

**MANAGEMENT FACTORS INFLUENCING ACADEMIC PERFORMANCE IN
AGRICULTURE IN PUBLIC DAY SECONDARY SCHOOLS IN KISUMU WEST
SUB-COUNTY.**

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DECLARATION AND RECOMMENDATION

Declaration

I declare that this thesis is my original work that has not been presented in any other University for award of Masters.

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DEDICATION

My dedication goes to my Brother Godfrey Deya for his patience, encouragement, and moral support he accorded me during the tiresome moment of developing this thesis document.

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ABSTRACT

The study of Agriculture in education contributed significantly in political, social and economic realms of development. Academic results of Agriculture in most secondary schools in Kisumu West Sub-County was challenged by factors including inadequate learning resources, the discipline of the students, improper approach to teaching, poor mastery of the content, overloading of teachers, denial of field trips and strikes. Effective and proper supervision and curriculum implementation played a significant role in the manner under which Agriculture performed. The major objective of this research was finding out the management factors influencing academic performance of students' in Agriculture in public day secondary schools in Kisumu West Sub-County. This research was based on a model developed by Mitzel with an aim of advancing the opinion that teaching is a concept with an interplay that employs sets of variables. The study utilized descriptive survey design to analyse and collect data. The target population consisted of 24 Principals, 24 Head of departments and 24 Agriculture teachers, one County Education Officer and 203 form four Agriculture students. The researcher used purposive Sampling to collect data from 24 Head teachers and 24 Agriculture teachers while the study utilized simple random sampling to collect data from 203 form four Agriculture students. A reliability coefficient of 0.7 was an acceptable value for research purposes, hence the researcher considered the instruments reliable for data collection. Findings obtained included inadequate Agriculture textbooks (85%) and the study established that improving physical resources by 1 unit would enhance academic performance in Agriculture by 0.362 unit ($\beta_1 = 0.362$; $p > 0.05$). It was found that enhancing attitude of students and teachers influenced learning and teaching of Agriculture by 1 unit enhances academic performance in Agriculture by 0.516 unit ($\beta_2 = 0.516$; $p < 0.05$). The study also established that improving supervision on learners by 1 unit increases academic performance in Agriculture by 0.265 unit ($\beta_3 = 0.265$; $p > 0.05$). In conclusion physical resources, attitude of students and teachers influence learning and teaching of Agriculture. Furthermore, supervision on learners have a positive and important influence on academic performance in Agriculture. The study recommended that there's need to implement appropriate policies to ensure adequate physical resources as well as improve supervision of learners. Furthermore, TSC should employ teachers to curb the acute shortage and external and internal supervision of curriculum should be intensified in all schools teaching agriculture in the Sub-County. Similarly, seminars for teachers should be intensified to encourage cultivation of positive attitude toward teaching Agriculture in these public schools. In addition, teachers need to be role models for a positive attitude towards learning agriculture. School principals should monitor curriculum implementation frequently to check whether the teachers use lesson plans in line with professional documents. Therefore, the researcher further recommends that another research should be conducted in other Sub-Counties in Kisumu to assess their level of preparedness in teaching agriculture.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIS	Agricultural information systems
BOM	Board of Management.
FDSE	Free Day Secondary Education
IT	Information Technology
KCSE	Kenya Certificate of Secondary Education
KICD	Kenya Institute of Curriculum Development
MOE	Ministry of Education
MOEST	Ministry of Education Science and Technology
PTA	Parent Teachers Association
QASO	Quality Assurance and Standards Office
QFAT	Questionnaires for Agriculture Teachers
QFHD	Questionnaires for Head of Department
QFP	Questionnaires for Principals
QFS	Questionnaires for Students
SCDE	Sub-County Director of Education
SMC	School Management Committee
STR	Students Teacher ratio
TAC	Teacher Advisory Centre
TLM	Teaching and Learning Materials
TLR	Teacher Learner Resources
TSC	Teacher's Service Commission
USAID	United States Agency for International Development
WASCE	West Africa School Certificate Examinations

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

From a worldwide point of view development started with Agriculture, when our itinerant predecessors started to settle and develop their own sustenance, human culture always showed signs of change (Nova, 2016). Not exclusively did centres, towns and urban communities started to thrive, as well as information, expressions of the human experience and the innovative sciences.

Agribusiness has a vital effect to humankind as far as worldwide sustenance supplies, hunger mitigation, financial advancement and arrangement of work (Nova, 2016). Accordingly, Agriculture can be viewed as a column for human survival and thus the significance of Agriculture being instructed at all degrees of training.

In the U.S.A, formal projects in Agriculture training are directed at optional schools, junior colleges and tertiary colleges. As a professional instructive program, rural training centres' around three noteworthy parts - formal study hall guidance, vocation training experience projects and authority advancement. These segments are conveyed through a competency based educational program concerning Agriculture in the U.S.A (Lloyd and Osborne, 2014). Past the auxiliary Agriculture program, junior colleges and tertiary colleges give magnificent chances to understudies to practice and pick up attitudes and learning in Agriculture (Williams and Dollisso, 2014).

Agriculture is the customary establishment of Chinese society and China is confronting an extraordinary test in rebuilding its framework to address the issues of the market economy. The

country's financial framework is moving from a half-way state to a market driven framework (State Committee, 2015). Specifically agribusiness instruction is assuming a significant job in getting individuals ready for another period of great advancement. According to Xiarong and Thomas (2012) China's monetary change development proposed Agriculture educational program and methodologies to address the issues of the new financial substances in Chinese Agriculture instruction.

In sub-Saharan Africa particularly in South Africa, Agricultural sector is the overwhelming supplier of work, and it plays vital role for monetary development. In addition, in many parts of Africa, nourishment security is yet a basic issue and therefore sustenance creation will keep on being a noteworthy focal point of Agriculture instruction and preparing foundations (Vandenbosch, 2016). In certain nations in sub-Saharan Africa, Agriculture has been presented when all is said in done school educational plans at auxiliary training levels as an obligatory or as a discretionary subject. The method of reasoning for offering agribusiness to auxiliary school understudies counter the evident negative mentality to cultivating by numerous optional school understudies, whose word related decisions are frequently restricted, and in this manner presenting them to the information and abilities that they would require in Agriculture generation, should they become ranchers (Abalu, 2013).

Agriculture is the fundamental wellspring of job creation in Kenya and along these lines, instructing the subject in secondary schools is adequately significant (Mwangi and Mwai, 2012). Prior to freedom in 1963, Agriculture was educated in elementary schools to the Africans just, and the technique for instructing especially the common sense work made the subject disagreeable (Ngugi, Isinika, Temu and Kitalyi, 2012). Occasionally Agriculture work was utilized as a discipline for errant understudies. Anyway, after autonomy, Agriculture has

been joined into the school educational program. This has given it significance similar to that of other examinable subjects in the auxiliary school educational plan.

With respect to showing agribusiness in auxiliary schools, during the period somewhere in the range of 1965 and 1976, the US Office for Global improvement, (USAID) assumed a noticeable job in supporting the presentation of Agriculture in optional schools by financing the structure of workshops, preparing of schools and the preparation of Agriculture educators at Egerton College. Anyway because of the severe conditions that auxiliary schools needed to satisfy before they could be permitted to show agribusiness, just around 1,000 understudies were taking the subject at the level by 1966 (Weir, 2014). This pattern proceeded so that in 1980, just around 100 schools out of 1,760 were putting forth agribusiness as an examinable subject.

The Government of Kenya introduced 8-4-4 system in 1985 where different subjects were then introduced. Years later, a number of studies to test the level of performance were done to investigate the general performance of Agriculture over the country and the management factors that influenced the performance. The findings showed that the performance of Agriculture with time was deteriorating, therefore a lot of concern and energy must be in place to boost the performance of Agriculture as a subject. In 1985, the 8-4-4 training framework was acquainted with a new study system the 7-4-2-3 framework. This implied presentation of new educational program that accentuated the need to make students confident when they left school, by offering them expansive – based and practice arranged educational program (Republic of Kenya, 1981). Agriculture as a pragmatic subject was along these lines made necessary in every single elementary school and the initial two years of auxiliary school instruction.

In Kenya, students are encouraged to take Agriculture at auxiliary school level to create independence in agribusiness, to exhibit practice of cultivating is an honourable and gainful occupation and to upgrade abilities required in doing Agriculture practices. This is to create word related viewpoint in Agriculture and to empower schools to take a functioning part in National improvement through Agriculture exercises (Vandenbosch, 2016).

The destinations of the auxiliary school training are good for planning understudies to make a positive commitment to the advancement of society and to gain information, abilities, and frames of mind for the improvement of oneself and the country (Mwiria, 2012).

The instructive destinations of training Agriculture in day secondary school as a subject are spelt out in the prospectus as follows; advance an enthusiasm for Agriculture as an industry and make attention to circumstances existing in agribusiness. Related segments, upgrade attitudes required in completing Agriculture practices, give foundation to further examinations in Agriculture, create confidence, genius and critical thinking capacities in agribusiness, empower schools to take a functioning part in national improvement through rural exercises and advance rural exercises, which upgrade natural preservation (Service of Training, 2014). Instruction in the entirety of its structures can possibly enable individuals, by expanding their self-assurance, their ability to improve their employments and their support in more extensive procedure of social and monetary change.

The study of Agriculture in education played a key role in Kenya's economic, social and political fields in development. Schneider (2013) in his study looked at what are the direct effects on training and learning with sufficiency and management of physical materials had in Agriculture as a subject. Textbooks enabled students to make good follow up of the teacher's steady flow in understanding of lessons. Court (2010) observed that when an individual posted good results in examinations, the higher the chances of joining a prestigious university and the

prospects of a well-paying job in the field of Agriculture as it helped to determine ones career choice. The research looked into the influence of management on learners performance and the attitudes of teachers towards learning and teaching of Agriculture, and hopefully gave some ways on how performance can be improved.

According to Foster and Henson (2012) indicated that Agricultural technology is the basis of any culture. According to Food and Agriculture Organisation, (2013) the Government of Kenya has given primacy to evolving Agriculture area as one of the approach to expand the economy, to provide food for its growing population and to realise Vision 2030. Provision of agricultural education is one of the rudimentary measures for the expansion of agricultural sector in Kenya. In fact, Kenya requires academicians and expert persons particularly in the field of Agriculture so as to keep the motive of the Kenya government of enlightening the agricultural sector. Controverting with government motive, majority of parents in Kenya do not want their children to be registered for Agriculture. Students do not want to enrol for Agriculture rather they would prefer to enrol for other optional subjects such as computer studies, business studies, art and design and technology as they perceive it as a dirty job (Lone, 2015). Students prefer other subjects as compared to Agriculture and therefore, students enrol in Agriculture only when they are unable to undertake alternative subjects or programs of study (FAO, 2013). This has been evident by the low performance of agriculture compared to other subject as indicated in the table below;

Grade	Subjects				
	Mathematics	Chemistry	Biology	Physics	Agriculture
A	2.78	1.24	1.75	3.60	1.641
A-	4.19	1.27	1.47	5.56	2.205
B+	3.47	2.49	4.18	6.39	4.605
B	5.48	2.63	7.57	7.17	3.460
B-	8.81	5.95	8.37	8.93	5.125
C+	6.70	11.42	13.77	3.33	7.054
C	5.39	10.02	14.60	3.85	9.615
C-	6.14	11.35	13.39	11.49	11.107
D+	12.12	13.43	16.14	14.27	12.949
D	14.73	23.95	10.74	9.11	10.051
D-	19.91	14.52	4.30	14.79	19.590
E	10.28	1.74	2.96	11.51	12.175
X	0.00	0.00	0.76	0.00	0.422
Total	100.00	100.00	100.00	100.00	100.00

Source: Published 2017 KCSE Results in SMT from Kisumu West Sub – County Education Office

In spite of the significance of Agriculture, there is proof that the quantity of understudies taking Farming is low. This can be ascribed to institutional and non-institutional based difficulties. UNESCO (1999) saw that absence of money related assets blocked the development of institutions, which prompted explicit issues in professional subjects like Agriculture. They included that absence of assets keeps schools from building up their ranches.

According to Sifuna (2012) in many secondary schools, performance in Agriculture was challenged by factors including inadequate learning resources, the discipline of the students, improper approach to teaching, poor mastery of the content, overloading of teachers, denial of field trips and strikes. In the study carried by Foreman, (2014) on the perceived components of academic facility style essential in rising the training climate shows that effective and correct management and course of study implementation compete a

major role within the performance of Agriculture. Management factors such as physical resources in learning and teaching of Agriculture, attitude of students and teachers towards learning and teaching Agriculture and supervision on learners academic performance in Agriculture influence the academic performance therefore the importance to conduct the study. This thesis therefore, tried to find out how management factors influenced performance in KCSE Agriculture exams in public day secondary schools in Kisumu West Sub-County. The main interest therefore was to investigate how management factors influence academic performance in Agriculture as a subject and why there was no impressive Agriculture results in KCSE Examinations in the Sub-County.

1.2 Statement of the Problem

The performance of Agriculture in KCSE examinations in the county had been unimpressive between 2012-2015, Kisumu County education statistics report 2016. For instance the average mean grade of C- (minus) for the County had been below half the possible average mean score of A for the last five years. This kind of performance had agitated more interests among parents, education officers, teachers, Principals, and other stakeholders in Kisumu West Sub-County. The posting of low grades in Agriculture in Sub-County, had a negative effect on the average grade attained by individual students and the school as a whole. Besides, if the trend continued, it was certain that the numbers of students enrolling to train for careers such as agricultural engineering, meteorology, Agro-climatology, surveying, Agroforestry among others that consider Agriculture as part of requirement for qualification were at a risk of facing shortage of skilled work force. An important manifestation of proper management towards teaching of Agriculture was to better student performance in Agriculture as a subject. The performance especially in KCSE Examinations can improve by good management and would prepare the students adequately for future world of work (Olutosin, 2017). Agriculture forms the backbone

of Kenya's economy and to realise and achieve Vision 2030 Agriculture should come as priority key pillar in the country.

Since Agriculture is the primary wellspring of business for most of Kenyans who live in provincial territories, educating and learning the subject in secondary schools successfully is significant (Mwangi and Mwai, 2012). Horticulture as a subject has been instructed when autonomy with the general reason for existing being the advancement of essential Agriculture attitudes significant to Kenya and the learners' home condition (Kenya Secondary School prospectus, 2012). Mwiria (2012) considers the points of showing Agriculture in agreement to Kenya optional school schedule as strengthening interest and mindfulness for circumstances existing in Horticulture and exhibiting that farming is an honourable and productive occupation. To grow the understudies information on fundamental standards and practices in Agriculture, create students' comprehension of the estimation of Horticulture to the family and network with a perspective on advancing independence, creativity, neediness decrease, improved nourishment security, critical thinking capacities, an occupation viewpoint in Horticulture and advance Agriculture exercises which upgrade natural protection.

This study therefore tried to investigate the influence of management on the academic performance within the secondary schools in Kisumu West Sub-County. The level of deteriorating performance was a major concern to the ministry of education and heads of schools in the county had been going round in different contexts. This has been posing the question, how management factors such as physical resources in learning and teaching of Agriculture, attitude of students and teachers towards learning and teaching Agriculture and supervision on learners academic performance in Agriculture influence the academic performance hence the need to carry out a study. This study therefore, tried to establish how management factors influenced performance in KCSE Agriculture exams in public day

secondary schools in Kisumu West Sub-County. The main interest therefore was to investigate why Kisumu West Sub-County in Kisumu County was not registering impressive Agriculture results in KCSE Examinations.

1.3 Purpose of the Research

The purpose of the study was to determine management factors on learners' academic performance in Agriculture by students, the influence of attitude towards Agriculture, and the role of supervision towards teaching and learning Agriculture in public day secondary schools in Kisumu West Sub-County and hence suggested the possible solution to the existing problems.

1.4 Research Objectives

1.4.1 Broad Objective

To determine the significant management factors that influenced performance in Agriculture.

