
Yes	128	73.99
Total	173	100.0

Table 4.25 Presents information on awareness of agricultural careers by students taking agriculture. Majority 128(73.99%) of the respondents were aware of agricultural careers while 45(26.01%) indicated that they are not aware. the results identified that students are always made aware of agricultural careers.

4.6.8 Making choice for students taking agriculture

Further, the researcher wanted to find out who makes choice for student's taking agriculture subject in their school. The findings are presented on Table 4.26.

Table 4.26 Making choice for student's taking agriculture subject

	Frequency	Percent
Subject teacher	63	36.41
Head of technical Department	60	34.68
Student	50	28.90
Total	173	100.0

Data on Table 4.26 indicates who makes choice for student's taking agriculture subject in their school. Majority 63(36.46%) of the respondents indicates that subject teachers makes the choice for the students, 50(34.68%) head of technical department and also 50(28.90%) by students. The findings showered that students do not have much say when it comes to selection of the subject but the teachers do select subject to the students.

4.6.9 Agriculture as a good career

The study sought to find out how the respondents got to know agriculture as good career choice. Their responses were as shown on Table 4.27

Table 4.27 Agriculture as good for career choices

	Frequency	Percent
Radio	40	23.12
Television	60	34.68
Teacher	53	32.37
Colleague	20	11.56
Total	173	100.0

Data on Table 4.27 indicates how the responds got to know agriculture as good career choices. Majority 60(34.68%) of the respondents indicates that they knew of agriculture as good career choices through television 53(32.37%) teacher, 40 %(23.12%) radio and 20(11.56%) other colleague.

4.6 Influence of student's Home and social background on choice of agriculture subject

4.6.1 Place of residence

The study sought to find out whether place of residence has influence on subject choice. Their responses were as shown in Table 4.28

Table 4.28 Place of residence

	Frequency	Percent
Urban	38	21.97
Rural	135	78.03
Total	173	100.0

Data tabulated on Table 4.28 Shows respondent's place of residence. Majority 135(78.03%) of the respondents indicated that they come from rural areas while minority 38(21.97%) indicated they come from the urban. The findings reviewed that most of the respondents came from the rural compared from urban areas.

4.6.2 Choosing of agriculture subject

The study sought to find out whether the respondents choose agriculture because they came from rural or urban area. Their responses were as shown in Table 4.29

Table 4.29 Choosing of agriculture subject because respondents come from an urban or rural area

	Frequency	Percent
Yes	170	98.27
No	3	1.73
Total	173	100.0

Data tabulated on Table 4.29 Shows respondents choose agriculture because they come from rural as they work in the field during holidays while those from town they do not have the exposure. Majority 170(98.27%) had come from the rural setting where agriculture is highly practiced while minority 3(1.73%) indicated came from urban area.

4.6.3 Students social and home background factors

The study sought to find out whether students social and home background factors influences choice of agriculture subject. Their responses were as shown in Table 4.30

Table 4.30 Student’s social background factors influences choice of Agriculture subject among secondary schools.

Social background factors	Strongly agree	disagree	Strongly disagree	I don’t know
Parents’ education level	80	53		40
family social-economic background		22	120	31
Parental advice	120	23	12	5
Family background	56	55	21	26
Parents careers	110	33	12	5

Table 4.30 indicates how student’s social background factors influences choice of Agriculture subject among secondary schools. Parents’ education level, family social-economic background, Parental advice, Family background, Parents careers were among the factors highlighted to be factors influences choice of Agriculture subject among secondary schools to a certain extent.

