

**INFLUENCE OF LEARNERS' PARTICIPATION IN CO-CURRICULAR
ACTIVITIES ON ACADEMIC PERFORMANCE IN PUBLIC SECONDARY
SCHOOLS IN WEST POKOT COUNTY, KENYA**

BY

LOSHANGOLE CLEMENT ROTICH

**A THESIS SUBMITTED TO THE DEPARTMENT OF CURRICULUM AND
EDUCATIONAL MEDIA, SCHOOL OF EDUCATION IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
MASTER OF EDUCATION IN CURRICULUM STUDIES**

MOI UNIVERSITY

2025

DECLARATION

Declaration by the Candidate

This research is my original work and has not been presented for a degree in any university. No part of this research may be reproduced without prior permission from the author and/or Moi University.

Sign

Date.....

Loshangole Clement Rotich

EDU/PGCM/1008/16

Declaration by the Supervisors

This research was conducted under our supervision and is submitted with our approval as university supervisors.

Sign

Date.....

Prof Alice Yungungu

Department of Curriculum, Instruction and Educational Media,

School of Education, Moi University.

Sign

Date.....

Dr Silyvier Tsindoli

Department of Curriculum, Instruction and Educational Media,

School of Education, Moi University.

DEDICATION

This thesis is dedicated to my cherished family, whose support has been a constant companion throughout my academic expedition. Their guidance has consistently acted as my source of resilience and motivation. This endeavor is also dedicated to my mentors and educators, who have nurtured my research skills and intellectual advancement. Their tireless commitment to my education is vividly showcased through this accomplishment.

ACKNOWLEDGMENT

I appreciate God for giving me good health and energy to carry out this research. I also appreciate my supervisors Prof. Alice Yungungu and Dr. Sylvie Tsindoli for their immeasurable counsel, support, and mentorship in the course of this research journey. Gratitude is also extended to my peers and fellow researchers for their collaborative efforts and valuable insights, which have significantly enriched this work. The principals and co-curricular activity teachers of Kapenguria Sub-County, West Pokot County, Kenya, deserve acknowledgment for their generous participation in this study. Their involvement has facilitated a profound comprehension of influence of learners' participation in co-curricular activities on academic performance. Finally, my family merits recognition for their constant encouragement and support, which are pivotal to my academic endeavors.

ABSTRACT

Co-curricular activities are vital for the holistic development of learners, as they foster interest and enhance intellectual capacity. Despite these benefits, there seems to be varying arguments on how learner participation in co-curricular activities influence their academic performance. The purpose of this study therefore was to investigate the influence of learner participation in co-curricular activities on academic performance in public secondary schools in Kapenguria sub-county, west Pokot County. The objectives of the study were to: To establish the influence of education-based co-curricular activities on academic performance in public secondary schools, examine the influence of sport-based co-curricular activities on academic performance in public secondary schools, find out the influence of social-based co-curricular activities and academic performance in public secondary schools and assess the influence of community-based co-curricular activities on academic performance in public secondary schools. The study was anchored on Austins theory of involvement. Mixed method approach and convergent mixed research design were adopted. Target population consisted; 50 principals, 200 teachers of co-curricular activities and 826 form three students from 50 schools. A sample of 277 respondents was selected comprising 232 students, 36 teachers and 9 principals using simple random sampling and Purposive sampling techniques. Data was collected through students' and teachers' questionnaires and interview guides for principals. Quantitative data from the closed ended questions was analyzed using SPSS using descriptive statistics such as frequencies and percentages and presented in tables. Qualitative data from the interview guide was thematically analyzed and presented through narration. The study revealed that: a reasonable number of the learners said that their schools offer academic clubs 84(36.2%), debates clubs 48(20.7%) and field trips which they mostly participated in while article writing 4(1.7%) was the least offered and participated in followed by symposiums 8(3.4%). This was supported by teachers and the interviewed principals. Participation in education based co-curricular activities positively influenced learners' academic performance. Athletics and football were the most popular sports offered in schools while handball, volleyball, basketball, netball and table tennis were least offered according to the students, teachers and the principals. Data from teachers and the interviewed principals confirmed that participation in sport-based activities improves learners' academic performance. Music, drama, scouting and guiding were also offered in schools. Students, teachers and the interviewed principals were in agreement that there was high participation in these activities. Students, teachers and the interviewed principals affirmed that students who participated in social-based activities were able to improve their social and interaction skills that later on enable them to improve in their academic performance. A reasonable number of students 67(28.9%) and teachers 24(66.7%) stated that garbage collection activity was the most offered compared to Red Cross and tree planting. Students, teachers and principals were in agreement that participation in community-based activities positively impacts learners' academic performance. The study concluded that participation in education-based, sports-based, and social-based co-curricular activities positively influenced learners' academic performance. The study recommends proactive planning and management of co-curricular activities by principals and teachers to enhance students' intellectual growth. These recommendations aim to enhance the integration of co-curricular activities into education, benefiting school administrators, teachers, students, and other stakeholders.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURE	xii
ABBREVIATIONS	xiii
CHAPTER ONE	1
INTRODUCTION TO THE STUDY	1
1.0 Introduction	1
1.1 Background to the Study	1
1.2 Statement of the Problem	9
1.3 Purpose of the Study	10
1.4 Objectives of the Study	10
1.5 Research Questions	11
1.6 Justification of the Study	11
1.7 Significance of the Study	12
1.8 Scope of the Study	12
1.9 Limitations of the Study	13
1.10 Assumptions of the Study	14
1.11 Theoretical Framework-Astin Theory of Involvement	14
1.12 Conceptual Framework	15
1.13 Operational Definition of Terms	17
CHAPTER TWO	19
LITERATURE REVIEW	19
2.0 Introduction	19
2.1 Government Policy on Co-curricular Activities in Schools	19
2.2 Education - based Co-curricular Activities and Academic Performance	20
2.3 Sport - based Co-curricular Activities and Academic Performance	24
2.4 Social - based Co-curricular Activities and Academic Performance	30
2.5 Community - based Co-curricular Activities and Academic Performance	35

2.6 Related Studies.....	38
2.7 Chapter Summary	40
CHAPTER THREE	42
RESEARCH DESIGN AND METHODOLOGY	42
3.1 Introduction.....	42
3.2 Research Design.....	42
3.3 Study Area	42
3.4 Target Population.....	43
3.5 Sampling Techniques and Sample Size	44
3.6 Research Instruments	46
3.6.1 Students' Questionnaire	46
3.6.2 Teachers' Questionnaire	47
3.6.3 Interview Guide for Principals	47
3.7 Validity and Reliability of the Research instruments	48
3.7.1 Validity of the Research instruments	48
3.7.2 Reliability of the Research instruments	48
3.8 Data Collection Procedures.....	50
3.9 Data Presentation and Analysis	50
3.10 Ethical Considerations	51
CHAPTER FOUR.....	53
DATA PRESENTATION, ANALYSIS, INTERPRETATION AND	
DISCUSSION OF FINDINGS	53
4.1 Introduction.....	53
4.2 Demographic Information.....	54
4.2.1 Students' Demographic Information.....	54
4.2.2 Teachers' Demographic Information	55
4.3 Education-based Co-curricular Activities.....	57
4.3.1 Education- based Activities Offered in Schools	57
4.3.2 Frequency of Students' Participation in Education-based Co-curricular Activities	59
4.3.3 Students' Responses on Influence of Education- based Co-curricular Activities on Academic Performance	62
4.3.4 Teachers' Responses on Influence of Education-based Co-curricular Activities on Students' Academic Performance.....	65

