

**EFFECT OF TEACHING AND LEARNING PRACTICES ON SCHOOL KCPE  
PERFORMANCE IN PUBLIC PRIMARY SCHOOLS IN NAMBALE  
SUB-COUNTY, BUSIA COUNTY, KENYA**

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EDUCATIONAL PLANNING AND MANAGEMENT OF MASINDE MULIRO  
UNIVERSITY OF SCIENCE AND TECHNOLOGY.**

**OCTOBER, 2025**

**DECLARATION**

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

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## **DEDICATION**

This Thesis is dedicated to my family for their financial and moral support.

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## ABSTRACT

Kenya is experiencing low performance in KCPE according to recent research. If it were not for the government directive that all KCPE candidates transit to the next level of education, many could not due to poor KCPE performance. The purpose of this study was to establish the effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county. To attain the purpose of the study, three objectives were addressed; to establish how early syllabus coverage contribute to KCPE performance in public primary schools in Nambale sub-county, determine how homework assignment contribute to KCPE performance in public primary schools in Nambale sub-county and to establish how testing contributes to KCPE performance in public primary schools in Nambale sub-county. The study adopted the theory of academic performance by Elger. A correlational research design was adopted in the study. The study was conducted in Nambale sub-county, Busia County involving 48 public primary schools. The target population of the study consisted of 336 teachers and a sample size of 210 respondents were selected. The sample included 43 head teachers and 167 class eight subject teachers. The selection of participants in the study followed the Taro Yamane formulae. The data was collected using questionnaires. The instruments were tested for reliability using Cronbach alpha coefficient. Content validity of the questionnaires was established by the study supervisors. The data was analyzed using descriptive and multivariate statistics. The results were presented in tables. The study found out that early syllabus coverage was statistically significant in explaining the variation in academic performance in public primary schools in Nambale Sub-County. The regression coefficient for Early syllabus coverage (0.032), was statistically significant ( $t=0.555$ ,  $p=0.032$ ). The regression coefficient for homework assignments given (0.002), was statistically significant ( $t=1.805$ ,  $p=0.002$ ) and the regression coefficient for testing (0.004), was statistically significant ( $t=0.606$ ,  $p=0.004$ ). The study concludes that early syllabus coverage and the use of homework assignments and testing was an effective strategy in achieving positive, appropriate and improved student performance. This study recommends that the head teachers, teachers and board of management to prioritize policy on early syllabus coverage and encourage the use of homework assignments and testing as effective strategies to improve academic performance.

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## **LIST OF ABBREVIATIONS AND ACRONYM**

<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>SPSS</b>	-	Statistical package for social science
<b>PTA</b>	-	Parents Teachers Association
<b>QUASO</b>	-	Quality Assurance and Standard Officer
<b>UNESCO</b>	-	United Nation Education, Science and Cultural Organization
<b>MoE</b>	-	Ministry of Education
<b>KNEC</b>	-	Kenya National Examination Council

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Overview**

The chapter presents the information on the background of the study, statement of the problem, purpose of the study, specific objectives, research hypotheses, significance of the study, limitations of the study, assumptions of the study, theoretical and conceptual framework; and operation definition of terms.

#### **1.2 Background to the study**

The academic performance of students is a matter of international concern (Romer hausen, 2013). Research has been conducted on academic performance on a global scale, but the results are inconsistent. The United States continues to experience a disparity in academic performance among students by ethnicity and social class (National Assessment of Education Progress, 2009).

Aturupane (2011) discovered that students in Sri Lankan public and private schools performed poorly in the classroom. As demonstrated in Namibia, the majority of students in Sub-Saharan Africa experience subpar academic performance (Akpo & Nita, 2016). Despite the government of Tanzania and the community's efforts to improve the education system by expanding schools to local levels and reducing education expenditures, the academic performance in primary schools remains poor. The anticipated objective of the academic performance ratio in primary school education was not achieved by 2009 according to United Republic of Tanzania (URT, 2013). Due to its intrinsic and extrinsic advantages, education is highly valued in Kenya, as it is in any other nation (Kosgei et al, 2015). Due to the fact that achievement in Kenya's education system is evaluated by the

quality of results in national examinations administered in schools, the system is examination-oriented.

In Kenya, the enhancement of the quality of education and the allocation of resources to education and human resources are considered effective factors that facilitate the country's widespread development. Increasing academic performance of the students is among the basic goals of educational planning. Academic performance allows students to fully access their abilities and skills in line with the goals of education. An important parameter of integrity of education is academic performance. It is also undisputed that academic performance is a major worry in the society. Scholars have undertaken a lot of efforts to decipher the mysteries of scholastic achievement (Ikpi et al, 2014). The presence of gaps in the academic performance of young people has a variety of answers according to psychology researchers (Ikpi et al, 2014). External factors, including the type of school, teaching methods, school location, instructional material, caliber of teachers, and their experience, have been the subject of considerable attention, as reported by the researchers. Academic Performance is seen as a measure of intellectual ability. There is variety of viewpoints on the reasons behind the academic success of certain learners and the apparent underperformance of others. Consequently, numerous psychologists have continuously endeavored to determine the primary factors that can predict individual academic achievement. Academic achievement on examinations is determined by the interplay of several factors, including learning mechanisms. Acquisition of knowledge has a crucial part in the lives of students (Mangal & Mangal 2009). Academic performance serves as the benchmark for evaluating the alteration of behavior (Dutt, 2007). Diverse learning styles

among individuals manifest in varying academic aptitudes, deficiencies, proficiencies, and interests. It is commonly argued that academic achievement can be mostly attributed to elements such as personal initiative, effort, and merit (Timothy et al, 2007). While education is not the exclusive pathway to achieving success in the professional realm, significant endeavor is carried out to recognize, assess, monitor, and promote the advancement of pupils at educational institutions (Bell, 2017).

The academic performance of their children is of great concern to parents as they hold the belief that achieving good academic results will lead to increased employment opportunities and stronger job stability (Bell, 2017). Furthermore, educational institutions made significant investments in cultivating positive academic behaviors for the same purpose. Specifically, they effect issues over the school's reputation and the potential financial assistance from government organizations, which reflects the school's overall academic success.

Performance results enable children to be systematically evaluated and organized on a clearly understandable numerical scale, therefore reducing grievances by ensuring that teachers and schools are held responsible for the components of each grade level. The evaluation of academic achievement is often conducted through examinations or ongoing assessment. However, there is no consensus on the most effective methods of evaluation or the importance of procedural knowledge, such as skills, versus declarative information, such as facts (Bhagat, 2013). Moreover, there is uncertainty regarding the specific elements that effectively predict academic achievement. Therefore, while constructing models of school performance, it is important to take into account phenomena such as

exam anxiety, environment, motivation, and emotions (Mosche, 1998). Nevertheless, variations in student achievement have been associated with disparities in cognitive abilities and personality traits (Sophy et al, 2011).

Academic result is a crucial determinant of the success or failure of any educational programme (Okoye, 2010). Academic achievement serves as the foundation for monitoring the education of a student and is a fundamental aspect of the wider concept of educational development (Singh and Choundry, 2015). Academic performance standards are the predetermined benchmarks that students are required to achieve in a specific subject within a country's curriculum. These standards are officially recognized by professional educators, parents, and often include the political process. The use of academic standards has resulted in favourable outcomes within the educational systems of countries such as Australia, France, Germany, and Japan. Academic achievement, as defined by Ali (2010), refers to the level of proficiency shown by a student or group of students in completing specific tasks within a specified subject or field of study. Teachers, students, parents, and other stakeholders in the education sector prioritise academic accomplishment as the primary objective.

This interest spans all disciplines at every level of the public education system, encompassing primary, secondary, and university levels. A strong academic performance observed in any student serves as an indicator of the effectiveness of the teaching and learning process. Conversely, a low academic performance suggests that the teaching and learning process is ineffective. According to Athieno et al. (2012), both customers and providers of education services in Kenya and other developing nations continue to place a

high priority on the pursuit of providing high-quality education. The academic achievement of pupils or students being assessed in an examination is directly linked to the quality of their results. Kenyan schools engage in intense competition, striving to get excellent results annually. There is a growing desire from parents, taxpayers, and other stakeholders for schools to excel in national exams, as they assess schools based on the academic achievements of their students.

Unsatisfactory academic results in national exams weaken students' prospects of transferring to a more prestigious secondary school for advanced education and reduce chances for employment, therefore restricting their involvement in national progress (GOK, 2014). Hence, primary school teachers are compelled to enhance the academic performance of pupils in KCPE. A comparative study on public and private primary school education in developing nations found that private schools are not limited by bureaucratic limitations that hinder public schools and have the ability to make and implement numerous decisions at the school level (Eaghen, 2011).

In Busia County, particularly in Nambale Sub-County, performance in KCPE examinations has remained consistently lower in public primary schools compared to private ones. Studies such as Eaghen (2011) show that private schools often perform better due to greater flexibility in implementing effective teaching and learning practices, including proper syllabus coverage, testing, and early homework review. In contrast, public schools face challenges such as limited instructional resources, large class sizes, and inconsistent teaching practices, which may contribute to poor academic results.

These disparities have drawn attention to the need to examine how specific teaching and learning practices affect pupils' KCPE performance in public primary schools. The current study therefore sought to evaluate the effect of teaching and learning practices specifically syllabus coverage, homework assignments, and testing on pupils' KCPE performance in public primary schools in Nambale Sub-County, Busia County, Kenya.

### **1.3 Statement of the Problem**

Nambale Sub-County has low academic performance, especially in public primary schools. This is shown by the average scores for the last four years in the sub-county. Mean scores in Nambale sub-county are lower than the County mean score, which typically falls between 255 and 259. An analysis of the average scores in Nambale Sub-County compared to Busia County from 2017 to 2021 indicates a notable disparity in academic achievement in Nambale Sub-county. The persistently low average scores in Nambale Sub-County, in comparison to other sub-counties in Busia County, offer substantiation for the assertion that academic performance in Nambale is substandard.

Both the Kenyan government and its inhabitants highly prioritise the successful completion of national examinations (Karori, et al, 2013). Candidates for the KCPE examination receive marks based on a scale of 500 marks for the five topics they have taken: English, Kiswahili, Mathematics, Science, and Social Studies/Religious Education. Previous research examined the overall academic performance of students in both low and middle-income nations (Gakuru, 2010; Fuller & Clarke, 2014). Educational performance achieved by students in schools is a direct result of the efforts or methods employed by teachers to facilitate learning.

During the years 2017 – 2021, the Nambale sub-county education office recorded mean scores of 249.47, 250.03, 246.04, 249.93, and 254.32 correspondingly. Stakeholders in the Sub County are seeking remedies to rectify the situation of poor KCPE performance.

One of the critical factors influencing academic performance is the nature of teaching and learning practices adopted in schools. The persistent low performance in Nambale Sub-County may be linked to the instructional methods teachers employ, the adequacy of learner-centered approaches, classroom engagement, and the availability and utilization of learning resources. Ineffective teaching strategies, over-reliance on rote learning, limited use of participatory methods, and inadequate assessment feedback may hinder learners' ability to grasp key concepts and perform well in national examinations. Similarly, learning practices such as learners' attitudes, motivation, and participation in class activities can also affect performance. Therefore, understanding the extent to which teaching and learning practices contribute to the observed low KCPE performance is vital in informing interventions aimed at improving academic achievement in Nambale Sub-County. To what extent do teaching and learning practices affect the performance of KCPE in public primary schools in Nambale sub-county, considering that the sub-county mean scores are lower than the county mean scores for the years 2017-2021?

#### **1.4 Purpose of the study**

The purpose of this study was to establish teaching and learning practices on KCPE performance in public primary schools in Nambale Sub-county, Busia County, Kenya.

#### **1.5 Objectives of the study**

The study was guided by following specific objectives

- i. To determine the effect of early syllabus coverage practices on KCPE performance in Public Primary schools in Nambale Sub County.
- ii. To determine the effect of homework assignments coverage practices on KCPE performance in public primary schools in Nambale Sub-County.
- iii. To establish the effect of testing coverage practices on KCPE performance in public primary schools in Nambale Sub-County.

### **1.6 Hypothesis of the study**

The study was guided by the following research hypothesis

**H<sub>01</sub>:** Syllabus coverage practices have no statistically significant effect on KCPE performance in public primary schools in Nambale Sub-County.

**H<sub>02</sub>:** Homework assignments have no statistically significant effect on KCPE performance in public primary schools in Nambale Sub-County

**H<sub>03</sub>:** Testing practices have no statistically significant effect on KCPE performance in public primary schools in Nambale Sub-County.

### **1.7 Scope of the study**

The study was limited to Public primary schools in Nambale Sub-County. The study confined itself to the effect of teaching and learning practices on KCPE performance (2017- 2021) in public primary schools in Nambale Sub County.

### **1.8 Significance of the study**

The research has the potential to be advantageous for head teachers, teachers, parents, and other various stakeholders. The study would serve as a valuable reference for the Ministry of Education Officials, particularly the QASO, in conducting inductions aimed at enhancing teaching and learning methods to achieve higher performance in the KCPE. The

study of benefit may be of interest to head teachers throughout the Teachers Performance Appraisal and Development (Tpad) process at primary schools. The teachers shall revitalise and maintain exemplary teaching and learning methods to enhance KCPE academic achievement. It is anticipated that this study will contribute to the existing literature on the effect of teaching and learning methods on the average score performance in KCPE exams in public primary schools. Additionally, it may serve as a foundation for future research in the area of academic achievement.

### **1.9 Limitations of the study**

The investigation was limited to Nambale Sub-county, excluding the other six Sub Counties. This would pose a challenge in extrapolating the findings to the whole County. Moreover, the study specifically focused on public schools, which would require caution in applying the results to private schools.

In addition to geographical and institutional scope, several methodological aspects may have influenced the findings but were not fully controlled for. First, the study relied on self-reported data from teachers and head teachers, which may have been affected by respondent bias, exaggeration, or social desirability tendencies. Second, variations in teacher competence, experience, and motivation levels across schools were not controlled for, yet these factors could affect teaching practices and learner outcomes. Third, differences in school infrastructure and resource availability (such as textbooks, classrooms, and teaching aids) were not systematically accounted for, even though they directly influence teaching and learning. Fourth, pupil-level factors such as socio-economic background, parental involvement, and individual learner motivation were beyond the

scope of the study but may have significantly contributed to KCPE performance. Finally, the study covered performance data over a limited period, which may not fully capture long-term trends or external shocks such as strikes, policy changes, or disruptions (e.g., COVID-19).

### **1.10 Assumptions of the Study**

The following assumptions were made in this study;

- i. All subject teachers in public primary schools diligently finish the syllabus for class eight in advance to allow ample time for revision in preparation for the KCPE examination.
- ii. All eighth-grade subject teachers in public primary schools assign homework in their respective subjects to achieve high average marks in the KCPE.
- iii. Class eight subject teachers in public primary schools provide exams to pupils in order to enhance their performance in the KCPE examination.

### **1.11 Theoretical framework**

The theory of performance (ToP), created by Elger (2007), served as the foundation for this investigation and focuses on three axioms that can be utilized to explain both performance and performance enhancement.

A performance-oriented mindset involves deliberate planning and execution of teaching and learning activities that stimulate learners and foster academic excellence. This aligns with syllabus coverage, as teachers who plan their lessons effectively and ensure comprehensive syllabus completion before examinations demonstrate intentionality in achieving desired learning outcomes.

The second axiom, immersion in a stimulating environment, underscores the importance of an enabling learning atmosphere that enhances learners' cognitive, emotional, and social engagement. Practices such as testing and interactive classroom activities immerse pupils in continuous assessment and feedback, thus reinforcing understanding and improving KCPE performance. The third axiom, reflective practice, refers to learners and teachers evaluating their experiences and learning from them. This directly relates to homework assignments, which provide opportunities for learners to review classwork, apply knowledge independently, and reflect on their learning progress. Teachers also use homework feedback to adjust instructional methods for improved outcomes.

Furthermore, the Theory of Planned Learning complements the ToP by emphasizing that learning outcomes depend on deliberate instructional planning and structured engagement. The combination of these theories supports the notion that effective teaching and learning practices syllabus coverage, homework, and consistent testing are products of intentional planning and reflection, which ultimately enhance pupils' performance in KCPE.

The KCPE results serve as an indicator of a candidate's performance. A performer may refer to either an individual or a collective of individuals participating in a cooperative endeavor. The process of developing performance is a continuous journey, and the level of performance measures the position in that journey.