1.4.2 Specific Objectives

- i. To determine the influence of physical resources in learning and teaching of Agriculture in public secondary schools in Kisumu West Sub-County
- ii. To investigate the influence of attitude on students' Academic performance towards learning Agriculture in public secondary schools in Kisumu West Sub-County.
- iii. To establish the influence of supervision on learners academic performance in Agriculture in public secondary schools in Kisumu West Sub-County

1.5 Research Questions

The study sought to answer the following research questions:

- i. What was the influence of physical resources in teaching Agriculture in secondary schools in Kisumu West Sub-County?
- ii. What was the influence of attitudes of learners and teachers towards learning and teaching of Agriculture in secondary schools in Kisumu West Sub-County?
- iii. To what level was the influence of supervision on learners' academic performance in Agriculture in secondary schools in Kisumu West Sub-County?

1.6 Significance of the Research

It was expected that the findings of this study would be necessary in improving Agriculture performance in public day secondary schools in Kisumu West Sub-County. All Principals, heads of departments, teachers (Agriculture) and Sub-County director of education would take corrective measures to enhance the quality performance required in the public day secondary schools in the Sub-County and to improve better grades to all Agriculture students.

The study would contribute to, firstly the teachers' improvement in their instructional strategies, assessment techniques, and regular attendance, which would eventually lead to good results. Secondly, the study would also try to contribute towards positive behaviour modification among Agriculture students and teachers towards learning and teaching of the subject. thirdly this information may be helpful in providing adequate resources in all the schools and lastly, The information may ensure proper and adequate supervision from all the concerned parties to ensure proper guidelines are followed towards teaching and learning of Agriculture as a subject to better the performance in public day secondary schools in Kisumu West Sub-County.

1.7 Scope of the Research

This study sought to investigate management factors on learners' performance in Agriculture by students in public day secondary schools in Kisumu West Sub-County. The Sub-County has a total of 24 public Secondary schools. The target population consisted of 24 Principals, 24 Head of departments, 24 Agriculture teachers from public day secondary schools and the Sub-County director of education. Student target population involved the 203 form four students taking Agriculture subject in public day secondary schools in the Sub-County. The study confined itself only within Kisumu West Sub-County day secondary schools thus saving on Cost and time.

The research design that was employed was descriptive survey design. Issuance of questionnaires was used to obtain data from the school principals, Head of departments, Agriculture teachers and form four students. An interview schedule was also conducted for the Sub-County director of education. The scope was limited to the stated objectives of the study, which spelt out the variables that include Adequacy of physical resources, attitude of students, and supervision was studied. The study was carried out between the months of May 2017 to January 2019

1.8 Limitations of the Study

There was expected challenges in the process of data collection because some respondents withheld certain sensitive information on performance of Agriculture. The method of data collection was administered by means of questionnaires to all the respondents and Interview schedule for the Sub-County director of education. The researcher however worked at winning the confidence of those involved in the research by giving reasons for the research and assuring them of confidentiality. The researcher was unable to collect all the required information since some of the respondents appeared to be uncooperative. This was due to lack of interest to

participate in the research and fear of victimization to the extent that they refused to offer the needed information and therefore some questions were not well answered even though this did not greatly affect the study findings as the response rate was adequate to carry out research analysis. The respondents were however assured that the information they gave was solely used for the research purpose only, they were free to answer the questions to the best of their knowledge, and this helped in overcoming the limitations and achieving the objectives. Furthermore, the study was carried out in Kisumu West Sub-County and this limited the generalization of the study findings to the whole Kisumu County.

1.9 Assumptions of the Study.

The Assumptions made in the study included:

Agriculture teachers in the sampled schools were well trained, result oriented, and dedicated to their jobs.

All the learning and teaching resources was available in all the schools under investigation.

The researcher was able to investigate the management factors influencing Academic performance in Agriculture in public day secondary schools.

The methods that was used to collect and analyse information yielded valid data and results.

The Agriculture teachers in the sampled schools were highly motivated to teach and improve Agriculture performance.

The respondents were expected to give their answers to the best of their knowledge without coercion.

1.10 Operational Definition of Terms

The following terms that have been widely used in the research study bear the following meanings;

- Academic performance:** This refers to pupil education achievement in a learning setup.
- Adequacy** This is the state of sufficiency for the purpose concerned. The meaning does not give excellence or abundance, or even more than what is completely necessary.
- Agriculture** This is the study of a science and an art, or occupation concerned with growing crops, tilling of land, and rearing of livestock.
- Attitude** This is a tendency to reply absolutely or negatively towards an exact plan, object, person, or scenario. Attitude influences a personality's selection of action, and responses to challenges, incentives, and rewards
- Educational supervision:** This term is used to refer to the work that is often performed by education administrative workers. Education supervisors are often charged with the mandate of ensuring that they provide adequate guidance and offer feedback on matters of academic, professionalism development as expected.
- Head of Department:** A person in charge within a section and mandated to perform duties on behalf of the institution.

Inspection:	Referred to overseeing the condition and maintenance of resources as well as terminal evaluation of performance and organizational effectiveness
Learning:	Term used to connote the change that is relatively permanent in relation to the knowledge of a person and behavior that comes because of experience. Learning is a process that are often transformative in the context that we take information and process it, but when we mix it with the experiences, it determines what we do and subsequently what we know.
Material Resources:	this refers to all materials and equipment used to enhance effective learning, that included laboratories, classroom and school garden.
Performance:	Referred to the level of student's achievements or attainments of knowledge and skills compared to others. It also indicates the performance index of a school in relation to others.
Principal:	The highest rank in the school setup who takes the leading role in the daily running of the institution.
Physical resources	Include reallocation of physical space in the school for setting up learning laboratories, Libraries, Classroom and adequate garden space and installing computers in classroom to ensure effective operation of the school.

Public school:	Refers to a state school or a non-fee school, funded and operated by the government towards achieving its resources.
Secondary education:	This referred to the level of education that precedes tertiary or university education.
Student:	A person who undergoes learning process in a school towards behavior modification and change
Sub-County:	This is a devolved unit in county as established by law, which is responsible for all Education matters within the Sub-County.
Teacher:	A qualified trained expert who instills knowledge, Competence, and virtue to learners.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section dealt with an analysis of related literature on influence of management on performance in matters pertaining academics by learners in Agriculture in Kisumu West Sub-County. The review of documents and necessary reports from various sources that do with issues like management and adequacy of physical resources, attitude of teachers towards learning and teaching of Agriculture, supervision and curriculum implementation.

2.2 The Adequacy and Management of Physical Resources

Physical resources include reallocation of physical space in the school for setting up learning laboratories, libraries, classroom, adequate garden space and installing computers in classroom to ensure effective operation of the school towards teaching and learning of Agriculture. Research indicated that well equipped schools that in terms of the instructional resources have better chances of recorded better scores and performances compared to schools that are poorly funded (Kombo 2014). The psychologists argue that students absorbed about 10 percent through the sense of hearing while 80 percent is absorbed through the sense of sight have ratified the same opinion. Notably, students retain 20% of what they have heard and half of what they have seen through the sense of sight. It therefore indicates that in the event that teaching aids are used, they promote the concept of understanding, perception, and retention.

2.2.1 Concepts of Learning Resources and Teaching

The aspect of Teaching Learning Resources (TLR) on adequacy is used to refer to suitable and acceptable quantities and qualities of physical facilities, material resources and human

resource. In relation to DFID (2014), in the event that the instructional materials such as charts and textbooks that are used as the main instructions input of improving the performance of student and is also known as the most cost effective model. In this case therefore, the supply of the text books are done in a manner that ensures that one textbook is shared by three students to ensure that at least one student will have an opportunity to read a new book in every week.

In the event that TLR is used to determine the efficiency of the education system, Padmanbhan (2013) pointed out that it is a very useful model of determining the efficiency. In this regard, the presence of the instruction materials ensures that teachers deliver their teaching activities in an intellectually approved manner on the account that the students are assumed to have read the contents and context of the teachings that the teacher delivers in a classroom setup.

However, it should be noted that even as the instruction materials are given, teachers are expected to have a personal plan to ensure an adequate physical facilities and instructional materials with an aim of supporting education effort. In this regard therefore, the inadequacy of the instructional materials will greatly affect the performance of the students.

2.2.2 Performance Based on Learning Resources and Teaching

TLR is known to comprise of three mechanisms; physical facilities, human resources and material resources (DFID, 2014). Previous research has indicated that in relation to the availability of TLR in school, TLR in most schools is not available. Thus, it has been established that lack of TLR is a serious challenge to educators. Lyons (2012) opined that learning is a composite activity, which are made up of the relationships of student's motivation, physical facilities and lack of skills that are needed in the course of teaching curriculum demands and teaching resources. The aspect of accessibility of TLR has been proved to

improve the effectiveness of schools on the account that they are known as the resources that bring on board good performance for students in terms of academics.

2.2.3 How Access of Learning Materials and Teaching Affects the Performance of Students

The materials that was used in this regard will include charts, maps, textbooks, electronic materials and audio-visual materials such as radio, tape recorder, and television. Other materials or requirements may include pens, crayon, chalk, pens, books, maps, ruler among others (Atkinson, 2010).

A sub-county director of education in 2013 made a discovery that there is a mutual relationship between the instructional materials that are used in teaching and the underlying performance of students in terms of their academic activities. Therefore, the school that use more instructional materials will perform better than those that do not make use of them.

2.2.4 Impacts of Access to Physical Facilities on Performance of Students

Research indicates that there is an immediate relationship between developed physical facilities and student's performance. In this case, sponsors, parents and communities should be encouraged to contribute towards the development of physical facilities. The encouragement of the development of the physical facilities is backed by the fact that in the event of such facilities, the performance of students in academic could decline (Republic of Kenya, 2015). DFID (2014) opined that it is important to have the physical facilities in the institutions of learning. Different institutions that are mandated with the task of regulating and assessing learning in schools have indicated that it very important to have physical facilities in all the learning institutions. It is important to mention the physical facilities that are being discussed herein. In this regard, the physical facilities includes the classrooms, lecture halls,

administration offices, libraries, auditoriums, laboratories, play grounds, assembly halls, workshops and school garden.

2.2.5 Impacts of Access to Human Resources to Performance of Students in KCSE

TLR takes part in determining the education system's failure or success. To determine the teacher adequacy, Students Teachers Ratio (STR) the model is used which assesses the number of students that are assigned for a specific teacher in a specific education level. When used, the STR indicates the workload of a teacher in a specific subject are often common in education level. Other than determining the workload of the teacher, STR also indicates the amount of the teaching work force, which is needed for an expected enrolment of students. Therefore, the STR can be used to indicate if the teacher is underutilized or over utilized (Afolabi, 2015).

2.2.6 How TLR has been utilized in FDSE

In the event that resources are utilized in education, they contribute to fruitful learning on the account that, the used resources are used in motivating students and stimulating their learning. There is a common way of assessing how well the learning resources are utilized which is normally to evaluate the expenditure of the school on the account that schools have bulks of expenditure that may go unnoticed (Meghir, 2012).

In this regard therefore, schools should make use of the resources that are available to them in the course of advancing the learning processes that are given to students. It is also a sole responsibility of the school heads in ensuring that there is adequate classroom spaces for all the students and ensure that all the required resources by the students are met by his or her team of administrators so as to meet the demands of their students and ensure good results are achieved. It can therefore be noted that on the account that the FDSE has been provided, it has

made a need for evaluation of the adequacy of TLR, a model that appears to have been well utilised by schools in Kisumu West Sub-County.

2.3 The Attitude of Students and Teachers towards Learning and Teaching of Agriculture

The indispensable role of attitude within the learning of Agriculture has garnered the eye and attention of instructional researchers and Agriculture educators for a long time. Hence, literature is concerned with empirical proof on the connection between teacher perspective and academic performance of the student in Agriculture.

2.3.1 Theories on Attitude

The terms attitude is used to mean an affinity that is psychological in nature, which is expressed through an estimation of a specific thing coupled with some goodwill aspects (Eagly & Chaiken, 2013). Similarly, attitude is also known as the trend or bias that is used in the course of replying either positively or negatively to a knowledge, individual, object, approach object or a condition. Attitude is believed to sway people's prizes, motivations, perception or reaction to different aspects or concepts. According to Zelle, Elaine and Marianne, (2015) attitude is normally a negative or a positive opinion about an individual, object, or a place that is in most cases known as the attitude object. Furthermore, Arul (2015) posted that attitude is both a neural state or psychological state of the aspect of willingness which is brought about by the comprehension, application of a directive or an influence that is forceful on the answers of an individual in relation to circumstances and all and objects that are connected to it.

2.3.2 Mechanisms of Attitude

Previous researches have pointed out that the mechanisms of an attitude are three namely cognitive, behavioral and affective (Eagly & Chaiken, 2013). Cognitive mechanism of an

attitude is the tenant within which an individual knows trusts or thinks about an attitude object. For example, there are individuals who think that agriculture is a dirty job. The core aspect of the cognitive attitude is the emotions or moods of an individual that is correlated to the attitude object. An example that can be used to explain this is the account whereby an individual's attitude is aroused by the thought of a dirtiness. Secondly, the behavioural mechanism is known to be the urge by an individual to respond to a certain concept or event in a certain way that is definite. A good example to explain this is the person who believes and perceive that all Agricultural activities in any event is dirty. Thus, behavioural, affective and cognitive mechanisms can be said to be organised and consistent.

2.3.3 Formation of Attitude

According to research, it is possible to develop attitude. In this regard, attitude is formed because of how people involve themselves with life. According to social psychology, there are three ways of forming attitude namely; standard preparing, observational learning and operant preparing. Standard preparing in this case is the course of adjusting to behaviour by which the recurring coupling incitement that is undefined agitation, which leads to enhancement of a reaction that is, conditioned (Ntim, 2010, Linero & Hinojosa, 2012). Secondly, operant preparing is involved in incentives that are neutral which in the most obvious way that provokes response. In this case, an example that can be given in support of this is the account that students who become admirers of professions that are held by their parents mostly their fathers. Observational learning on the other hand explains that students learns from the aspect of looking at what their parents or other persons in their social environment are doing (Yara, 2016).

2.3.4 Attitude towards Agriculture

According to the reports by most of the authorities within Agricultural setup, people like or dislike Agriculture based on all that pertains the subject. However, some of the people extend the meaning to the extent of embracing ability, usefulness and beliefs of Agriculture. For instance, Martino and Zan (2014) posted that the attitude towards Agriculture may be either positive or negative. In this regard, the attitude towards Agriculture is known to have cognitive behavioral and affective mechanisms just like all the known attitudes. Similarly, it is important to note that the attitudes towards Agriculture can be formed through the processes that was highlighted earlier. In this regard, students can develop an attitude towards Agriculture because he or she has interacted in the past with events that may help him or her in loving Agriculture. Notably, the aspect of positive reinforcement may create a room that may lead to the formation of a negative or positive attitude for Agriculture.

2.3.5 The Attitude of Students towards Agriculture

The perception and attitude of the students towards the subject of Agriculture has been considered as great and impressive. Most of them admitted enjoying the agricultural lessons and the possible impacts in their life (Borasi, 2010; Shoenfeld, 2015). Normally, the concept and the students' attitude towards Agriculture plays a significant role in determining how the students feel about the agricultural subject and determines the approaches that they take towards the subject. Attitude towards the subject is therefore the most important thing in the course of studying the subject.

It is also worth noting that attitude has a correlation to gender. In this case, there are people who believe that boys do well in Agriculture compared to girls. The belief that boys do better than girls in Agriculture may affect the attitude of the girls undertaking the subject and thus

contribute to the ripple effects of affecting the performance. A study in Pakistan found out that the performance in agricultural subject is solely depended on the attitude of the students. However, similar studies have found out that girls have lower success rate compared to boys in terms of the agricultural subjects. The studies that have been done to determine the impacts of the students in relation to performance in the agricultural subject found out that the performance is pegged on the attitude. Therefore, the element, mostly the social environment should work to ensure that all students regardless of the gender have the right attitude to improve the performance of the students mostly concerning the subject. Without the right attitude mostly among students, Girls are made to think that they cannot do better than boys in Agriculture subject in National exams. Therefore positive attitude should always be enhanced in the school environment to ensure all students are given equal chances towards Agriculture to help reduce the negative attitude that seems to institutionalise the thinking that it is only boys who can do better than girls in Agriculture subject should not be encouraged.