4.4 Sports Based Co-Curricular Activities.....	68
4.4.1 Sports based Co-curricular Activities Offered in Schools	68
4.4.2 Frequency of Participation in Sports-based Co-curricular Activities in Schools	71
4.4.3 Students' Responses on Influences of Sports-based Co-curricular Activities on Academic Performance	75
4.4.4 Teachers Responses on Influence of Sports-based Co-curricular Activities on Students' Academic Performance	78
4.5 Social based Co-curricular Activities	82
4.5.1 Social Based Co-Curricular Activities Offered in School	82
4.5.2 Frequency of Students' Participation in Social-based Co-curricular Activities	85
4.5.3 Students Responses on Influence of Social- based Co-curricular Activities on Academic Performance	88
4.5.4 Teachers Responses on Influence of Social- based Co-curricular Activities on Students' Academic Performance	91
4.6 Community- based Co-curricular Activities.....	95
4.6.1 Community -Based Co-curricular Activities Offered in School.....	95
4.6.2 Frequency of Students' Participation in Community- based Activities.....	97
4.6.3 Students Responses on Influences of Community- based Co-curricular Activities on Academic Performance.....	100
4.6.4 Teachers' Responses on Community- based Activities on Students' Academic Performance.....	104
CHAPTER FIVE	107
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	107
5.1 Introduction.....	107
5.2 Summary of the Findings.....	107
5.2.1 Education Based Co-Curricular Activities.....	107
5.2.2 Sports Based Co-Curricular Activities.....	109
5.2.3 Social Based Co-Curricular Activities	111
5.2.4 Community Based Co-Curricular Activities.....	112
5.3 Conclusions.....	113
5.4 Recommendations.....	117

5.5 Suggestions for Further Research	118
REFERENCES	119
APPENDICES	127
Appendix I: Introduction Letter	127
Appendix II: Students' Questionnaire	128
Appendix III: Teachers' questionnaire.....	133
Appendix IV: Interview Guide for Principals	138
Appendix V: Research Authorization	141
Appendix VI: NACOSTI Permit.....	142
Appendix VII: Research Authorization County Government.....	143
Appendix VIII: Map of Kapenguria Sub-County, West Pokot County	144
Appendix IX: Plagiarism Awareness Certificate	145

LIST OF TABLES

Table 3.1: Target Population and Sample Size	46
Table 3.2: Reliability Coefficients for the Study	49
Table 4.1: Demographic Information of the Students	54
Table 4.2: Teachers' Demographic Characteristics	55
Table 4.3: Students' Responses to Distribution of Education based Co-curricular Activities Offered in their Schools.	57
Table 4.4: Responses of Teachers on Distribution of Education-based Activities Offered in Schools.	58
Table 4.5: Frequency of Students' Participation in Education- Based Co-Curricular Activities	59
Table 4.6: Teachers Responses on Frequency of Students' Participation in Education- based Co-curricular Activities.	61
Table 4.7: Students' Responses on Education-based Co-curricular Activities.....	63
Table 4.8: Teachers' Responses on Education-based Co-curricular Activities.....	66
Table 4.9: Students Response on the Distribution of Sports-based Co-curricular Activities Offered in Schools.....	69
Table 4.10: Teachers Response on the Distribution of Sports Based Co-Curricular Activities Offered in Schools.....	69
Table 4.11: Students Response on Frequency of Participating in Sports-based Activities	71
Table 4.12: Teachers' Response on Frequency of Students' Participation in Sports- based Co-curricular Activities	73
Table 4.13: Students' Responses on Sport-based Co-curricular Activities	75
Table 4.14: Teachers' Responses on Learners' Participation on Sport-based Co- curricular Activities and their Influence on Academic Performance.....	79
Table 4.15: Students Responses on the Distribution of Social-based Co-curricular Activities Offered in Schools.....	83
Table 4.16: Teachers' Response on the Distribution of Social-based Co-curricular Activities Offered in Schools.....	83
Table 4.17: Students Response on Frequency of Participating in Social-based Activities	85

Table 4.18: Teachers Responses on Frequency of Students Participating in Social-based Activities	85
Table 4.19: Students' Responses on Social-based Co-curricular Activities.....	88
Table 4.20: Teachers' Responses on Students' Participation on Social-based Co-curricular Activities and their Influence on Academic Performance.....	91
Table 4.21: Students' Responses on the Distribution of Community based Co-curricular Activities Offered in their Schools.....	95
Table 4.22: Teachers' Responses on the Distribution of Community based Co-curricular Activities Offered in their Schools.....	95
Table 4.23: Students Responses on Frequency of Participation in Community-based Co-curricular Activities	97
Table 4.24: Teachers Responses on Frequency of Students Participating in Community- based Co-curricular Activities.....	98
Table 4.25: Students' Responses on Community-based Co-curricular Activities.....	100
Table 4.26: Teachers' Perception on Community-based Co-curricular Activities....	104

LIST OF FIGURE

Figure 1.1: Conceptual Framework	16
--	----

ABBREVIATIONS

BOM	Board of Management
CEO	County Education Officer
CSO	Curriculum Support Officer
KNEC	Kenya National Examinations Council
MOE	Ministry of Education
NACOSTI	National Commission for Science and Technology Innovation
PAT	Physical students Achievement Test
SAT	Scholastic Assessment Test
SMT	Sports Management Team
SQUASO	Sub- County Quality Assurance Officer

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Introduction

This chapter presents the background of the study, purpose of the study, research objectives, research questions, statement of the problem, justification of the study, significance of the study, the scope of the study, limitations of the study, assumption of the study, theoretical framework, conceptual framework and operational definition of terms.

1.1 Background to the Study

The primary reason for participation in co-curricular activities has been the promotion of knowledge retention which subsequently leads to success in life. Co-curricular activities have been linked to intellectual, emotional, social and moral development of learners (Acquah & Anti Partey, 2014). Active participation has been positively linked to academic outcomes including grades, test scores, school engagement, and educational aspirations (Fujita, 2016). This section reviews and discusses the nature and type of co-curricular activities and their linkages to academic performance and develops the study objectives that highlight the relationship between co-curricular activities and academic performance.

Co-curricular activities, as the name implies, are those activities, not directly related to the prescribed curricular/formal classwork. These include; sports, athletics, scouting, clubbing, excursions debates and various hobbies to bring social and physical adjustments in the child. Co-curricular activities are not isolated from other developmental contexts; rather, they are embedded in schools and communities and are influenced by families and peers (Veliz & Shakib, 2014). They take place outside

the formal school curriculum and learners voluntarily engage in these activities (Zaman, 2017). Co-curricular activities are an integral part of the school program and are an important outlet for students in today's world. It provides the students with situations, alternative resources, and life-long learning experiences (Acquah & Anti Parthey, 2014).