4.6.3 Students social background

The study sought to find out whether students social background factors influences choice of agriculture subject. Their responses were as shown in Table 4.31

Table 4.31 Student’s social background influences choice of Agriculture subject among secondary school students

	Frequency	Percent
Influence Students minds in selecting agriculture and they pass exams well	30	17.34
Increased towards liking the subject	40	23.12
Improved main grade	55	31.79
Copying of what happens at home write the same in exams	21	12.14
Home experience gives them carriage to select subject they experience its skills in real world	27	36.99
Total	173	100.0

Information on Table 4.31 shows respondent states how student’s social background influences choice of Agriculture subject among secondary school students. Majority 55(31.79%) of the respondents indicated that they Improved main grade, 40(23.12%) Increased towards liking the subject, 30(17.34%) Students selects agriculture and they pass exams well, 27(36.99%) More students getting university entry and 21(12.14%) Improved farming skills.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter depicts the summary of the data findings on the factors influencing choice of agriculture subject among public school students in Kibirichia Division, Buuri Sub-County. The conclusions and recommendations are based on the study objectives. The chapter is therefore structured into summary of findings, discussions, conclusions, recommendations and area for further research.

5.2 Summary of findings

The objectives of this study were to investigate whether choice of agriculture subject in public schools was influenced by the following factors: 1) guidance and counselling of subject choice by teacher 2) teaching methods employed by teachers 3) career awareness 4) students home and social background. The summary of findings is indicated below.

Objective one: To find out how guidance and counselling of subject choice by teachers influence choice of agriculture subject among public school students in Kibirichia Division, Buuri Sub-County.

Findings revealed 98.27% of the respondents had no counselor in the school that was trained basically to handle students matters related to subjects. However 1.73% of the respondent schools had a counselor who was trained to give students services on subject's selection.

The study found out that 80.25% of the respondents strongly disagree there is provision of subject choice information by counselor to the students. 25.86% of the respondents agree there is provision of subject choice information.

The study found out that 73.99% of the respondents agree there is insufficient information on subject choice while 26.01% indicated that they had sufficient information on subject choice.

In addition, it was established that 73.99% there is no of Guidance and counselling sessions taking place in schools while 26.01% indicated there is little of guidance and counselling sessions taking place in schools.

It was also established that 46.24% other subject's teachers as well as 34.01% curriculum masters and 1.16% counselling teachers offer guidance and counselling in schools. To encourage students to take agriculture it was found that other guests were invited to talk about subject selection. The findings reviewed that there is a lot of influence by teachers on subject choice information through guidance and counselling which alters the mind of the students to like agriculture. The findings reviewed that guidance and counseling of students taking agriculture subject has a lot of influence on the subject's selection including performance.

Objective two: To identify how teaching methods employed by agriculture teachers influence the choice of agriculture subject among secondary school students in Kibirichia Division, Buuri Sub-County

The study found out that 100% of teachers employ continuous assessment tests, 100% the examination, 69.36% practical's, 17.34% discussion groups and 13.87% field trips.

The study found out that the most influential method used that influences the choice of agriculture. Lecture was presented by 40%, Question answers and assignments methods 40%, group discussion 10% demonstrations 7% and field trips and education trips. The study reveals that lectures and questions and answering methods are most influence methods of learning in secondary schools.

The study found out that teacher characteristic has influence on choice of subject. Teachers encouraged students to ask questions to a very large extent, Teachers are sufficient in teaching, Teachers use variety of teaching methods, and Teachers pay attention to students and Teacher accepts student's ideas. All these kind of teachers characteristic were rated above average; three, four and five points translating to more than 75% percent. .

Objective three: To access how career awareness influence choice of agriculture subject among secondary students in Kibirichia Division, Buuri Sub-County.

The study found out the career the respondents would aspire to pursue after school. Majority 60(34.68%) of the respondents indicated they would like to be farming company directors, 58(33.52) farm managers, agriculture teachers 20(11.56%), 5(2.89%) fruit vendor /large scale farmers and 30(17.4 %) agriculture professors.

The study found out subjects studied whether prepare respondents for future career. Majority 170(98.27%) of the respondents indicated that subject studied has prepared respondents for future career while minority 3(1.73%) indicated it does not.

The study found out teachers explains the importance of the subjects they teach. Majority 160(98.27%) indicated the teachers explains the importance of the subjects they teach while 17(1.73%) indicated teachers do not explain.

The study found out that Majority 60(46.24%) of the respondents indicates that teachers talk to the students about the importance of the subjects daily, 50(34.01%) monthly and also 43(24.86%) Termly.