2.3.6 Teacher Attitude towards Agriculture

To understand the extent to which an attitude is either acquired or learnt establishes between student's attitude and teachers, performance and attitude. According to Schofield, (2013) there is a positive attitude of the teachers in relation to the agricultural subject, which has a very high correlation with high performance of students in the same subject. A research that was conducted by Bridget, Twemlow, Vermberg and Dill (2015) confirms the attitude of the teachers in the agricultural subject is core in determining the performance of the students and subsequently, there behaviour. Similarly, the research also found out that the teachers who work with a lot of devotion were confirmed by their fellow teachers to be very helpful in terms of reducing the cases of bullying in schools compared to the teachers who do not show an aspect of devotion. Notably, the study also indicated, the teachers who are said to be devoted

shows the determination and courage in the course of facing the difficulties in their lives in school. In the face of having devoted teachers and their corresponding influence to the lives of the student, most students were observed to have high disciplines and performance in the subject because of the psychological influences of their teachers and the encouragement. In other words, devoted teachers go an extra mile beyond their duties in class and thus being helpful to students. The extra mile duties performed by the teachers contributes to them becoming the default role models to the students by the virtues of inspiring the students and being there to ensure that the students have performed their best according to their capabilities. In terms of the attitude of the teachers and its influences on the students, the likes and dislikes of the teachers, also, affects the students in terms of what they also like or dislike and to some extents how the students behave. Without knowing therefore, students learn from their teachers even without the consent of them (Yara, 2016).

Just like any other attitudes, the attitude of the teacher in relation to the agricultural subject may be evaluated by the response emotion (affective) of the teachers towards the said subject, their beliefs about the subject (cognitive) equally to the behavioral aspects. Thomas, (2016) indicated that the practices and attitude in terms of teaching in Agriculture which is affected in a complex way mostly in social context, beliefs and emotions and the knowledge content. The research that have been done have confirmed that emotional responses in relation to Agriculture which are often found in teachers include anxiety, dislikes and self-confidence toward the agricultural subjects.

The beliefs of the teachers about the agricultural subject includes how useful the subject can be to the students, how the subject can be learned, how easy or difficult the subject is in terms of learning. Similarly, the beliefs are related to the perceptions and ability that plays a very important role in terms of influencing the performance of students. Christou and Philipou

(2014) posted that the beliefs of the teachers in relation to the utility of Agriculture can often be derived from the correlation, which may either be negative or positive attitude towards the course. There is a belief that in the event that a teacher considers Agriculture to be a useful subject to the lives of the students across the world and the a logarithms that are used in the course of learning Agriculture may see their students memorizing the procedures and the rules that are involved even without understanding their meaning. On the other hand, the outlook that is negative may contribute to the students having a very negative attitude towards the subject and thus record poor performances. Similarly, in the event that a teacher believes that Agriculture is a subject that is performed well by girls compared to boys, the girls adopts that notion in their classes and thus perform badly.

There is another aspect of the attitude of the teachers towards Agriculture that are used in determining or predicting the behaviour of the teacher towards Agriculture. The behaviour that is related to Agriculture includes Agriculture avoidance, agriculture pursuit, and the behaviour that is instructional in the classroom, which affects the performance and attitude of the students. As we have seen previous accounts, the attitude of both the teachers and the students affects both the behaviour and the performance of the students in class towards the agricultural subjects (Ministry of Education Ontario, 2014).

An important concept of learning could most probably act as either a hindrance or an enhancement of learning. Therefore, a student with high motivations to learn is highly likely to find it useful to learn the subject and equally finds a rare energy and motivation to learn compared to those who are not inspired or motivated. If one was motivated to learn, he or she appreciates its value and chances to perform are too high (KESSP, 2016). Wilkins (2014) asserted that in the event that the learner have participated in learning through volunteering, they are likely to be very motivated and dedicated in their class work compared to the learners

who are not volunteers. Therefore, volunteering is a very essential aspect in the learning process as it brings about motivation. Mukono (2014) expressed the same view. He posted that there were little or no efforts that were directed towards changing negative attitudes of students towards learning despite there being set school policies. Soakpa (2015) carried out a study on the attitudes of students towards learning in the Democratic Republic of Congo. Questionnaires and survey design were used by the researcher to collect data and his study found out that the learner's socio-economic backgrounds were to a larger extent found to affect the attitudes of teachers and attitudes of the learners in the course of learning towards Agriculture on the accounts that it was associated with the rich quota of the society.

Russel (2015) on students' interest in learning, (a survey in Finland) attributed the characteristic of a person in terms of interest. It was aroused as a function of interestingness of a content and context and partially under regulation of the teacher (Todd, 2010). Interest could be conceptualized as a component that is integrated of a network that is interrelated of social, physical factors in a certain situation of learning (Fullan, 2013). The attitude of learners were greatly influenced by their teachers (Breakwell, 2013). Consequently, very few students would join school unless either they were encouraged by their teachers or they were supplied with the model of teaching that would be used.

Gitau (2013) carried out a study on the on the contemporary situation in terms of the teaching and learning that is applied by schools in Kikuyu. His study revealed that policies in education reflected the attitudes of policy makers and had been responsible for the attitudes students had towards learning. His study found out that with those policies, certain subjects had been given a lot of emphasis than the others, thus students and their teachers through this developed a negative attitude towards certain subjects like Agriculture. However, this study did not address the fact that these attitudes had instrumental contributions to the processes of learning and

teaching and consequently the Agriculture performances. The current study explored the ways in which the attitudes of learners and teachers affected the teaching and learning and their influence on final KCSE performance on Agriculture. This was because teachers are influenced largely on the effectiveness of teaching and learning process and all this depended on their attitudes towards their work and the learners attitude too. The satisfaction of a teacher was positively related to his or her achievements in the good performance of his or her students,(Kibui 2015). Efumbi (2012) posted that, rather than the teacher becoming too strict in terms of punishing the students and showing aspects of being authoritative to learners while teaching them in a classroom setting, he or she should observe the role of becoming a good guide, Model and facilitator. In doing so, a teacher should encourage students, ensure that they have formed group activities, and guide them to ensure that they come up with their own list of things that they would be doing in their respective groups. Within this context thus, a good teacher is determined by his or her creativity in choosing the right learning and teaching strategies that would end up motivating his or her learners. The objective of the proposal therefore was to determine if learners and teachers attitude towards learning and teaching would have any influence on Agriculture performance.

2.4 The Effectiveness of Supervision and Curriculum Implementation

Syllabus coverage determined the performance of learners in the examinations because that students would be assessed generally in any random topic in the syllabus but in the event any school may not have covered all the topics in the entire syllabus, the learners will end up being disadvantaged. Effective curriculum coverage depended on effective time management by principals, teachers and students in the school. Cambell (2016) observed that efficient and effective curriculum management and the instructions that are given to the learners could be a

pre-requisite assessment of aspect of ensuring that the students have met their objectives and goals thus improving their performance.

As stated by Comber and Keves (2013) that in the event that learners and teachers are allocated more to study under instructions, the more they are likely to record high scores in their respective subjects. In addition, the students' performance in examinations depends on the homework given and corrected. This implied that effective time management by teachers would ensure proper curriculum coverage. This study investigated whether that was the cause in Kisumu West Sub-County. Eshiwani (2016) rubberstamped the essence of according extra training to the students who were preparing for key examinations of the national ranking. Assessing the students more often may lead to a situation that would see them improving examination performance, promptness in marking and giving homework that would help in establishing the areas where the students may register weaknesses that needs to be improved. Group activities are very instrumental in ensuring that the syllabus is fully covered on the account that it would help the learner to cover the entire syllabus even in the event that the teacher were absent in their duties.

Diugnan (2016) identified that the success or failure of the school is due to the leadership of the school as an essential aspects. He further broke it down to identify the activities that are involved in the leadership of the school majorly by the principals, which include bringing order in the school, ensuring that students have high expectations of teachers and staff to the school goals. In addition, the principal had a role of implementing educational policies and objectives into programmes at the school setup. In this regard, the principal is expected to carry out the administrative functions as well as supervisory roles. Principal are needed to have managerial skills to execute educational policies and objectives efficiently, that would enable him or her to adequately plan, evaluate, control, make proper decisions and supervise. An effective

principal played his/her role in task areas, which included student learners, staff personnel, school community relation, provision of physical facilities and financial management.

2.4.1 Leadership and School Effectiveness

The success of the school is evaluated within the purview of the multi-level management strategies that are put in place by the school to ensure that leadership and management of the school is adequately done. Whereas the leadership of schools is often thought to be the sole responsibility of the principals. It is not only the role of the principals to lead the school, and in other words, the role of leadership should be extended to the teachers who undertake both informal and formal leadership of the school. Even though the process of ensuring that the leadership of the school runs in line with goals and objectives of the school is a difficult happening, but the product is widely recognised.

The vibrant role of the school culture is at the centre of ensuring strong school leadership and effective teaching. Amid the frequent meanings that are used to define the culture of the school. Peterson & Deal (2010) and Schein (2015) opines that the school culture alludes to the values, opinions, culture and traditions of a school that have been entrenched over a long period of time dating back to the history of the school. Peterson (2012) posts that the school culture is built over a long period courtesy of instructional leaders working together such as students, parents and teachers. Through the school culture, the school is in a good position to meet its goals and objectives such as staff development. (Fullan & Steiglebauer, (2013) are opposed to the fact that the key to the realization of the fruitful change is not only entrenched on the change that happens in the structure of the organisation, but rather entrenched on the instrumental change of the culture. According to Squires and Kranyik, (2012) positive school culture may contribute to an influence of both social and academic success of the learners in a given school. Becker and Hedges (2012) opines that in the event that schools indicate positive culture, it

benefits from the positive ripple effects of improving the rates of attendance, recording low or no interruptions and consistent better achievements in terms of the academic performance.

Previous studies have shown that strong leadership (Lezotte, 2013) characterizes effective schools. Day *et al.*, (2010) study in England recognised twelve operative schools, concluding that one mutual characteristic of these schools was a solid leadership. The study discovered that these schools had effective headteachers who continually controlled at assisting individual students to improve, often work on improving the interrelations between the teachers, staff and students with the nearby community thus, upholding a motivation on program and goal consistency. Equally, Leithwood (2014) study in Canada discovered that effective school leaders employ their time developing people, constructing assurance to change, generating circumstances for the morale for teachers and interlinking it to the forces that are outside the school environment while repeatedly gaining and steering resources. These are qualities of effective leaders.

2.4.2 Supervision and Teacher Effectiveness

Principals often do the supervisions. While the supervisions are necessary to ensure that the students have the right strategies used by the teachers in the course of dispensing knowledge to students, it is necessary for the supervisions to be conducted from time to time to ensure that the students have all that they might require for the education in Agriculture have been indicated. According to Duke (2014), supervision refers to the activities of monitoring the efforts of the teachers while in class. The monitoring in this case can be said to include; use of professional development that could lead to improvement of classrooms, supervision conducting, and observation of teachers while in classrooms. In this regard, the supervision provides an aspect of principals for the purposes of monitoring instructions (Hallnger & Murphy, 2015). It is significant to note that the principals can make good use of classrooms

visits for the purposes of ensuring that the teachers are compliant to the instructions given to them.

The supervision by the teachers in relation to the activities of the classroom is known to have effects on the instructions of the classrooms (King, 2013). On the other hand, Blase and Blase, (2014) opined that there are five strategies that can be used in conducting the supervisions.

1. Suggesting improvement of instructions.
2. Provision of feedback based on the observations in classrooms.
3. Conducting a modelling of good instructions.
4. Conducting an inquiry to establish what the teachers might be thinking.
5. Seeking to have the opinions of other teachers.

The strategies above have been found to affect the teachers positively through an increase of the use of the instructional behaviours that are informed reflectively. This are referred to the teachers involving him or herself in the risks of the classrooms using the strategies that are instructional in nature and emphasizing the instructional planning (Blase & Blase, 2014).

The outcome of the instructional conferences that was held for principals resolved that it was necessary for the school heads to ensure an implementation of the high-order thinking techniques for the social studies students in high school, an assertion that was made by (King, 2013). After the resolve, there was a follow up question to the principals regarding the the essence of the teachers using higher-order thinking skills pedagogy. In this case, teachers should also ensure that the conventional methods of teaching are being used for instance the direct instructions. The behaviours of supervisory have been found to create a climate in the schools that necessitated teachers to critically think and discuss the instructional issues concerning the high order thinking pedagogy. According to Roberts and Blase, (2014)

classrooms visits is a strategy supervision that affects the teachers positively. In this regard, the school heads utilises classroom visits to assess what the teachers are doing in classes and evaluate whether the teachers are using the right instructions in the course of their delivery and also to facilitate their personal interactions with the teachers. Notably, Blase and Blase (2014) revised the notion of the (Roberts & Blase 2014). In their view, it was therefore observed that there is a visibility in the course of walking around the school and making informal classroom visits that is rarely correlated to the increase of the behaviours of the teachers who are said to be the best.

There are behaviours by the principals that affects the teachers negatively. In this regard, this behaviours including the needs of the teachers, isolation of the teachers, spying on teachers, withholding the resources that are supposed to capacitate the duties of the teachers, criticizing, overloading, threatening, prevention of the advancements and also accounts of unfair evaluations. They further noted that in an environment where teachers work under the principals who have behaviours that curtail their growth, their creativity is thus limited. It was noted that teachers reported that it did not make sense to them to become risk takers of instructional calibre whereas they were tied on the conventional models and that the principals did not support them.

2.4.3 Supervision and Teacher Improvement

Advancing educator improvement and expert progress is the most known head authority on behaviour found by analysts to positively affect instructor to study guidance (Desimone, Porter, Garet, Yoon, & Birman 2012; Johnsen, Haensly, Ryser, & Ford 2012). Competent improvement is believed to be a crucial aspect for improving instructor guidance (Elmore & Burney, 2015). Instructional pioneers take care of giving educators quality training advancement (Desimone, Smith, & Ueno, 2016). Headteachers achieve this through guiding

instructors to competent training advancement openings and sorting out in-administration exercises at their schools that attention on explicit instructional objectives (Hallinger & Murphy, 2015). Headteachers advance competency improvement by utilizing directors and partners to prepare educators on academic instructional methodologies, giving instructors' time for adequate investigations, and utilizing external sources, for example, school curriculum, local level workshops, and experts with specific qualifications on specific territory (Duke, 2014).

The advancement of instructor progression and expert improvement by supervisors expands teachers' use of higher-request training methodologies when they get competency improvement on a particular system (Desimone et al., 2012). Higher-request training techniques includes training in non-conventional manners and were found to expand the limit learning of understudies (Desimone et al., 2012). Supervisors were seen by educators to improve composing guidance by giving staff advancement on encouraging the composition procedure (McGhee & Lew, 2014).

A critical correlation was found by Sheppard (2012) that advance competent teaching between principals and instructor competency to attempt new and various instructional thoughts in the study hall. The advancement of skilled improvement by principals builds teachers' utilization of accepted educated practices, as well as creative thoughts and tutorial hazard taking (Blase & Blase, 2014). Mellow and Blasé (2014) gave a combination of methodologies principals accustomed advance educator improvement that expanded teachers' utilization of accepted educated practices: (a) highlighting the investigation of learning and, instructing (b) backup coordinated practices among instructors, (c) starting training connections among instructors, and (d) utilizing standards of grown-up in sampling out on staff improvement.