Co-curricular activities provide varied ways in which students can spend their free time and positively or negatively impact on academic achievements depending on the activity they choose (Daniyal *et al.*, 2012; Olson, 2015). Student participation in co-curricular activities may also lead to improvements in cognitive development, interpersonal and communication skills, identity development, development of desirable affective and attitudinal outcomes, and in job-seeking skills and actual employ-ability (Tan & Pope, 2017). It may contribute to an increase of wellness in mental health, improved students' engagement in school and achievement, strengthen their long-term educational outcomes and find that participation may decrease problem behaviours (Olson, 2015).

Studies indicate that participation in co-curricular activities is linked to improvements in academic performance of the students (bin Rashid *et al.*, 2019; Guest & Schneider, 2015; Fujita, 2016) but they do not have direct relationship with academic subjects (Daniyal *et al.*, 2012). Various studies have demonstrated the beneficial effects of participation in extracurricular activities (Fujita, 2016). This include the linkages between co-curricular and psychological outcomes, such as higher self-esteem and lower rates of depression (Leung, Ng & Chan, 2011). It also predicts a higher likelihood of college attendance, more favorable mental health, and increased civic engagement and is associated with lower dropout rates and reduced problem behavior in areas such as delinquency and substance use (Fujita, 2016). However, participation

in highly competitive extracurricular activities can increase stress and anxiety among the participants (Fredricks & Eccles, 2016).

Schools also structure co-curricular activities to reduce absenteeism, bullying, and high drop-out rates (Daniyal *et al.*, 2012), higher educational aspirations and reduced absenteeism (Acquah & Anti Partey, 2014; Tan & Pope, 2017). This concept of structured co-curricular activities serves as a strategy for schools to build resilience, support pro-social behavior, offer opportunities for engagement with school and related activities, and may provide constructive academic performance and general well-being (Gilman *et al.*, 2014). Further, students assume responsible positions of leadership spur spontaneous interests, affiliations and experiences and provide mentorship opportunities between the teachers and students (Leung, Ng & Chan, 2011).

Participation in high-quality co-curricular activities, such as sports and school clubs, is a productive use of adolescents' leisure time and provide distinct opportunities for growth and development (Fredricks & Eccles, 2016). Participation in co-curricular activities help students develop character and skills such as self-efficacy, self-esteem, positive work, perseverance, locus of control which boost academic performance. It also confers the students with a sense of belonging and group membership which promotes students' self-efficacy and finally, it creates a positive atmosphere for social interaction among students and the school, fostering the development of social ties and social capital (Bekomson *et al.*, 2020).

Co-curricular activities are important for the development of the academic, social, mental, and character of students (Daniyal *et al.*, 2012). Co-curricular activities facilitates: The acquisition of interpersonal skills and positive social norms,

membership in pro-social peer groups and stronger emotional and social connections to one's school. Participation in co-curricular activities encourages the acquisition of some type of supportive relationship, mentor or role model with an adult (Olson, 2015). Co-curricular activities are an avenue for students to refine their interpersonal skills, problem-solving skills, positive interpretation of events, reliance and social support (Ayoub, Fares, and Fares, 2015).

Several activities such as music, parental involvement and sports have an influence on academic performance (Fujita, 2016). Students involved in any kind of sports, participating in drama and other literary activities positively affect their academic performance (Daniyal *et al.*, 2012), Olson (2008), participation in school's music program reduces students' feelings of alienation, promotes individual growth, and provides a common bond between home and school. For instance, student athletes interact with peers, work for the best interest of the team, and learn to follow instructions and may contribute to the student athlete's development of self-identity (Marsh & Kleitman, 2005).

Participation in sports may also provide students with unique development opportunities that positively impact the student's social self-concept. However, sports have been linked to developmental hazards such as delayed identity development, increased level of school deviance, higher rate of alcohol consumption and competition anxiety and self-centeredness (Acquah & Anti Partey, 2014). However, when compared to other co-curricular activities, athletics is weakly linked to academic performance (Fujita, 2016).

A research conducted by the education department of the United States of America discovered that the students who actively participate in the co-curricular activities are

more likely to have a Grade Point Average (GPA) of 3.0 or more as compared to those who are not involved in co-curricular activities (Stephens & Schaben, 2016). Furthermore, among secondary school learners in the United States, participation in co-curricular activities is associated with higher academic attainment, positive social development and a decline in the drop-out rate (Dearman, 2017; Granger 2014; Nelson-Addy, 2017).

Within European context, Sauerwein and Fischer (2016) established that learners in Germany engaging in co-curricular activities had a low propensity for risky behaviours and better class attendance compared to their peers who were not involved in these activities. Tan & Pope, (2017) examined the impact of student participation in co-curricular activities in UK and found out that collaborative co-curricular programs related to increasing students' job awareness and preparation. These studies showed that participation in curricular activities improved on class attendance and student's job awareness.

Within the Asian context, Ma and Shek (2014) examined the impact of the effect of the co-curricular activities among the high schools students in Hong – Kong. The study used a questionnaire and reported that participation in co-curricular activities promoted positive youth development qualities, life satisfaction, positive adjustment, and social interaction. Leung, Ng & Chan (2011) examined whether participation in co-curricular activities could; enhance student learning effectiveness and have positive effects on the academic performance of self-funded degree students in Hong Kong. The study findings showed that participation in co-curricular activities could not enhance student learning effectiveness.

Daniyal *et al.*, (2012) examined the effect of co-curricular activities on academic performance of university students in Pakistan. The study indicated that co-curricular activities positively impacted on academic. The same was true for learners in India participating in co-curricular activities that benefited from regular school attendance and higher self-concept, which translated to better grades (Annu & Sunita, 2014). It therefore appears that co-curricular activities influence educational experiences of learners. Consequently, students participating in these activities are in a position to learn the importance of commitment, teamwork and hard work (Kumar & Kumar, 2012).

In the African context, participation in co-curricular activities is beneficial to learners but not a guarantee for higher academic attainment (Kariyana *et al.*, 2012). Acquah and Anti Partey (2014) examined the linkages between co-curricular activities and academic performance of university students in a Ghanaian University. The study findings indicated that involvement in co-curricular activities impacts positively on students' academic performance. Bekomson *et al.*, (2020) evaluated the impact of the co-curricular activities on self-efficacy of the secondary students in Nigeria. However, in Nigeria, there are two sides to learners' participation in co-curricular activities. In the case of Ibiam and Enendu (2015), learners found it difficult to balance between co-curricular activities and academic performance. On the flip side, Adeyemo (2010) noted that learners in selected high schools in Nigeria participating in school-based co-curricular activities performed exemplary in the physics subject.

Within the East African context, a study in Uganda evaluated the impact of the physical infrastructure for co-curricular activities on learning and discipline among high school students (Sulaiman, *et.al*, 2017). The study observed that availability of physical facilities has huge impact on learning and discipline. In an exploratory study

in Tanzania, Lyoba and Mwila (2022) examined the effectiveness of the co-curricular activities in contributing to the learning process. The study employed questionnaires and interviews and observed that co-curricular activities contribute significantly to the learning process by encouraging learners to attend schools as well as increasing their confidence in learning.