The study found out that Majority 110(80.25%) of the respondents indicates that teachers do encourage while 43(1.16%) discourage

The study found out that Majority 103(59.54%) of the respondents indicated they have school head of department for curriculum while 47(27.1%) indicated they don't have school have and 23(13.29%) were not familiar with the department allocation

The study found out that Majority 128(26.01%) indicated that there is no provision of information on the careers that one can pursue in reference to specific Subjects while 45(26.01%) indicated they do have.

The study found out that Majority 128(26.01%) of the respondents were aware of agricultural careers while 45(26.01%) indicated that they are not aware.

The study found out that Majority 63(36.46%) of the respondents indicates that subject teachers makes the choice for the students, 50(34.68%) head of technical department and also 50(28.90%) by students.

The study found out that Majority 60(34.68%) of the respondents indicates that they knew of agriculture as good career choices through television 53(32.37%) teacher, 40 %(23.12%) radio and 20(11.56%) other colleague

Objective four: To find out how students social and home background influence choice of agriculture subject among secondary school students in Kibirichia Division, Buuri Sub – County

The study found out that Majority 135(78.03%) of the respondents indicated that they come from rural areas while minority 38(21.97%) indicated they come from the urban. The findings reviewed that most of the respondents came from the rural compared from urban areas.

The study found out that Majority 170(98.27%) had come from the rural setting where agriculture is highly practiced while minority 3(1.73%) indicated came from urban area.

The study found out that Majority 55(31.79%) of the respondents indicated that they improved main grade, 40(23.12%) Increased towards liking the subject, 30(17.34%) Students selects agriculture and they pass exams well, 27(36.99%) More students getting university entry and 21(12.14%) Improved farming skills.

5.3 Discussion of findings

This section focuses on a detailed discussion of the major findings of the study which also entails comparing the study findings to the literature in order to come up with comprehensive conclusion.

5.3.1 Guidance and counselling of subject choice by teachers influence choice of agriculture subject among public schools.

Findings revealed 98.27% of the respondents had no counselor in the school that was trained basically to handle students matters related to subjects. However 1.73% of the respondent schools had a counselor who was trained to give students services on subject's selection. The findings reviewed that most schools have no counselor who is expected to give the students guidance and counselling sessions. School guidance and counselling programmes have therefore been introduced to assist students overcome the number of challenges they experience at home and at school. Nzira (1999) states that because of

many pressures imposed on the family, parents tend to have little time with their children to give them the necessary guidance and therefore it was found necessary for these schools support findings by (Nzira, 1999).

The study found out that 80.25% of the respondents strongly disagree there is provision of subject choice information by counselor to the students. 25.86% of the respondents agree there is provision of subject choice information. These findings concur with those of (Okeke, 2000) who indicated that there are schools with counselors who give counselling to students with on how to choose subjects

The study found out that 73.99% of the respondents agree there is insufficient information on subject choice while 26.01% indicated that they had sufficient information on subject choice. The findings reviewed that there is insufficient information on subject choice through guidance and counselling in the secondary schools. The findings differs with the opinion of (Okeke, 2010) who thought that the school has a great role to play in influencing students' choice of agriculture subject particularly in Africa and therefore he recommends that the school management should support subjects and careers decision making.

It was also established that 46.24% other subject's teachers as well as 34.01% curriculum masters and 1.16% counselling teachers offer guidance and counselling in schools. To encourage students the findings reviewed that there is allot of influence by teachers on subject choice information through guidance and counselling which alters the mind of the students to like agriculture. A trained teacher is an asset to the institution in which he/she is an instructor (Onguti, 1987) since a teacher has learnt the tricks of handling individual differences in classroom situation; he is well placed to ensure effective learning takes place. To take agriculture it was found that other guests were invited to talk about subject selection. The findings reviewed that there is allot of influence by teachers on subject choice information through guidance and counselling which alters the mind of the students to like agriculture. The findings reviewed that guidance and counseling of students taking agriculture subject has a lot of influence on the subject's selection including performance. The results reviewed that most students are encouraged to take agriculture which is examinable in the KCSE at the end of the course. The results tallies with those of (Goliath,

2008) who showed that Good teacher training equips its clients with good subjects' curriculum management skills. The pre-service education prepares student by equipping them with necessary academic competencies.