The Theory of Planned Learning (ToP) presents a challenge to educators as enhancing our own performance enables us to empower ourselves in facilitating the learning and development of others. Performance is strongly correlated with the acquisition of knowledge for comprehension (Wiske, 1998). By acquiring knowledge and developing

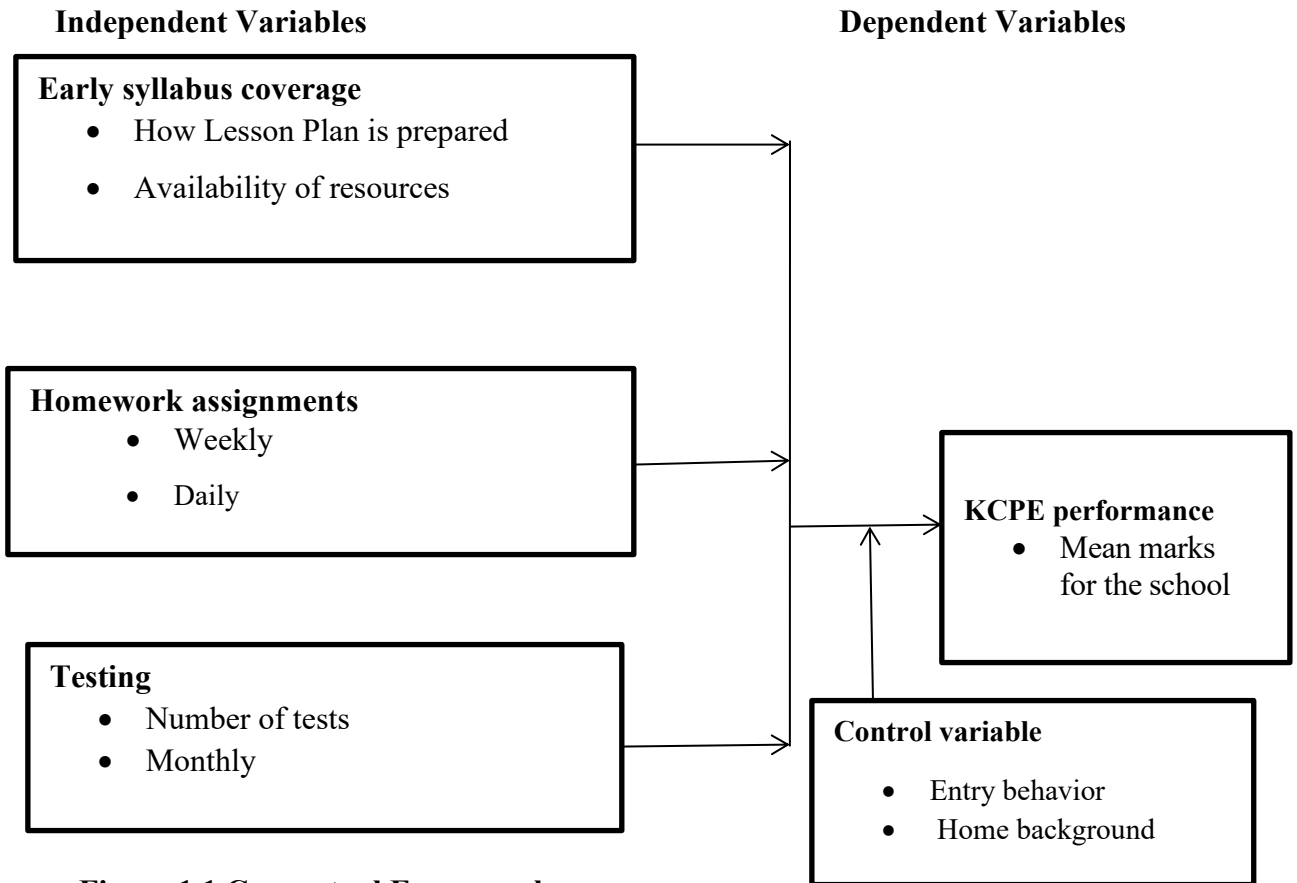
personally, individuals gain the ability to generate outcomes and effect meaningful change. An educator motivates pupils to pursue their aspirations. A teacher tangibly establishes a connection with a student.

The notion of performance guides the process of learning in conventional classrooms and other relevant educational settings. Within an educational institution, the theory of performance guides the process of learning by assessing the degree of achievement made by the school. Such can be achieved by consistent testing. Performance is the execution of a sophisticated sequence of activities that apply expertise and understanding to generate significant outcomes. Does the implementation of numerous homework assignments and testing contribute to achieving such outcomes in KCPE? This study is well-suited for the theory of performance as it focuses on the teaching and learning methods that directly influence academic achievement, namely the mean scores achieved by schools in the National Examinations (KCPE).

### **1.12 Conceptual framework**

Mathooko, et. al (2011) define a conceptual framework as a model that facilitates the logical understanding of the interrelationships among numerous aspects chosen as significant to the problem. Within this conceptual framework, it is postulated that teaching and learning techniques have an effect on KCPE performance. Teaching and learning techniques refer to the implementation of early syllabus coverage, homework assignments, testing, and KCPE success as measured by performances from 2017 to 2021. The concept posits that thorough covering of the syllabus, completion of homework assignments, and testing directly affect performance in the KCPE. However, the link can be altered by the

entering behavior of learners and their home context, as seen in the conceptual framework depicted in figure 1.1.



**Figure 1.1 Conceptual Framework**  
**Source: Self-conceptualization (2022)**

### 1.13 Definition of Significant Terms

The following are the significant terms used in the study.

**Performance:** Mean score achievement indicator of schools in relation to others in the KCPE examination.

**Public Primary school:** Denotes a government-funded state-owned educational institution.

**Sub-County:** Refers to a decentralized administrative body in a county created by legislation and accountable for all educational affairs within its jurisdiction.

**Learning:** is the cognitive process by which acquired information is analysed to shape our actions and ultimately our knowledge.

**Early Syllabus Coverage:** Refers to the practice of completing the syllabus in advance (during term 2) of the examination year to provide sufficient time for studying for the summative examination being taken in term three.

**Entry behavior:** Specifies the entry/admission mark for class eight.

**Academic qualification:** Refers to the highest educational attainment achieved by a classroom teacher.

**Free primary education:** Fee-free education refers to the educational services offered by the government in the second cycle of a school system, where parents are not required to pay tuition fees since the government covers the costs to support the education.

**Homework:** Work assigned by teachers for students to complete independently at home.

**Syllabus:** is a compilation of subjects that students study in a certain academic discipline.

**Practices:** Refers to methods of enhancing scholastic achievement.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The present chapter provides an overview of the existing literature pertaining to the effect of teaching and learning methodologies on the performance of KCPE in public elementary schools. Several hypotheses have been proposed to elucidate the effect of teaching and learning technologies on the academic performance of primary schools. This research will specifically concentrate on the early coverage of the syllabus, completion of homework assignments, and consistent testing techniques that serve as the foundation of the study.

#### **2.2 Early Syllabus coverage and academic performance**

The major objective of the study was to identify the elements that influence the prompt coverage of the syllabus in public primary schools. Supplementary tuition, student/teacher attendance, and collaborative teaching. In some schools, lessons for standard eight have been extended beyond the designated teaching hours set by the Ministry of Education (MoE) from 8:20am – 12:40pm for the morning session and 2:00pm – 3:10pm for the afternoon session. Further lessons are scheduled for Saturdays from 8:00am to 12:30pm, and for Sundays from 2:00pm to 6:00pm.

Maina et al, (2011) noted that the Kenya primary school curriculum is too extensive and the time frame allotted on the timetable is insufficient, thereby necessitating additional time for remedial purposes. Similar perspectives were noted by Ireson and Rushforth (2004). The study conducted by Dindyal & Besoondyal (2007) revealed that private remedial courses in Mauritius are not only pursued by students with lower academic ability, but also by students of all levels. Students engage in private tutoring for several

reasons, such as enhancing their academic performance, being compelled by their parents, seeking curriculum enrichment, addressing their specific challenges, and benefiting from the opportunity to practice and learn more effectively from their private tutors.

The entry behavior of learners directly influences the extent to which the syllabus is covered. Proficiency in fundamental concepts and a solid foundation in the necessary background knowledge for the subject matter would enable students to advance more rapidly. Academic, attention, socio-emotional, and reading abilities at class admission were found to contribute to the overall attention skills required for faster completion of the scheduled task (Duncan et al, 2007).

The attitude and comprehension of learners are part of the behavioral factors that can affect the speed at which the syllabus is covered (Jannison & Beswick, 2010).

The delivery of specialized material and syllabus covering have been demonstrated to benefit from team teaching. Ordinarily, many teachers do not possess comprehensive understanding in all subject areas. Therefore, it is necessary to guarantee that students are sufficiently exposed to a wide range of knowledge and practical skills by professors who possess expertise in those specific areas.

Instructors categorize material based on specific criteria that they find most suitable. Effective collaboration, comprehensive coverage of material, and provision of skills are guaranteed in this manner (Murawski and Dieker, 2004; York Barr, et al, 2004). The use of team teaching involves the delivery of content through direct instruction at a pace that guarantees the presentation of all topics. One potential drawback of team teaching for

syllabus coverage is that it may lead to a sequence of autonomous and uncoordinated teaching.

Instead of benefiting learners who want to get comprehensive covering of the curriculum, the outcome may result in conflict and cause the learner to work in a contradictory manner. Other potential elements that may have a detrimental effect on syllabus covering are absenteeism, teachers' workload, school discipline, time management, illness, group discussions, and supervision activities conducted by head teachers.

Self-control exhibited by the student guarantees early completion of homework and supplementary exercises. An analysis by Allen (2010) indicates that classroom discipline has an effect on the learning process, which in turn influences the extent of syllabus coverage. Academic discipline governs the implementation of time management in schools. Simatwa (2010) emphasizes the significance of time management by highlighting its ability to facilitate instructors in adapting quickly to challenging work environments, establishing efficient classroom management, and contributing to teamwork. Can the aforementioned elements be applied to ensure early coverage of the syllabus in public primary schools in Nambale sub-county?

### **2.2.1 Needs for Early Syllabus Coverage**

Mazzeo (2003), as referenced in Mwikya (2013), argues that service quality is a tangible measure of performance for many organisations and is of great significance to entrepreneurs, directors, employees, and clients. Furthermore, the early implementation of the curriculum in educational institutions acts as a measure for assessing performance, since it directly influences performance in both fundamental and final examinations. The

provision of comprehensive and punctual curriculum coverage enables students and teachers to allocate sufficient time for reviewing the term end, year-end, and course end examinations conducted by KNEC. Assuring prompt dissemination of syllabi improves students' ability to understand both theoretical and practical subjects, thereby boosting their likelihood of attaining high performance, especially in final examinations.

### **2.2.2 Teacher Effective Communication on Early Syllabus Coverage and Academic performance.**

According to Nzuve (1999), communication is the deliberate or inadvertent mechanism through which information is transferred between persons. Furthermore, Nzuve (1999) asserts that communication fulfils the subsequent purposes: Regulates employees' conduct by clearly defining job responsibilities and adherence to company values, promotes motivation by elucidating the necessary actions to enhance performance, allows for the expression of emotions and achievement of social objectives, and supports decision-making by collecting and presenting the necessary information for individuals and groups to make informed choices.

In order to prevent uncertainty that can result in irritation among employees and customers, Greenberg and Baron (2008) argue that effective communication is characterized by the use of language that is comprehensible to all parties involved. In primary schools, the head teacher, who serves as the CEO, should strive to maintain communication with the staff. If the person in charge and those who report to them are not aligned, there is little cause for optimism regarding the success of the schools' operational activities, which include providing learners with early and relevant knowledge, skills, and attitudes. The CEO

should thereafter visit the teachers at their designated work locations, such as classrooms, improve the monitoring process by ensuring a systematic approach and, whenever feasible, establish a transparent and amicable communication channel.

According to Brand (2007) cited in Tubbs and Moss (2010), abiding by basic principles is crucial for successful communication: Articulate your thoughts clearly, express your intended meaning, refrain from using acronyms and abbreviations, and identify the accurate common denominators. Effective communication facilitates a transfer of meaning between two individuals, enabling them to separately express their emotions and knowledge (Newstrom, 2011). The presence of efficient communication between the teacher and student often leads to enhanced academic performance among the pupils.

Efficient communication is a fundamental requirement for achieving organizational objectives. No matter how brilliant an idea may be, it is essentially irrelevant until it is conveyed or comprehended by people who are interested in it (Okumbe, 1998). Successful communication serves as a catalyst for motivating teachers, students, and other stakeholders. Effective communication within an educational institution ensures that all members are well-informed about the tasks to be completed, their current performance, and opportunities for improvement. This is achieved through a well-designed feedback system (Okumbe, 1998).

A critical look at the studies reviewed on syllabus coverage reveals variations in research designs, sample sizes, sampling techniques, and analytical approaches, which influence the reliability and applicability of their findings. For instance, Maina et al. (2011), who argued that the Kenyan primary school curriculum is too broad for the time allocated, primarily

employed a descriptive survey design. While this design is useful in capturing perceptions and practices of teachers and learners, it often lacks the capacity to establish causal relationships, thereby limiting the extent to which findings can be generalized. Similarly, Ireson and Rushforth (2004) applied a mixed-method approach, combining quantitative and qualitative elements. Although this provided a deeper understanding of supplementary tuition practices, the relatively small sample sizes in their case studies weakened the statistical power of their results.

In contrast, Dindyal and Besoondyal (2007), in their study on private tutoring in Mauritius, utilized a larger and more representative sample. Their survey-based research employed stratified sampling to ensure inclusion of learners across ability levels, thus enhancing the generalizability of their findings. However, reliance on self-reported data from students and parents raises concerns about response bias, which may have affected the accuracy of the reported reasons for seeking private tuition. Regarding learner entry behavior, Duncan et al. (2007) based their conclusions on longitudinal data analysis. Longitudinal designs offer stronger evidence on the effects of early skills on later academic achievement compared to cross-sectional studies. Nonetheless, longitudinal studies are often resource-intensive and subject to attrition, which can compromise the representativeness of the final sample.

Murawski and Dieker (2004) and York-Barr et al. (2004), who examined team teaching, relied on case study methodologies within specific school contexts. While their work highlighted the benefits and drawbacks of collaborative teaching, the limited sample size and purposive sampling methods used limit external validity. Their results may not

adequately reflect the diverse teaching contexts in different regions, such as Nambale Sub-County.

On data analysis, descriptive statistics such as means, frequencies, and percentages were widely used in most of the reviewed studies (e.g., Maina et al., 2011; Simatwa, 2010). While these analyses provided useful summaries of trends in syllabus coverage and time management, they fell short of establishing statistically significant relationships between practices and outcomes. More rigorous techniques, such as regression analysis or structural equation modeling, would have been more effective in isolating the specific influence of variables like absenteeism, teacher workload, or classroom discipline on syllabus coverage and academic performance.

According to Wambui and Nyagah (2017), schools that ensure full and early syllabus coverage tend to perform better in national examinations than those that do not. Mugambi (2018) further observes that delayed syllabus coverage limits learners' exposure to examination content and reduces revision time, ultimately affecting performance. Effective syllabus completion allows pupils to consolidate knowledge and practice adequately before assessments (Muriithi, 2019).

However, despite these findings, most studies have focused on secondary education contexts or generalized national performance trends, leaving a gap in understanding how early syllabus coverage specifically influences KCPE performance in public primary schools, particularly in Nambale Sub-County. This study seeks to fill that gap by examining how teachers' adherence to lesson plans and termly coverage schedules relates to pupils' performance in KCPE examinations.

### **2.3 Homework assignments and academic performance**

The notion of education is so expansive that it cannot be delimited to the realm of formal education. On the contrary, education is a continuous and lifelong endeavor that takes place in both educational institutions and other settings, therefore highlighting its multifaceted nature (Baydogan & Sahin 2001). While informal education is a product of personal experiences facilitated by social institutions such as families, religious practices, and mass media, formal education is often regarded as the duty of schools in almost all countries (Bloom, p.9). Yet, education does not occur just within the confines of a school. These institutions collectively represent only a portion of it.

The second component of formal education persists at home through the completion of homework assignments. In essence, the process of acquiring knowledge at school should be strengthened at home, and it is the only feasible approach to facilitate youngsters in developing the ability to study consistently. Regarding the matter, Celenk (2003) contends that students' academic performance is greatly influenced by various elements such as familial harmony, parents' attitude towards children, and parental engagement in school work. Through the implementation of desirable practices, schools can successfully attain educational objectives.

Nevertheless, it is necessary that academic assignments be supplemented with independent study. Homework is a type of assignment that is to be completed outside of school, either with parental supervision or independently prescribed by teachers. Swanson (2001) contends that homework consists of pre-established tasks designed to strengthen retention of knowledge. It is a widely used learning technique especially designed to strengthen

learning and facilitate future investigation. Homework prepares students for future courses and allows them to use their knowledge and skills in new problems (Civi, 1994).

Epstein (2001) asserts that teachers construct homework assignments with the intention of ensuring students are aware of the learning objectives, therefore establishing the present content of the homework. Undoubtedly, homework plays a significant role in the process of student learning. Nevertheless, Sullivan and Seqieria (1996) contend that the crucial aspect is in the methods by which professors assign assignments. Iigar (2005) asserts that teachers should take into account several factors while assigning homework, such as the student's proficiency level, the level of originality, the duration of the assignment, and the feedback provided. Furthermore, the school, teachers, and parents each bear a substantial responsibility in attaining the objective of homework. Kozmierzak (1994) contends that to enhance the effect and effectiveness of homework as a learning activity, teachers should inquire about the frequency of its completion.

Furthermore, other than enhancing student performance, homework offers several other advantages. It enables children to develop traits of self-control, autonomy, and accountability, instructs them on how to manage their time outside of school, and facilitates their ability to tailor their studies to their abilities and identify their interests. Essentially, homework assignments enable pupils to acquire knowledge outside of the traditional classroom setting (Kapikiran & Kiran, 1990). The beneficial contribution of homework to student progress is contingent upon its meaningfulness and reinforcement of the in-class work. Fuyle and Bailey (1986) asserted that homework serves as a conduit between schools and parents. Teachers ought to apprise parents of the objective of

homework and provide guidance on how to engage their children in the educational process.

Atilgan (2006, p.329) suggests that homework assignments, that follow a similar style, have some drawbacks that can lead to student boredom.

The presence of homework can restrict the amount of time allocated for parent-child or child-environment interactions. Conversely, parents might exert adverse influence on homework activities if they personally complete the homework for their children or if they provide inaccurate responses when prompted to answer homework-related questions. In severe instances, these consequences may lead to academic dishonesty or fabricating information during examinations. The avoidance of these adverse outcomes can be achieved by assigning homework in alignment with the pre-established objectives. An analysis conducted by Dietz and Kuhrt (1960) examined several forms of homework assignments and determined that appropriate homework assignments can enhance student learning and academic performance. From this standpoint, the researcher aims to determine whether adequate homework assignments are provided in public elementary schools in Nambale sub-county and, if so, the reasons behind the poor KCPE result.

### **2.3.1 Types of Homework**

There exist three distinct categories of educational homework objectives: In order to facilitate student development and intentional learning, teachers might employ practice, preparation, and extension (Rosa'rio et al., 2015) to tailor homework assignments. Practice homework is a set of activities that professors assign in class to enhance student speed, show proficiency, review work, prepare for tests, and maintain certain abilities over time

(Rosa'rio et al., 2015). Instructors provide practice and preparatory homework more due to its convenience and time efficiency. The majority of practice homework is assigned in mathematics and spelling to enhance spelling skills and competence in mathematical concepts. Preparatory homework is activities designed to equip pupils for the upcoming lecture (Rosa'rio et al., 2015).