Supervisors supporting and empowering interest in expert advancement exercises influence instructors to change their way of study to address the issues of talented understudies (Johnsen et al., 2012). The expert advancement exercises includes preparing from another association on the most competency method to change the learning plan to address the issues of talented understudies. Supervisors simultaneously empowered instructor interest in these expert improvement practices, and this help propelled educators to keep partaking (Johnsen et al., 2012). Lord (2013) found that the main interest of supervisors in learning plan of work with educators was a vital to the usage of higher-request thinking attitudes by the instructors.

2.4.4 Issues and Challenges Facing Supervision

So many problems face principals in carrying out the supervision in their respective places of work. According to a research that was carried out in Arizona, it was found out that the major challenges in the course of supervision is lack of time. In the Kenyan context, it was repeatedly reported that the principals are often overloaded thus lacking time for supervision.

According to the Bridges (2012), other than lack of enough time to carry out the implementation of supervision, the desire by the principals to avoid conflict is also cited as a challenge. In this regard, the desire by the principals to avoid conflict leads to the account that even at the point when the principals do not desire to end up antagonizing his or her team of staff. supervision, even at the point when the supervision is carried out, the principals ensures that it is not carried out properly to ensure that there is no conflict. Bridges (2012) on the other hand posted that it is not possible to avoid conflict as result of the account that the conflict is a by-product of criticism, which is often using while accompanying the performance of the teachers.

There are many challenges that are faced in the course of undertaking supervision in the institutions of higher learning. In some studies, it has been noted successfully that most of the supervisors are hindered by the lack of the structural support in their course of undertaking the supervisory roles. Some of the major challenges that have been quoted in this regard is the lack of financial resources to completely undertake the role of supervision and thereby ensuring that there is no major outcomes in terms of what should be improved and what should be rectified. While there are very many known needs as to why it is essential to facilitate the supervisors with all the resources that are required in the course of undertaking the supervision.

Notably, lack of preparations from the principals has also been cited as one of the major challenges, while the principals are expected to be the sole individuals in charge of the supervision function, it has been noted that they role or the function is undertaken without the principals being adequately prepared. We should understand that in the event that there is lack of adequate preparations while undertaking any of the role or obligation, it is deemed not to bear the fruits that it ought to have produced as the results.

Lack of preparation in this case is the result of poor training by the agents of supervision. It should be noted that in any event that is undertaken with a desired course as the outcome, adequate preparations should be done in terms of training. In this regard, we cannot expect principals to undertake the supervisory roles without necessarily being trained on how to do it. In the event that there is not training being carried, it would mean that there is no capacitation in terms of how the work should be done. It should also not forgotten that the manner in which the principals in Kenya are appointed without prior notice affects supervision level largely. This indicates that the preparations that should be done by the principals are not done, as they would have been undertaken. At the point at which we assume the role of the principals as being in charge, they are not aware of the roles that they should undertake and it may not be in

their knowledge. In the event that the principals are adequately prepared, it would then make the supervision of the classwork's easier and attainable. Therefore, the principals need to be capacitated to ensure that they know how to undertake the course. It is ironic that despite understanding the roles and the possible impacts of undertaking supervision in any institution, there is no capacity to carry out the same activity. It can only mean that lack of training by the principals on how to undertake the role of supervision are the attempts to ensure that the supervisory activities will not be effective. Supervision therefore considered effective and should be undertaken within the context that it will have maximum benefits in the event that there is adequate training as these issues could present challenges for effective supervision in schools.

The literature review presented in this section shows that leadership promotes school effectiveness as measured through academic performance as well as teacher motivation and focus on school instructional objectives. In general, strong leadership (Lezotte, 2013) characterizes effective schools. In this regard, the leadership is explored and understood within the concept that it is at the centre of success of any institutions. The schools cannot be successful without having the right leadership strategies to ensure that the leadership that is charged with supervision cares about the future and the performance of the institution.

On the issues of the challenges that faces the supervision functions, it should be understood that at the height of it all is the question of leadership and supervision that better academic performance in any school. In this case, the supervision is a role that sits at the height of the question of leadership and how to address the same issue. Therefore, the leadership of the school should be well equipped in the course of undertaking the functions of supervision. While the impacts of the supervision are supposed to have huge ripple effects that would affects the institution in terms of addressing what should be done so as to successes, it thus ridiculous to

expect that supervision can be undertaken without equipping the relevant institutions with the resources that might be needed to underscore the duties. In terms of leadership like was earlier pointed out, it does not solely rest with the principals but rather addresses the role of every stakeholder in the course of addressing the supervision and the possible ways of improving the performance of the school. In this regard it connotes that all the leaders and stakeholders should come together and ensure that the task that is about to be undertaken has been endorsed and given all the support by all the stakeholders.

Leadership has also been shown to improve supervision and teacher improvement, through training of teachers. However, the review also shows that in the case of Kenya, there are a number of challenges facing supervision. This means that they may not have the necessary skills for effective leadership. In addition, as pointed out by Wanzare and Ward (2010), most headteachers in Kenyan schools do not receive adequate induction, which could hinder their effectiveness in supervision. These challenges could be the reason why secondary schools in Kenya, especially those in Kisumu West Sub-County, perform poorly in examinations. There are however, no empirical Kenyan studies on this, and especially on the role of supervision on teacher performance. Consequently, this study investigated the effects of instructional supervisory work of principals on teacher performance in Kisumu West Sub- County day secondary schools.

In Kenya, many studies was done on factors leading to student's poor performance in subjects taught and studied by students in secondary schools. Achacha (2012) established that despite of the fact that teachers of Agriculture are qualified, they did not attend in-service courses to update their knowledge in Agriculture, which is a dynamic subject. The study also established that school policies on selection of subject had an influence on students' performance in Agriculture. In majority of the schools, Agriculture lessons were offered at the same time when

Geography lessons were being offered to other students. A student had therefore to take either Agriculture or Geography and therefore Students perceived Agriculture as a difficult subject and tried to avoid it (Achacha, 2012). He further indicated that Institutional factors like parental economic status influence the performance of students in Agriculture in that some learners whose family background and source of income came from other fields like Banking sector, Law or business, etc, such learners tended to follow the footsteps of their families. Students' attendance if poor affected the flow of concepts in Learning in that irregular class attendance would always lower the general performance in examinations. It had also been noted with a lot of concern that parents would always give little attention to Agricultural field activities like their inability to pay extra money to enable students go for field trips and therefore fieldtrips despite being important was not conducted (Kathuri, 2016).

According to Kimani (2012) there were various ways of supervising the implementation of curriculum progress this includes progressive assessments, mid-term examinations and regular checking learners notebooks. However, these scholars had not related the curriculum implementation with summative evaluation. The study dealt with the supervision and curriculum implementation in relation to Agriculture performance.

The adequacy and management of physical resources had a direct impact on the status of education. Inadequate Agriculture textbooks made teaching a hard task for teachers teaching the subject hence making it more abstract to students. In this regard, the students should not only be taught by the use of text books but also ensure that the content delivery by their teachers should be done in a manner that would ensure that it has been demonstrated to the students how better to understand the content in Agriculture such as through the use of material resources.

In the event that the teachers may choose to stick to the text books for the delivery of the content, it would affect the manner in which students understand it on the account that different students understand contents differently. There are those who can only understand after the teacher had demonstrated to them and there are those who can understand by only reading the textbooks and understanding. Therefore, teachers should use a wide and broad ways of delivering the content to the students in a manner that can easily be understood.

In this regard, it underlines the importance of supervision in classrooms because it would highlight the challenges and the weaknesses and the better ways of addressing them for the purposes of ensuring that students' performance has improved.

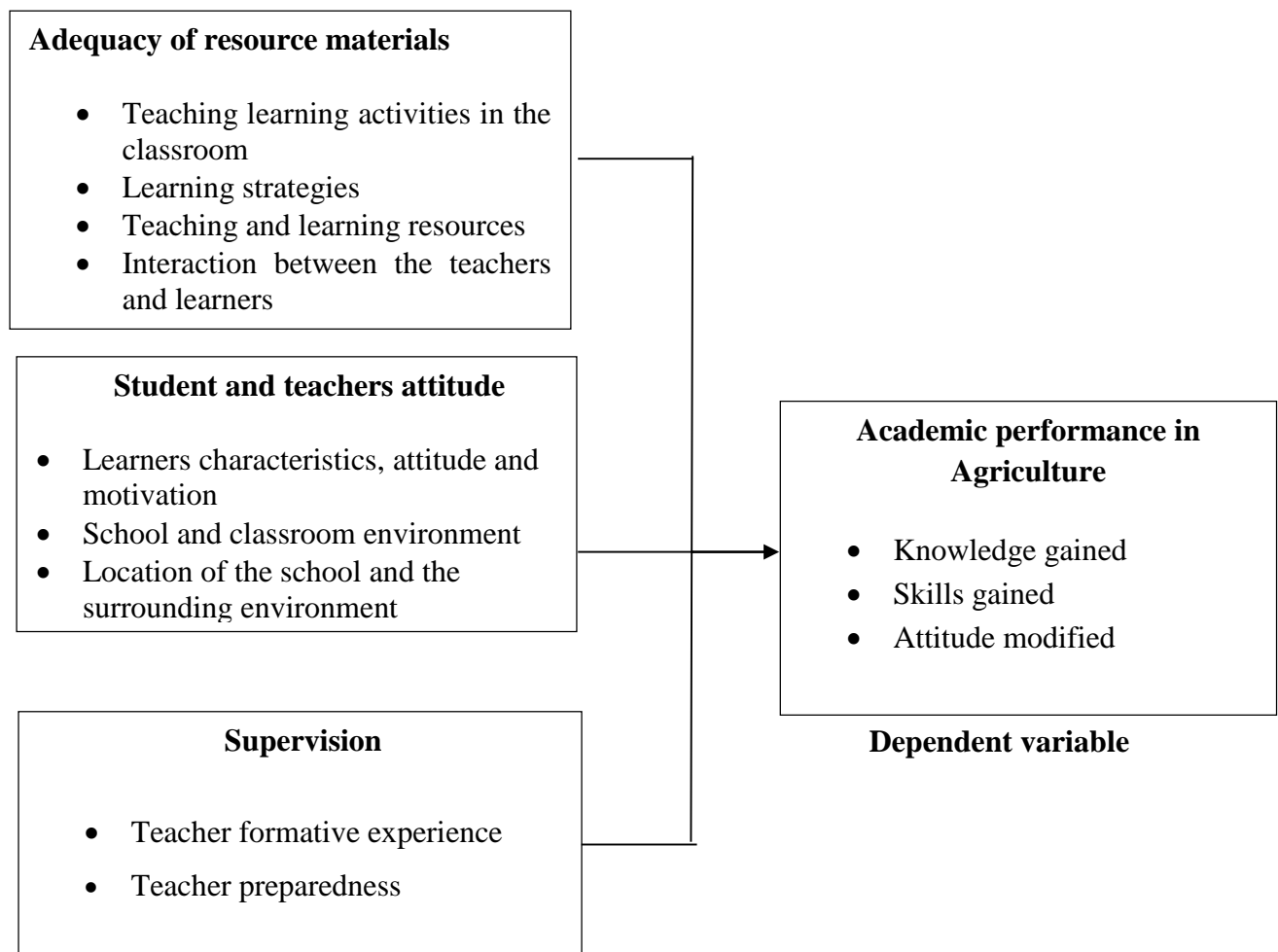
2.5 Theoretical Framework

This research is based on the model that was developed by Mitzel (2016), it was developed with an aim of advancing the perception or rather than an opinion that teaching is a concept with an interplay that employs sets of variables. In this regard, the research considered the teachers and students. The two subjects interact and the possible result of the interaction between students and teachers. Upon the development of the Mitzel model, Dunkin and Biddle (2014) later expanded the tenets of the model to include presage, context, product and process.

To begin with, the presage variable addresses the question of the personality of the teacher, general characteristics, preparations, and the experience of the teacher, competencies, inadequacies, background and the properties of the teacher (Mitzel, 2016). Second, the context variable is understood within the contexts that it addresses the environment of the classroom and the characteristics of the students. Third, the process addresses the question of the relationship of teachers and the student. Lastly, the product assesses the effects or the impacts of the interactions between students and teachers (Dunkin & Biddle, 2014).

2.6 Conceptual Framework

A conceptual framework builds a structure or concept of what has been learnt in a particular area of study. This study was carried out in public day secondary schools in Kisumu West Sub-County located within Kisumu County. It is a hypothesized model identifying the concepts under study and their relationship (Mugenda & Mugenda, 2013). The conceptual model derived from variables are put to test in order to establish the significance of the proposed relationships.



Independent variables

Figure 2.1 Conceptual Framework

Source: Researchers (2018)

2.7 Gaps Identification.

Many scholars had explored the attitude of learning and teaching in public secondary schools. Soakpa (2015) noted that learners' attitude towards teaching and learning as they progressed through school. Mukono (2014) noted that not a lot is in action to alter the negative attitudes of learners on their study despite there being set departmental policies. This study tried to establish and indicate the negative attitude of students on learning Agriculture and its effects in the final examinations and attempt to fill this research gap.

Mwale (2013) completed a review in Malawi on secondary school student's frame of mind towards educating and learning in schools. In addition, the frame of mind and desire for students were enormously impacted by their instructors (Breakwell, 2015). These investigations and others had not associated the frame of mind of instructors and the last outcomes for example in KCSE. The current examination endeavoured to fill this research gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed how the study was carried out. This includes the design, which the study used, location where the study was conducted, target population, sampling procedures and techniques used, sample size, data collection materials and procedure and finally data analysis. This study was based on existing organization theory, which stated that all systems were characterised by assemblage, or combination whose functions is interdependent.

3.2 Research Design

In identifying the variables used in this study descriptive survey was utilized and ex-post facto design which specified the methods and procedures for collection and analysis of the needed information. It specified the framework or the blue print for the research. As ascertained by Mugenda and Mugenda, (2013), descriptive research designs gives the findings in their original form and allows for the observation of participants in unchanged environment and hence functional. It is the mostly used method for collection of data about people's opinions, attitudes, habits or a variety of social issues related to education and it also helps in gathering both qualitative and quantities data. A descriptive research design therefore helped to describe and answer questions on the influence of management on learner's academic performance in Agriculture in public day secondary schools in Kisumu West Sub-County.

3.3 Location of the study

This study was carried out in public day secondary schools in Kisumu West Sub-County located in Kisumu county. The study selected the Sub- County because it is located in semi-

arid in the outskirts of Kisumu County. The study considered the area due to climatic conditions existing in the s as one of the non-management factors influencing teaching and learning of Agriculture in public secondary schools. The study choose Sub-County since according to statistics from County Statistics Office (2014) public day secondary schools in Kisumu West Sub-County obtained poor grades in Agriculture at national examinations with a mean grade of C-(minus). In the last five years as compared to other sub-counties which recorded a mean grade of B and above and Private schools within Kisumu county.

3.4 Target Population

The population under study consisted of 24 Principals, 24 Head of departments and 24 Agriculture teachers from public day secondary schools in Kisumu West Sub-County. Educational officials included the Sub-County director of education. Student target population involved the 203 form four students taking Agriculture subject drawn from 24 public day secondary schools in the Sub-County. The researcher chose students randomly from both sexes in all the 24 public day secondary schools. Researcher selected students from fourth forms due to their more experience since they had spent the longest time in the schools than either form three, two, or one. The study assumed that they were able to respond to the questionnaires. The total target population consisted of 276 respondents. Table 3.1 gives summary of the target population.

Table 3.1

Target Population

Respondents	Population
Principals	24
Heads of departments	24
Teachers (Agriculture)	24
Students	203
Sub-County director of education	1
Total	276

Source: Kisumu West Sub-County (2017)

3.5 Sampling Procedures and Sample Size

The researcher utilized stratified random sampling in his study to get the sample size for the examination. Stratified random sampling was utilized to get test number of the understudies and instructors in optional schools in Kisumu West Sub-County. Stratified random sampling permitted each sample size in open population an equivalent chance of being chosen and furthermore enabled respondents an equal opportunity of being represented in the study. Purposive Sampling was utilized to gather data from the school principal, HODs, Agriculture teachers, Form four students and Sub-County director of education. Purposive sampling was utilized on the grounds that it was most effective method to get all the required information from the respondents during research investigation.