In the Kenyan context, Kamau, *et.al* (2020) examined the influence of competitive co-curricular activities (that is, sports, music and drama) based on the central region sports participation using an ex-post Facto research design. The study finding indicated that student participating in co-curricular activities score highly on self-concept when compared to their non- participating students. Okumu, *et.al*, (2017) evaluated the influence of student participation in music on the academic performance of students in public secondary schools in Nakuru County, Kenya. The study was descriptive in design and randomly sampled students, teachers and principals using questionnaires. The study finding indicated that participation in music is moderately correlated with students' academic performance.

Muthike, *et.al*, (2017) examined the influence of school policies on student participation in co-curricular activities in public secondary schools in central Kenya. The study was descriptive in design and used teachers and principals of public schools. The findings indicated that there are significant linkages between school policies and student participation in co-curricular activities. In a study carried out in all the counties of the former rift valley province, Kimengi, *et.al*, (2014) examined the perceptual effects of student participation in co-curricular activities on academic performance of secondary students in Kenya. Kimengi, *et.al*, (2014) study focused on the student athletes using random sampling technique and observed that participation in co-curricular activities has no significant relationship with academic performance

but there were significant differences in academic performance depending on the type of sport.

According to Kamau, *et.al*, (2020) involvement in co-curricular activities is not entirely recognized in a number of schools in Kenya. On the other hand, there is a growing recognition that co-curricular activities are a vital part of the education curriculum (Kisango, 2016). Though the curriculum comprises both curricular and co-curricular activities, participation in co-curricular activities is limited in a majority of the schools (Ongonga, *et.al*, 2010). Ogoch and Thinguri, (2013) evaluated the effectiveness of the co-curricular policy in developing talent among learners in secondary schools and concluded that the education system does not provide an opportunity to identify and developed talent early in life. Thus, the 8-4-4 education curriculum was criticized because it failed to accommodate co-curricular activities holistically into the curriculum (Amukowa, 2013).

From the foregoing discussion, most of the studies in Kenya have concentrated on the influence of school policies on co-curricular activities, perceptual effects of students participation in co-curricular activities, influence of student participation in co-curricular activities on self-concept and influence of students participation in specific co-curricular activities such as athletics and football on academic performance or on specific subjects like physics and mathematics. This presents a knowledge gap on how learner's participation in specific education- based, sports-based, social-based and community-based co-curricular activities generally impact on the learners academic performance and specifically in Kapenguria sub-county, west Pokot county

It is against this backdrop that the current study seeks to investigate the influence of learners' participation in co-curricular activities on academic performance in secondary schools in Kapenguria sub-county, West Pokot County.

1.2 Statement of the Problem

Whereas, co-curricular activities provide learners with unique opportunities to develop competencies and skills beyond the school setting, the effect of the sports activities and athletics has been debatable over years (Moore, 2016 & Daniyal *et al.*, 2012.). Many studies have mainly examined student's retention and graduation, school policies, perceptual of the students' participation in co-curricular activities and influence of learner participation in co-curricular self-perception.

Despite the significant amount of literature related to the importance of student involvement in co-curricular activities and its potential impact on retention and the promotion of other educational gains, limited empirical data exists regarding the exact influence of learner participation in co-curricular activities on academic performance. (Tan & Pope, 2017). Critics contend that co-curricular activities deflect time away from academic work. For instance, Bekomson *et al.*, (2020) noted that involvement in co-curricular activities does not holistically enhance students' learning effectiveness, further (Ibiam & Enendu, 2015; Mullen, 2016; Bagaya and Sekabembe, 2011) observed that co-curricular activities are hindrance to academic performance. However, other scholars view co-curricular activities as key in improving academic grades (Dearman, 2017; Granger 2014; Nelson-Addy, 2017; Sauerwein, *et.al*, 2016). In the midst of these contradicting arguments, there's need to investigate whether learner participation in co-curricular activities influence academic performance.

The studies in Kenyan context tackled the general aspects of co-curricular activities both athletics, football, music, drama independently thus there is a gap in examining the holistic aspects of co-curricular activities and their influence on academic performance. There is therefore need for research delving specifically linking the involvement of learners in public secondary schools in education-based, sport-based, social-based and community-based co-curricular activities and their academic performance. Therefore, due to contextual, empirical and conceptual gaps, the current study sought to investigate the influence of learners' participation in co-curricular activities on academic performance in public secondary schools in Kapenguria sub-county, West Pokot County.

1.3 Purpose of the Study

The purpose of this study was to investigate the influence of learners' participation in co-curricular activities on academic performance in public secondary schools in Kapenguria sub-county, West Pokot County.

1.4 Objectives of the Study

- i. To establish the influence of education-based co-curricular activities on academic performance in public secondary schools.
- ii. To examine the influence of sport-based co-curricular activities on academic performance in public secondary schools.
- iii. To find out the influence of social-based co-curricular activities on academic performance in public secondary schools.
- iv. To assess the influence of community-based co-curricular activities on academic performance in public secondary schools.

1.5 Research Questions

The study was guided by the following research questions:

- i. How do education-based co-curricular activities influence academic performance in public secondary schools?
- ii. What influence do sport-based co-curricular activities have on academic performance in public secondary schools?
- iii. What influence do social-based co-curricular activities have on academic performance in public secondary schools?
- iv. How do community-based co-curricular activities influence academic performance in public secondary schools?

1.6 Justification of the Study

Participation in co-curricular activities by students in public secondary schools is crucial in offering alternative paths to livelihoods as it confers opportunities to students to participate in co-curricular activities. This would enable the student to progress academically and professionally later on in life. Despite the growing recognition of the importance of co-curricular activities, there is limited empirical literature on their impact on academic performance in the Kenyan context, particularly in West Pokot County and therefore the study seeks aimed to fill this gap.

There is the need to focus on both curricular and co-curricular activities by the schools' administration as this will uplift the general learning outcomes of the learners. This study will contribute to the ongoing debate on the relationship between co-curricular activities and academic performance by testing Astin (1984) Theory of involvement by providing insight into applicability of the theory in diverse settings

Finally, by focusing on public secondary schools in West Pokot, the study will provide context –specific insights that can inform policy and practice in the region.

1.7 Significance of the Study

The objective of the study was to establish the influence of co-curricular activities on learners' academic performance. Therefore, this research is important to the ministry of education in terms of more information on increasing participation in co-curricular activities and ensuring that schools can incorporate co-curricular activities in their curriculum. Further, the study findings will provide insights in Improving academic performance by identifying the relationship between co-curricular activities and academic performance. The school administration can use the findings of this study to design strategies that will improve the student's outcomes and academic achievement.

The study will also highlight the importance of co-curricular activities for student's holistic development that is, physical, social, emotional and cognitive development. To parents and guardian, this study will raise awareness on the importance of co-curricular activities on learner's academic performance and the overall development of learner. This study will also contribute to the existing body of knowledge on the impact of co-curricular activities on student's academic performance particularly in West Pokot County in Kenya.