This particular homework is intrinsically connected to pre-learning as described by Vatterott (2009). The homework prompts the schools to reflect on prior classwork and proactively prepare for upcoming subjects. Conducting extension homework facilitates the transfer of prior knowledge to novel assignments (Rosa'rio et al., 2015). Extension homework is employed by teachers to foster academic collaboration and promote creativity among students during the learning process. The completion of extension homework tasks requires the use of real-life, practical application skills, which enhances the learning experience for Students. Rosa'rio et al., 2015 observed that homework designed with a clearly defined objective or extension (to enhance problem-solving abilities) is beneficial for enhancing academic performance in schools.

### **2.3.2 Components of a Worthy Homework and academic performance**

Regardless of prevailing anti-homework or pro-homework movements, homework should not be limited to mere memorization of information. An effective homework assignment should expand students' comprehension and enhance fundamental abilities (Vatterott, 2010). Vatterott contends that the optimal homework assignment should have five key attributes: purpose, efficiency, ownership, competence, and aesthetic appeal. Homework assignments should have a distinct academic objective, such as providing practice,

assessing comprehension, or implementing the knowledge or skills acquired during the class. The assignment should effectively showcase student learning, foster ownership by providing options, and be deeply meaningful to the students. Students must achieve the ability to competently perform homework independently. In order to provide optimal learning outcomes, it is important that the exercises are both fun and fascinating to the student (Vatterott, 2009). According to Schimmer (2016), teachers should inquire about the following aspects to guarantee that homework serves as a fruitful educational opportunity:

- i. Is it learning-centered? Homework should be about vital learning or standards. It should never be about busy work or putting-in time.
- ii. Is it necessary? Is it ideal for students to take time from their home lives to complete an assignment?
- iii. Is it reasonable? Is it reasonable to expect students to complete an assignment within time available? Is it reasonable time given the age of students?
- iv. Is it high quality? Work searches and cross word puzzles are not quality tasks in lieu of other activities or family time.
- v. Are students ready? Students must be ready to work independently in order for the homework to be productive. Otherwise, frustrations and discouragement can result.
- vi. Were students involved? Homework is more productive when students have input on its purpose, what it entails and how much is necessary. Do

students have a choice, whenever possible, in deciding activities beyond instructional minutes (Schimmer, 2016, P.112)

These questions also pertain to Vatterott's (2010) five critical indicators of effective homework. Homework should possess significance, intentionality, effectiveness, individualization, feasibility, and appeal (p.15). Above all, students should have the ability to engage in unrestricted communication with teachers when they encounter difficulties and acknowledge areas where they lack comprehension of a task, without facing any negative consequences such as poor grades or increased homework requirement. Cooper asserts that the effect on homework is intricate, and there is no universally applicable conclusion that applies to all students. Therefore, if homework is offered, it must be tailored to suit the requirements of all learners (Bennett & Karlish, 2006).

#### **2.3.4 Parent Involvement with Homework and academic performance**

Parental participation is associated with both beneficial and detrimental outcomes (Cooper et.al, 2006; Gonida & Cortina, 2014). One detrimental consequence of parental participation is when a parent exerts excessive pressure on themselves to ensure their children finish homework and achieve high academic performance. When parents are actively involved in their children's learning, some experience perplexity regarding teaching methods, particularly in mathematics, and fail to provide effective support to their children (Gonida & Cortina, 2014). Any further assistance provided by parents at home with their children is highly valued by a teacher. Although some parents may feel inadequate in assisting their children at home due to their lack of skills, schools urge

parents to foster a positive relationship with their children, since this enhances confidence and communication abilities.

Research by Cooper et al. (2006), Gonida & Cortina (2014), and Voorheis (2011) indicates that parental involvement fosters a robust connection with the school of their children and enhances healthy communication.

The manifestation of parental engagement in their children's academic development also fosters confidence and enhances the knowledge base of schools. The awareness of parental participation in the relationship between home and school by students leads to increased effort and a higher rate of work completion, therefore enhancing student accomplishment to its maximum potential (Cooper et al., 2006). Bembenutty (2011) stipulates that the parent should assume the following duties in order to be most beneficial in the home work process.

- i. Be a stage manager. Make sure your child has quite, well-light place to do homework. Provide the needed material to do homework.
- ii. Be a motivator. Homework provides a greater opportunity for the parent to tell the child how important the school is. Be positive about homework.
- iii. Be a role model. When your child does homework, don't sit and watch TV. If the child is reading, you read too. Show them that the skills they are practicing are related to things you do as an adult.
- iv. Be a monitor. Watch your child for signs of failure and frustrations. If the child asks for help, provide guidance, not answers.
- v. Be a mentor. When the teacher asks that you play a role in homework, do

it. If homework is meant to be done solely by the student, stay away.

Engaging in homework provides pupils with an excellent opportunity to cultivate self-reliant lifetime learning abilities. Research suggests that parental engagement in homework assignments may influence student achievement by influencing the completion of homework tasks. Educational institutions that prioritize parental engagement in homework might contemplate offering parent seminars aimed at instructing parents on how to effectively participate in their children's schoolwork (Patall, et al, 2008). Are seminars of this nature conducted in public primary schools within Nambale sub-county?

A review of existing studies on homework and academic performance highlights methodological diversity that affects the strength and applicability of their findings. For instance, Celenk (2003) employed a descriptive survey design focusing on family engagement and its effect on students' homework and performance. While this design effectively captured perceptions from parents and teachers, its reliance on self-reported responses may have introduced bias, thereby limiting the objectivity of the results. Similarly, Swanson (2001), who explored homework as a retention tool, based much of his work on experimental classroom settings. Although such quasi-experimental approaches provide deeper understandings into causal relationships, they were often carried out with small, localized samples that limit generalizability to broader populations. Epstein (2001) applied a mixed-method approach by combining surveys with qualitative interviews from teachers and parents. This enriched the understanding of how homework is structured and assigned, but the purposive sampling procedure used may have skewed the data toward more engaged parents and schools, leaving out marginalized populations.

In contrast, Dietz and Kuhrt (1960) employed comparative experimental designs, testing different forms of homework assignments across student groups. While their findings demonstrated the link between structured homework and improved learning outcomes, the dated nature of the study and lack of consideration for modern socio-cultural factors raise concerns about its current relevance.

Ilgar (2005) emphasized the importance of tailoring homework to learner characteristics, drawing on small-scale classroom-based studies. Although such studies provided nuanced, context-specific insights, the limited sample size and lack of randomization in sampling procedures restricted external validity. Similarly, Atilgan (2006), who examined the drawbacks of repetitive homework styles, employed cross-sectional survey techniques with moderate sample sizes. While his statistical analysis included correlations, it did not extend to more rigorous inferential techniques like regression analysis that would isolate the effects of homework frequency from other confounding variables, such as socio-economic background or school type.

Most studies reviewed relied heavily on descriptive statistics such as percentages, means, and frequencies (e.g., Kozmierzak, 1994; Kapikiran & Kiran, 1990). These approaches provided useful summaries of trends but fell short in establishing the statistical significance of relationships between homework practices and performance. More advanced analytical techniques, such as multivariate regression or hierarchical linear modeling, could have helped to account for the complex interplay between homework frequency, parental involvement, and school-level factors.

Homework provides learners with opportunities to reinforce classroom learning, practice

problem-solving, and enhance self-discipline. Epstein and Van Voorhis (2010) argue that and well-structured homework contributes to academic achievement by extending learning beyond the classroom. Similarly, Mwaniki (2018) notes that homework fosters responsibility and allows teachers to monitor learners' progress. Bates (2019) adds that consistent homework practices help pupils internalize concepts and improve test performance.

Despite this, studies on homework frequency have shown mixed results. Some researchers, such as Cooper (2006), caution that excessive or poorly designed homework may lead to learner fatigue and disengagement. Moreover, existing literature rarely contextualizes homework practices within rural or resource-constrained settings like Nambale Sub-County, where parental supervision and learning materials may be limited. This study, therefore, aims to bridge this gap by analyzing how the frequency and feedback of homework assignments affect pupils' KCPE performance in public primary schools.

#### **2.4 Testing and academic performance**

A concerning tendency in Kenya is the prioritization of outstanding performance in national exams by teachers, students, and parents, to the detriment of the physical classroom environment. Rache, et. al (2012) note that Kenya's education system is primarily characterised by Examination centered teaching, in which the sole indicator of performance and learning success is passing examinations. In 2010, a study conducted by MOE revealed that both learners and parents considered classroom tests to be crucial for preparing for various types of questions expected in KCPE.

UNESCO (2000) agrees that teachers are attuned to the details of the test that their students will be undertaking. They prioritize subjects and specific issues that they anticipate will be included in the test while downplaying those that are not. According to the research report, this mentality prioritises National exams over genuine learning objectives. In the study, educators highlighted the need of the classroom process in identifying learners' strengths. This is because there are several learning tasks that are not assessed by the Kenya National Examinations Council (KNEC) at the Kenya Certificate of Primary Education (KCPE), particularly in subjects such as physical education (PE), music, art, and craft. These subjects are crucial for the development of psychomotor skills in students.

According to William and his colleagues (2004), the intense pressure in schools to get better outcomes in externally administered tests or examinations hinders the effectiveness of the classroom process. According to Wafula (2011), most teachers lack familiarity with the significance of in-classroom processes. This is the reason why certain educators opt to replicate tests from textbooks or acquire commercially created examinations by individuals who are not teachers and administer them to the students. Mc Daniel (1994) verifies that the majority of classroom examinations conducted by teachers are extensively derived from textbooks, which are usually authored by professional item writers who lack expertise in education.

However, these assessments may not effectively assist teachers in identifying the strengths and weaknesses of students in their learning competencies. Primary school teachers in Kenya often issue written exams following the Kenyan National Examination Council (KNEC) format throughout the mid-term and at the conclusion of the term or year. These

tests aim to prepare students for the final KCPE examinations (MoE, 2010).

#### **2.4.1 Teaching, Learning and Test**

Knowledge acquisition is always preceded by instruction, and assessments are administered at specific intervals. Typically, tests are administered after a period of instruction, although occasionally they are scheduled before further teaching. Competency tests, placement tests, diagnostic tests, and aptitude tests are required to be administered to students prior to their enrolment in a course. However, what most of us are used to is an achievement test, which is administered upon the completion of a specific course or portion of the course to assess the extent to which students have accomplished or mastered the lesson or topics they have been taught.

Despite the aversion of many teachers to the process of preparing and marking exams, and the apprehension of most students towards taking them, tests are very effective instructional instruments that fulfill at least four purposes. Testing enables the evaluation of pupils and the assessment of their acquisition of expected knowledge. Furthermore, carefully crafted assessments aid in motivating and organizing students' academic endeavors.

According to Crooks (1988), Makeachie (1986), and Wergin (1988), students engage in studying methods that mirror the nature of their future examinations. If students anticipate a fact-based examination, they will have committed information to memory; if they anticipate a test that will demand problem-solving or the integration of knowledge, they will strive to comprehend and apply learned material. Thirdly, tests can provide insight into the effectiveness of your presentation in conveying information. Finally, assessments

can boost learning by offering pupils indications of the subjects or abilities they have not yet fully understood and should focus on. Notwithstanding these advantages, testing is also emotionally intense and anxiety-inducing.

#### **2.4.2 Testing and Academic performance**

Research investigating the effect of testing on student performance dates back to the 1930s (Hertzberg, et al, 1932; Keys, 1934; Kulp, 1933; Turney, 1932). In the experimental study conducted by Keys (1934), an experimental group was administered weekly examinations and assignments, while a control group received monthly tests and homework in an educational psychology course. Upon the conclusion of the intervention, students were administered an unexpected final examination.

The findings indicated that there was no statistically significant distinction between the experimental group and the control group. Conversely, Keys (1939) likewise subjected them to an unexpected test. The results demonstrated that the experimental group exhibited a statistically significant superiority over the control group. According to Keys (1939), the outcomes of the announced examination can be attributed to the thorough preparation of all pupils for the definitive final test. Nevertheless, the outcomes of the unexpected examination demonstrated, as confirmed by the research of Roedigars and Karpickes, that consistent testing enhances the long-term retention of information.

Additional research studies have also shown that consistent testing enhances students' academic performance (Salas-Morera et.al., 2012). Additional research revealed that consistent testing facilitates students in maintaining pace with a particular subject and

enhances their engagement. Furthermore, students demonstrated a significant degree of enthusiasm in engaging in testing (Salas-Morera et al., 2012).

Bangerts Drown et al, (1991) found that students who participated in exams consistently achieved higher scores compared to those who did not participate. However, the magnitude of this effect diminished as the number of tests administered to students increased. One possible explanation for this discovery could be attributed to another finding: Excessive testing duration for instructional purposes (Gholamy & Moghaddam, 2013). During the 2000s, there was a surge in demand to explore the correlation between the frequency of testing and the academic performance of students.

Connor-Greene (2002) conducted a research to evaluate the effectiveness of daily quizzes with announced tests. Her observation was that the limited number of announced tests throughout the year resulted in a tendency to delay tasks and engage in last-minute preparation. Conversely, daily quizzes motivated pupils to finish their homework. She reached the conclusion that consistent testing has a significant role in motivation of pupils to acquire additional knowledge.

#### **2.4.3 Testing as a Retrieval Practice**

In addition to evaluating student learning, testing also enhances student learning (Roediger & Karpicke, 2006). Research by Roediger and Karpicke (2006) shown that administering exams after studying enhances the retention of acquired knowledge for a greater duration compared to studying alone. The phenomenon is alternatively referred to as the testing effect (Roediger & Karpicke, 2006). The retrieval practice is the theoretical framework underlying the testing effect, which is a learning technique that emphasizes the recovery of

information from memory (Agarwal, 2016). By engaging in retrieval exercises, students enhance their memory for the material they are retrieving, therefore reducing the likelihood of forgetting (Agarwal, 2016). Testing is a commonly employed method for retrieval (Agarwal, et al 2012; Brame & Biel, 2015; Roediger, et al, 2011a).

Empirical evidence suggests that using testing as a retrieval technique can have both direct and indirect effects on student learning (Roediger et al, 2011a). Direct effect pertains to the effect of testing on retention, whereas indirect effect encompasses other consequences (such as encouraging students to engage in study) that testing may have. Roediger et al. (2011a) outlined the 10 advantages of testing, both via direct and indirect effects, as follows: Retrieval enhances future knowledge retention, testing reveals knowledge gaps, testing promotes further learning in subsequent study sessions, testing enhances knowledge organization, facilitates knowledge transfer to new contexts, enables retrieval of untested material, improves cognitive monitoring, prevents interference from prior material during new material learning, provides feedback to instructors, and reinforces students' motivation to study (Pp.31). Despite its advantages, Roediger and Pyc (2012) argued that testing is an underutilized instrument in education.

#### **2.4.5 Test Type Questions**

Multiple-choice tests are an evaluative method to which examinees are required to choose the most optimal response from a set of multiple-choice options. The multiple-choice test is the most commonly utilized and objective form of test methodology (Al-Rukban, 2006). The use of multiple-choice tests is widespread in all educational levels, particularly in large

class settings, despite the contention that they hinder critical thinking and prioritize memory over understanding (Kerkman & Johnson, 2014).

Proponents of multiple choice exams argue that if these examinations are well designed and effectively worded, they can assess both high-order and fundamental abilities (Steve, 1997).

Al-Rukban (2006) contends that multiple-choice examinations are effective in assessing different degrees of learning, exhibit objectivity, are easily gradable, dependable, and time-efficient. Today, numerous websites, programs, and software have enabled automatic grading and prompt response for multiple-choice tests, therefore enabling teachers to save a substantial amount of time and effort (Online Testing Tools for Teachers, 2015).

Testing is an essential tool for evaluating learners' understanding and guiding instructional improvement. Black and Wiliam (2018) emphasize that formative assessment enhances learning by identifying knowledge gaps early and informing instructional adjustments. Orodho (2017) found that schools that administer continuous tests tend to perform better in national examinations, as testing keeps learners engaged and accustomed to examination formats.

Nevertheless, prior studies have primarily concentrated on the effect of summative examinations rather than the cumulative effect of testing throughout the academic year. Additionally, limited attention has been paid to how the frequency and quality of testing influence learner motivation and retention at the primary level. This study addresses this gap by exploring how formative and summative tests contribute to improved KCPE outcomes in public primary schools within Nambale Sub-County.

## **2.5 Schools' academic achievement**

Education is widely regarded by different stakeholders and participants as an essential fundamental requirement and entitlement. It exerts a formidable influence in the domains of political, economic, and social growth. Since gaining independence in 1963, the Government of Kenya has consistently prioritised the advancement of the education sector. Educational professionals and policymakers prioritize achievement as a key issue on the national agenda, with a particular emphasis on testing, accountability, curriculum reform, teacher quality, school choice, and other related matters.

It is widely acknowledged that the primary indicators of high-quality education are literacy, cognitive skills, academic success, and advancement to advanced levels of learning. Academic attainment is primarily assessed using scores and transition rates as fundamental indicators. Research indicates that the efforts of several low- and middle-income countries, such as Chile, Brazil, Egypt, and Mexico, to improve the quality of their schools generate significant benefits in terms of children's cognitive abilities, academic performance, and future success in the job market (Delors, 1998).

In Scotland, policy-makers employ academic achievement management and measurement strategies particularly to enhance schools' attainment and improve teacher performance. Academic achievement management has emerged as the primary tool employed by policy-makers to enhance the education system, elevate levels of accomplishment, and ensure greater responsibility of instructors (Ozga, 2003).

Academic accomplishment refers to the ranking of schools based on their scores in a specific examination. At the individual level, it pertains to the grades or scores given to

pupils who take a designated examination. In this study, academic accomplishment is defined as the capacity of a student to demonstrate the knowledge acquired during a certain timeframe and under certain circumstances in a designated examination. The standard of achievement in an examination is a quantitative measure. Scholars have traditionally conceptualized schools' academic accomplishment based on four primary factors: inputs, practices, outputs, and policies (Lugayila, 2002).