Gay, (2012) prescribed that when the total population was less than 1000 individuals, a 20% was satisfactory for educational research, however, in this case the total target population was less than 1000 members, 24 principals, 24 head of departments, 24 Agriculture teachers, The Sub-County director of education and 203 Agriculture students were sampled totaling to 276. Basing on 20% index, a random sample from the 276 members of the respondents' target

population, a sample of 55 respondents were selected to yield sufficient sample and catered for non- response rate and this avoided too many missing scores that were discarded, hence minimize sampling error. According to Gay, (2012) he suggested that when he sample is large the sampling error is likely to be smaller. The study employed Purposive sampling to pick schools, principals, and Sub-County director of education. Table 3.2 indicates the sampling matrix.

Table 3.2

Sample Matrix

Respondents	Population	Sample size
Principal	24	5
Heads of Department (AGR)	24	5
Teachers	24	9
Students	203	35
Sub-County director of education	1	1
Total	276	55

Source: Research Data

3.6 Instrumentation

The research instruments that were used in the study were the questionnaires for principal’s (QFP), Questionnaires for heads of department (QFHD), questionnaires for Agriculture teachers (QFAT), and questionnaires for Agriculture students (QFS). There was an interview schedule for the Sub-County director of Education (SCDE) found in the appendices A to E.

3.6.1 Questionnaires

Since questionnaires are easy to give quantifiable answers and that, it can reach a large number of people relatively easy and economically. The current study used them to collect opinions from principals, heads of department (Agriculture), Agriculture teachers, and students who

took Agriculture on issues relating to influence of management on learners performance in Agriculture in public day secondary schools in Kisumu West Sub-County. The researcher utilized questionnaires in this study because it reduced bias that resulted from the personal characteristic of the interviewer. The questionnaire for principals had two sections i.e. the background data of principals and the information on the influence of management on learners' performance in Agriculture in Kisumu West Sub-County. The questionnaire for heads of department (Agriculture), teachers who taught Agriculture and students also had two sections i.e. personal information and the information on the influence of management on learner's academic performance in Agriculture in Kisumu West Sub-County.

The study adopted a five-point Likert scale and the respondents were required to show their level of agreement or disagreement with each of the statement, from strongly agree to strongly disagree.

3.6.2 Interview Schedules for Sub-County director of Education

Interview guides gave adaptability and the capacity to test and explain reactions; they noted nonverbal just as verbal conduct. They additionally gave high reactions and were versatile (McMillan & Schumacher, 2010).

Despite the fact that Interview guides were expensive, it contained driving inquiries that was utilized in the examination since they permitted direct association with the respondents and the accumulation of inside and out data that the questionnaires did not assemble. The investigation likewise used unstructured interview meetings that were increasingly casual and free streaming that acquired top to bottom data. Interview schedules were conducted with the Sub-County director of education in a more probing manner on the influence of management factors on learner's academic performance in Agriculture in KCSE Examinations in Kisumu West Sub-County.

3.7 Piloting

According to Mugenda and Mugenda (2013), stipulated that piloting is a process of pre-testing of the analysis instrument by giving it to a particular group that is not similar to the particular sample that the researcher plans to use within the study. Piloting of the analysis instruments was performed in 2 schools which were not enclosed within the same locality of the study. The pilot study was designed to look into things within the form that were in contradiction or unclear to the respondents and thence modified or modify them. The pilot study conjointly helped the researcher to inform himself with the administration of the instrument.

3.7.1 Validity

Validity referred to the accuracy and significance of the inferences a researcher makes supported on the results of the information (Mugenda & Mugenda, 1999). It was associated with how correct the information obtained in the study would represent the variables under study. To ensure that the data collected in this study represented the variables underneath study, the instrument was subjected to scrutiny by University supervisors as well as other experts to ensure validity and the recommendations made were incorporated. Pre-testing of the instruments prior to data collection was undertaken on Two schools, Lwala kadawa and Orando mixed secondary schools to assist in testing their validity necessary for making proper adjustments. To Orodho (2014) legitimacy was worried about whether the correct poll substance was estimating what they were proposed to gauge. The examination guaranteed that information gathered utilizing different instruments spoke to the substance region under investigation. This included distinguishing the important things for every one of the instruments utilized in the investigation.

3.7.2 Reliability

The number of cases recommended in pre-test were not supposed to be very large, Mugenda and Mugenda (2013) but should be between 0-10% percent of the sample size. Therefore, the researcher considered 10% of the actual sample size. Two schools, Lwala kadawa and Orando mixed secondary schools were selected for the pilot testing. With the help of two principals, two heads of department (Agriculture) and 10 form four students from the sample unit. Orando and Lwala Kadawa mixed secondary schools were selected for piloting, as they are the oldest schools in the Sub-County. These two schools were not included in the final sampling to avoid contamination of the data collected because the respondents first were sensitized by testing to remember their responses during the exact data collection. There was a review of the questionnaires to identify the accuracy and its reliability. There was improved modification on the questionnaires and the structured interview to change and modernize the standards of the research instruments hence increase reliability. According to Fraenk and Wallen (2012), a reliability coefficient of 0.7 was an acceptable value for research purposes; hence, the instruments were reliable for data collection.

3.8 Data Collection Procedures

The researcher introduced the study after visiting the study area for survey to the school principals, HODs, Agriculture teachers, Form fours Agriculture students and the Sub-County director of education. The structured questionnaires was then administered to the respondents to fill upon. Face to face, interview was also conducted for the Sub-County director of education

3.9 Data Analysis

The respondents' information acquired was recorded in preparation for investigation. Subjective information as per Mugenda and Mugenda (2013) did not deliver discrete numerical

information. Subjective information that was gotten from open-ended questions and class timetable was broken down through topical examination for example an examination of the primary subjects as found in the investigation. The outcomes was then organized in recurrence tables for simplicity of understanding in order to effectively show the different outcomes as given by the respondents. Finally, the researcher did harmonization of the reactions given by the different respondents for example reactions on comparative subjects or targets that arose from various respondents was compared with findings of other respondents who agreed on different issues. The researcher analyzed all data collected responses by comparing to every specific research question based on the reactions given by the respondents to ensure the study achieved the stated objectives. The study used quantitative and qualitative examination analysis to determine the set objectives through numerical estimations. Later frequencies and percentages was used for the analysis of data collected from the respondents.

After data collection by use of questionnaires, it was set promptness for analysis by editing, handling blank responses, coding, categorizing and entering it into Statistical Package for Social Sciences (SPSS) version 25-computer software for analysis. Descriptive statistics that was done includes; frequencies, percentages, means and standard deviations. Inferential statistics was also conducted by getting the multiple regression analysis and correlation analysis. The independent variables was linked to the dependent variable by multivariate regression model as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \mu$$

Where; Y represents academic performance in public secondary schools

β_0 represents the y-intercept

X_1 , X_2 and X_3 represent physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department respectively

β_1 , β_2 and β_3 represent the coefficients of physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department respectively

μ is the error term

3.10 Ethical and Legal Considerations

The researcher sought permission to carry out the study from the Kenya Methodist University, a transmittal letter from Kisumu West Sub-County Education office and data collection permit from National Commission for Science Technology and Innovation (NACOSTI). Informed permission was also sought from all the study participants, that their, confidentiality, and privacy was fully maintained. Upon visiting every sampled school, the researcher introduced himself to the present school principals and explained the purpose and nature of the study without pre-empting its results. The researcher then sought the consent to carry out the research in the school, which involve interaction with the learners and the teaching personnel and observing within the school environment. After being granted permission, the researcher requested the school administrator to organize a convenient interaction place and arrange on how he will select the participants. The researcher assured the participants of their confidentiality by explaining that the information to be obtained (from them), would only be used for the purpose of the study and no undesirable persons will have access to it. In addition, the researcher requested the participants to respond to the questionnaire without writing neither their names nor of their school.

CHAPTER FOUR

RESULTS AND DISCUSSION.

4.1 Introduction

This chapter contains data analysis and presentation of the study findings. It is mainly divided as per the research questions used for this study.

4.2 Response Rate

A random sample from the 276 members of the respondents' target population, a sample of 55 respondents were selected to yield sufficient sample 42 out of 55 respondents returned their questionnaires that was used to analyse data.

Table 4.1

Response Rate

Respondents	Sent Questionnaire	Returned Questionnaire
Principal	5	3
Heads of Department (AGR)	5	4
Teachers	9	8
Students	35	26
Sub-County director of education	1	1
Total	55	42

The response rate of the questionnaires was 42 out of 55 giving a response rate 76%. This response rate was adequately enough because it conformed to the stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response of 70% and over is excellent (Mugenda *et al.*, 2013). Most of the respondents were reluctant in

disclosing their details hence the researcher had to convince them of confidentiality and not indicating their names on the questionnaires but had unique identifying numbers on the questionnaire that were only known to the researcher.

4.3 Reliability Test

Table 4.2

Table Showing Reliability Decisions

Indicator	Alpha	No. of item
Students	0.726	10
Agriculture teachers	-	-
H.o.d (Agriculture)	0.701	2
Principals	0.764	2
Sub-County director of education	-	-

4.4 Results and Discussions

In this study, the researcher sought to establish the influencing management factors of academic performance of students in Agriculture in public day secondary schools in Kisumu West Sub-County, Kisumu County. This study therefore was based on three objectives. Firstly, to assess the adequacy and management of physical resources in public day secondary schools in Kisumu West Sub-County. Secondly, to determine the attitude of students and teachers towards learning and teaching Agriculture and thirdly, to establish the effectiveness of supervision and curriculum implementation among teachers by head of Agriculture department, principals and Sub-County education officers. The findings of the study have been analysed and presented on graphs and tables.

4.4.1 Demographic Characteristics

Table 4.3

Demographic Characteristics of Respondents

Respondents	Male		Female	
	F	%	F	%
Students	14	54	12	46
Agriculture teachers	6	75	2	25
H.o.d (Agriculture)	3	67	1	33
Principals	3	100	0	0
Sub-county director of education	0	0	1	100

Table 4.3 indicates that males were the majority (54%) in most of all categories. obtained Agriculture teachers 75% males and 25% females. The same trend was witnessed with students of small percentage in girls indicating that there is much needs in encouraging more girls to take Agriculture to have more female in learning and teaching of Agriculture.

4.5 Adequacy of Physical, Teaching and Learning Resources.

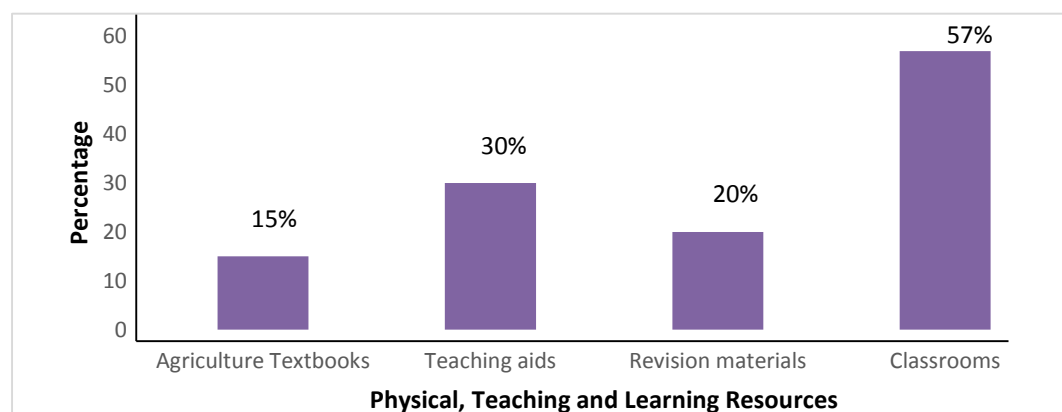


Figure 4.1 Adequacy of Physical, Teaching and Learning Resources

34 out of 42 of the respondents in response to adequacy of teaching and learning resources for Agriculture admitted that there were inadequate Agriculture textbooks (85%), 8 of the respondents in public day secondary schools in Kisumu West Sub-County. 30% indicated that indicated that teaching aids such as wall maps, atlases among others were adequate.

The discoveries of the investigation demonstrate that the schools speculation on course readings was sufficient, this most likely regardless of the way that the administration financing through FDSE arrangement was directed to arrangement of TLM. Additionally most schools offered need deeply subjects, science, English and Kiswahili, perhaps because in the center subjects assignments are given after each exercise. Sometimes when teaching resources are not available or insufficient, the teaching/learning procedure is undermined and this consequently is shown by low academic performance, poor educator motivation and neglected instructive objectives (Hassan, 2015). Course books, teaching aides and models are basic in execution of the educational program. Course readings guarantee that understudies can do their assignments, total assignments in time and direct gathering discourses. Course readings can likewise be utilized as reference materials to enhance the teachers' guidance. Teachers' aides provide the educators guidance on the most proficient method to present and convey content in different branches of knowledge. Models make the exercises significant and upgrade understudies' comprehension of ideas. Presence of dialog gatherings implies that the understudies are given chances to gain from each other, peer guidance and convey what needs be and may improve their scholastic execution. Insufficiency being used of course books implies that the students get from each other along these lines they are moderate in finishing assignments and some may wind up replicating from their cohorts. Deficiency of assets in the library and Agriculture room implies that learning holes may happen in these branches of knowledge bringing about low mean evaluations in national assessments. Reference books upgrades the understudies perusing material consequently not confined to a couple of study hall course readings hence widen their

insight and improve execution. Discoveries from the investigation uncovered that TLM are genuinely satisfactory.

On sufficiency of capacity and equipment in the research center, Agriculture room the teachers reactions showed that most schools did not designate enough assets to prepare their labs, referred to by a decent level of educators who firmly oppose this idea. Horticulture rooms were additionally portrayed to be not well prepared referred to by practically 50% of educators' reactions who firmly differ on their amplexness. Research facility, agribusiness rooms give understudies a chance to see and mention objective fact of what they are instructed, and that learning happens best through revelation investigation and collaboration with the interior outside condition. (Oyeniran, 2013). The examination researched the amplexness of restrooms/toilets, limit of eating lobby, water supply and power supply to schools. The educators firmly concurred that the lavatories/toilets are deficient, and the vast majority of teachers unequivocally differ that the workplaces allotted are satisfactory and a couple emphatically differ on the amplexness of the feasting lobby limit, these reactions for the teachers showed that the schools just organized on issues straightforwardly identified with educational cost. Offices, for example, water supply, eating corridor, lavatories/toilets, play area and recreational offices pretty much location understudy welfare and along these lines their sufficiency was in some cases over looked.

4.6 Attitude of Students towards Learning Agriculture

Table 4.4

Showing Attitude of Students towards Learning Agriculture

Strongly Agree = SA, Agree = A, Disagree = D, Strongly Disagree = SD

Research Question	SA		A		D		SD	
	F	%	F	%	F	%	F	%
Students who dislike their Agriculture teachers fail in exams	29	64	7	18	5	14	1	4
I enjoy reading Agriculture books but fail in exams	7	18	8	20	9	22	18	40
I enjoy spending my leisure time reading Agriculture books to improve my grade	27	64	15	36	0	0	0	0

Table 4.4 indicate that attitude of students towards learning Agriculture is a factor affecting public day secondary school student's performance in Agriculture examinations in Kisumu West Sub-County. The study revealed that 68% of the respondents strongly agreed, 18% agreed, another 14% strongly disagreed while 4% of the respondents disagreed. The study established that students with negative attitude towards their Agriculture teachers seem to perform poorly in Agriculture examinations as evidenced by many of the respondents who strongly agreed (68%) to the question that students who dislike their Agriculture teachers fail in exams.