1.8 Scope of the Study

The scope of this research study revolved around the influence of four co-curricular activities (education-based, sport-based, social-based and community-based) on the academic performance of students. The study covered 9 public secondary schools in Kapenguria sub-county, West Pokot County and mainly focused on Form Three learners because they have been in school long enough to account for the impact of

co-curricular activities on academic performance. Form Four learners were not part of the focus because they were preparing for their final year examinations. The 36 teachers in charge of co – curricular activities were targeted since they are the implementers of the co-curricular activities curriculum and are in a better position to give sufficient insights into the influence of co-curricular activities on learners' academic attainment. The study also targeted 9 principals in order to give an administrative view of the school as well as the participation of the principals in the co-curricular activities.

1.9 Limitations of the Study

The study was limited to public secondary schools in Kapenguria sub county, west Pokot County, which may not be representative of the entire County. The sample size may be limited, which could affect the generalizability of the findings to a large population. to mitigate this, both purposive and simple random sampling techniques were used to give all individuals in the study area an equal chance to participate in the study the study reliance on self-reported or participants responses may introduce biases or limitation in data collection. This was handled by adopting mixed method approach so as to triangulate findings and enhance validity.

Other challenges faced by the researcher during the study were closely linked to policy requirements. The researcher, however, overcame this challenge by obtaining a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) as well as consent from the public secondary schools in Kapenguria sub-county, West Pokot County. The researcher also experienced time and financial constraints.

1.10 Assumptions of the Study

The study made the following assumptions;

- i. The respondents would be willing to share the information that the researcher sought to obtain
- ii. There exists a formal co-curricular program in all the public secondary schools with a teacher responsible for coordinating the co-curricular activities.
- iii. All the learners targeted are actively involved in co-curricular activities.

1.11 Theoretical Framework-Astin Theory of Involvement

The study utilized Astin (1984) Theory of Involvement. The theory was fronted by Astin (1984) and postulate that students learn better when they are actively involved in both academic and co-curricular activities in their school experience. Astin (1984) espoused that learners are not passive but instead are active in ascertaining their level of participation in academic work and co-curricular activities. Participation in co-curricular activities enables the learners to connect to the school community and enhances the relationship between peers (Astin, 1985).

According to Austin's theory, involvement in co-curricular activities requires both the physical and psychological energy of learners. Consequently, all the factors in a learners' school life are competing for the time dedicated to it. Astin (1984) espoused that successful learners are those that manage to balance academic and co-curricular activities. The researcher was guided by this concept to investigate how the students managed to balance the co curricula activities and academics. He went further and identified the skills learners acquired in their active participation in co-curricular activities. Nevertheless, balancing time is especially difficult for learners that are over-involved in these activities (Astin, 1984). Since learners' resources (time) are finite. Those that are over-involved in co-curricular activities will dedicate less time

to their academic work resulting in dismal academic performance, and limited interactions with teachers.

The theory is based on the idea that students learn best when they balance academic and co-curricular activities. The assumption, therefore, is that students can perform well if they are also involved in co-curricular activities. As such, education based, sport-based, social-based and community-based co-curricular activities were just as important as academic activities. Specifically, when learners are involved in community activities such as garbage collection, they are likely to be more connected to the community and at the same time, learn valuable lessons on environmental conservation. Besides, Astin (1984) asserts that there is an improvement in the relationship among peers as they participate in environmental conservation for the benefit of the society. The implication is that learners are in a position to learn valuable skills in working as a team that could be applied in the classroom set-up. Further, other than physical education, other school teachers engage in co-curricular activities. Consequently, learners spend more time with the instructors hence increasing the amount of learning and development experienced by the learners. The theory is ideal for the study since it describes how learners' participation in co-curricular activities ultimately influences their academic performance.

1.12 Conceptual Framework

The conceptual framework is an outline highlighting how the variables are expected to relate in the real setting and the knowledge that builds the study's basis (Kothari, 2004). Independent variables in the study are co-curricular activities which are education-based, sport-based, social-based and community-based while the dependent variable is academic performance. In the midst of these variables, there are

intervening variables which are the school environment and the government policy on co-curricular activities. Figure 1.1 shows the conceptual framework.

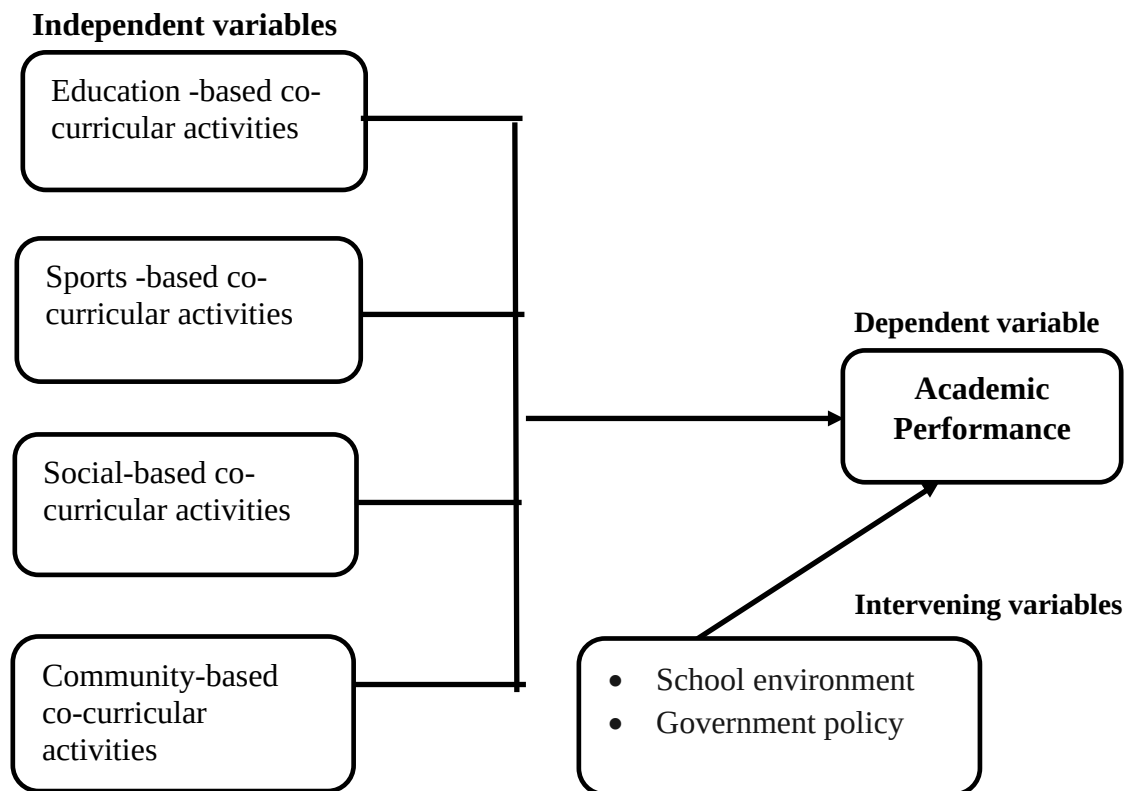


Figure 1.1: Conceptual Framework

Source: Researcher, 2021

Student participation in education – based co-curricular activities is expected to contribute to the development of higher cognitive processes through the interaction with other students and sharing of knowledge. The presentation involves related reviews and further learning on the topics and thus increases the student’s knowledge base which would translate to academic success.