In Kenya, examinations are often regarded as reliable indicators of academic success (Maiyo, 2009). The system is primarily characterised by examination-focused instruction, where pass marks serve as the standard for success due to the absence of an internal mechanism for measuring learning progress at other stages of an educational cycle. Secondary school placement and admission are contingent upon the successful completion of the KCPE examination in standard eight (Michael, Miguel & Rebecca, 2004). The KCPE examination is graded on a scale of 0 to 500. To enhance the performance of schools, classroom evaluation is consistently conducted. School assessment refers to the quantification of exams, homework assignments, and internal examinations that are conducted and supervised in different primary schools. Classroom assessment enables teachers to achieve valuable feedback on the content, extent, and quality of their students' learning. This information can then be used to redirect their teaching and learning efforts, so enhancing efficiency and effectiveness for both teachers and students (Angelo and Cross, 1998).

By closely monitoring students during the learning process, gathering feedback on their learning, and intentionally designing small-scale classroom experiments, teachers can gain

valuable insights into how students learn and, more precisely, how students react to different teaching methods (Bloom, 1982). This greatly enhances the competitiveness and preparedness of schools to effectively manage both internal and external examinations, therefore boosting their academic performance. Does this phenomenon occur in schools located in Nambale sub-county?

A concerning tendency in Kenya is the prioritization of outstanding performance in national exams by teachers, students, and parents, to the detriment of the physical classroom environment. Rache et al. (2012) note that Kenya's education system is primarily characterised by examination-centered teaching, in which the sole indicator of performance and learning success is passing examinations. In 2010, a study conducted by the Ministry of Education (MOE) revealed that both learners and parents considered classroom tests to be crucial for preparing for various types of questions expected in KCPE. UNESCO (2000) agrees that teachers are attuned to the details of the test that their students will be undertaking. They prioritize subjects and specific issues that they anticipate will be included in the test while downplaying those that are not. According to the research report, this mentality prioritises national exams over genuine learning objectives. In the study, educators highlighted the need of the classroom process in identifying learners' strengths. This is because there are several learning tasks that are not assessed by the Kenya National Examinations Council (KNEC) at the KCPE, particularly in subjects such as physical education (PE), music, art, and craft. These subjects are crucial for the development of psychomotor skills in students.

According to William and his colleagues (2004), the intense pressure in schools to get better outcomes in externally administered tests or examinations hinders the effectiveness of the classroom process. Wafula (2011) argues that most teachers lack familiarity with the significance of in-classroom processes. This is the reason why certain educators opt to replicate tests from textbooks or acquire commercially created examinations by individuals who are not teachers and administer them to the students. McDaniel (1994) verifies that the majority of classroom examinations conducted by teachers are extensively derived from textbooks, which are usually authored by professional item writers who lack expertise in education. However, these assessments may not effectively assist teachers in identifying the strengths and weaknesses of students in their learning competencies. Primary school teachers in Kenya often issue written exams following the KNEC format throughout the mid-term and at the conclusion of the term or year. These tests aim to prepare students for the final KCPE examinations (MOE, 2010).

The reviewed studies on testing and academic performance employed varied methodologies that affect the credibility and generalizability of their findings. For example, the MOE (2010) study that examined parental and learner perceptions of classroom tests relied heavily on large-scale surveys. While this approach captured broad national trends, it lacked in-depth qualitative insights into how different schools implement classroom assessments. Similarly, UNESCO (2000) based its findings on cross-country comparative reports using descriptive survey designs. Although this provided useful international perspectives, the lack of standardized sampling frames raises questions about representativeness and comparability across contexts.

Rache et al. (2012) utilized descriptive research designs focusing on the Kenyan education system's exam-centered culture. The study's reliance on purposive sampling of specific schools limits the ability to generalize findings across the country. Moreover, their analysis employed mostly descriptive statistics, which summarize patterns but fail to establish causal links between testing emphasis and actual student outcomes. On the other hand, William et al. (2004) used experimental and quasi-experimental approaches to examine the effect of test pressure on classroom practices in the UK. These designs offered stronger causal evidence than descriptive surveys. However, differences in socio-cultural and institutional contexts mean that findings cannot be directly applied to Kenya without caution. McDaniel (1994), who studied textbook-based tests, mainly used document analysis and case studies. While rich in detail, this qualitative approach involved small sample sizes and lacked statistical analysis, thus limiting external validity.

Wafula (2011) employed a case study methodology focusing on selected Kenyan schools. Though the in-depth approach offered context-specific insights into classroom testing practices, the small, non-random sample restricted generalizability. Additionally, the analysis relied on thematic interpretation without triangulating findings with quantitative data, thereby limiting methodological rigor.

Academic achievement reflects the overall effectiveness of a school's instructional practices, learning environment, and administrative support. Oketch and Somerset (2010) assert that school performance is a product of multiple interrelated factors, including teacher quality, availability of learning resources, and classroom management. Onsomu et

al. (2014) found that schools with strong instructional leadership and consistent evaluation systems record higher mean scores in KCPE.

However, most of these studies have analyzed academic achievement at the county or national level, offering little insight into the specific teaching and learning practices that drive school performance at the sub-county level. The current study fills this gap by examining how specific teaching practices namely syllabus coverage, homework frequency, and testing practices jointly affect school academic achievement in Nambale Sub-County.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The present chapter outlines the approach employed in the investigation. A comprehensive examination of the research design, target population, sample size and sampling processes, research instruments, validity and reliability of the instruments, data collecting procedures, and data analysis is provided in this chapter.

#### 3.2 Research Design

Research design refers to the comprehensive strategy for acquiring resolving the questions or hypothesis under investigation. The research design employed in this study was correlational. A correlation research design is the technique of observing two variables to determine a statistically significant link between them. The objective of correlation is to ascertain variables that exhibit a statistical link such that a modification in one variable results in a modification in the other variable.

Furthermore, it indicates the magnitude and/or orientation of the correlation between the variables. For the purpose of determining the status without changing factors under investigation, the researcher administered a questionnaire to head teachers and class eight subject teachers from the studied schools. An analysis of the data was conducted using tabulation. The selection of the design was based on the fact that surveys enable the gathering of extensive samples with diverse attributes in a limited timeframe, hence offering numerical representations of certain segments of the population. Furthermore, apart from its suitability for thorough study, the design enables the researcher to gain a

deeper understanding of a population by studying a subset of it. The design enables the creation of links among the variables under investigation.

### **3.3 Study Area**

The sub-county is delineated into two educational zones, namely Bukhayo Central and Bukhayo East/North zones. This study is motivated by the absence of published research evidence supporting the effect of teaching and learning techniques on KCPE performance in public primary schools in Nambale sub-county. The research site is identified as Nambale sub-county, situated inside Busia County. The sub-county covers an area of around 237.3 square kilometers and shares borders with Kakamega County to the east, Bungoma Sub County to the northeast, Butula Sub-County to the southeast, Teso District to the south, and Busia Sub-County to the west. The selection of Nambale Sub-County for the study is based on its notable low KCPE performance for the years 2017-2021. Furthermore, Nambale Sub-County exhibits diverse school characteristics, including variations in teacher–pupil ratios, resource allocation, and instructional practices, making it a suitable setting for examining how different teaching and learning practices influence pupils' academic performance. The area also represents a typical rural educational context where infrastructural and pedagogical challenges intersect, providing a fertile ground for exploring strategies that could enhance learning outcomes.

Geographically, the sub-county is one of the seven that make up Busia County and is divided into two education zones, Bukhayo Central and Bukhayo East/North. Academically, however, the sub-county has consistently registered poor performance in the KCPE over the years. The KCPE mean scores for both public and private schools between 2017 and 2021 were 249.47, 250.03, 246.04, 249.39, and 254.32, respectively, out of a

possible 500 marks. These results reveal a persistent pattern of underachievement and place Nambale Sub-County below the county average in the same period.

Further, Nambale Sub-County has 48 public primary schools, which makes it a sizeable sample space for examining teaching and learning techniques and their relationship to KCPE performance. Despite this relatively large number of institutions, the sub-county has continued to exhibit weak academic outcomes. The absence of published empirical evidence that links instructional approaches to KCPE performance in this area further justifies its selection. While focusing on Nambale Sub-County, the study not only addresses a critical gap in existing research but also seeks to generate insights that could inform interventions aimed at improving performance in public primary schools within the sub-county and the wider Busia County. Nambale Sub County has consistently achieved mean scores lower than those of Busia County in the specified years.

**Table 3.1 KCPE performance**

<b>Sub-counties/County</b>	<b>Years/ Mean scores</b>				
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Bunyala</b>	280.72	274.15	282.1	279.70	285.78
<b>Busia</b>	265.70	261.66	269.5	270.75	277.8
<b>Teso south</b>	245.01	248.02	256.63	251.37	247.72
<b>Butula</b>	250.12	252.32	250.04	256.90	256.03
<b>Teso North</b>	244.83	245.31	256.29	241.25	241.33
<b>Samia</b>	258.78	256.16	250.27	254.32	249.87
<b>Nambale</b>	249.47	250.03	246.04	249.93	254.32
<b>BUSIA COUNTY</b>	256.38	255.38	258.70	257.75	258.98

*Source: County Education Office (2022)*

### 3.4 Study Population

The unit of analysis for this study was the school, since teaching and learning practices vary across schools rather than among individual respondents. Accordingly, the study population comprised all public primary schools in Nambale Sub-County, categorized by educational zone and school type. The sub-county has a total of 48 public primary schools, of which 20 are located in the Central Zone and 28 in the East/North Zone.

Within these schools, the study targeted the head teachers and class eight subject teachers, who are directly involved in teaching, learning supervision, and performance evaluation. This group was considered most knowledgeable about the instructional practices and academic outcomes being investigated. The total respondent population, therefore, included 48 head teachers (one from each school) and 288 class eight subject teachers, distributed proportionally across the two zones, with 120 teachers drawn from the Central Zone and 168 teachers from the East/North Zone.

In line with the conceptual framework, the study also recognized variations in school characteristics such as school type (boarding or day), school size, and teacher–pupil ratio, which were factored into the sampling and analysis to account for potential differences in teaching and learning practices among the schools.

**Table 3.2 Target Population**

<b>Category</b>	<b>School Type</b>	<b>Number of Schools</b>	<b>Head Teachers</b>	<b>Class Eight Teachers</b>	<b>Total Respondents</b>
<b>Central Zone</b>	Day Schools	16	16	96	112
<b>Central Zone</b>	Boarding Schools	4	4	24	28
<b>East/North Zone</b>	Day Schools	22	22	132	154

<b>East/North Zone Total</b>	Boarding Schools —	6 <b>48</b>	6 <b>48</b>	36 <b>288</b>	42 <b>336</b>
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Source (Data, 2022)

### 3.5 Sample Size and Sampling Procedure

The schools included in the sample were chosen using the stratified random sampling method. The educational institutions were classified according to the educational zones in the sub-county, namely the Bukhayo Central Zone and Bukhayo East/North zone. The stratified sampling technique was employed to identify sub-groups within the population and determine the proportions of each sub-group that will be included in the study sample. The process involves categorizing a population into distinct homogeneous subgroups that possess similar attributes, in order to guarantee fair and equal representation of the population in the sample. Its objective is to achieve proportional representation while considering the variations in sub-group characteristics. In this study, the research population consisted of head teachers and standard eight subject teachers, who were selected to investigate the effect of teaching and learning methods on KCPE performance in public primary schools in Nambale Sub-county. An appropriate sample size was determined using the formulas proposed by Taro Yamane in 1973.

$$n = \frac{N}{1 + N(e)^2}$$

where

n - signifies sample size.

N signifies the population under study. e - signifies the margin error (0.05).

Class eight Subject teachers  $n = \frac{288}{1 + 288(0.05)^2} = 167$  Subject teachers comprising of 70 from Central zone and 97 from East/North Zone. Head teachers

$n = 48 / (1 + 48(0.05)^2) = 43$  Head teachers that constituted 18 from Central and 25 from East/North Zone. Using Yamane (1973) formula: 167 class eight subject teachers and 43 head teachers was used in the study.

**Table 3.3 Sample size**

Category	School Type	No. of Schools	Head Teachers (1/school)	Class Eight Teachers	Total Respondents
Central Zone	Day Schools	16	16	40	56
Central Zone	Boarding Schools	4	4	9	13
East/North Zone	Day Schools	22	22	55	77
East/North Zone	Boarding Schools	6	6	15	21
<b>Total</b>	—	<b>48</b>	<b>48</b>	<b>119</b>	<b>167</b>

### 3.6 Data Collection Instruments

The design of the research instruments was derived from the study's purpose and conceptual framework. This study utilized both a questionnaire and an interview schedule as primary data collection instruments. Questionnaires are essential for gathering data while maintaining the anonymity of respondents. Such practices promote research integrity and encourage free expression of views. The study employed questionnaires because it focused on variables that required statistical correlation, and such information is best collected using a questionnaire (Touliotos & Compton, 1988). The target respondents were generally literate and were therefore expected to complete the questionnaires with ease.

The questionnaire for teachers comprised two sections. Section I contained demographic-related questions designed to collect personal information, teaching experience, and academic qualifications of the teachers. This information was analyzed to establish possible correlations with KCPE performance. Section II consisted of items presented on a

rating scale ranging from 0 to 10, focusing on aspects such as early syllabus coverage, homework assignments, and frequency of testing, which are critical indicators of KCPE achievement in public primary schools.

Similarly, the questionnaire for head teachers consisted of two sections. Section I focused on the head teachers' professional training and administrative experience. Section II contained a rating scale (0–10) emphasizing the head teacher's contribution to school management, supervision of teacher performance, and curriculum implementation through monitoring of syllabus coverage, homework, and testing practices.

In addition, an interview schedule will be used as a complementary data collection tool for school head teachers. This instrument will capture more in-depth insights on instructional leadership, teacher supervision, and school management practices that influence KCPE performance.

### **3.7 Piloting of the study**

A pilot study was carried out before the actual data was collected to determine the reliability, validity and clarity of the research instruments. The pilot study was conducted in four open primary schools, two schools in each educational zone which is Bukhaya central zone and Bukhaya North/East zone. The main study left out these four schools in the sampled schools. Sampling was done in these schools, as they had similar features with the schools to be studied in the primary research in terms of their teacher qualifications, number of pupils and the environment of the schools.

The pilot study was necessary because it enabled the researcher to determine whether the instruments were appropriate for collecting accurate and meaningful data on the effect of

teaching and learning practices on pupils' KCPE performance in public primary schools. Through the pilot, the researcher was able to identify ambiguous questions, detect inconsistencies, and ensure that all items were clearly understood by respondents. Feedback obtained from the pilot study was used to make necessary adjustments to the instruments. Questions that were found to be unclear were rephrased, while those that did not elicit useful information were either modified or removed. The piloting process also helped in estimating the time required for data collection and refining the procedures to be used in the main study.

### **3.7.1 Validity of the instrument.**

Validity refers to the extent to which the findings derived from data analysis accurately depict the phenomena being studied (Kathori, 2004). The content validity of the instrument was demonstrated by the ability of the respondents to comprehend and internalize the content of the questions organized in the questionnaire. Supervisors' opinion was sought to determine the content correctness.

### **3.7.2 Reliability of instruments**

Cohen, et.al; (2007) defines reliability as the extent to which the results of a study remain consistent, trustworthy throughout time, and can be replicated systematically with a comparable or same population. The objective of the pilot study was to verify the appropriateness of each questionnaire. The primary aspects assessed were the appropriateness of the language, the lucidity of the questions, and the duration of time taken by the respondents to complete the questionnaire.

Respondents were administered identical questionnaires specifically tailored to the study's purpose to guarantee dependability. The consistency of the questionnaire guaranteed its reliability and accuracy in measuring the skills considered necessary for the job. This study employed the split half approach to assess the reliability of the data collecting tools. The reliability of the answered questionnaires was tested using Cronbach's alpha. The pre-test questionnaires were subsequently gathered for the purpose of analysis. The questions to be addressed with the responder in order to determine the degree of content validity and dependability. This information was valuable to the researcher in calculating the correlation coefficient between two sets, therefore obtaining an approximated coefficient of reliability. Cohen et al. (2007) indicate that a research instrument is deemed dependable if its reliability coefficient exceeds 0.80. The reliability coefficient for head teachers was 0.81, whereas for teachers it was 0.83.

### **3.8 Data Analysis**

The study objectives and corresponding hypotheses guided the data analysis procedure. Descriptive as well as inferential statistical methods were utilized. Measures of dispersion (range, standard deviation, and variance) and measures of central tendency (mean, median and mode) were used in the descriptive analysis. These had been utilized to generalize and outline the features of the data gathered in the sampled schools and respondents.

To perform the inferential analysis, the study made use of multiple linear regression analysis to determine the impact of each of the independent variables on the dependent variable (KCPE performance). This type of regression was the appropriate one to use since the independent and dependent variables were assessed using an interval scale and the

objective was to establish the strength and direction of the relationship between teaching and learning practices and the academic performance of pupils.

Additionally, Analysis of Variance (ANOVA) was used to test for statistically significant mean differences in KCPE performance across schools exhibiting variations in teaching and learning practices, such as syllabus coverage, frequency of homework assignments, and testing. The application of ANOVA was therefore meant to substantiate whether these variations among the three identified school practices led to significant differences in performance outcomes. All tests were conducted at a significance level of  $\alpha = 0.05$ , implying a 95% confidence level. The degrees of freedom were determined based on the number of predictors and sample size for each model.

The following analyses were conducted per objective:

- Objective One: To determine the effect of early syllabus coverage on KCPE performance in public primary schools in Nambale Sub-County. Data were analyzed using descriptive statistics and multiple linear regression to test the relationship between syllabus coverage practices and KCPE mean scores.
- Objective Two: To examine the effect of homework assignments on KCPE performance in public primary schools in Nambale Sub-County. Descriptive statistics were first used to summarize the data, followed by multiple linear regression to establish the extent to which homework frequency predicts performance outcomes.
- Objective Three: To determine the effect of testing on KCPE performance in public primary schools in Nambale Sub-County. The data were analyzed descriptively,

and inferentially using multiple linear regression, to test whether testing frequency significantly influences mean KCPE scores.