Concerning the statement of enjoyment in reading of agriculture materials, 40% of the respondents strongly disagreed that students who enjoy reading Agriculture books fail in Agriculture exams, 18% strongly agree, only 22% disagreed with the question. The study established that students who enjoy reading Agriculture textbooks do not fail in exams.

The study determined whether the reading of Agriculture textbooks by Agriculture student during their leisure time help to improve their grades in Agriculture examinations. Results indicated that 64% who responded strongly agreed, 36% who responded when asked the same question disagreed. From these findings therefore, the study brings to light that even though students read their Agriculture books during leisure time, still there is poor performance in Agriculture examinations.

Table 4.5

Attitude of Teachers towards Teaching Agriculture in Kisumu West Sub-County

Research question	SA		A		D		SD	
	F	%	F	%	F	%	F	%
I do not effectively prepare students for Agriculture exams	0	0	0	0	5	60	3	40
I always prepare lesson plans for effective teaching to improve performance	2	35	0	0	6	65	0	0
I enjoy using varied methods in teaching Agriculture to improve performance	5	58	3	42	0	0	0	
I always complete Agriculture syllabus and allow enough time for revision	6	65	2	35	0	0	0	0

Table 4.5 shows that 60% of the Agriculture teachers disagree with the question asking them whether they do not effectively prepare students for Agriculture exams. 40% strongly disagree. Data obtained established that 65% of Agriculture teachers disagree when asked whether they always prepared lesson plans for effective teaching to improve Agriculture performance 35% strongly agreed that they prepare lesson plans for effective teaching to improve Agriculture performance. A lesson plan is a necessary professional document that enables a teacher to make up for lessons missed or concepts not comprehended by his students. Improper management of

lesson plans and other professional documents could lead to poor performance in Agriculture if not properly used and managed hence poor performance in Agriculture in the Sub-County.

The study found out that teachers enjoy using varied methods in teaching Agriculture to improve performance. The data obtained indicate that 58% strongly agree. 42% of these respondents agree that they enjoy using varied methods in teaching Agriculture to improve performance. 0% were not sure, disagree, and strongly disagree respectively on the question whether they enjoy using varied methods in teaching Agriculture to improve performance. The study established that even though Agriculture teachers in the Sub-County enjoy using varied methods in teaching Agriculture to improve performance, it seem that they ineffectively use these varied methods to teach content to be learnt hence leading to poor Agriculture performance in Kisumu West Sub-County.

The findings of this study on whether teachers always complete Agriculture syllabus and allow enough time for revision in preparation for national examinations indicates that 65% strongly agreed that they always complete Agriculture syllabus and allow enough time for revision in preparation for national examinations. 35% agreed with the question and 0% were not sure, disagree as well as strongly disagree respectively on the question whether they always complete Agriculture syllabus and allow enough time for revision in preparation for national examinations. From the study, the findings established that even though Agriculture teachers always complete Agriculture syllabus and allow enough time for revision in preparation for national examinations, students taking Agriculture still performed poorly in national examinations in the Sub-County.

4.7 Effectiveness of Supervision and Management of Curriculum Implementation

Table 4.6

Effectiveness of Supervision and Management of Curriculum Implementation

Research Question	Daily		Weekly		Monthly		Termly	
	F	%	F	%	F	%	F	%
a)How often are students notebooks and assignments checked and marked	23	55	10	23	7	18	2	4
b)How often in a term are students given tests by their Agriculture teachers	6	13	17	42	13	32	6	13

The study established how often student’s notebooks and assignment are checked and marked. 55% responded that their notebooks and assignment are checked and marked daily, 23% weekly, 18% monthly, 4% termly. Even though the majority of the respondent’s notebooks and assignment were checked and marked, it could be that this is not done on time by Agriculture teachers and lack of revision especially when students fails to score well on Agriculture assignments hence poor performance in Agriculture by students in the Sub-County.

How often in a term, do their Agriculture teachers give students tests? Data obtained indicates that 13% were daily given tests, 42% were weekly tested, 32% were monthly tested, and 13% were termly given tests during school going days. The more the students are tested the better they learn. Completion of Syllabus determines the learner’s performance in examination tested from any topic in the syllabus and any way the school does not cover all the topics in the syllabus, it will be disadvantaged. Continuous assessment of students can improve examination performance, promptness in giving and marking tests assist in identifying areas of weakness to be improved. Daily testing of students is a prerequisite for good performance hence reduced

amount of its practice could be a reason for poor performance in Agriculture in Kisumu West Sub-County.

Table 4.7

Effectiveness of Supervision and Management of Curriculum Implementation by Heads of Department (Agriculture)

Research Question	Yes		No	
	F	%	F	%
a) Is there field study organized for you in a term by the school	6	13	36	77
b) Are the schemes of work available and exhaustive	42	100	0	0
c) Are the lesson plans available	42	100	0	0

Table 4.7 illustrates that 13% of the respondents confirmed that there were field studies organized for them by the school in a term. While 77% of the respondents on the same question indicate that field studies were organized for them in a term. Field studies are necessary if good results are to be posted by students at national exams in Kisumu West Sub-County. Inadequate field studies therefore seem to lead to poor performance in Agriculture by students in the Sub-County.

The findings on the availability of schemes of work indicates that 100% of the respondents confirmed their availability. A scheme of work is a professional document that enables the smooth implementation of the curriculum. Its absence therefore could be detrimental in the effective supervision and management of curriculum implementation by heads of department (Agriculture) hence poor performance in Agriculture.

The findings on the availability of the lesson plans indicates that 100% of those who respondent said that they were available.

Table 4.8***Effectiveness of Supervision and Management of Curriculum Implementation by Principals***

Research question	Response				Response			
	Daily		Weekly		Monthly		Termly	
a) How often do you check professional documents	F	%	F	%	F	%	F	%
	0	0	0	0	42	100	0	0
b) Do you frequently avail the relevant materials required to facilitate curriculum implementation	Yes				No			
	F	%	F	%	F	%	F	%
	0		0		42		100	
c) Do you supervise teaching and learning activities in your school	F	%	F	%	F	%	F	%
	0	0	42	100	0	0	0	0

Table 4.8 part (a) sought to determine the frequency in supervision of professional documents such as schemes of work and lesson plans. This squarely are on the hands of heads of department (Agriculture) and school principals. The frequency of checking professional documents make sequential teaching and improvement of the results.

Table 4.9***Teaching Learning Strategies Employed in the Teaching of Agriculture***

Strategy	Frequently		Rarely		Not at all	
	F	%	F	%	F	%
a) Lecture method	10	26	16	37	16	37
b) Question and answer	36	86	4	10	2	4
c) Project and research	0	0	10	26	32	74
d) Discussions	23	55	10	26	9	19
e) Field studies	4	10	10	26	28	64
f) Resource persons	6	14	10	26	26	60

The strategies used in the teaching of Agriculture by teachers indicates that 26% use lecture method, 37% rarely use lecture method as well as 37% not at all. 86% of Agriculture teachers admitted that they use question and answer method, 10% rarely use the method while 4% does not use question and answer. The study found out that 0% use project and research in the teaching of Agriculture, 26% indicated that they rarely use project and research and 74% does not use the project and research method. In the absence of the use of these methods, then it may be true that lack of the methods could be contributing to student's poor performance in Agriculture.

Data obtained indicate that 55% of the respondents frequently use discussions, 26% rarely use discussions while 19% does not use discussions. This study revealed that 10% Agriculture teachers frequently use field studies, 26% rarely use field studies while 64% does not use field studies in the teaching of Agriculture. Resource persons is used frequently by 14%, 26% rarely use resource persons while 60% of Agriculture teachers in the Sub-County does not use resource persons in the teaching of Agriculture. The study established there is minimal use of field studies to enhance the teaching of Agriculture. This could be a management factor for influencing performance in Agriculture by the students in Kisumu West Sub-County.

4.8 Inferential Analysis

In relation to the dependent and the independent variables, the researcher conducted correlation and multiple regression analysis.

4.8.1 Relationship between Physical resources and Academic performance in public secondary schools

The relationship of physical resources and Academic performance in public secondary schools was analysed. Table 4.10 depicts the results.

Table 4.10:

Correlation Analysis Physical resources

		ECTS efficiency Kenya customs
Physical resources	Pearson Correlation	.510
	Sig. (2-tailed)	.000

The findings a positive relationship is experienced indicating that there is significant relationship between physical resources and Academic performance in public secondary schools ($r = 0.510$; $p < 0.05$). It means that improved physical resources is associated with increased Academic performance in public secondary schools and if there is insufficient physical resources the academic performance is likely to reduce.

4.8.2 Relationship between Attitude of students and teachers towards learning and teaching Agriculture and Academic performance in public secondary schools

The researcher examined the relationship between attitude of students and teachers towards learning and teaching Agriculture and Academic performance in public secondary schools. The results of analysis are as shown in Table 4.11.

Table 4.11:

Correlation Analysis for Attitude of students towards learning and teaching Agriculture

		Academic performance in public secondary schools
Attitude of students and teachers towards learning and teaching Agriculture	Pearson Correlation	.546
	Sig. (2-tailed)	.000

The study findings it is shown that there is a positive and significant relationship between attitude of students and teachers towards learning and teaching Agriculture and Academic performance in public secondary schools ($r = 0.546$; $p < 0.05$). It means that improving attitude of students and teachers towards learning and teaching Agriculture is linked with improved Academic performance in public secondary schools and vice-versa.

4.8.3 Relationship between Supervision by head of department and Academic performance in public secondary schools

The researcher examined the relationship between supervision by head of department and Academic performance in public secondary schools. The results of analysis are in Table 4.12.

Table 4.12:

Correlation Analysis for Supervision by head of department

		Academic performance in public secondary schools
Supervision by head of department	Pearson Correlation	.369**
	Sig. (2-tailed)	.000

It was noted that there is a negative and significant relationship between supervision by head of department and Academic performance in public secondary schools ($r = 0.369$; $p < 0.05$). It means that improved supervision by head of department is associated with increased Academic performance in public secondary schools and vice-versa.

4.8.4 Multiple Regression Analysis

The researcher also examined the combined effect of physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department

on Academic performance in public secondary schools. The results of analysis are as shown in Table 4.13.

Table 4.13:

Multiple Regression Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.681	.464	.451	.73341

a. Predictors: (Constant), supervision by head of department, physical resources, attitude of students and teachers towards learning and teaching Agriculture

b. Dependent Variable: Academic performance in public secondary schools

The findings indicated that there is a positive and strong relationship between physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department and Academic performance in public secondary schools ($R = 0.681$). It was determined that 45.1% of the variation in Academic performance in public secondary schools can be explained by physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department ($R^2_{adj} = 0.451$). These findings denote that physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department determine Academic performance in public secondary schools. However, model has an error of 0.73341 in predicting Academic performance in public secondary schools. The regression analysis of variance (ANOVA) was conducted to assess the fit of the model for the data (Lind, Marchal, & Wathen, 2012). The results of analysis are as shown in Table 4.14.

Table 4.14:

Results of ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	56.338	3	18.779	34.913	.000
Residual	65.084	121	.538		
Total	121.422	124			

a. Predictors: (Constant), supervision by head of department, physical resources, physical resources

b. Dependent Variable: Academic performance in public secondary schools

The findings indicate that there is a statistically significant relationship between physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department and Academic performance in public secondary schools ($F = 34.913$; $p < 0.05$). It is implied that the model was fit for the data. The study also conducted the t-tests to examine the statistical significance of coefficients of regression. The pertinent results of analysis are as shown in Table 4.15.

Table 4.15:

Evaluating Individual Regression Coefficients

	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	.103	.341		.301	.764
Physical resources	.362	.087	.311	4.188	.000
Attitude of students and teachers towards learning and teaching Agriculture	.516	.085	.426	6.107	.000
Supervision by head of department	.265	.096	.197	2.754	.007

a. Dependent Variable: Academic performance in public secondary schools

The study found out that physical resources predicts Academic performance in public secondary schools significantly ($t = 4.188$; $p < 0.05$). It was revealed that attitude of students and teachers towards learning and teaching Agriculture significantly predicts Academic performance in public secondary schools ($t = 6.107$; $p < 0.05$). The study found out that supervision by head of department significantly predicts Academic performance in public secondary schools ($t = 2.754$; $p < 0.05$). It is revealed that the predictor variables, physical resources, attitude of students and teachers towards learning and teaching Agriculture and supervision by head of department is incorporated in the multiple regression equation as they were statistically significant ($p < 0.05$) (Lind, Marchal, & Wathen, 2012). To explain the results of analysis, multiple regression function is as shown in Equation 4.1

$$Y = 0.510X_1 + 0.546X_2 + 0.369X_3 \dots\dots\dots \text{Equation 4.1}$$

The findings indicate that improving physical resources by 1 unit increases Academic performance in public secondary schools by 0.510 unit ($\beta_1 = 0.510$; $p > 0.05$). The study established that enhancing attitude of students and teachers towards learning and teaching Agriculture by 1 unit enhances Academic performance in public secondary schools by 0.546 unit ($\beta_2 = 0.546$; $p > 0.05$). It was revealed that that improving supervision by head of department by 1 unit increases Academic performance in public secondary schools by 0.318 unit ($\beta_3 = 0.369$; $p > 0.05$).

4.9 Discussion of Key Findings

Psacharapolous and Woodhall (2015) indicated that use of textbooks contribute much in the performance of examinations. Chepchieng (2015) who observed that if in secondary school there is availability and quality textbooks also shares this view. It is strongly related to achievement among children in poverty related rural schools. Textbooks enable students to be in line with the teacher's progress of presentation and helps in understanding of lessons (Ubogu, 2014). He also asserted that lack of learning materials, which are basic school needs, could not provide the learners a stable mind and conducive environment for the study. Munda, Tanui & Kaberia, (2010) indicated that physical facilities contribute positively to student's performance. The Government of Kenya in the Koech Report (2016) noted that overpopulated classrooms affects the teaching and learning environment. The study therefore depicts that lack of these relevant resources makes learning of Agriculture very immaterial to the students taking Agriculture and could be a reason contributing to poor performance in Agriculture in national examinations.

The first research question sought data on the effective supervision and implementation of curriculum. Otieno (2012) asserts that the tasks of a head teacher among other roles includes the interpretation and management of curriculum programmes and instructions, provision of

facilities, staffing and maintaining effective school community leadership. Teachers on the other hand are an important component in the management process (Kibui, 2015).

Lack of preparation and utilization of the professional documents, which stipulates the time, resources and methods of curriculum implementation, may compromise the quality of education leading to poor performances. a consistent trend in the County studies concerning academic performance conducted by Kathuri (2012) and Orodho (2016) found that there is a positive and significant relationship between students' achievements in science subjects and the level of adequacy of science textbooks, laboratories, and exposure to practical exercises.

Eshiwani (2015) indicates that most schools, which perform poorly, spend less money on the purchases of teaching and learning resources. In addition, although the chalkboards were noted as adequate in all the schools, they were however very small in size and others were dilapidated.

Thuranira (2010) noted that lack of learning and teaching materials as one of the factors that caused poor Agriculture performance, which caused lack of motivation to learners. Thuranira (2010) says that quality of teachers may be affected by attitudes. Job satisfaction of a teacher is generally positively related to his or her achievement. Negative attitude of teachers towards teaching contributed to low performance in affected primary schools Thuranira (2010). The satisfaction of a teacher is positively related to his/her achievements in the good performance of his or her students, Kibui (2015).

For the control of the quality of education at all levels throughout the country the quality assurance and standards Department in the Ministry is responsible. Mbiti (2014) identified the overall role of the inspectorate as that of “controlling the quality of education at all levels throughout the country through inspection, guidance and advice to all schools in the country”. According to Olembo (2012), understaffing is a great impediment to the QASO to carry out

effectively their important role of ensuring quality education. He asserts that the explosive growth of schools in Kenya has led to the number of inspectors being inadequate compared to the number of schools particularly primary school which are adversely affected by the increasing enrolment.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

5.1 Introduction.

This chapter entails of research summary, discussion, conclusion and recommendations. The purpose of the study was to establish management factors influencing Academic performance in Agriculture in public secondary schools in Kisumu West Sub-County. The study was guided by the following specific objectives: to establish the influence of physical resources in learning and teaching of Agriculture, to establish the influence of attitudes of students and teachers towards learning and teaching of Agriculture and to establish the influence of supervision by head of department so on learners academic performance in Agriculture in Kisumu West Sub-County.