5.3.2 Teaching methods employed by agriculture teachers influence the choice of agriculture subject among public secondary school.

The study found out that 100% of teachers employ continuous assessment tests, 100% their examination, 69.36% practical's, 17.34% discussion groups and 13.87% field trips. (Wilhelm, 2004) indicated that students have a larger preference for the knowledge that they can receive from a class rather than the instructor, it is the instructor who has a significant impact on how useful the subject can be.

The study found out that the most influential method used that influences the choice of agriculture. Lecture was presented by 40%, Question answers and assignments methods 40%, group discussion 10% demonstrations 7% and field trips and education trips. The study reveals that lectures and questions and answering methods are most influence methods of learning in secondary schools. The study reveals that lectures and questions and answering methods are most influence methods of learning in secondary schools. Teaching learning strategies are traditionally referred to as methods of teaching (Kisirikoi et al., 2008). Modern trends in teaching emphasize certain approaches which determine the strategy to be used. These approaches include; interaction approach, collaborative approach, transmission approach, experiential approach and facilitation approach. The most used strategies in teaching agriculture are, lectures, demonstrations, discussion, educational visits, projects, question and answers, assignments and practical (Vandenbosch, 2006). Lecture as a method of teaching involves transmission of information from the teacher to the learner

The study found out that teacher characteristic has influence on choice of subject. Teachers encouraged students to ask questions to a very large extent, Teachers are sufficient in teaching, Teachers use variety of teaching methods, and Teachers pay attention to students and Teacher accepts student's ideas. All these kind of teachers characteristic were rated above average; three, four and five points translating to more than 75% percent. .

5.3.3 Career awareness influence choice of agriculture subject among secondary students.

The study found out teachers explain the importance of the subjects they teach. Majority 160(98.27%) indicated the teachers explain the importance of the subjects they teach while 17(1.73%) indicated teachers do not explain. The study found out that Majority 60(46.24%) of the respondents indicates that teachers talk to the students about the importance of the subjects daily, 50(34.01%) monthly and also 43(24.86%) Termly. The findings reviewed that most teacher's talks to their students on the importance of the subjects they teach. This means that agriculture teachers do take their humble time to explain students how the subject can be of benefits to them. 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.

The study found out that Majority 110(80.25%) of the respondents indicates that teachers do encourage while 43(1.16%) discourage. The findings reviewed that most teacher's talks to their students on the importance of the subjects they teach. This means that agriculture teachers do take their humble time to explain students how the subject can be of benefits to them. 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.

The study found out that Majority 103(59.54%) of the respondents indicated they have school head of department for curriculum while 47(27.1%) indicated they don't have school head and 23(13.29%) were not familiar with the department allocation. An identification of factors that influence student's career choice can be a tool to assist program design in secondary agriculture, Tech-Prep, and School-To-Work Transition initiatives. Understanding these environmental and background factors which help shape how students view themselves in the "world of work" is a key to understanding their motivation for selection of programming options at the secondary level.

5.3.4 Students social and home background influence choice of agriculture subject among secondary school students

The study found out that Majority 135(78.03%) of the respondents indicated that they come from rural areas while minority 38(21.97%) indicated they come from the urban. The findings reviewed that most of the respondents came from the rural compared from urban areas. According to Okeke, (2000) parents had a significant effect on students' choice of career and subjects. Parents' characteristics played a vital role in students' choice of technical subjects. Parents had a crucial task of preparing the child for education. In their task of socializing the child's parents had a greater influence on the child's development and future life choices (Mabunda, 2002).

The study found out that Majority 170(98.27%) had come from the rural setting where agriculture is highly practiced while minority 3(1.73%) indicated came from urban area. Parents' education level, family social-economic background, Parental advice, Family background, Parents careers were among the factors highlighted to be factors influences choice of Agriculture subject among secondary schools to a certain extent. 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.