All analyzed data were presented using frequency tables, percentages, and inferential summary tables showing coefficients,  $R^2$  values, and p-values for each regression model.

### **3.9 Ethical Considerations**

The researcher obtained correspondence from Masinde Muliro University of Science and Technology, the director of education in Nambale sub-county, as well as a research authorization letter and a research permit from the National Commission for Science Technology and Innovation (NACOSTI). These documents granted the researcher permission to carry out the study in the selected public primary schools in Nambale Sub-county. The researcher obtained consent from the questionnaire respondents and provided them with an explanation of the study. The researcher guaranteed that all provided information was handled with strict confidentiality and solely utilized for the study's objectives. The researcher guaranteed the participants that their identities and the school with which they were affiliated would remain anonymous throughout the investigation.

**CHAPTER FOUR**  
**PRESENTATION, INTERPRETATION, AND DISCUSSION OF RESEARCH**  
**FINDINGS**

**4.1. Introduction**

This chapter provides an Overview of Data Analysis, Presentation, and Interpretation. The data was examined and presented by the researcher in a concise and coherent manner, while also providing interpretations by deriving meanings from the established data patterns.

**4.2 Response rate**

The results show that out of 210 surveys sent out, all 210 were filled out and returned, yielding a response rate of 100%. This is within the 50% minimum response rate that Thornhill (2012) specified as statistically significant. Table 4.1 shows the results about the response rate.

**Table 4.1: Response rate**

<b>Response Rate</b>	<b>Returned questionnaires</b>	<b>Response rate</b>
Population	<b>210</b>	
Response	210	100%
Total	210	100%

**Source: Field Data (2022)**

The teachers' questionnaire had a return rate of 100%, with no instances of rejection. Their active involvement demonstrates their readiness to contribute to the goals of the study. In

accordance with Mugenda & Mugenda (2010), a response rate of 75% or more is considered sufficient for academic research.

### 4.3 Demographic Information

The section presents the demographic profile from head teachers and class eight subject teachers, with respect to their gender; highest level of education attained, and age distribution.

#### 4.3.1 Gender of the Respondents

An analysis of the gender distribution of participants in the study, as shown in Table 4.2, is important for comprehending the possible effect of teaching and learning methods on the performance of KCPE in public primary schools in Nambale sub-county, Busia County, Kenya. This section elucidates the effect of gender on KCPE performance within the framework of teaching and learning methods, together with supporting evidence from pertinent literature.

**Table 4.2 Gender of the Respondents**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	95	56.9
Female	72	43.1
Total	167	100.0

**Source: Field Data (2022)**

Table 4.2 indicates that 95 respondents, or 56.9%, identified as Male, while the remaining 72 respondents, or 43.1%, identified as Female. Nevertheless, while the men surpassed the

females in number, the margin of difference was minimal. Thus, the results of this study confirm that the effect of teaching and learning methods on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya, were applicable to individuals of all genders and were sensitive to gender.

Hence, this study suggests that the gender of students can influence the manner in which teaching and learning principles are encountered and interpreted in an educational environment. Empirical evidence indicates that variations in learning styles, interests, and preferences based on gender might affect the way students interact with the curriculum and instructional approaches (Archer et al., 2013; Sadker & Sadker, 1994). For instance, there may be variations in the preferences for classroom activities, communication styles, and active involvement levels between girls and boys, which effect their educational achievements.

#### **4.3.2 Highest level of education of respondents**

Table 4.3 displays the distribution of the highest academic qualifications provided by the respondents in the survey. The data presents information on the several levels of academic qualifications attained by the participants, encompassing Certificate, Diploma, Bachelor's degree, and Master's degree. Understanding the potential effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya is facilitated by the information provided in the table, which offers insights into the educational background of the respondents. The various levels of academic certification correspond to distinct levels of skill and pedagogical knowledge that teachers apply in their teaching practices.

**Table 4.3 Education level**

<b>Qualification</b>	<b>Frequency</b>	<b>Percent</b>
Certificate	103	61.7
Diploma	32	19.2
Bachelors	24	14.4
Masters	8	4.8
Total	167	100.0

**Source: Field Data (2022)**

Table 4.3 provides an overview of the participants' highest academic qualifications, showcasing the distribution of respondents across different educational levels. It is evident that the majority of respondents

103(61.7%) hold certificate level of education, teachers with Certificate qualifications may have a positive effect on KCPE performance through their focus on fundamental pedagogical practices and foundational subject knowledge. However, their effect may be limited in addressing more complex teaching and learning challenges. 32(19.2%) hold Diploma level of education, teachers with Diploma qualifications may have a more nuanced understanding of subject matter, enabling them to provide more in-depth explanations and engage students in higher-order thinking.

Their specialized knowledge could contribute to improved KCPE performance, particularly in subjects aligned with their expertise. 24(14.4%) hold Bachelors level of education, teachers with Bachelor's degrees are likely to have a broader and more advanced understanding of teaching and learning theories. They may employ innovative teaching practices and strategies that cater to diverse learning styles, potentially enhancing KCPE performance across various subjects while

8(4.8%) hold Masters level of education.

Teachers with Master's degrees may have an advanced understanding of curriculum development, assessment techniques, and educational research. They can potentially contribute to the design of effective teaching practices that promote critical thinking, problem-solving, and holistic student development, potentially leading to improved KCPE performance. The results suggest that being employed in primary school requires some level of education and that the respondents were academically qualified to participate in this study.

#### **4.3.3 Date of first appointment as a teacher**

Table 4.4 presents the distribution of respondents based on the date of their first appointment as a teacher. The table categorizes respondents into four time periods: 1985-1989, 1990-1994, 1995-1999, and 2000-2004. The data provides insights into the tenure of teachers in the education system and their experience levels, which can be important factors in understanding the potential effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya.

**Table 4.4 Date of appointment as a teacher**

<b>Year</b>	<b>Frequency</b>	<b>Percent</b>
1985-1989	95	56.9
1990-1994	40	24.0
1995-1999	16	9.6
2000-2004	16	9.6
Total	167	100.0

**Source: Field Data (2022)**

Table 4.4 indicates that 95(56.9%) of the respondents were appointed as a teacher

in the year 1985-1989, Teachers appointed during this period have relatively longer experience in the education system.

They may have witnessed changes in teaching methodologies, curriculum reforms, and educational policies over the years. Teachers with longer experience may possess a deep understanding of teaching practices and classroom management. They might have adapted their teaching methods to meet evolving educational needs. Their experience could contribute to effective classroom management and student engagement, potentially positively effecting KCPE performance.

40 (24%) of the of the respondents were appointed as a teacher in the year 1990-1994, Teachers from this time period may have integrated new teaching strategies and pedagogical approaches into their practice. Their ability to adapt to changes in education could influence student outcomes by promoting innovative and effective teaching and learning practices while there was a tie of 16(9.6%) of the respondents were appointed as a teacher in the year 1995-1999 and 2000-2004 respectively.

Darling-Hammond (2000) emphasized the positive effect of experienced teachers on student learning outcomes. Experienced teachers often demonstrate greater mastery of subject matter, pedagogical skills, and classroom management techniques (Ingersoll, 2001). They are more likely to employ effective teaching practices that engage students and promote deeper understanding (Rivkin et al., 2005).

Furthermore, Novak and Korn (2006) highlighted the importance of ongoing

professional development for teachers at all experience levels. Continuous training and exposure to modern teaching methods can enhance the effectiveness of teaching practices. Professional development programs can equip teachers with new strategies to improve student learning outcomes.

#### 4.3.4 Current position

Table 4.5 gives the data concerning the present roles of the respondents with regard to the research on the impact of teaching and learning practices on the achievement of KCPE in public primary schools in Nambale sub-county, Busia County, Kenya.

**Table 4.5 Current position**

<b>Position</b>	<b>Frequency</b>	<b>Percent</b>
Head teacher	25	15.0
Senior Teacher	70	41.9
Teachers	72	43.1
Total	167	100.0

**Source: Field Data (2022)**

Table 4.5 indicates that greater part of the respondents were Teacher. This was confirmed by 72(43.1%) of the respondents who indicated that they were teachers, Teachers are at the forefront of delivering instruction and implementing teaching and learning practices directly with students. Their instructional methods and classroom strategies can significantly affect students' academic performance.

Teachers are central to the study's focus on teaching and learning practices and their effect on KCPE performance. They are responsible for implementing instructional techniques, assessment strategies, and classroom management

approaches that can influence student learning outcomes (Hattie, 2009).

70(41.9%) were senior teachers, Senior Teachers play a vital role in influencing teaching and learning practices at the classroom level. Their experience and expertise can contribute to the dissemination of effective instructional strategies among colleagues. They may also lead professional development initiatives to enhance teaching quality (Harris, Muijs, & Chapman, 2004) while 25(15%) of the respondents indicated that they were Head teachers. Head Teachers have a significant influence on shaping teaching and learning practices within the school. They are involved in decision-making related to curriculum, teacher development, and student support. Their leadership can affect the adoption and implementation of innovative teaching methods and strategies that enhance KCPE performance (Leithwood & Riehl, 2005).

The findings revealed that all the teachers were positioned of responsibility in their respective schools and thus qualified to take part in this study and that sound school leadership and instruction practices have been known to positively influence student achievement. Research by Leithwood and Riehl (2005) emphasized the role of school leaders, including Head Teachers, in creating a positive school climate and promoting effective teaching practices. Harris, Muijs, and Chapman (2004) highlighted the influence of Senior Teachers on teacher professional development and instructional improvement.

Moreover, John Hattie's meta-analysis (2009) underscored the significance of teacher practices in student achievement. Hattie's work emphasized the importance

of evidence-based teaching methods, constructive feedback, and the use of effective assessment techniques in enhancing student learning outcomes.

#### 4.3.5 Date of birth

Table 4.6 displays the distribution of respondents' date of birth in the study on the effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya.

**Table 4.6 Age brackets**

<b>Year</b>	<b>Frequency</b>	<b>Percent</b>
1960-1965	34	20.4
1966-1970	53	31.7
1971-1975	32	19.2
1976-1980	24	14.4
1981-1985	16	9.6
1986-1990	8	4.8
<b>Total</b>	<b>167</b>	<b>100.0</b>

**Source: Field Data (2022)**

Table 4.6 indicates that 53(31.7%) of the respondents were born between 1966-1970, 34(20.4%) of the respondents were born between 1960-1965, 32(19.2%) of the respondents were born between 1971-1975, 24(14.4%) of the respondents were born between 1976-1980, 16(9.6%) of the respondents were born between 1981-1985 while 8(4.8%) of the respondents were born between 1986-1990.

The study suggest that the distribution of respondents' birth years provides insight into the age diversity of educators participating in the study. The varying birth years suggest that the sample includes educators with different levels of experience and exposure to evolving teaching and learning practices over the years.

As teaching and learning practices have evolved with advancements in education

and pedagogical approaches, educators from different birth year ranges may have encountered distinct instructional methods and strategies throughout their careers. This concurs with research on generational differences in teaching practices and attitudes highlights the influence of birth year cohorts on educators' instructional approaches (Cuban, 1992; Rainbird & Ramsay, 2014). Cuban (1992) discussed how teachers' experiences during their formative years effect their teaching practices. Rainbird and Ramsay (2014) explored the influence of generational factors on teaching beliefs and approaches, emphasizing the need to consider generational perspectives in educational research.

#### 4.3.6 Subject taught in class eight

Table 4.7 presents the distribution of respondents' subject specialization for teaching in class eight as part of the study investigating the effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya.

**Table 4.7 Number of subjects taught in class eight**

<b>Subject</b>	<b>Frequency</b>	<b>Percent</b>
Math	79	47.3
English	32	19.2
Kiswahli	8	4.8
Social studies	16	9.6
science	24	14.4
CRE	8	4.8
Total	167	100.0

**Source: Field Data (2022)**

Table 4.7 indicates that majority of respondents (47.3%) teach the subject of Mathematics to class eight students. This indicates that Mathematics is a

prominent subject among the surveyed educators. A significant proportion (19.2%) of respondents specialize in teaching the English language to class eight students. A smaller percentage (4.8%) of respondents teach the Kiswahili subject to class eight students. Another 9.6% of respondents specialize in teaching Social Studies to class eight students. Science is taught by 14.4% of respondents, indicating its presence as a subject of instruction. The subject of Christian Religious Education (CRE) is taught by 4.8% of respondents. This study suggest that the distribution of subjects taught by respondents in class eight provides insights into the subject areas covered in the study.

Different subjects may require varied teaching and learning practices, and educators' specialization in particular subjects could influence their instructional approaches and strategies. This buttress with a research on subject-specific teaching practices emphasizes the importance of tailored instructional strategies for different subjects (Hattie, 2009; Shulman, 1986). Hattie (2009) highlighted the significance of subject matter expertise and effective pedagogical approaches in influencing student achievement. Shulman (1986) introduced the concept of "pedagogical content knowledge" and discussed how subject-specific teaching methods can enhance learning outcomes.

#### **4.3.7 Number of lessons taught in class eight per week**

Table 4.8 presents the distribution of the number of lessons taught by respondents in class eight per week as part of the study investigating the effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya.

**Table 4.8 Number of lessons per week**

<b>Lessons</b>	<b>Frequency</b>	<b>Percent</b>
5 lessons	25	15.0
6 lessons	48	28.7
7 lessons	54	32.3
8 lessons	40	24.0
Total	167	100.0

**Source: Field Data (2022)**

Table 4.8 indicates that 54(32.3%) of the respondents do teach 7 lessons per week, 48(28.7%) of the respondents do teach 6 lessons per week, 40(24%) of the respondents do teach 8 lessons per week, while 25(15%) of the respondents do teach 5 lessons per week. This study suggests that the distribution of the number of lessons taught per week provides insights into the workload and instructional time allocated to class eight students. Different numbers of lessons per week may influence the depth and breadth of content coverage, as well as the amount of time available for various teaching and learning practices.

This study agrees with a research on instructional time allocation emphasizes its role in student learning outcomes. Darling-Hammond (1984) highlighted the importance of sufficient instructional time for effective teaching and learning. A study by Robinson (2011) emphasized the quality of instruction within allocated time as a critical factor in student achievement.

#### **4.3.8 Number of subjects taught by a teacher**

Table 4.9 displays the distribution of the number of subjects taught by respondents

in their respective schools as part of the study focused on investigating the effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya.

**Table 4.9 Number of subjects taught by teachers**

<b>No. of subjects</b>	<b>Frequency</b>	<b>Percent</b>
5 subjects	25	15.0
6 subjects	48	28.7
7 subjects	54	32.3
8 subjects	40	24.0
Total	167	100.0

**Source: Data (2022)**

Table 4.9 indicates that 54(32.3%) of the respondents do teach 7 subjects in this school, 48(28.7%) of the respondents do teach 6 subjects in this school, 40 (24%) of the respondents do teach 8 subjects in this school, while 25(15%) of the respondents do teach 5 subjects in this school.

### **4.3 Effect of early syllabus coverage and KCPE performance**

#### **4.3.1 To establish the effect of early syllabus coverage and KCPE performance in public primary schools in Nambale Sub-County.**

##### **4.3.1.1 Descriptive statistic on early syllabus coverage**

The study sought to establish the effect of early syllabus coverage on KCPE performance in public primary schools in Nambale Sub-County. Table 4.10 presents the results.

**Table 4.10 Descriptive Statistics**

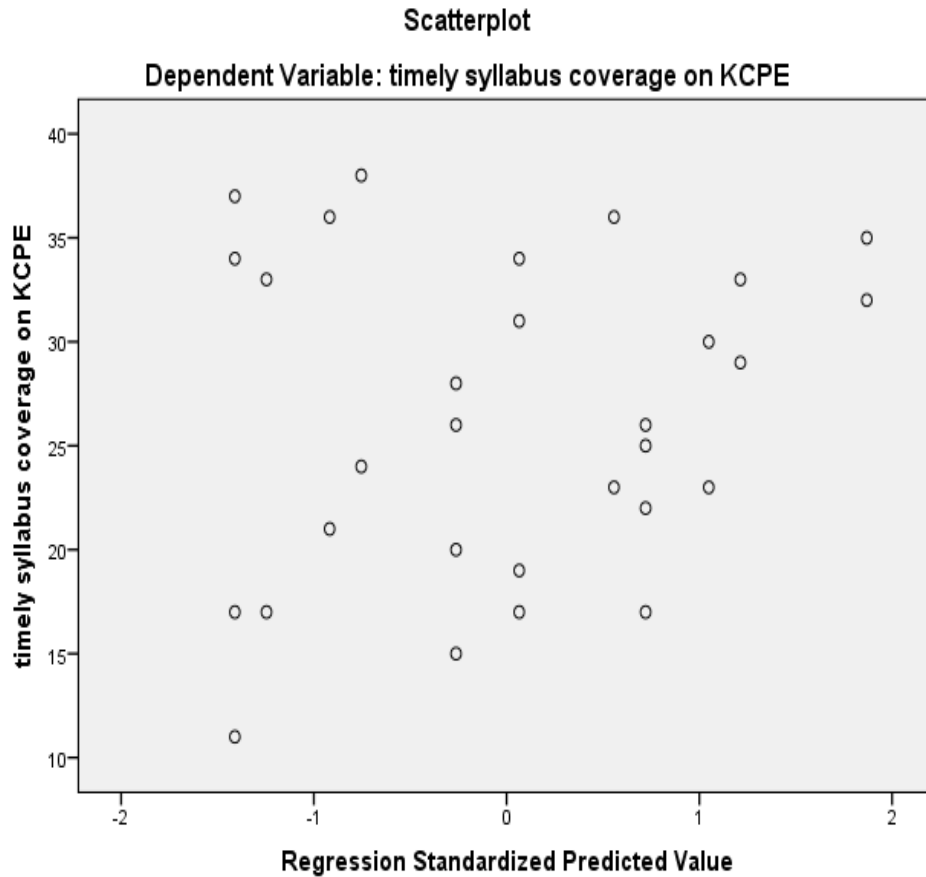
S	N	Minimum	Maximum	Mean	Std. Deviation
early syllabus coverage on KCPE	167	11	43	27.09	6.928

**Source (Field Data 2022)**

The results from Table 4.10 suggests that minimum and maximum scores observed range from 11 to 43 respectively, which was supposed to be the maximum possible score. The mean was 27.09 with a standard deviation of 6.928. Therefore, early syllabus coverage is a crucial factor in student achievement. Research by Marzano (2003) emphasizes the importance of pacing instruction to ensure that curriculum objectives are effectively addressed within the allocated time frame. Effective instructional planning and pacing have been shown to positively affect student learning outcomes.