5.2 Summary and Findings.

The researcher dealt with management factors influencing academic performance in Agriculture by students in Kisumu West Sub-County, Kisumu County. The findings of this study was necessary in improving Agriculture performance in public day secondary schools in Kisumu Sub-County as all stakeholders take corrective measures to enhance the quality performance required in the public day secondary schools in the Sub-County. The study was to contribute to the teachers' improvement in their instructional strategies and assessment techniques, which will eventually lead to good results. The study also tried to contribute towards positive behaviour among Agriculture students and teachers towards the learning and teaching of the subject in public day secondary schools in the Sub-County. The objectives of the study was to assess the adequacy and management of physical resources, to find out the attitude of students and teachers towards learning and teaching Agriculture and to establish the

effectiveness of supervision and curriculum implementation in public day secondary schools in Kisumu West Sub-County. The study utilized descriptive survey research design that used structured questionnaires and interview schedules to capture information that influence management on performance in Agriculture by students in public day secondary schools in Kisumu West Sub-County.

5.2.1 The Adequacy of the Teaching and Learning Resources

The consequences of the discoveries demonstrated that in spite of the fact that the physical, instructing and learning assets were accessible in every one of the schools, not all offices accessible were sufficient. Schedule inclusion decides student's presentation in assessment since understudies are tried mostly from any subject in the prospectus and if any school does not cover every one of the themes in the prospectus, that school stand distraught. Visit presentation of understudies to test can improve assessment execution, expeditiousness in giving and stamping tests help with recognizing regions of shortcoming to be improved. Daily testing of students is a prerequisite for good performance hence reduced amount of its practice could be a factor contributing to poor performance in Agriculture in Kisumu West Sub-County. It was found out that there is a positive and significant relationship between physical resources in learning and teaching of Agriculture in secondary and Academic performance in public secondary schools ($r = 0.510$; $p < 0.05$). The study established that improving physical resources in learning and teaching of Agriculture in secondary by 1 unit increases Academic performance in public secondary schools by 0.362 unit ($\beta_1 = 0.362$; $p > 0.05$).

5.2.2 The Effectiveness in the Supervision and Implementation of Curriculum

The investigation uncovered that lion's share of instructors' readied proficient archives constantly. Nevertheless, lion's share of them occasionally utilized them in genuine instructing.

What's more, larger part of instructors demonstrated that head educators directed the learning and showing forms in schools. All the head educators said they directed the usage of the educational plan by checking records of work, plans of work, exercise participation and execution. The frequencies of supervision were termly, month-to-month, week after week and every day.

In a similar report, larger part of head educators said that treatment of the educational plan was not fulfilling since instructors were not viable in that educators never complete the prospectus. The Sub area chief of instruction through the survey referred to opening late and shutting right on time as the real explanation behind educators not finishing the prospectus. Different reasons given are understudies' and instructors' absenteeism, perception of understudies towards learning Agriculture subject and level of neediness in the zone, what's more, larger part of understudies felt that educators once in a while denoted understudies' books and assignments, Inadequate tests inside a term and absence of field trips as the fundamental driver of horrible showing in Agriculture. The study found out that there is a positive and significant relationship between Supervision by head of department and Academic performance in public secondary schools ($r = 0.369$; $p < 0.05$). The study established that improving Supervision by head of department by 1 unit increases Academic performance in public secondary schools by 0.265 ($\beta_3 = 0.265$; $p > 0.05$).

5.2.3 Attitude of Students towards Learning Agriculture

From the investigation, the understudies bolstered the view that understudies who abhorrence learning flop in Agriculture. Greater part of understudies demonstrated that they did not appreciate perusing farming books in anticipation of tests. It was additionally apparent that understudies did not every now and again react to instructors' inquiries while only a couple said they addressed inquiries in class. Larger part of understudies brought up that they despised

Agriculture subject. Larger part of understudies did not appreciate investing their relaxation energy perusing farming; along these lines further proposing that, lion's share of understudies had a negative frame of mind towards learning horticulture. In any case, just couple of quantities of understudies delighted in perusing horticulture during free occasions. What's more, greater part of head educators and half of instructors said that understudies had a negative frame of mind towards learning Agriculture. It was noted that the respondents were undecided on whether cases of transit cargo theft have reduced significantly or not. It was revealed that security of transit goods there is a positive and significant relationship between Attitude of students and teachers towards learning and teaching Agriculture and Academic performance in public secondary schools ($r = 0.546$; $p < 0.05$). It was found out that enhancing Attitude of students and teachers towards learning and teaching Agriculture by 1 unit enhances Academic performance in public secondary schools by 0.516 unit ($\beta_2 = 0.516$; $p < 0.05$).

5.2.4 How the Attitude of Teachers towards Teaching Agriculture affect Performance

The investigation demonstrated that lion's share of instructors did not wish to accept a showing agribusiness as a profession. Educators did not viably get ready understudies for tests. Larger part of educators firmly differ that instructors are awkward dealing with horticulture and that they do not follow the guideline. On whether instructors constantly arranged exercises plans for powerful educating of horticulture, larger part of educators said they were awkward planning exercises plans.

5.3 Conclusions

The main findings of the study indicated that there were inadequate Agriculture textbooks for use by students taking Agriculture in the Sub-County. In addition, the study established that there were inadequate teaching aids such as wall maps, atlases and models for teaching the

subject during lesson presentation, consequently the other finding of the study indicated that attitude of students towards learning Agriculture is a factor affecting public day secondary school student's performance in Agriculture examinations in Kisumu West Sub-County.

In addition, data obtained by the researcher indicated that inadequate revision materials for Agriculture in public day secondary schools in Kisumu West Sub-County could be a factor leading to poor performance in Agriculture. Supervision plays a vital role in the academic performance of Agriculture subject and the researcher found out that the rate of supervision was adequate hence, more efforts should be put in place and finally the researcher findings adequately addressed the questions raised during the research. This study made a number of conclusions in line with study objectives. This study concluded that physical resources in learning and teaching of Agriculture in secondary has a positive and significant influence on Academic performance in public secondary schools. It was also concluded that Attitude of students and teachers towards learning and teaching Agriculture positively and significantly influences Academic performance in public secondary schools. The study also concluded that Supervision by head of department has a positive and significant influence on Academic performance in public secondary schools.

5.4 Recommendations

The research made the following recommendations based on the findings from the study:

The study noted that the Sub-County suffers from acute shortages of Agriculture teachers and this leads to poor performance. The study recommends employment of teachers to close this gap in schools facing acute shortage either by the Government or through the parents' initiative. Provision of quality Education calls for the participation of all the stakeholders including

parents who should be ready to share the cost of Education by employing more teachers through Board of management.

Despite the fact that greater part of schools have physical, instructing and learning assets, they are not satisfactory. The investigation prescribes that schools start salary-creating exercises to raise assets to enhance assets given by the Free Education programs, which incorporate appropriate use of school homestead to guarantee more deliver to finance other Agriculture exercises inside the schools.

The study noted that internal supervision of curriculum was not effective since head teachers rarely checked the utilization of professional documents prepared by teachers. Furthermore, there was only three QASO officers in the whole County thus comprising the external supervision of curriculum and handling of other education matters. The study recommends that there is need for intensifying of external and internal supervision of curriculum in all the schools in Kisumu West Sub-County.

The study established that both the teachers and the learners had negative attitude towards teaching and learning of Agriculture since teachers said they disliked teaching Agriculture while students said they also disliked learning Agriculture. The study recommends that there is need to intensify seminars and In-service Courses for teachers to encourage them cultivate positive attitude toward teaching Agriculture in public day Secondary schools. In addition, teachers are encouraged to advice the students to cultivate positive attitude towards learning through Field trips and excursions, National Agriculture competition congresses, employing varied teaching strategies and proper mastery of the content in all public day Secondary schools within Kisumu West Sub-County.

5.4.1 Principals

To mitigate on the inadequacy of Agriculture textbooks and equipment's, the researcher recommends that the school administration needs to enhance their provisions to the public day secondary schools in the Sub-County. Principals should also extend their supervision to all students in the schools to ensure they possess with the recommended Agriculture textbooks to supplement the few that had been bought by the schools. The administrations of the secondary schools in the Sub-County need to enhance provisions of teaching aids for Agriculture as well as encouraging improvisation using the locally available materials by Agriculture teachers together with the students taking Agriculture. There is need for school principals to monitor curriculum implementation frequently to check whether the subject teachers (Agriculture) make good use of the professional documents in preparation for lesson presentation. There should be adequate field studies, National Agriculture competitions and rewarding students for better performance for Agriculture students organized in every term. Agriculture teachers need to indicate whether the lesson has been taught and objectives achieved immediately after presenting a lesson. If the lesson is not taught, then, the teacher should indicate the reason why and when he or she intends to cover it. if the lesson objectives are not achieved, and by indicating lessons taught and lessons not taught the teacher plans for remedial lessons to cover those areas in view of achieving good performance in the subject. The ministry of education officers in the Sub-County need to enhance their supervisory roles and functions to check on the preparations of teachers before and during lesson presentations. The ministry also need to ensure proper teaching and learning resources provision in the school are adequate from the County's and the Ministry's office in all public day secondary schools in the Sub-County.

5.4.2 Teachers.

To mitigate on the inadequacy of relevant revision materials for students taking Agriculture the administration of secondary schools in the Sub-County need to enhance their provisions as well as recommending to parents and guardians to buy the materials for their children.

Agriculture teachers in Kisumu Sub-County need to prepare adequate lesson plans before teaching lessons. Heads of department (Agriculture) in schools in the Sub-County need to supervise closely the preparations of lesson plans before lessons are taught. The school administration need to invite experienced personnel and resource persons in the field of Agriculture especially from Kenya national examination council to give the required KNEC tips of answering Agriculture questions both in paper one, paper two and practical's. National examiners for Agriculture should not be strict while marking student's scripts. Discussion, project, research and field studies should be used in order to supplement lecture method, question, and answer method in teaching Agriculture to ensure individual differences for Agriculture students in the Sub-County are met. The government and other stakeholders such as Non-Governmental Organisations need to provide adequate funds for infrastructure development in public secondary schools. Some public day secondary school in the Sub-County were sharing facilities with their neighbouring primary schools.

5.4.3 Students.

Train agriculture students in the Sub-County on positive attitudes towards their Agriculture teachers. In addition, teaching and equipping students taking Agriculture in the Sub-County with necessary reading skills including note taking for use during their leisure. To mitigate on the inadequacy of relevant revision materials for students taking Agriculture the administration of secondary schools in the Sub-County need to enhance their provisions as well as

recommending to parents and guardians to buy for their children. Teachers and students taking Agriculture should be motivated by the administration. School administration and other education stakeholders should also devise affordable means in which both students and their teachers are motivated especially after release of examination results. This include tokens for the teachers. Time for revising Agriculture by teachers and students need to be properly utilized. Students should be adequately involved in identifying topics to be revised with their Agriculture teachers to avoid repeating topics on simple concepts at the expense of those topics, which are more challenging to Agriculture students in the Sub-County. Weekly tests need to be encouraged as well as joint Agriculture examinations. Field trips and excursions plays a vital role in Agriculture subject hence Students in the Sub-County should always get a chance towards such trips to expose them more to improve the performance. Scientific Agriculture conferences should also be given a priority to install more knowledge and ideas regularly in all the public day secondary schools in the Sub-County.

5.5 Recommendations for Further Research.

The study was carried out in public day secondary schools in Kisumu West Sub-County. The researcher therefore recommends that another study be done in other sub-counties to assess the influence of management factors on the performance of Agriculture, which was not a concern in this study. It was also recommended that another study be done to find out the preparedness in terms of school infrastructure and facilities towards teaching Agriculture in public Secondary schools.

REFERENCES

- Adesina, S. (2001). *Some Aspects of School Management*. Ibadan: Educational Industries Ltd.
- Aduda, D. (2013, February 28). Kenya Certificate of Secondary Education, Examination Results released by Minister of Education. *Daily Nation*, Nairobi: Nation Media Group Ltd, p2.
- Akinsanmi, B. (2008). The optimal learning environment: Learning theories. *Retrieved March 2, 2009, from <http://www.designshare.com/index.php/articles>*.
- Bell, L. R. (2006). *The skills of Secondary School Management*. London: Routledge.
- Berner, M. (2013). *Building Conditions, Parental involvement and Student Achievement*. Columbia Public school System: Urban Education.
<https://journals.sagepub.com/doi/abs/10.1177/0042085993028001002>
- Berry, M. (2012). *Healthy School Environment and Enhanced Educational performance; The case of Charles Young elementary school*. Washington, DC: Carpet and Rug Institute.
- Bert, V. (2011). *The impact of school facilities on learning environment; A Dissertation Presented in Partial Fulfillment Of the Requirements for the Degree Doctor of Philosophy*. Capella University: United State of America.
- Berthoud, R. (2000). *Introduction. The dynamics of social change*. Bristol: policy press.

- Beynon, J. (2007). *Physical facilities for education: what planners need to know*. Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Buckley, J. S. (2004). *School Facilities and Academic Performance*. Washington DC: National Clearinghouse for Educational Facilities.
- Buckley, J. S. (2014). *The Effects of School Facilities Quality on Teacher Retention in urban school Districts*. Washington DC.
- Bunting, A. (2014). *Secondary Schools Designed for a Purpose-But Which one?* *Teacher*, 154, 10-13
- Butterfield, E. (2009). *School renovation and the importance of maintenance*. Available at: <http://www.designshare.com>.
- Campbell, D. (2006). *Introduction to educational Administration 3rd Edition*. Boston: Allyn Press.
- Chan, T. C. (2006). *Environmental Impact on Student Learning*. Retrieved from <http://eric.ed.gov>.
- Chiuri, L., & Kiumi, J. (2015). *Planning and Economics of Education*. Nairobi: Pangolin Publishers.
- Comber, M. & Keves, A. (2003). *Implementing Organizational Innovation. A Sociological Analysis of Planned Educational Changes*. New York: Basic Book Incl.
- Court, D., & Ghai, P. (2004). *Education, Society and Development: new perspectives from Kenya*. Nairobi: Oxford University Press.

- Culp, B. (2015). *Management of the Physical Environment in the Classroom and Gymnasium: It's not that different Teaching Elementary Physical Education*. 17(5), pp 13-15
- Desarrollo, J. (2011). *The Quality of Education In Latin America And Carribean Latin America*. Paraguay: Research Work Institute Desarrollo.
- Duignan, R. (2006). Research of effective schooling. *Some implications for school improvements journal of education Administration* 2(2), 3-12.
- Earthman, G. (2008). Paper Presented at annual meetings of Virginia Educational Facility Planners. In *How a Facility affects Learning*. Virginia: Blacksburg.
- Earthman, G. L. (2006). Review on the Research on relationship between school buildings, students achievement and student behavior. *Paper presented at the annual meeting of the Council of Education Facility Planners International*. Tarbon: Florida.
- Efumbi, M.D. (2002). *An investigation into factors associated with low Achievement of students in Chemistry subject in Busia District: at KCSE level unpublished thesis of Kenyatta University*.
- Ellis, J. (2005). Place and Identity for Children in Classrooms and Schools. *Journal of the Canadian Association for Curriculum Studies*, 3(2), 55–73.
- Eshiwani, G.S. (2003). *Factors influencing performance among primary and secondary schools pupils in Western province*. Nairobi: Bureau of Education Research, Kenyatta University.
- FAO. (2013). *The Agriculture Sector in Kenya*. Nairobi: FAO Publications catalogue.