Student participation in sports- based co-curricular is expected to contribute highly to students’ academic performance by reducing stress and refreshing their minds and thus lead to more academic success. It is also envisioned that students who actively

participate in sports gain from instructions, regulation and discipline that are drafted into the sport- based co-curricular activities.

Student participation in the social – based co-curricular activities is expected to contribute significantly in building the student’s capabilities in socializing and sharing which will inherently promote collaboration, co-operating learning arrangements and encourage knowledge sharing. These activities will inadvertently improve on the academic performance of the students

Student participation in the community – based co-curricular activities is envisioned to improve the student’s understanding of the external and environmental situations. Through these activities, students will be challenged to study and understand the occurrences and thus promote knowledge acquisition which positively affects academic performance.

The government policy on co-curricular activities is that the policy informs the need for a balance between curricular and co-curricular activities in order to draw out the holistic and balanced developmental needs of the student and to encourage divergent career paths as well as promote the physical well – being of the students. The school environment aids in student participation and promotes the co-curricular activities as part of the holistic development of the students.

1.13 Operational Definition of Terms

Academic performance: Refers scores, grades and class rank attained by secondary school learners in the examination.

Co- curricular activities: Refers to school sponsored activities not part of the formal academic curriculum and student’s voluntarily participates in them.

These activities are officially approved by the ministry of education in Kenya and have no extra marks or grades in exam.

Community-based co-curricular activities: Activities that emphasis the benefit of the community and interaction with community members outside of school.

Educational based co-curricular activities: Activities related to academics such as debate, symposiums, environmental clubs, science congress and competitions related to the different subjects offered in the education curriculum.

Social-based co-curricular activities: These are school sponsored activities that focuses on social interactions, community engagement and personal development through interaction with others. These include; fine arts such as music, drama and spoken word.

Sport-based co-curricular activities: Physical activities such as football, athletics and volleyball that complement and enrich the regular curriculum during normal class days.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The section first examines the policy guiding the implementation of co-curricular activities in Kenya. It also examines literature on education- based, sport-based, social-based and community- based co-curricular activities and draws out the relationship between study variables

2.1 Government Policy on Co-curricular Activities in Schools

Muthike, *et.al* (2017) examined the influence of school policies on students' participation in co-curricular activities in secondary schools in central region, Kenya. The findings showed a strong, positive correlation between school policies and student participation in co-curricular activities. Thus, school administration support levels were associated with high levels of student participation in curricular activities.

Januarto, *et.al* (2020) conducted a meta-analytical study in government policy on co-curricular activities in Bangladesh. The study examined the extant literature on the policy and the findings indicated that the policy puts emphasizes on schools having programme on co-curricular activities because students can develop life and social skills like decision making, critical thinking, interpersonal relationships, self-esteem, effective communication, self-awareness, and stress and anxiety management. The policy also stated that the Ministry of Education envisions a scenario where every teaching staff is involved co-curricular activities.

In Zambia Omabe, *et.al* (2017) evaluated the government policy on co-curricular activities in secondary schools. The findings indicated that the National Education Policy demands that every teacher should participate in co-curricular activities and

schools put in place policies that guide the running of co-curricular activities. At some schools all the pupils and teachers are required to belong to one or more co-curricular activity.

2.2 Education - based Co-curricular Activities and Academic Performance

Education-based co-curricular activities are related to academics such as debates, symposiums, environmental clubs, science congress and competitions related to the different subjects offered in the education curriculum. The impact of education-based co-curricular activities on the academic performance of students in high schools in the United States was investigated by Ritchie (2018). The specific focused on the number of academic co-curricular activities that the students were involved in and their grade point average and relied on descriptive and inferential statistics. The results of the study showed that the involvement of learners in co-curricular academic activities led to an increase in the grade point averages of high school learners.

Ayesha *et al*, 2024 in their study role of co-curricular activities in educational performance and character building from teacher's perspective in Shakargarh, categorized co-curricular activities into two; physical and non-physical. A questionnaire was prepared as the data collection instruments. A total of 120 respondents were randomly selected from eight schools, with 15 respondents chosen randomly from each school. The collected data underwent analysis using the Statistical Package for Social Science (SPSS). The findings revealed that nonphysical activities such as reading, Naats, and debates were ranked among the top three, while physical activities like cricket, handball, and football were identified as the top three physical activities. According to the study, co-curricular activities contribute to character building, enhance physical health, and positively impact the academic

learning of students. This study categorized the co-curricular activities according to types and examined their influence on academics in Kapenguria, West Pokot County.

A study conducted by Muhammad *et al*, 2022 to examine the effect of Co-Curricular activities on the academic achievement of Secondary School Students in District Quetta intended to find out how much boys and girls have an interest and participation in Co-curricular-activities. The study was Exploratory and the researcher used Pearson Correlation to explore the relation between Co-curricular activities and academic achievement. The researcher selected the sample of 386 (191 Boys and 195 Girls) secondary school students of grade 10th from 10 different secondary schools. The study revealed that boy students were more active in Co-curricular activities at the secondary level. The Pearson Correlation value indicates that Co-curricular activities have a positive link with academic improvement.

Romica & Philip, (2020) examined the effects of extra and co-curricular activities on an intermediate pupil's academic performance in Binmaley, Pangasinan. the study identified the profile of pupils in terms of type of school, number of learners, teachers, extra and co-curricular organization and the number of extra and co-curricular activities participated in by the students, the extent of contribution of the extra and co-curricular activities to the attainment of learning competencies of scouting, journalism, mathematics enhancement, science quest and camp, leadership development, athletic meet, arts and talent competition, the problems encountered by the pupils in participating extra and co-curricular activities as perceived by the teachers and the significant relationship between the extent of contribution of extra and co-curricular activities to the learning competencies and their profile variables. The descriptive method of research was used in the study. Purposive sampling technique was used in determining the respondents. The research questionnaire that

was used in gathering the data is a questionnaire distributed and retrieved by the researcher. The study found out that there is a significant relationship between the extent of contribution of co-curricular activities to the learning competencies and school profile. Also, the participation of the learners in the co-curricular activities contributes in attaining their learning competencies. In this study, the focus is on the influence of these co-curricular activities to academic performance of students in public secondary schools.

Fredricks & Eccles (2016) examined the impact of co-curricular activities using a large – student sample in the US. The longitudinal study used interviews and self-administered questionnaires and involved parents of school going children. The findings indicated that participation in both high school clubs predicted academic adjustment, educational status and civic engagement later on in life. Moreover, the strength of the relation between activity participation and development differed by type of activity, outcome, and time point.

Further, Champoux (2016) analysed the influence of students' involvement in education-based co-curricular activities on their educational achievement. The research was conducted on 18 students from a liberal arts institution in New York. The grade point average was compared from a time when the students were not highlighted involved in education-based co-curricular activities to when they were highly involved in these activities. A questionnaire with both a Likert scale and open-ended questions were utilized by the study. The findings of the research indicated that learners' participation in education-based co-curricular activities contributed to an improvement in their academic performance. Besides, learners were more connected to the university through their participation in education-based co-curricular activities.