5.4 Conclusion

The study concludes that guidance and counselling of subject choice by teachers influence choice of Agriculture subject among secondary school students. For example there is provision of subject choice information by counselor to the students and counsellors to some schools showed that there is sufficient information on subject choice information through guidance and counselling. In other schools, there is little or no of Guidance and counselling sessions taking place in schools which leaves the students to selects agriculture subject bases on their own experience. Guidance and counselling by other subject's teachers as well as curriculum masters leads to forcing student to take agriculture subject where most students are encouraged to take agriculture. The findings concluded that most

of the teachers were not trained specifically for counselling student on how to select the subject but they do the way they understand it best, guests were invited to encourage students or to talk about subject selection. In general, there was a lot of influence by teachers on subject choice information through guidance and counselling which alters the mind of the students to like agriculture.

Secondly, the study concluded that teaching methods employed by Agriculture teachers influence the choice of Agriculture subject. Continuous assessment tests, Group discussion, theory examination, practical's, discussion groups and field trips, Lectures and education visits, were the methods found most influencing the choice of the subject, mainly the way is taught and examined. In addition, Teachers encouraged students to ask questions where it was strongly agreed upon, Teachers use a variety of teaching methods, Teachers pay attention to students and hardly accept student's ideas.

Thirdly, the findings conclude that career awareness influence choice of Agriculture subject among secondary school students. The findings revealed that the respondents would want to be agriculture teachers, farm managers or directors, large scale farmers, agriculture professors and others farm mechanical engineers. Most teachers talk to their students on the importance of the subjects they teach daily, monthly and also termly where they encouraged the students to opt for subject selection in form two because they need to also give short to other subjects so that they can see which they can perform better. The findings also conclude that there is no little provision of information on the careers that one can pursue in reference to specific subjects where agriculture was the focus subject and students are always made aware of agricultural career choices through television, teacher, radio and other colleagues.

Finally, the study concludes students' Home and social background influence choice of Agriculture subject among secondary school students. The findings found that most of the respondents came from the rural compared from urban areas and therefore they choose agriculture coz they come from rural because they work in the field during holidays while those from town they did not have the exposure. Parents' education level, family social-economic background, Parental advice, Family background and Parents careers were also found influencing student choice of Agriculture. Student's social background influenced

choice through Influence Students minds in selecting agriculture and they pass exams well, Increased towards liking the subject, Improved main grade, Copying of what happens at home write the same in exams and Home experience gives them carriage to select subject they experience its skills in real world.

5.5 RECOMMENDATIONS

Based on the findings made in the course of this study, the following recommendations are hereby suggested:

1. The government through the ministry of education should employ counselors who will guide and counsel the students on subject choice in secondary schools.
2. The school head teacher, through the curriculum master should make sure the teaching methods employed by Agriculture teachers influence the choice of Agriculture subject among secondary school students.
3. The school management should make sure that students are being given talks on career awareness so as to equip them with knowledge on subject choice like Agriculture among secondary school students. This can be done by teachers and other invited guests in the school.

5.6 Recommendations for Further Studies

1. This study has explored the influence of choice of agriculture subject among public secondary school students in Kibirichia Division, Buuri Sub-county. There is need to research on challenges facing management of the schools on the issue of guidance and counselling.
2. The study focused on Kibirichia Division only, thus the same study should be done in other divisions and in the rest of 47 counties to enable generalization of results.

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APPENDICES

APPENDIX 1: INTRODUCTION LETTER

DOREEN K.KIRIMI
P.O.BOX 955- 60200
MERU
Date 06 JULY 2015

Dear sir/ madam,

RE: TRANSMITTAL LETTER FOR RESEARCH INSTRUMENTS.

My name is *Doreen K.kirimi* a student at the University of Nairobi carrying out a research study for the award of a Master of Arts degree in project planning and management. The research study focuses on the influence of choice of Agriculture subject among public secondary schools students in Kibirichia Division Buuri Sub-county.

In this regard therefore I would kindly request you to avail your support by responding to the attached questionnaire. Your accuracy and candid response will be critical in ensuring objective research.