**4.3.1.2 Descriptive Scattered plot for Homoscedasticity and Heteroscedasticity**

The graph below presents the scattered plot for Homoscedasticity and Heteroscedasticity. Data was also checked for constant variance in the error term.



**Figure 4.1 Scattered plot for Homoscedasticity and Heteroscedasticity**

Figure 4.1 indicates that the scattered plot output appears that the spots are diffused across the chart and therefore form a clear specific pattern, this therefore the study concludes that the larger the spread means that the independent variable affects the dependent variable by a higher proportion.

Interviews were used to collect qualitative data for this study. The next section presents the results obtained from the interviews, starting with the response rates of the selected participants. Significantly, the statement of the purpose under inquiry prominently includes the voices of the participants themselves. The rate of responses to my research requests for

interviews with different chosen individuals was really promising. The initial target number of participants was nearly met within the school, as more school heads and teachers expressed their willingness and availability to be interviewed.

The findings from the interview schedules shows that early syllabus coverage plays a role on KCPE performance. For instance, one head teacher said:

*“We employ tuition sessions in our school in order to cover syllabus and do thorough revision so as to equip the students with knowledge they need to perform better in exams (Source Field data).”*

#### 4.3.1.4 Regression model on early syllabus coverage

The primary objective of the study was to determine effect of early syllabus coverage on KCPE performance in public primary schools in Nambale Sub-County. The regression model is presented as follows in Table 4.11

**Table 4.11 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.336 <sup>a</sup>	.113	-.029	6.188	.113	.796	1	166	.032	.676

a. Predictors: (Constant), Early syllabus coverage

b. Dependent Variable: Academic achievement

**Source: Field Data (2022)**

Table 4.11 indicates that the multiple linear regression results indicate that the p-value (Sig. F Change = 0.032) is less than the significance level of 0.05, implying that early syllabus coverage has a statistically significant effect on KCPE performance among public primary schools in Nambale Sub-County. Therefore, the study rejects the null hypothesis that there is no statistically significant relationship between early syllabus coverage and pupils’ academic achievement.

Although the R Square value (.113) indicates that 11.3% of the variation in KCPE performance can be explained by syllabus coverage, the decision to reject or accept the hypothesis is primarily based on the p-value, which confirms that syllabus coverage is a significant predictor of performance outcomes. These findings align with the observations of Maina et al. (2011), who established that the primary school curriculum in Kenya is extensive, and the time allocated for coverage is inadequate. Consequently, the need for early and comprehensive syllabus completion is crucial to improving learner outcomes.

#### 4.3.1.5 Analysis of Variance

The objective of this study was to analyse the variance in the effect of early syllabus coverage on the performance of students in the KCPE in public primary schools in Nambale Sub-County. The findings are shown in Figure 4.12.

**Table 4.12 ANOVA<sup>b</sup>**

<b>Model</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	121.895	1	30.474	.796	.032 <sup>a</sup>
	Residual	957.305	166	38.292		
	Total	1079.200	167			

a. Predictors: (Constant), Early syllabus coverage  
b. Dependent Variable: Academic achievement

**Source: Field Data (2022)**

As indicated in table 4.12, the calculated F-value stands at 0.796 with p-value at 0.032 that is below the traditional significance level of 0.05. It means that the model is statistically significant, and there is a significant impact of early syllabus coverage on KCPE performance in public primary schools in Nambale Sub-County.

Hence, the study rejects the null hypothesis which stated that there is no statistically significant effect of early syllabus coverage on KCPE performance. The results imply that

variations in syllabus coverage practices among schools contribute meaningfully to differences in pupils' academic outcomes. These findings reinforce the importance of ensuring early completion of the curriculum as a key determinant of improved academic achievement among primary school learners.

#### 4.3.1.6 Coefficient of determination

The objective of the study was to determine the coefficient of determination on the effect of early syllabus coverage on the performance of students in the KCPE in public primary schools in Nambale Sub-County. The findings are shown in Table 4.13.

**Table 4.13 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
1 (Constant)	11.522	20.771		.555	.584			
Early syllabus coverage	.090	.245	-.112	-.367	.716	.164	-.073	-.069

a. Dependent Variable: Academic achievement

**Source: Data (2022)**

Based on this model, it was determined that when all the numerical values of the independent variables are set to zero, the academic performance will be 11.522. The statistical significance of the regression coefficient for Early syllabus coverage (0.090) ( $t=0.555$ ,  $p=0.584$ ) suggests that a one-unit increase in Early syllabus coverage will lead to a corresponding rise of 0.090 to Academic achievement.

Therefore, if the school implements a fresh and up-to-date curriculum, there will be an enhancement in academic performance. This finding aligns with the results of a study conducted by Dindyal & Besoondyal (2007), which also revealed that in Mauritius, private

remedial courses are not just pursued by students with lower academic ability in certain areas, but also by students of all abilities. Students engage in private tutoring for several reasons, such as enhancing their academic performance, being compelled by their parents, seeking curriculum enrichment, addressing their specific challenges, and benefiting from the opportunity to practice and learn more effectively from their private tutors.

#### 4.3.1.7 Control variable and academic performance

This study aimed to examine the correlation between the control variables, namely entry behaviour, home background and academic performance. The findings are presented in Table 4.14.

**Table 4.14 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F	df 1	df 2		
1	.516 <sup>a</sup>	.266	.262	5.953	.266	59.812	1	165	.000	.033

a. Predictors: (Constant), Control variables

b. Dependent Variable: early syllabus coverage on KCPE

#### Source (data 2022)

The model summary indicates a significant correlation ( $R = 0.516$ ) between early syllabus coverage and academic performance. The R Square statistic was 11.3% before moderation, but it dropped to 26.6% after moderation. Indications suggest that the academic performance of students is influenced by their family environment. The moderating term is statistically significant with a P value of 0.000 less than 0.05, suggests that the model is statistically significant. This implies that the relationship between the intervening variables

and academic performance did not occur by chance. These findings indicate that 26.6% of students' academic success may be mostly attributed or explained by their familial context.

#### **4.3.1.8 Discussion**

The primary purpose of the research was to determine how early covering of the syllabus influences the performance of KCPE students in the Nambale Sub-County schools in the public primary schools. The null hypothesis was tested to find out whether the early coverage of syllabus has a statistically significant effect on the achievement of KCPE in the public primary schools in Nambale Sub-County.

The findings of the study given in Table 4.11 show that the model summary was used to explain the variability in the dependent variable that can be explained by the independent factors. The association between the independent factors and the dependent variable had a coefficient of determination (r-square) of 0.113. In this way, it can be concluded that the independent variables, which are syllabus coverage, explain 11.3 percent of the variability in the dependent variable, which is Academic accomplishment..

The regression model findings in Table 4.11 indicate that the coverage of syllabus at an early age plays a statistically significant part in accounting the variation among Academic achievement in public primary schools in Nambale Sub-County. This research therefore rejected the null hypothesis that the early coverage of syllabus has no statistically significant impact on the performance of KCPE in public primary schools in Nambale Sub-County. In these findings, it is indicated that there is a positive impact on academic performance by early coverage of the syllabus. This paper goes along with the findings of a survey carried out by Maina et al, (2011) who reported how primary school curriculum in

Kenya is too wide and the time allocated in the schedule is inadequate. Thus, more time is required to conduct remedial activities.

The results of the analysis of variance given in Table 4.12 reveal that ANOVA was used to determine the appropriateness of the model to the data. The calculated F value was 0.796 with the p value of 0.000. The P-value obtained was greater than the generally accepted value of 0.05.

These findings indicate that the regression equation possessed a high level of predictive power in establishing the relationship between syllabus purview in the early stages and the performance in KCPE in government primary schools in the Nambale Sub-County. The ANOVA showed the statistically significant ( $p > 0.05$ ) correlation between the dependent and the independent variables. The model, therefore, was considered to be appropriate to match the data. In this case, one can predict the impact of early syllabus coverage on the performance of the students in KCPE in publicly-run primary schools in Nambale Sub-County.

Coefficient model investigation showed that at the time all the values of the independent variables are fixed equal to zero, the academic performance is equal to 11.522. The fact that the regression coefficient of Early syllabus coverage (0.090) ( $t=0.555$ ,  $p=0.000$ ) is statistically significant implies that a one-unit increase in Early syllabus coverage will result in a corresponding increase of 0.090 to Academic achievement.

As such, in case a new and current curriculum is instituted in the school, academic performance will improve. This result is in agreement with another study that was carried out by Dindyal and Besoondyal (2007) that also revealed that in Mauritius, the doing of

private remedial courses is not only done by lower ability students in some subjects, but also all the students.

Students engage in private tutoring for several reasons, such as enhancing their academic performance, being compelled by their parents, seeking curriculum enrichment, addressing their specific challenges, and benefiting from the opportunity to practice and learn more effectively from their private tutors.

The theoretical analysis of the intervening factors indicates a significant correlation ( $R=0.516$ ) between early coverage of the curriculum and academic performance. The pre-moderation R Square was 11.3%, but after moderation, it dropped to 26.6%. Indications suggest that the academic performance of students is influenced by their family environment. The moderating term is statistically significant with a P value of 0.000 less than 0.05. These findings suggest that the home environment influences the overall effect of the explanatory factor on academic performance. These findings indicate that 26.6% of students' academic success is mostly influenced or accounted for by their home environment.

#### **4.4 Effect of homework assignments and KCPE performance**

##### **4.4.1 To determine the effect of homework assignments given on KCPE performance in public primary schools in Nambale Sub-County.**

###### **4.4.1.1 Descriptive statistic on homework assignments given**

The study sought to establish the effect of homework assignments given on KCPE performance in public primary schools in Nambale Sub-County. Table 4.15 presents the results.

**Table 4. 15 Descriptive Statistics**

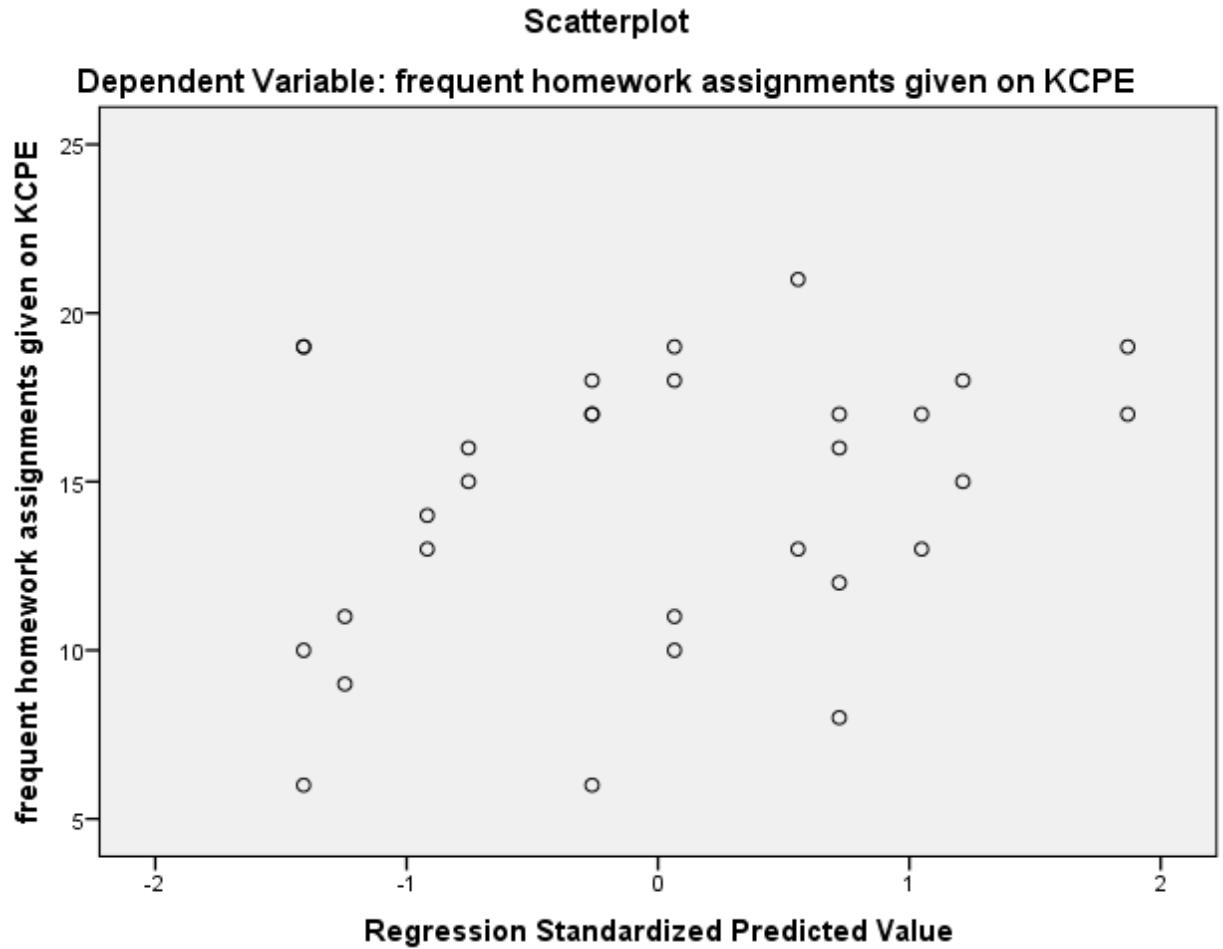
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Homework assignments given on KCPE	167	6	21	14.44	4.083

**Source Field data (2022)**

Table 4.15 indicates that the observed scores range from 6 to 21, which corresponds to the maximum achievable score predicted. The calculated mean was 14.44, accompanied by a standard deviation of 4.083. Thus, homework assignments are a prevalent educational pedagogy, and their influence on student performance has been well examined. A meta-analysis of data on homework by Cooper et al. (2006) revealed a favourable link between the completion of homework and student performance. Distributing suitable homework assignments can offer student's chances to engage in practice, strengthen their understanding, and cultivate self-directed study routines.

**4.4.1.2 Descriptive Scattered plot for Homoscedasticity and Heteroscedasticity**

The graph below presents the scattered plot for Homoscedasticity and Heteroscedasticity. Data was also checked for constant variance in the error term.



**Figure 4.2 Scattered plot for Homoscedasticity and Heteroscedasticity**

The findings of the study in Figure 4.2 indicate that the scattered plot output will show that the spots in the chart are diffused, hence they create a specific pattern, hence it is concluded in the study that the bigger the spread the more proportionate the independent variable on the dependent variable will be.

Qualitative data collection in this study was done through interviews. The third section describes the findings of the interviews beginning with the response rates of the sampled participants. Particularly, the voicing of the participants themselves is the main feature of

the statement of the purpose under inquiry. The number of the replies to my research requests to conduct interviews with various selected people was quite encouraging. The predetermined number of participants was almost achieved in the school since more school heads and teachers showed their desire and accessibility to be interviewed.

The findings from the interview with the school heads shows that the school heads have different perspectives with regards to the influence of homework assignments given on KCPE performance in public primary schools in Nambale Sub-County (as quoted from the interview, words said by one of the head teacher’s)

*“The use of homework has been helpful in the maintaining good academic performance of the pupils since they are put to task on what is expected of them for greater performance.” (Source: Field data).*

#### 4.4.1.4 Regression model on homework assignments

The second objective of the study was to establish the effect of homework assignments given on KCPE performance in public primary schools in Nambale Sub-County. This study therefore modeled influence of homework assignments given on KCPE performance in public primary schools in Nambale Sub-County using linear regression analysis. The regression model is presented as follows in **Table 4.16**

**Table 4.16 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson	
						F	df1	df2		
1	.296 <sup>a</sup>	.088	.055	5.930	.088	2.690	1	166	.002	.606

a. Predictors: (Constant), homework

b. Dependent Variable: Academic achievement

**Source: Data (2022)**

Table 4.16 points out that the model summary has been used to explain the variability of the dependent variable that can be explained using the independent factors. According to the results of the study as indicated in Table 4.16, the results of the multiple linear regression show that the p-value (Sig. F Change = 0.002) is lower than the significance level of 0.05, which shows that homework does have a statistically significant effect on the KCPE performance of the public primary schools in Nambale Sub-County. Thus, the null hypothesis that early syllabus coverage and academic performance of pupils are not statistically related is rejected in the study. The association between the independent factors and the dependent variable had a coefficient of determination (r-square) of 0.088. In this regard, the variability in the dependent variable (Academic accomplishment) can be accounted by the independent factors (commonly, homework assignments provided) in 8.8 percent.

As it is revealed by the regression analysis in Table 4.16, the distribution of homework assignments turned out to be statistically significant in explaining variability in the academic achievement in the public primary schools in Nambale Sub-County. Therefore, this research rejected the null hypothesis whereby homework assignments did not produce statistically significant impact on performance of children in basic education (KCPE) in public primary schools in Nambale Sub-County. Thus, these results indicate that homework assignments positively influence the academic performance..

This study aligns with a study conducted by Celenk (2003) which posits that pupils' academic performance is deeply influenced by various elements such as familial harmony, parental attitudes towards children, and parental engagement in school-related activities.

Through the implementation of desirable practices, schools can successfully attain educational objectives. Nevertheless, it is necessary that academic assignments be supplemented with independent study. Homework is a type of assignment that is to be completed outside of school, either with parental supervision or independently assigned by teaching staff.

#### 4.4.1.5 Analysis of Variance

The objective of this study was to analyse the variance in the effect of homework assignments on the performance of students in the KCPE in public primary schools in Nambale Sub-County. The findings are graphically shown in Figure 4.17.