Shamsudin *et al.*, (2014) examine the influence of physical, educational, and social co-curricular activities on students' academic performance in Malaysia. A cross-sectional design with a quantitative approach was used in the study. Data was collected from a total of 150 learners in selected public universities in Malaysia. The findings revealed that there is no connection between participation in co-curricular activities and students' academic performance. Particularly, there was no significant positive link between engagement in educational, physical and social co-curricular activities and the academic achievement of learners. The findings suggested that the co-curricular activities were designed in such a way that they were not of benefit to the academic attainment of students. The current study focuses on secondary school learners with a focus on education-based co-curricular activities.

Another study was conducted by (Rathore, *et al.*, 2018) in Lahore. The researcher took thirty schools and colleges in Lahore, the researcher selected 636 secondary and higher secondary students, and surveyed the 10th and 12th class examination grades and class attendance. The researcher used multiple regression and unveiled the findings that there is a positive relationship between the participation in co-curricular activities and academic performance. The researcher further argued that there was an academic enhancement in terms of class division and class attendance in the participatory group, that is, those who participated in co curricula had a frequent class attendance which enhanced their academic performance.

Finally, Adeyemo (2010) investigated the relationship between learners' involvement in education-based co-curricular activities and their performance in the Physics subject. The sample consisted of two hundred senior secondary school learners from Lagos state, Nigeria. The research utilized a questionnaire and physics students' achievement test (PAT) to collect data. The collected data was analysed using

regression analysis and the results indicated that participation in education-based co-curricular activities significantly influenced learners' achievement in Physics. However, the current study will focus on the overall academic performance of learners as opposed to only the physics subject.

2.3 Sport - based Co-curricular Activities and Academic Performance

Sport-based co-curricular activities encompass physical activities such as athletics and football that are questionnaireal in complementing and enriching the regular curriculum. Empirical studies have reported the positive association between sports activities and academic performance. Involvement in sports activities does not guarantee good marks in the examination but it may be possible good students are involved in sports related activities (Daniyal *et al.*, 2012). According to Reeves (2008), students who took part in three or four co-curricular activities during the academic year had dramatically better grades than those who participated in no co-curricular activities at all.

Ashfaq (2021) carried out a study in Ex-Fata in Pakistan about function of sports and co-curricular activities (CCA) on academic achievement among secondary schools students in newly merged districts in khyber Pakhtunkhwa Province ex Federally Administrative Tribal Areas. A sample size of 200 subjects was chosen from 10 high schools in the Frontier Region Kohat (FR Kohat). A questionnaire of five points likert scale after in quest of due authorization from heads of institutions was used to reach to the in facet of the recognizable truth. Arithmetical technique Mean, Percentage and Standard Deviation were run to inspect the collected records. The pollster analyzes the link of sports and co-curricular contribution and its optimistic role to enhance educational performances of secondary schools students as to increase grade point average GPA. Sports and Co-curricular activities have optimistic outcome on

students' management. It was also established that, student who participated in sports gain improved self-confidence, poise and self honor. This study was conducted to determine the skills students gain as they participate in sports. Finally Ashafaq concluded that involvement in sports and co-curricular activities have an imperative result on student's accomplishment score and other related activities.

Furthermore, Ashafaq (2021) also looked at the challenges associated with students participating in sports and he established that schools are faced with budget problems; most of heads of institutions are not interested in sports and co-curricular activities; most of teachers and parents consider these activities as wastage of time; facilities are not available for students; proper security is not available for partakers and students need proper nutrition but unfortunately balance diet not available for them. However, this study did not focus on these factors, instead it was concerned on how learner participation in co-curricular activities influences academic performance in Kapenguria Sub County, West Pokot County.

In Northern Ireland, Mullen (2016) investigated the connection between co-curricular activity involvement and student academic achievement. A questionnaire was used to determine the degree to which students participate in co-curricular activities, as well as the types of activities they participate in. On the other hand, learners' standardized scores were used as a measure of their academic performance. The results revealed a negative relationship between students' participation in co-curricular physical activities and their academic achievement. The research however recommended further studies on the same to establish if the results hold.

In the context of 11th Grade female Hispanic learners in the United States, Manlove (2014) aimed at finding out the influence of engagement in co-curricular athletic

activities on their GPA. The study utilized a mixed-method design. The findings indicated that the participation of female Hispanic learners in athletic activities positively impacted their academic achievement. Additionally, Qurban, *et.al* (2018) delved into the relationship between participation in sports and the academic performance of learners in Pakistan. The study utilized questionnaires to collect data on the students' level of engagement in sports and their subsequent academic performance. Structure equation modelling was used in the analysis of data. The results found no direct relationship between participation in sports and the academic performance of learners in Pakistan. The difference with the current study is that Qurban *et al.*, (2018) conducted their study on the university students in Pakistan while the current study was carried out in Kapenguria sub-county, west Pokot County.

Rathore *et al* (2018) in their study about the relationship between co-curricular activities and exam performance with reference to role of attendance, in Pakistan examined the role of co-curricular activities and exam performance of students at different levels of class attendance. Secondary data (co-curricular participation data, attendance of 10th class and grades in 10th class board exams) of 636 students through multistage purposive sampling was collected from thirty high schools of Lahore. Multiple regression analysis demonstrated that co-curricular activities have positive impact on student's exam performance. Sobel test of mediation showed that attendance partially mediated the association of involvement in co-curricular or non-classroom activities with exam performance. The study established that participation in co-curricular activities improves class attendance of students which then play an important role in achieving high grades in exams. The study concluded that students who were involved in co-curricular or non-classroom activities had better grades or exam performance from those students who were not part of these activities.

Ayesha & Ahmad (2020) canvassed the correlation between co-curricular activities and academic performance. The study was correlation in nature and employed descriptive research. The population of the study was all the college students, both male and females of government and private sector of district Lahore. The tool that was designed to collect data was a questionnaire that constructed on Likert scale. The study established that there is a moderate positive relationship between participation in co-curricular activities and academic achievement of the students. It is concluded that co-curricular activities play a major role in the academic achievement of the students at college level. The students who actively participate in co-curricular activities have higher percentages than those students who do not participate. The researcher of this study was determined to establish if the same findings will be realized on secondary school students. This study concentrated on the influence of the co-curricular activities on academic performance of public secondary school students in Kapenguria, West Pokot County.

The study Co-Curricular Activities, Physical Activity Motivation and Sports Performance of High School Athletes done by Angeline, 2022 was a descriptive study that determined the co-curricular activities, physical activity motivation and sports performance of high school athletes in Mina National High School. A total of 40 purposively selected respondents who are the athletes in the Integrated Meet (Division Level). To gather data a researcher-made questionnaire for Co-curricular Activities, Sports Performance of the athletes and a Physical Activity Motivation Questionnaire Checklist based on the studies and Theory by Edward L. Deci and Richard Ryan (2000) were used. Frequency distribution, Mean, Standard Deviation were the descriptive statistics while the Mann-Whitney U Test, and Spearman Rho Correlation Coefficient Analysis, set at .05 level of significance, were the inferential statistics. A

significant relationship existed between physical activity motivation and the level of sports performance of students.