The information that you will provide will be treated with uttermost confidentiality and the findings of this research will solely be used for academic research purposes and to enhance knowledge in the area of subject choice in secondary schools.

Thank you for your support.

Yours faithfully

DOREEN K. KIRIMI

L50/70447/2013

APPENDIX II: STUDENTS QUESTIONNAIRE

PART A: BACKGROUND INFORMATION

1. (a) What is your gender? Male () Female ()

(b) What is your age?

13-15 years () above 15 years ()

Part B Guidance and counselling on choice of Agriculture subject

3 (a). Do you have a counselor at you school? Yes () No ()

(b). Is there provision of subject choice information by counselor to respondents?

Strongly agree () disagree () unaware () agree () strongly agree ()

c.) There is sufficient information on subject choice information through guidance and counselling

Yes () No ()

4(a). Do you have Guidance and counselling sessions taking place at your school?

Yes () No ()

b) If yes, are they available to offer career guidance and subject selection?

Yes () No ()

c) If your school has no counselors who else offer counselling and guidance on subject selection?

Teacher ()

Curriculum master ()

Guidance and counselling teacher ()

Other -----

Specify-----

-

d) If the teachers do it, do they encourage you to take agriculture? Yes () No ()

c) Do you have trainings held in your to offer training on subject choice? Yes () No ()

d) Do you have speakers, mentors, coming in your school to offer seminars on subject choice?

Yes () No ()

c) Guidance and counselling of subject choice by teacher's influences choice of Agriculture subject among secondary school

Yes () No ()

d) In your opinion how does guidance and cancelling of subject choice by teacher's influences choice of Agriculture subject among secondary school students

.....
.....
.....

PART C Influence of teaching Methods employed by agriculture teachers on subject choice

5a) Which Teaching methods do your teacher use to teach agriculture subject?

.....

Rate the following teaching methods as the way your agriculture teacher uses in teaching the subject. Use 1 to award the least marks and 5 to give the best.

Teaching Methods	1	2	3	4	5
group discussion					
Lectures					
Field trips and education visits					
Question answers and assignments					
Demonstrations					

b) To the best of your knowledge, which is the most influential method used that influences the choice of agriculture and why?

.....

c) Award a minimum of one mark and a maximum of 5 marks on the extent on each of the following factors influence choice of subject.

Teacher characteristics	1	2	3	4	5
Teachers encourage me to ask question					
Teachers is insufficient in teaching					
Teachers use variety of teaching methods					
Teachers pay attention to me					
Teacher accepts students ideas					

Part D: how career awareness influences subject choice.

6a) Please indicate your highest aspired level of education?

Form Four ()

Tertiary college ()

University degree ()

b) Please indicate the career you aspire to pursue after school?

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

Yes () No ()

d) Do teachers explain the importance of the subjects they teach to you?

Yes ()

No ()

e) If yes How often?

Every Lesson ()

Monthly ()

Termly ()

6a) Do teachers encourage you to opt for their subjects in your choices in form two?

Yes ()

No ()

b) What reasons do they give? _____

c) Do teachers discourage you to opt for their subjects in your choices in form two?

Yes ()

No ()

d) What reasons do they give?

7a) 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?

Yes ()

No ()

c) Are you aware of agricultural careers?

Yes () No ()

d) Who makes choice for student's taking agriculture subject in your school?

.....

e) How did you know of agriculture as good career choices?

Radio () TV () teacher () colleagues ()

f) Are you given special training on career awareness? Yes () No ()

g) Suggest ways in which career awareness influences choice of Agriculture subject among secondary school students

.....
.....

PART E Influence of student's Home and social background on choice of agriculture subject

8(a) Where do you live? Urban area () rural ()

b) Did you choose agriculture subject because you come from an urban or rural area?

Explain your answer. -----

c) State how the following student's social background factors influences choice of Agriculture subject among secondary schools, tick the most appropriate box.

Social background factors	Strongly agree	agree	disagree	Strongly disagree	I don't know
Parents' education level					
family social-economic background					
Parental advice					
Family background					
Parents careers					

d) State how student's social background influences choice of Agriculture subject among secondary school students

.....