**Table 4.17 ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.581	1	94.581	2.690	.002 <sup>a</sup>
	Residual	984.619	166	35.165		
	Total	1079.200	167			

a. Predictors: (Constant), homework assignments given on KCPE

b. Dependent Variable: Academic achievement

**Source: Data (2022)**

Table 4.18 results of the analysis of variance indicate that the ANOVA was used to determine the appropriateness of the model to the data collected. The F value calculated was 2.690 and the p-value was 0.002. The P-value obtained is small compared to the normal accepted value, which is 0.05. The findings show that the regression model was an important predictive variable in establishing the relationship between the number of homeworks assignment and the KCPE performance in the public primary schools within Nambale Sub-County. The analysis of variance (ANOVA) brought out that the correlation between the dependent and independent variables was statistically significant ( $p < 0.05$ ). Therefore, the model was considered to be quite appropriate to the data. It may therefore

be utilized to predict the impact of homework tasks on performance of students in KCPE in public primary school in Nambale Sub-County.

#### 4.4.1.6 Coefficient of determination

The objective of this study was to determine the coefficient of determination on the effect of homework assignments on the performance of students in the KCPE in public primary schools in Nambale Sub-County. The results are shown in Table 4.18.

**Table 4.18 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
1 (Constant)	7.254	4.018		1.805	.002			
homework	.439	.267	.296	1.640	.002	.296	.296	.296

a. Dependent Variable: Academic achievement

**Source: Data (2022)**

Based on this model, it was determined that when all the values of the independent variables are set to zero, the academic performance corresponds to 7.254. The statistical analysis revealed a significant regression coefficient of 0.439 for homework assignments given ( $t=1.805$ ,  $p=0.002$ ). This significant coefficient suggests that a one-unit increase in homework assignments given will lead to a 0.439 rise in Academic accomplishment. In such scenario, if the school implements a new homework schedule, academic performance will enhance.

This discovery aligns with the results of a study conducted by Swanson (2001), which implies that homework consists of predefined activities designed to strengthen learning and ensure its long-term retention. It is a widely used learning technique especially designed to strengthen learning and facilitate future investigation. Engaging in homework prepares

learners for subsequent courses and allows them to apply their knowledge and abilities in new contexts.

#### 4.4.1.7 Influence of intervening variable on academic performance

This study aimed to examine the correlation between the intervening variables, namely entering behavior and home background, and academic performance. The findings are presented in Table 4.19.

**Table 4.19 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson	
						F Change	df 1	df 2		
1	.861 <sup>a</sup>	.741	.739	2.086	.741	471.004	1	165	.002	2.292

a. Predictors: (Constant), Control variables

b. Dependent Variable: homework assignments given on KCPE

#### Source (data 2022)

According to the model summary obtained in Table 4.20 Indications, family environment is said to have an impact on the academic performance of students. The statistical insignificance of the moderating term ( $P=0.002$  which is less than 0.05) implies that the model is statistically significant. This means that the connection between the intervening variables and the academic performance was not by chance as a strong correlation ( $R=0.861$ ) was found between home works assignment and academic performance. The pre-moderation R SQ was 8.8 but the post-moderation came down to 74.1. This implies that home environment affects the academic performance of the students. These results indicate that the home environment determines the net impact of the explanatory factor on

academic performance. These results suggest that family environment has a significant impact or explains 74.1 percent of the academic success of students.

#### **4.4.1.8 Discussion**

The second objective of the research was to determine the impact of homework tasks on achievement among students in KCPE examination in the public primary schools under Nambale Sub-County.

In this study, the null hypothesis was tested in the following manner; It was postulated that, the statistically significant effect of homework assignments on KCPE performance in the Nambale Sub-County public primary schools is equal to zero. As such, this research employed the linear regression analysis to approximate the impact of homework assignments on the performance in KCPE in the public primary schools in the Nambale Sub-County.

According to the study findings illustrated in Table 4.17, the model summary has been used to explain the variability in the dependent variable which can be explained by the independent variables. The association between the independent factors and the dependent variable gave a coefficient of determination (r-square) of 0.088. These results are indicative of the fact that a proportion of 0.088 of the variability of the dependent variable, which is Academic accomplishment, could be explained by the independent variables, which in this case is the frequency of homework assignments delivered.

Table 4.17 shows the regression analysis that the frequency of homework assignments given has a statistically significant impact in explaining the variation in Academic success in public primary schools in Nambale Sub-County. Therefore, the null hypothesis was rejected in this research which stated that homeworks assignments do not statistically

significantly influence the performance of children in the basic education (KCPE) in the primary schools in Nambale Sub-County. There are signs that homework assignments positively influence the academic performance. This paper is in line with a research done by Celenk (2003) that hypothesizes that academic achievement of pupils has strong relationships with a number of factors, including familial harmony, and parental attitudes towards children and parental involvement in school related activities. Educational goals can be achieved in schools through the adoption of desirable practices. However, there is a need that academic tasks should be accompanied with self-study. Homework is a genre of work, which is supposed to be done outside of the school setting, either under the supervision of parents or on their own, and assigned by the teaching personnel.

The figures in Table 4.18 indicate that the analysis of variance (ANOVA) was employed to assess the suitability of the model for the data. The computed F coefficient was 2.690 and the p-value was 0.002. The obtained P-value is less than the normally accepted threshold of 0.05. The results indicate that the regression model had a significant predictive power in determining the correlation between the frequency of homework assignments and the performance in the KCPE in public primary schools in Nambale Sub-County. The ANOVA revealed a statistically significant ( $p < 0.05$ ) correlation between the dependent and independent variables. Hence, the model was deemed to be rather suitable for the data. Thus forth, it can be used to forecast the effect of homework assignments on the performance of students in the KCPE at public primary schools in Nambale Sub-County. Coefficient model analysis revealed that when all the values of the independent variables are set to zero, the academic performance is 7.254. The statistical analysis revealed a

significant regression coefficient of 0.439 for homework assignments given ( $t=1.805$ ,  $p=0.082$ ). This significant coefficient suggests that a one-unit increase in homework assignments given will lead to a 0.439 rise in Academic accomplishment. In such scenario, if the school implements a new homework schedule, academic performance will enhance. This discovery aligns with the results of a study conducted by Swanson (2001), which implies that homework consists of predefined activities designed to strengthen learning and ensure its long-term retention. It is a widely used learning technique especially designed to strengthen learning and facilitate future investigation. Engaging in homework prepares learners for subsequent courses and allows them to apply their knowledge and abilities in new contexts.

The model summary from Table 4.19 above indicates a significant correlation ( $R= 0.861$ ) between homework assignments and academic performance. The pre-moderation R Square was 8.8%, but after moderation, it dropped to 74.1%. This indicates that the academic performance of the students is influenced by their home environment. Moreover, the moderating component is statistically significant with a P value of 000. These findings suggest that the home environment influences the overall effect of the explanatory factor on academic performance. These findings indicate that 74.1% of students' academic success is mostly influenced or accounted for by their family background.

#### 4.5 Effect of testing on KCPE performance

##### 4.5.1 To establish the effect of testing on KCPE performance in public primary schools in Nambale Sub-County.

###### 4.5.1.1 Descriptive statistic on testing

In this study, which examines the influence of teaching and learning methods on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya, Table 4.20 displays descriptive statistics for the variable testing on KCPE performance.

**Table 4.20 Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
testing on KCPE performance	167	13	25	18.37	3.667
Valid N (listwise)	167				

**Source (Data 2022)**

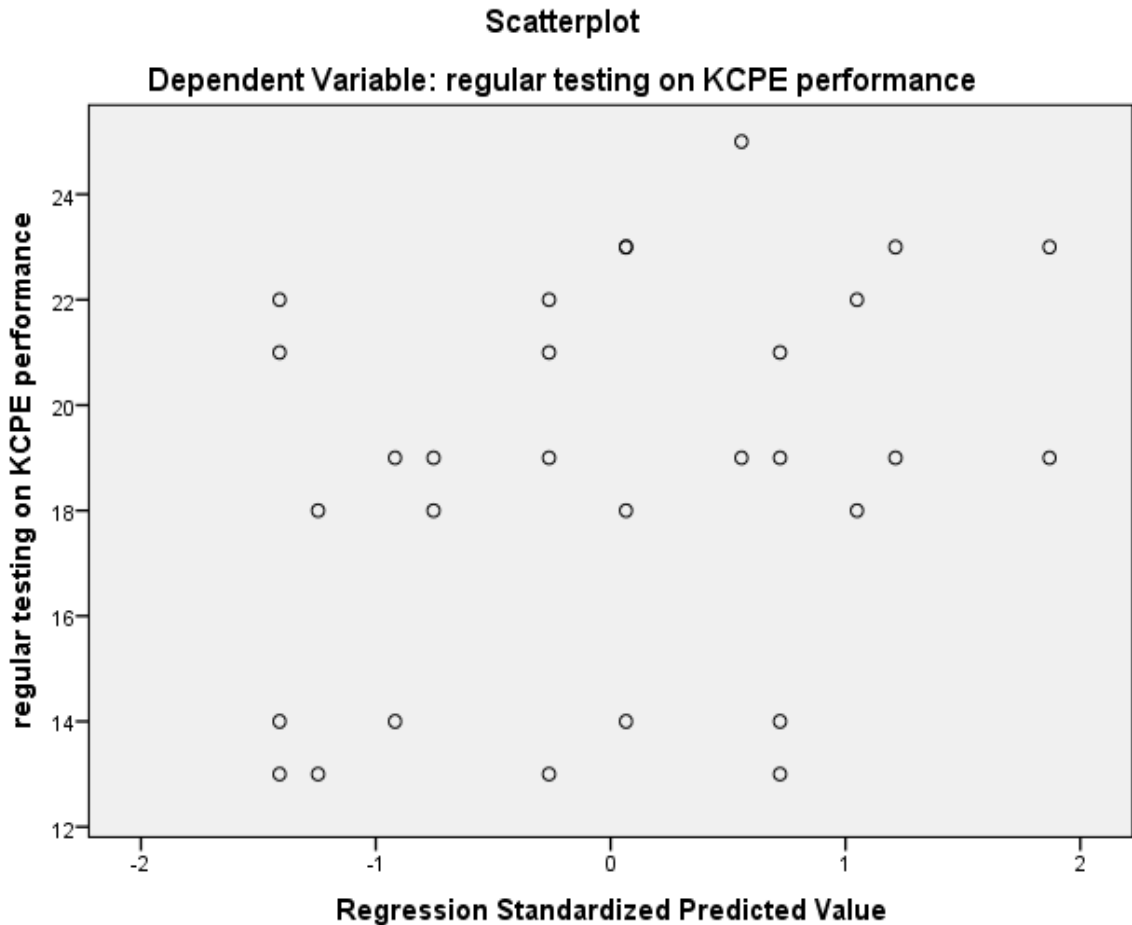
The data shown in Table 4.20 indicates that the observed scores range from a minimum of 13 to a maximum of 25, which was intended to represent the highest achievable score. The calculated mean value was 118.37, accompanied by a standard deviation of 3.667. Hence, the descriptive statistics provide valuable information on the effect of testing on KCPE performance. The comparatively higher average score indicates that, on average, schools are administering tests to evaluate pupils' readiness and advancement towards the KCPE examination.

The interval between the lowest and highest values (13 to 25) represents the range of variation in the degree of routine testing conduct. Testing is a widely employed

pedagogical approach to assess student development and enhance educational achievements. The influential study by Black and Wiliam (1998) examined the existing research on formative assessment and concluded that consistent assessment, when employed in a formative manner, can improve student learning and performance. It offers teachers and students useful insights into areas for improvement and guides educational interventions.

#### **4.5.1.2 Descriptive Scattered plot for Homoscedasticity and Heteroscedasticity**

The following graph displays the scatter plot measuring Homoscedasticity and Heteroscedasticity. Furthermore, the data was examined for consistent variance in the error term.



**Figure 4.3 Scattered plot for Homoscedasticity and Heteroscedasticity**

The analysis of Figure 4.3 indicates that the scattered plot output displays a diffused distribution of spots across the chart, forming a distinct pattern. Consequently, the study concludes that a larger spread implies a greater proportion of influence of the independent variable on the dependent variable.

Interviews were used to collect qualitative data for this study. The next section presents the results obtained from the interviews, starting with the response rates of the selected

participants. Significantly, the statement of the purpose under inquiry prominently includes the voices of the participants themselves. The rate of responses to my research requests for interviews with different chosen individuals was really promising. The initial target number of participants was nearly met within the school, as more school heads and teachers expressed their willingness and availability to be interviewed.

The discussion with the school heads reveals that they hold varying views on the effect of testing on the achievement of students in the KCPE at public primary schools in Nambale Sub-County.

*The school heads said that “on average of 7 testing were administered to the pupils to keep track of the learning process which in turn helps in achieving academic performance of the students in the long run” (source: field Data 2020).*

#### 4.5.1.4 Regression model on testing

The third aim of this study was to investigate the effect of testing on the performance of students in the KCPE in public primary schools in Nambale Sub-County. This study consequently employed multiple linear regression analysis to predict the effect of testing on KCPE performance in public elementary schools in Nambale Sub-County. The present regression model is displayed in Table 4.21.

**Table 4.21 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.324 <sup>a</sup>	.105	.073	5.872	.105	3.295	1	166	.004	.644

a. Predictors: (Constant), testing  
b. Dependent Variable: Academic achievement

**Source: Data (2022)**

According to table 4.21, results of multiple linear regression show that the p-value (Sig. F Change = 0.004) is below the level of significance of 0.05, which implies that testing has a statistically significant influence on KCPE performance in public primary schools in Nambale Sub-County. Thus, the null hypothesis is that the relationship between testing and academic performance of pupils is not statistically significant is rejected in the study. The association between the independent factors and the dependent variable had a coefficient of determination (r-square) of 0.105. These results indicate that the independent variables which are testing may explain 10.5 percent of the variation in the dependent variable, Academic accomplishment.

The statistical significance of testing in explaining the variation on Academic achievement in public primary schools in Nambale Sub-County is confirmed by the results of the regression analysis in Table 4.30. Based on the findings of this study, the null hypothesis that testing had no statistically significant effect on KCPE performance in public primary schools in Nambale Sub-County was rejected. These findings suggest that testing might have a beneficial effect on academic achievement.

The present study aligns with a previous study conducted by Mc Daniel (1994), which affirms that a significant portion of classroom assessments delivered by teachers are derived from textbooks authored by professional item writers who lack formal education. Therefore, such assessments may not assist teachers in identifying the strengths and weaknesses of students in their learning competencies. In Kenya, primary school teachers conduct written assessments following the Kenyan National Examination Council (KNEC)

format after the mid-term and at the conclusion of the term or year. These assessments aim to prepare students for the final KCPE examinations (MOE, 2010).

#### 4.5.1.5 Analysis of variance

The study aimed to implement an analysis of variance to examine the effect of testing on the performance of students in the KCPE in public primary schools in Nambale Sub-County. Table 4.22 presents the results.

**Table 4.22 ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113.623	1	113.623	3.295	.004 <sup>a</sup>
	Residual	965.577	166	34.485		
	Total	1079.200	167			

a. Predictors: (Constant), testing on KCPE performance  
b. Dependent Variable: Academic achievement

**Source: Data (2022)**

According to Table 4.22, ANOVA was used to determine the lack of suitability of the model to the data. The calculated F value was 3.295 and the critical p value was 0.004. The P-value, obtained, is lower than the conventionally accepted value of 0.05. The statistics indicate that, the predictive strength of the regression model was relatively high in determining the relationship between testing and KCPE performance in public elementary schools in Nambale Sub-County. The ANOVA showed that the relationship between the independent and dependent variables is statistically significant ( $p < 0.05$ ). In this way, this model was considered to fit the data appropriately. It can henceforth be employed to predict the impact of testing on the performance of the public primary schools of Nambale Sub-County in the KCPE.

#### 4.5.1.6 Coefficient of determination

The objective of the study was to determine the coefficient of determination on the effect of testing on the results of the KCPE in public primary schools in Nambale Sub-County.

The outcome is shown in Table 4.23.

**Table 4.23 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Correlations		
	B	Std. Error				Zero-order	Partial	Part
1 (Constant)	3.451	5.693		.606	.549			
testing	.545	.300	.324	1.815	.004	.324	.324	.324

a. Dependent Variable: Academic

**Source: Data (2022)**

Based on this model, it was determined that when all the values of the independent variables are set to zero, the academic performance will be 3.451. The regression coefficient for testing (0.545) revealed statistical significance ( $t=0.606$ ,  $p=0.004$ ), suggesting that a one-unit increase in testing will lead to a 0.545-unit increase in Academic attainment. Under such circumstances, implementing testing in the school will lead to an enhancement in academic performance.

This finding aligns with the results of a research conducted by Crooks (1988), Makeachie (1986), and Wergin (1988), which indicate that students study in a manner that mirrors the expected testing format. If students anticipate a fact-based examination, they will commit information to memory; if they anticipate a test that will demand problem-solving or the integration of knowledge, they will strive to comprehend and apply the material accurately. Thirdly, tests can provide insight into the effectiveness of your presentation in conveying information. Finally, assessments can boost learning by offering pupils indications of the

subjects or abilities they have not yet fully understood and should focus on. Notwithstanding these advantages, testing is also emotionally intense and anxiety-inducing.

#### 4.5.1.7 Influence of intervening variable on academic performance

The primary objective of this study was to examine the correlation between the intervening variables and academic performance, specifically focusing on the role of home background. The findings displayed in Table 4.24

**Table 4.24 Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F Change	df 1	df 2		
1	.987 <sup>a</sup>	.974	.973	.598	.974	6086.066	1	16	.000	3.258

a. Predictors: (Constant), Control variables

b. Dependent Variable: testing on KCPE performance

#### **Source (data 2022)**

Statistical analysis of the model showed a significant correlation ( $R = 0.987$ ) between consistent testing and academic performance. The pre-moderation R Square was 10.5%, however after moderation, the R square increased to 97.4%. These findings suggest that the academic performance of students is influenced by their family environment. Moreover, the moderating component is statistically significant with a P value of 000 ( $<0.05$ ). These findings suggest that the home environment influences the overall effect of the explanatory factor on academic performance. These findings indicate that 97.4% of

students' academic success is mostly influenced or accounted for by their family environment.