- Foreman, B., Maiden, J., & Byford, J. (2007). The perceived elements of educational facility design essential in improving the learning climate. *The Journal of School Business Management* 9, 45-49.
- Franken, J.R. & Wallen, N.E. (2010). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.
- Frederick, S. Withum III. (2006). *Educational Facilities Planning: A System Model. Unpublished Doctorate Dissertation. Duquesne University. America.*
- Fullan, M. (2011). *The New Meaning of Educational Change* . New York: Teachers College Press.
- Fulton, R. DA . (2008). *Conceptual Model for Understanding the Physical Attributes of Learning Environments*.
- Gakuru, J. (2012). *The Education of pre-school Education Project*. Nairobi: Kenya Institute of Education.
- Gakuru, O. N. (2012). *Analysis of factors that influence the achievement of primary education objectives*. Nairobi : Kera research report, Kenyatta University.
- Gay, L.R. (2012). *Educational Research competence for analysis and application*. Ohio: Millan publish Company.
- Gitau, E.M. (2003). *A Study of the Present Situation Regarding the Teaching and Learning of Kiswahili in Kikuyu Division in Primary Schools*. Nairobi: Nairobi university press.
- Haimowitz, M.L. (2009). Kenya National Examination Council. In T. Y. Crowwell., *Human development*. New York: Kcse.Examination Candidate.

- Heyneman, S. (2013). *The effects of primary school quality on academic achievement across twenty nine high and low income countries*. Washington D.C: World Bank.
- Higgins, S., Hall, E., Wall, K., Woolner, P., & McCaughey, C. (2005). *The impact of school Environments*. London, United Kingdom: The Design Council.
- Kathuri, N.J. (2012). *Factors that Influence the Performance of the pupils in CPE; research paper No. 1092 Education and Extension Department*. Njoro: Unpublished Research Paper Egerton University.
- Keep, G. (2012). *Buildings that Teach; The Educational Facilities Planners*. Accessed online 4/2/2014 at <[http://sbw.cepfoundation.org/pdf/Building Teach.pdf](http://sbw.cepfoundation.org/pdf/Building_Teach.pdf)>.
- KESSP. (2004). *Kenya Education Sector Strategic Plan*. Nairobi: Ministry of Education Science and Technology.
- Kibui, G. (2012). *A comparative study of the factors that influence examination paper of Public and Private School*. Nairobi: Unpublished paper Kenyatta University.
- Kimani, B. (2002). *Relationship between Management of Curriculum and Institution by Principals and academic performance of secondary schools in Kinangop division*. Nairobi: Nairobi University.
- Knezevich, S. (2015). *Administration of Public Education*. New York. Journal of Educational Administration, 53(6), 718–734. doi:10.1108/ JEA-08-2014-0103 National Policy Board for Educational Administration. (2015).
- Koech. D. (2009). *Koech Report on Commission of Inquiry into Education System in Kenya*. Government printer.

- Kombo, D.K. (2008). *Master Thesis on causes of poor performance in Harambee secondary school in Kathiani Division.*
- Lackney, J. (1994). *Educational facilities: The impact and role of the physical environment of the school on teaching, learning and educational outcomes.* School of Architecture and Urban planning: University of Wisconsin.
- McMillan, J. H., & Schumacher, S. (2001). *Research in Education 5th Edition.* .: London: Addison Wesley Longman.
- Ministry of Education. (2010). *Child Friendly School Manual.* Kenya: Ministry of Education: Government printer.
- Mugenda, O., & Mugenda, A. (2009). *Research Methods: Quantitative and Qualitative Approaches.* Nairobi: Acts press.
- Mukono, N. (2004). *Factors that contribute to poor performance of Kiswahili in Secondary schools; a case study of Parklands School in Nairobi.:* . Nairobi: Kenyatta University. Unpublished, M.Ed. Thesis.
- Orodho, J.A. (2004). *Techniques of writing research proposals and reports in education and social Sciences Bureau of Education Research Kenyatta University.* Nairobi: Reata Printers.
- Republic of Kenya. (2015). *Sessional Paper No 1 Of 2005 On A Policy Frame Work For Education, Training And Research .* Nairobi: Government Printer.
- Russel, J. D. (2005). *Instructional Media and the new techniques .* New York USA: John Wiley and Sons Inc.

- Schneider, M. (2013). *Do School Facilities Affect Academic Outcomes?* . Washington, D. C., : National Clearing house for Educational Facilities.
- Sifuna, D. & Otiende, J. (2006). *An introductory history of education*. Nairobi, Kenya: University of Nairobi Press.
- Sifuna, D. (2007). The quality of primary education in Kenya: some issues, in: . In C. M. K. Watson, *Educational Dilemmas: debate and diversity, quality in education* (p. (4)). London: Cassell.
- Sifuna, D. (2008). The challenge of increasing access and improving quality: An analysis of universal primary education interventions in Kenya and Tanzania since the 1970's. *International Review of Education*, 53, 687-699.
- Soakpa, L.R. (2005). *A study of Secondary School Teacher and students Attitudes towards English as a foreign Language in Congo*. Nairobi: Catholic University of Eastern Africa, Unpublished, M.Ed. Thesis.
- Todd, L. (2000). *An Introduction to Linguistics*. Singapore: Longman Publishers.
- Wilkins, D.A. (2005). *Second Language Learning and Teaching*. London Edward Arnold Limited.
- World Bank. (2006). *A report on school quality and achievement in Brazil*. Washington DC:: World Bank press.
- Yara, P. O. (2016). Relationship between teachers' attitude and students' academic achievement in Agriculture in some selected Senior Secondary Schools in South-western Nigeria. *European Journal of Social Sciences*, 11(3), 364-369.

Zan, R. and Martino, P. D. (2014). Attitudes toward Agriculture: Overcoming positive/negative dichotomy. *The Montana Agriculture Enthusiasts Monograph*, 3, 157-168.

APPENDICES

Appendix I: Letter of Transmittal



KENYA METHODIST UNIVERSITY MOMBASA CAMPUS

P O Box 89983-80100 MOMBASA, Kenya
Tel: +254-715120282

Fax: 041-2495946
E-mail: mombasa@kemu.ac.ke

Date: 28-7-2017

TO WHOM IT MAY CONCERN

Reg. No: EDU-3-7273-3/2015

Name: DEYA MARTIN OCHIENG

This is to confirm that the above named person is a bona fide student of this University pursuing a Master of Education Leadership as part of the degree requirements the student is required to undertake research and write a thesis in the area of specialization.

The student is undertaking research on "Management factors Influencing Attitude and Academic performance in Agriculture in Public day Secondary Schools in Kisumu West Sub-County" and is currently proceeding to collect field data.

Any assistance given towards attaining this goal will be highly appreciated.

Yours faithfully,


Eric M. Mwangi
For Coordinator, Postgraduate Studies





Appendix II: NACOSTI Permit

THIS IS TO CERTIFY THAT:
MR. MARTIN OCHIENG DEYA
of KENYA METHODIST UNIVERSITY,
90420-80100 MOMBASA, has been
permitted to conduct research in
Kisumu County

on the topic: MANAGEMENT FACTORS
INFLUENCING ACADEMIC PERFORMANCE
IN AGRICULTURE IN PUBLIC DAY
SECONDARY SCHOOLS IN KISUMU WEST
SUB-COUNTY

for the period ending:
17th August,2018



Applicant's
Signature



Helen Mwangi
Director General
National Commission for Science,
Technology & Innovation

Permit No : NACOSTI/P/17/29570/18667
Date Of Issue : 17th August,2017
Fee Received :Ksh 1000

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
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REPUBLIC OF KENYA


National Commission for Science,
Technology and Innovation

RESEARCH CLEARANCE
PERMIT

Serial No.A 15318

CONDITIONS: see back page

Appendix III: Questionnaires

A: Questionnaire for Agriculture students (form four)

Please note that the information given here will be kept in secret confidence. However, the usefulness of the information will depend solely on your honesty.

Part 1 – Personal Background

Sex Male Female

Which form are you in this school? [1] [2] [3] [4]

Part II - Adequacy and management of physical resources

Do your parent[s]/guardian[s] provide all items required by the teachers e.g uniform, bag, supplementary Agriculture textbooks? Yes No

Is your school a Government built secondary school? Yes No

Is your school community built secondary school? Yes No

What is the composition of students in your school?

- i. Girls only
- ii. Boys only
- iii. Both boys and girls

Part III - Indicate the adequacy of the following in the school (please tick)

	Adequate	Inadequate
Classrooms		
Agriculture textbooks		
Note books/exercise books		
Teaching aids e.g Wall Maps, Globe, Atlases		
Revision materials		

Part IV – How attitude of students towards learning Agriculture affect their performance

Show your opinion towards the following statements. Pick from the following phrases:

Strongly Agree [SA], Agree [A], Not Sure [NS], Disagree [D] and Strongly Disagree [SD].

Statements on attitude of students towards learning Agriculture	SA	A	NS	D	SD
Students who have negative attitude towards their Agriculture teachers fail in exams					
I enjoy reading Agriculture books but fail in exams					
I enjoy spending my leisure time reading Agriculture books to improve my grade					
I do all the homework assigned by my Agriculture teacher					
I sometimes fail to do all the homework assigned by my Agriculture teacher due to lack of interest of Agriculture subject					

Part V – Effectiveness and supervision and management of curriculum implementation.

	Daily	weekly	Monthly	Termly	Not at all
How often are your notebooks and assignments checked and marked?					
How often in a term does your Agriculture teacher give you tests?					
How frequent does your school organise field trips for Agriculture students?					

Indicate how often the following teaching learning strategies are used in your class

Strategy	Frequently	Rarely	Not at all
Lecture method			
Question and answer			
Projects and research			
Group work			
Field studies			
Resource persons			

Part VI – Views of the respondents on the strategies of improving Agriculture performance

In your own view, what do you think can be done to improve performance in Agriculture in KCSE Examinations?

B: Questionnaire for teachers (Agriculture)

Please note that the information given here will be kept in secret confidence. However, the usefulness of the information will depend solely on your honesty.

Part I – Demographic Data

Please respond to each question by ticking against the appropriate information as applies to you.

Gender Male Female

2. How long have you been teaching Agriculture?

Below 2-3 year 4-6 years 7-9 years above 9 years

Indicate your highest academic qualification

Masters Graduate Diploma

Part II – Indicate the adequacy of the following resources

	Adequate	Inadequate
Classrooms		
Agriculture textbooks		
Note books/exercise books		
Teaching aids e.g Wall Maps, Globe, Atlases		
Equipment and Implements		

Part III – How attitude of students towards learning Agriculture affect their performance

Do your Agriculture students show willingness to learn? Yes[] No[]

Strategy	Frequently	Rarely	Not at all
How frequent do students attend to their Agriculture assignments?			
How frequent do students answer oral questions asked during the lesson?			

Part V – How is teachers attitude towards teaching Agriculture affect performance

How do you rate your attitude towards teaching Agriculture? Indicate using the following phrases: Strongly Agree [SA], Agree [A], Not Sure [NS], Disagree [D] and Strongly Disagree [SD].

Statement	SA	A	NS	D	SD
I always effectively prepare students for Agriculture exams					
I always prepare lesson plans for effective teaching to improve performance					
I enjoy using varied methods in teaching to improve performance					
I always complete syllabus and allow enough time for revision					

Part VI-Effectiveness of supervision and management of curriculum implementation

How often do you prepare professional documents? Rarely[] Never[] All The Time[]

Do you frequently utilize the professional documents in teaching AGR? Yes[] No[]

How do you assess your Agriculture students in school?

Tests[] class exercises[] quizzes[] Term examinations []

1. Do you engage your students in Agriculture joint examinations?

Yes[] No []

In your own point of view, what factors have led to poor performance of Agriculture in your school in KCSE? Indicate how often do you use the following teaching and learning strategies

Strategy	Frequently	Rarely	Not at all
Lecture method			
Question and answer			
Projects and research			
Group work			
Field studies			
Resource persons			

Does the principal supervise teaching and learning activities in your school?

Yes[] No[]

If your answer is yes, how often does the principal supervise your work?

Daily [] Weekly [] Monthly [] Termly [] Not at all []

C: Questionnaire for Head of Department (Agriculture)

Please note that the information given here will be kept in secret. However, the usefulness of the information will depend solely on your honesty.

Part I – Demographic Data

Please respond to each question by ticking against the appropriate information as applies to you.

Indicate your gender Male Female

How long have you been teaching Agriculture?

Below 2-3years 4-6 years 7-9 years above 9 years

Indicate your highest academic qualification

Masters Graduate Diploma

Part II – Indicate the adequacy of the following resources

	Adequate	Inadequate
Classrooms		
Agriculture textbooks		
Note books/exercise books		
Teaching aids e.g Wall Maps, Globe, Atlases		
Equipment and Implements		

Part III – How is students attitude towards learning Agriculture affect their performance

Do you think Agriculture students in your school enjoy learning the subject?

Yes [] No []

Part IV – How is attitude of teachers towards teaching Agriculture affect performance

Do you think Agriculture teachers enjoy teaching Agriculture in your school?

Yes [] No []

Part V-Effectiveness of supervision and management of curriculum implementation

Are the schemes of work available? Yes [] No []

Are the scheme of work detailed, relevant? Yes [] No []

Are the lesson plans available? Yes [] No []

Are the records of work tallying with the schemes of work and students work?

Yes [] No [] Not at all []

Are the progress records/mark books available? Yes [] No []

In your own point of view, do you consider the way Agriculture teachers in you department handle the curriculum in a satisfying manner? Yes [] No []

If yes elaborate.

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How many times do you check the following professional documents?

Schemes of work	Daily	Weekly	Monthly	Termly	Not at all
Lesson plan					
Record of work covered					
Students' progress record/mark books					
Class registers					

Do you supervise classroom teaching? Yes [] No []

If yes how often do you do it? Daily [] Weekly [] Monthly [] Termly [] Not at all []

Part VI – Views of the respondents on the strategies of improving Agriculture performance in Kisumu West Sub-County

What do you think or suggest can be done to improve the performance in Agriculture in KCSE Examinations?

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D: Questionnaire for Principals

Please note that the information given here will be kept in secret confidence. However, the usefulness of the information will depend solely on your honesty.

Part I – Demographic Data

Please respond to each question by ticking against the appropriate information as applies to you.

Please indicate your gender Male Female

How long have you work in this school?

Below 3years 4-6 years 7-9 years above 9 years

Please indicate your highest academic qualification

Masters Graduate Diploma

Part II – Indicate the adequacy of the following resources

	Adequate	Inadequate
Classrooms		
Agriculture textbooks		
Note books/exercise books		
Teaching aids e.g Wall Maps, Globe, Atlases		
Laboratories, School garden		
Equipment and Implements		
Teachers (For Agriculture)		

Part III – How attitude of students towards learning Agriculture affect their performance

Do your Agriculture students show willingness to learn? Yes[] No[]

How frequent do students attend to their Agriculture assignments and projects?

Rarely[] Frequently [] Not at all []

Part IV – How attitude of teachers towards teaching Agriculture affect performance

Do you think Agriculture teachers in your school enjoy teaching the subject?

Yes [] No []

Part V-Effectiveness of supervision and management of curriculum implementation

How often do you check professional documents? Rarely[]Never[] All The Time[]

Do you frequently avail the relevant materials required to facilitate curriculum implementation on time? Yes[] No[]

Do you supervise teaching and learning activities in your school? Yes[] No[]

If your answer is yes, how often do you supervise these activities?

Daily [] Weekly [] Monthly [] Termly [] Not at all []

E: Interview schedule for Sub-County director of Education

How adequate are the resources to the needs of the teaching learning process in Agriculture?

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Is the management of curriculum and instruction in the public secondary school fully professional?

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How far does the attitude of the students towards learning Agriculture affect their performance?

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How far does the attitude of Agriculture teachers towards teaching influence their performance?

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In your own stand point, what are the strategies of improving Agriculture performance in KCSE Examinations