PART: Further information

9) In your own view would you choose Agriculture subject if given a chance?

Yes () No ()

Give a reason for your answer.....

Proportion of form 4 agriculture student compared with other subjects

More () Less ()

APPENDIX 111: TEACHER' S QUESTIONNAIRE.

PART A: BACKGROUND INFORMATION

1(a) What is your gender? Male () Female ()

(b) What is your age?

20-30 years () above 30 years ()

(c) Indicate your level of education.

Diploma ()

Degree ()

Masters ()

Part B Guidance and counselling on choice of Agriculture subject

2 (a). Do you have a counselor at you school? Yes () No ()

(b). Is there provision of subject choice information by counselor to the students?

Strongly agree () disagree () unaware () agree () strongly agree ()

c.) There is sufficient information on subject choice information through guidance and counselling

Yes () No ()

3(a). Do you have Guidance and counselling sessions taking place at your school?

Yes () No ()

b) If yes, are they available to offer career guidance and subject selection? Yes () No ()

c) If your school has no counselors who else offer counselling and guidance on subject selection?

Teacher ()

Curriculum master ()

Guidance and counselling teacher ()

Other -----

-

Specify-----

-

d) If the teachers do it, do you encourage students to take agriculture? Yes () No ()

4a) Do you have trainings held in your school to offer training on subject choice?

Yes () No ()

b) Do you have speakers, mentors, coming in your school to offer seminars on subject choice?

Yes () No ()

c) Guidance and counselling of subject choice by teacher's influences choice of Agriculture subject among secondary school

Yes () No ()

d) In your opinion how does guidance and cancelling of subject choice by teacher's influences choice of Agriculture subject among secondary school students

.....
.....
.....

PART C Influence of teaching Methods employed by agriculture teachers on subject choice

5a) Which Teaching methods do you employ to teach agriculture subject?

.....
.....
.....

Rate the following teaching methods as the way you employ in teaching agriculture subject. Use 1 to award the least marks and 5 to give the best.

Teaching Methods	1	2	3	4	5
group discussion					
Lectures					
Field trips and education visits					
Question answers and assignments					
Demonstrations					

b) To the best of your knowledge, which is the most influential method you use that influences the choice of agriculture and why?

.....
.....

c) Award a minimum of one mark and a maximum of 5 marks on the extent on each of the following qualities of you as a teacher influence choice of subject.

Teacher characteristics	1	2	3	4	5
Teachers encourage students to ask question					
Teachers is sufficient in teaching					
Teachers use variety of teaching methods					
Teachers pay attention to students					
Teacher accepts students ideas					

Part D: how career awareness influences subject choice

6a) Do you feel that the subjects the students are studying will prepare them for their future career?

Yes ()

No ()

b) Do you teachers explain the importance of the subjects you teach to students?

Yes ()

No ()

c) If yes How often?

Every Lesson ()

Monthly ()

Termly ()

7a) Do you teachers encourage students to opt for the subjects you teach in their choices in form two?

Yes ()

No ()

b) What reasons do you give? _____

c) Do you teachers discourage students to opt for the subjects you teach in their choices in form two?

Yes ()

No ()

d) What reasons do you give?

8a) 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?

Yes ()

No ()

c) Are students aware of agricultural careers?

Yes () No ()

d) Who makes choice for student's taking agriculture subject in your school?

.....

e) Are you teachers given special training on career awareness so that you can guide students?

Yes () No ()

f) Suggest ways in which career awareness influences choice of Agriculture subject among secondary school students

.....
.....

PART E Influence of student’s Home and social background on choice of agriculture subject

9a Where do most of your students live? Urban area () rural ()

b) Do you think they choose agriculture subject because they come from an urban or rural area?

Yes () No ()

Explain your answer. -----

c) State how the following student’s social background factors influences choice of Agriculture subject among secondary schools, tick the most appropriate box.

Social background factors	Strongly agree	agree	disagree	Strongly disagree	I don’t know
Parents’ education level					
family social-economic background					
Parental advice					
Family background					
Parents careers					

d) State how student’s social background influences choice of Agriculture subject among secondary school students

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