#### **4.5.1.8 Discussion**

The study's third aim was to assess the effect of testing on the performance of students in the KCPE in public primary schools in Nambale Sub-County. The null hypothesis examined was that testing does not have a statistically significant effect on the performance of students in the KCPE in public primary schools in Nambale Sub-County. This study consequently employed multiple linear regression analysis to predict the effect of testing on KCPE performance in public elementary schools in Nambale Sub-County. The empirical model is displayed in Table 4.21.

Table 4.21 shows that the model summary was used to explain the variability in the dependent variable which could be explained by the independent factors. The correlation between the independent factors and the dependent variable had a value of 0.105 as the coefficient of determination (r-square). These results indicate that the independent variables, testing, could explain 10.5 percent of variability in the dependent variable, Academic accomplishment.

The means of the regression analysis in Table 4.22 supports the fact that the outcome of the test is statistically significant in explaining the variation on Academic achievement in public primary schools in Nambale Sub-County. According to the results of this research, a null hypothesis that testing did not have a statistically significant impact on KCPE performance in public primary in Nambale Sub-County was rejected. Such results can indicate that testing can be positively related to academic success. The current paper

concur with a similar study carried out by Mc Daniel (1994) that confirms that a large percentage of classroom tests administered by teachers are based on textbook work written by their professional items writers with no formal education. Thus, such assessments might not help teachers to establish strengths and weaknesses of students in their learning competencies. In Kenya, elementary school teachers administer written tests in the form of the Kenyan National Examination Council (KNEC) format both during the mid-term and at the end of the term or year. These exams are meant to equip the students with the end-of-year KCPE examinations (MOE, 2010).

The data in Table 4.23 was analyzed using an analysis of variance (ANOVA) to determine whether the data were suitable in relation to the model. The F value calculated was 3.295 and the critical p value was 0.080. The P-value that was obtained was higher than the conventional accepted value of 0.05. The results indicate that the regression equation was a significant predictor of defining the relationship between testing and KCPE performance in the public elementary schools in Nambale Sub-County. The ANOVA indicated that there was statistically significant ( $p < 0.05$ ) correlation between the independent and dependent variables. In this way, the model was considered to be appropriate to the data. Therefore, it can be applied in the future to predict the impact of testing on performance of public primary schools in Nambale Sub-County in KCPE.

Coefficient model analysis showed that in case the values of all the variables of the independent variables are set to zero, the academic performance is 3.451. Testing regression coefficient (0.545) was found to be significant ( $t = 0.606$ ,  $p = 0.000$ ) indicating that a unit increase in testing will result in one-unit increase in Academic attainment. In

that case, the introduction of testing in the school will result in the improvement of the academic performance. This observation can be explained by the study of a study by Crooks (1988), Makeachie (1986) and Wergin (1988) which showed that students study according to the mode of testing that is expected. When the people expect the examination to focus on the factual piece of information, they will already have data stored in the memory; when they expect the test to involve the problem-solving or integration of the knowledge they will work to understand the presented material and apply it. Thirdly, the tests might give an insight about the effectiveness of your presentation to pass information. Lastly, testing has the capacity to enhance learning by providing students with clues about the topics or skills that they are yet to master and learn more. Regardless of these benefits, testing is also an emotionally charged and anxiety-provoking experience.

The model when statistically analyzed revealed that there is a significant correlation between consistent testing and academic performance ( $R = 0.987$ ). The R square of the pre-moderation was 10.5 though on moderation the R square rose to 97.4. These results indicate that the family conditions affect the performance of the students. In addition, the moderating element is statistical with P value of 3.258 ( $<0.05$ ). These results indicate that the home setting moderates the overall impact of the explanatory factor on the performance in academics. These results suggest that family environment of the students is largely affecting or explaining their academic success by 97.4 percent.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter provides a concise overview of the results, conclusions, recommendations, and proposals for future research activities. The goal of this study was to determine the effect of teaching and learning techniques on KCPE performance in public primary schools in Nambale Sub-County, Busia County, Kenya.

#### 5.2 Summary of Findings

##### 5.2.1 Early syllabus coverage and KCPE performance

The effect of early syllabus coverage on KCPE performance in public primary schools in Nambale Sub-County was shown to be statistically significant in elucidating the variability in Academic accomplishment within these schools. This study thus refuted the null hypothesis that early syllabus coverage does not have a statistically significant effect on KCPE performance in public primary schools in Nambale Sub-County. These findings suggest that early coverage of the syllabus has a beneficial effect on academic achievement. Therefore, there is a need for additional time for remedial activities. Thus, it can be inferred that 11.3% of the variability in the dependent variable, Academic accomplishment, can be accounted for by the independent variables, namely syllabus coverage.

##### 5.2.2 Homework assignments and KCPE performance.

The second aim of the study was to determine the effect of homework assignments on the performance of students in the KCPE in public primary schools in Nambale Sub-County. This study aimed to test the null hypothesis that homework assignments do not have a

statistically significant effect on KCPE performance in public primary schools in Nambale Sub-County. The study findings indicated a correlation coefficient of 0.088 between the independent variables and the dependent variable. This suggests that 8.8% of the variability in the dependent variable, Academic achievement, can be accounted for by the independent variables, namely the frequency of homework assignments given. Furthermore, it establishes that the frequency of homework assignments given has a statistically significant role in explaining the variation in Academic achievement in public primary schools in Nambale Sub-County. This study thus refuted the null hypothesis that homework assignments do not have a statistically significant effect on KCPE performance in public primary schools on Nambale Sub-County. These findings suggest that homework assignments have a beneficial effect on academic achievement. Through the implementation of desirable practices, schools can successfully attain educational objectives. Nevertheless, it is necessary that academic assignments be supplemented with independent study. Homework is a type of assignment that is to be completed outside of school, either with parental supervision or independently assigned by teaching staff.

### **5.2.3: Testing and KCPE performance**

The correlation between the independent factors and the dependent variable in an analysis of the effect of testing on KCPE performance in public primary schools in Nambale Sub-County was found to be 0.105. The findings suggest that 10.5% of the variability in the dependent variable, Academic achievement, can be accounted for by the independent variables, namely testing. Furthermore, the statistical significance of testing in explaining the variation in Academic achievement in public primary schools in Nambale Sub-County

is established. Consequently, our study refuted the null hypothesis. There is no statistically significant effect of testing on the performance of KCPE in public primary schools in Nambale Sub-County. Therefore, these findings suggest that testing has a beneficial effect on academic achievement. Therefore, such assessments may not assist teachers in identifying the strengths and weaknesses of students in their learning competencies. In Kenya, primary school teachers conduct written assessments following the Kenyan National Examination Council (KNEC) format after the mid-term and at the conclusion of the term or year. These assessments aim to prepare students for the final KCPE examinations.

### **5.3 Conclusion**

#### **5.3.1 Early syllabus coverage**

The following conclusions were drawn from the study:

The results of the multiple linear regression analysis in the model of early syllabus coverage indicate that the p-value (Sig. F Change = 0.032) is less than the significance level of 0.05, implying that early syllabus coverage has a statistically significant effect on KCPE performance. It was concluded that when teachers adequately complete syllabus early enough, it improves the school KCPE performance.

#### **5.3.2 Homework assignments**

The results of the multiple linear regression analysis in the model of homework assignment indicates that the p-value (Sig. F Change = 0.002) is less than the significance level of 0.05, implying that homework has a statistically significant effect on KCPE performance.

It was concluded that when teachers give homework assignments to the learners, it improves the school KCPE performance.

### **5.3.3 Testing**

The results of the multiple linear regression analysis on the model of testing indicate that the p-value (Sig. F Change = 0.004) is less than the significance level of 0.05, implying that testing has a statistically significant effect on KCPE performance. It was concluded that when teachers administer tests to the learners, it improves the school KCPE performance.

## **5.5 Recommendations**

### **5.5.1 Early syllabus coverage**

The following were the recommendations of the study:

The Ministry of Education, School Board of Management, Head teachers, teachers and parents each should play their active roles to ensure early syllabus coverage to enhance school KCPE performance. Schools should be adequately equipped with instructional materials, textbooks, and teaching aids to facilitate efficient syllabus coverage and effective delivery of the curriculum.

### **5.5.2 Homework assignments**

The Ministry of Education, School Board of Management, Head teachers, teachers and parents should help enhance homework assignments to the learners. Homework should be meaningful, relevant, and of reasonable quantity to avoid overwhelming learners while maintaining its instructional value.

### **5.5.3 Testing**

The Ministry of Education, School Board of Management, Head teachers, teachers

and parents should ensure that formative and summative assessments are integrated into teaching programs to monitor learners progress and enhance academic achievement. Teachers should utilize test results to identify learning gaps and provide targeted remedial rather than merely focusing on summative grading.

#### **5.6 Suggestions for Further Study**

- The study was limited to Nambale Sub-county. A similar study should be done in other sub-counties in Busia county to establish the effect of teaching and learning practices on summative performance in both public and private schools.
- A similar study should be done to determine the effect of teaching and learning practices on academic performance in other classes in the County other than standard eight.

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## APPENDICES

### APPENDIX I: LETTER OF TRANSMITTAL

Dear Sir/Madam,

**RE: RESEARCHON THE EFFECT OF TEACHING AND LEARNING PRACTICES ON KCPE PERFORMANCE IN PUBLIC PRIMARY SCHOOLS IN NAMBALE SUB-COUNTY, BUSIA COUNTY, KENYA**

I am a post graduate student at the Masinde Muliro University of science and technology, I am interest in conducting a research on the above topic and I have sampled your school to get the necessary data to inform the research.

The information acquired will be used for academic purpose and shall not be diverted for any other purpose. All private information disclosed to me during the process of research undertaking shall remain confidential and shall only be limited to usage in this research. I kindly request you to cooperate and allow me to collect information from your school.

Thank you for your cooperation,

Yours faithfully,

Wesonga William

**APPENDIX II: CONSENT**

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw any time without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant sign: \_\_\_\_\_ Date: \_\_\_\_\_

Investigators Sign: \_\_\_\_\_ Date: \_\_\_\_\_

### **APPENDIX III: HEAD TEACHER QUESTIONNAIRE**

This questionnaire is designed to seek information on the effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia county, Kenya. Kindly answer the questions as honestly and precisely as possible. The information given will be treated with utmost confidentiality.

Kindly fill the undersigned questionnaire to the best of your knowledge, information you have concerning the research topic above.

#### **Demographic Information**

Circle as applies to you by choosing the most appropriate response and where comments are required use the space provided.

1. Date of birth \_\_\_\_\_
2. Gender            1 =Male      2 =Female
3. Highest level of education attainment  
1=Certificate      2=Diploma      3 = Bachelors      4=Masters 5 = PhD
4. Date of first appointment as a head teacher \_\_\_\_\_
5. Class eight enrolment of the school.  
40-50  
51-60  
61-70  
71-80  
Above 80
6. Number of streams in class eight  
Below 1

1-2

Above 3

7. In which year was your school established /started?

1970-1980

1981-1990

1991-2000

2001-2011

8. Fill the table below showing your school enrolment per class?

Grade/Class	Boys	Girls	Total
1			
2			
3			
4			
5			
6			
7			

9. What is the number of usable classroom in your school?

Below 1

2-5

6-9

Above 9

10. What is the number of toilet doors in your school by gender?

Below 10

11-20

21-30

Above 30

11. What is the number of teachers in the school by gender?

Below 10

11-20

21-30

Above 30

12. Cycle the source of water used in your school?

1=Tape,

2= Borehole,

3= Rain,

4= From children's home,

5= Any other \_\_\_\_\_

13. Is the school connected to electricity grid?

1= Yes

2= No

14. Please indicate minutes used for the following preps for class eight.

**Morning prep**

10-20min

20-30min

Above 30min

**Evening prep**

10-20min

20-30min

Above 30min

15. How many minutes does your school use for the weekend preps?

Below 100min

100-150min

150-200min

Above 200min

16. On a scale of 0-10, where 0 = Very Poor and 10 = Very Good rate the quality of the following documents in your school.

<b>Documents/Rating</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
Schemes of work											
Lesson plans											
Record of work covered											
Pupils progress records											

**Section A: KCPE performance in public primary schools (2017-2021)**

Kindly fill the information per your school as indicated below:

**a) Please indicate Subject mean scores**

<b>Year and Subject</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
English					
Kiswahili					
Mathematics					
Science					
Social studies/CRE					

**b) Please indicate school mean score.....**

<b>School mean score</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
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**APPENDIX IV: QUESTIONNAIRE FOR TEACHERS.**

This questionnaire is designed to seek information on the effect of teaching and learning practices on KCPE performance in public primary schools in Nambale sub-county, Busia County, Kenya. Kindly answer the questions as honestly and precisely as possible. The information given will be treated with utmost confidentiality.

**Section A: Background information.**

Please **mark** the appropriate response.

1. Gender

1 =Male 2 =Female

2. Date of birth: \_\_\_\_\_

3. Highest academic qualification

1=Certificate                      2=Diploma                      3 = Bachelors                      4=Masters 5 = PhD

4. Date of first appointment as ateacher: \_\_\_\_\_

5. Current position

1. Deputy Head teacher                      2. Senior Teacher                      3. Teacher

**Section B: Effect of early syllabus coverage on KCPE performance.**

Below are questions about effect of early syllabus coverage on KCPE performance. Based on your school, answer them according to your subject.

1. Which subject do you teach in class eight?

\_\_\_\_\_, \_\_\_\_\_,  
\_\_\_\_\_

2. How many lessons do you teach in class eight per week?

\_\_\_\_\_

3. How many subjects do you teach in this school?  
\_\_\_\_\_
4. On what page of the course book used in your subject is your last taught lesson? \_\_\_\_
5. What is the number of pages in this course book?  
\_\_\_\_\_
6. What is your current topic in class 8?  
\_\_\_\_\_

**Section C: Effect of assignments on KCPE performance.**

Below are questions about effects of assignments on KCPE performance. Please answer them according to your subject.

1. How many homework assignments have you given and marked since the start of this term? \_\_\_\_\_
2. How many class assignments have you given and marked for the last four weeks? \_\_\_\_\_
3. What is the total number of pupils in your class?  
\_\_\_\_\_
4. How many homework assignments have you revised with your pupils? \_\_\_\_\_
5. How many homework assignments do you revise with class eight pupils in one week? \_\_\_\_\_
6. How many class eight pupils complete all their homework assignments given in a week? \_\_\_\_\_

**Section D: Effect of testing on KCPE performance.**

Below are questions about effects of testing on KCPE performance.

Please answer them according to your subject.

1. How many tests have you given since the term started?  
\_\_\_\_\_
2. How many of the tests given are marked? \_\_\_\_\_
3. How many of the given tests have you revised with the pupils since the start of the term? \_\_\_\_\_
4. On average how many tests do you give in your subject(s) per month? \_\_\_\_\_
5. How many tests are provided by school examination council per year? \_\_\_\_\_

**Section E: Control variables**

Below are questions about other factors that may influence KCPE performance.

Please answer them correctly about your school.

1. How many teachers teach subject in class eight? \_\_\_\_\_
2. What is the number of course books used in your subject? \_\_\_\_\_

THANK YOU

**APPENDIX IV: INTERVIEWGUIDE**

**1. Background information.** Gender, Age, academic qualification, position and experience.

**2. Early syllabus coverage on KCPE**

- a) How often do you finish the syllabus in your school in a term?
- b) Do Early syllabus coverage help in achieving improved pupils' performance? Give reasons.

**3. homework assignments**

- a) How often does your school give homework assignments?
- b) Does homework assignments help in maintaining good performance? Give reasons.

**4. testing.**

- a) How often do you administer test in a term?
- b) Is testing effective in maintaining appropriate performance in your school? Give reasons.

**5. General questions.**

- a) Is pupils' performance improving in your school? Elaborate.
- b) What challenges does the school face in maintaining appropriate performance?
- c) What do you think can be done to improve and maintain appropriate performance in your school?

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**THANK YOU**

## APPENDIX V: APPROVAL LETTER



### MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

Tel: 056-30870  
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E-mail: [directordps@mmust.ac.ke](mailto:directordps@mmust.ac.ke)  
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P.O Box 190  
Kakamega – 50100  
Kenya

#### Directorate of Postgraduate Studies

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Ref: MMU/COR: 509099

21<sup>st</sup> January 2022

Wesonga William Oronda,  
EPM/G/10/15,  
P.O. Box 190-50100,  
KAKAMEGA.

Dear Mr. Oronda,

#### RE: APPROVAL OF PROPOSAL

I am pleased to inform you that the Directorate of Postgraduate Studies has considered and approved your Masters' proposal entitled: "*Effect of Teaching Learning Practices on KCPE Performance in Public Primary Schools in Nambale Sub-County, Busia County, Kenya*" and appointed the following as supervisors:

1. Dr. Jason Nganyi - MMUST, EPM
2. Dr. Epari Ejakait - MMUST, EPM

You are required to submit through your supervisor(s) progress reports every three months to the Director Postgraduate Studies. Such reports should be copied to the following: Chairman, School of Education Graduate Studies Committee and Chairman, Educational Planning and Management Department. Kindly adhere to research ethics consideration in conducting research.






It is the policy and regulations of the University that you observe a deadline of two years from the date of registration to complete your master's thesis. Do not hesitate to consult this office in case of any problem encountered in the course of your work.

We wish you the best in your research and hope the study will make original contribution to knowledge.

Yours Sincerely,

Prof. Stephen O. Odebero, PhD, FIEEP  
**DIRECTOR, DIRECTORATE OF POSTGRADUATE STUDIES**

## APPENDIX VI: NACOSTIC APPROVAL LETTER

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
RefNo: 649088	Date of Issue: 01/March/2022
<b>RESEARCH LICENSE</b>	
	
<p>This is to Certify that Mr. William Wesonga Oronda of Masinde Muliro University of Science and Technology, has been licensed to conduct research in Busia on the topic: Effect of Teaching and Learning Practices on KCPE performance in Public Primary Schools in Nambale Sub-County, Busia County - Kenya for the period ending : 01/March/2023.</p>	
License No: NACOSTI/P/22/15986	
649088	
Applicant Identification Number	Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code
	
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