Further, Itankan and Akke (2019) delved into the nexus between co-curricular activities, particularly sports and the academic achievement of senior secondary school learners in Mathematics. The study targeted secondary schools in Nigeria and adopted a simple survey design. The study relied on a questionnaire based on a Mathematics sports-related scale to collect and collate data. The scale had 10 items that were administered to eighteen senior secondary schools in the North-East zone of Nigeria. The sample size was 590 learners. The study questionnaires were validated and found to be reliable. Analysis was done with reliance on the Spearman rank statistical method. According to the findings, there is a strong positive relationship between students' participation in sports and their academic achievement in Mathematics. As opposed to only the Mathematics subject, the emphasis of the current study was on the overall academic performance of learners as influenced by their participation in co-curricular activities in public secondary schools in Kapenguria sub-county, West Pokot County.

In Uganda, Bagaya and Sekabembe (2011) examined the link between learners' participation in sports and its influence on their academic performance. The data utilized in the study were gathered with the aid of a self-administered questionnaire. The data obtained were analysed using percentages and means. The hypotheses that guided the study were tested using Spearman's correlation coefficient and the findings showed there was a significant negative relationship between students' participation in sports and their academic performance.

In the Kenyan context, Kiptala and Okero (2014) examined the relationship between students' involvement in co-curricular activities and their performance in academics. The focus of the study was on Kenyan secondary schools. Kurt Lewin's perception theory guided the study. The research utilized an ex-post-facto research design. Learners that participated in volleyball and football sport were involved in the research. A questionnaire facilitated the collection of data. Analysis of data was done using frequencies, percentages, means and standard deviations. Besides, the inferential statistics utilized were Pearson correlation and ANOVA. The results indicated that 59.7% of the learners that participated in the sporting activities exhibited dismal academic performance. However, relative to students participating in volleyball, those participating in football were academically superior. Overall, there was no significant relationship between students' involvement in co-curricular activities and their educational achievement. The research sought to ascertain if this is the case among students in secondary schools in Kapenguria sub-county, West Pokot County.

Agnes *et al* (2020) investigated the influence of participation in competitive co-curricular activities (that is sports, music and drama) on the self-concept among secondary school students in Central Region, Kenya. The study adopted the Ex-post Facto research design and data was collected through a self-concept inventory questionnaire and examination of school records from students' participants (1,408) in the regional championships in central region Kenya. Data was analyzed using Independent t-test and Two-way ANOVA. The results indicated that participants had higher scores on self-concept than non-participants, and t-test revealed that there was a significant difference between participants and non-participants self-concept level. This implies that participation in co-curricular activities had a positive influence on

students' self-concept in reference to gender, school type, class and parental economic status. The findings also revealed that participants in drama had a higher self-concept compared to sports and music. The researcher of this study focused on the influence of co-curricular activities on the development of competence skills. This study also categorized different type of co-curricular activities and their influence on academic performance in Kapenguria, West Pokot County.

Kapelinyang and Lumumba (2017) examined the relationship between the participation of learners in co-curricular activities and their educational attainment. To accommodate both qualitative and quantitative data, the study used a concurrent mixed-method approach. Using both simple and stratified random sampling techniques, a sample size of 250 students, 15 co-curricular teachers, and 5 principals were drawn. The quantitative data was analysed using descriptive statistics, while the qualitative data was analysed using thematic analysis. Regression analysis was utilized in ascertaining if a significant relationship existed between learners' participation in co-curricular activities and their educational attainment. Findings indicated that participation in athletics, music and soccer positively influenced the academic performance of learners. The study will establish if the same holds among learners in public secondary schools in Kapenguria sub-county, West Pokot County.

2.4 Social - based Co-curricular Activities and Academic Performance

Social-based co-curricular activities are related to the fine arts such as music, drama and spoken word. Studies reflect a strong positive relationship between participation in music and academic performance (Fujita, 2016). Music continues to impact academic performance throughout a student's educational career (Fujita, 2016). In the United States, Craft (2012) analysed the link between students' participation in co-curricular activities and their achievement in academics. The emphasis of the research

was on ascertaining if involvement in co-curricular activities influenced the Scholastic Assessment Test (SAT) scores of learners in Georgia high school. In the study, co-curricular activities were divided into sports, school music programs and school clubs. The findings indicated that learners' participation in co-curricular activities positively influenced the SAT score. It was therefore concluded that engagement in social-based activities like music and school clubs positively influenced the learners' academic performance.

On the other hand, Amar *et al* (2019) in their study, Engagement in Co-curricular Activities and its Relationship Regarding Academic Performance, affirmed that social and cultural activities negatively affected the academic performance of the students. It was frequently cited as a reason for students to be excuse from attending classes thus being left behind in the syllabus. For instance, the involvement in social and cultural activities would require the students to attend field work which consume their hours during class periods. This study was conducted to establish if this also applied to students in public secondary schools in Kapenguria West Pokot County.

In the context of Pakistan, Denial, *et.al* (2012) analysed the nexus between learners' participation in co-curricular activities and its influence on their educational attainment. The study relied on a questionnaire filling technique which was distributed to 500 learners. The results indicated that learners participating in drama and other literary activities elicited superior performance compared to those that did not participate. The study, therefore, deduced that the participation of learners in social-based co-curricular activities positively influenced their academic performance. The difference with the current study is that it was conducted in a university context in Pakistan while the current study was conducted in public secondary schools, in

Kapenguria sub-county, west Pokot Kenya. The emphasis was on evaluating the effect of social-based co-curricular activities on academic performance.

In addition, Bashir and Hussain, (2012) also looked into the effect of co-curricular activities on the academic performance of high school students in Pakistan. The research was experimental with an emphasis on the Mathematics and English subject. The study utilized an achievement test that covered four English lessons and four chapters of Mathematics as a measuring questionnaire. There were two groups which were; control and experimental group. The experimental group participated in co-curricular activities while the control group did not participate in any activity beyond the classroom. The findings indicated that the experimental group participating in debates and drama speeches exhibited better performance compared to the controlled group. Hence, the findings indicate that participation in social-based co-curricular activities can contribute to enhanced academic achievement among secondary school learners in Pakistan.

In Bangladesh, Ahmad *et al.*, (2015) assessed the effect of co-curricular activity on learners' academic attainment. The study was cross-sectional in nature targeting a sample of 475 learners in Armed Medical College in Dhaka. The dependent variable in the study was the overall learners' improvement in examination results whereas the predictor variables were involvement and non-involvement co-curricular activities. The data was collected from the records at the college while analysis was in terms of percentage and correlation analysis. The findings indicated that the learners participating in the photography club, cultural and debate club activities exhibited better academic performance compared to non-participants. There was therefore a significant relationship between involvement in co-curricular activities and learners' academic attainment. The implication is that the learners' participation in social-based

co-curricular activities benefits from having better examination results. The current study, therefore, intends on establishing the link between social-based co-curricular activities and learners' academic performance but in the case of public secondary schools in Kapenguria, west Pokot.

Further, Sebum, *et.al* (2018) delved into the impact of co-curricular activities on the academic performance of learners in Dinajpur, Bangladesh. The co-curricular activities were divided into sporting activities, cultural and social and political activities. The study sampled a total of 270 learners with a focus on students that had received at least two-semester results. A standardized questionnaire and interviews were used to collect data. Besides, Regression analysis was also used to assess the impact of co-curricular activities on learners' school performance. The results indicated a negative but insignificant link between participation in co-curricular activities and academic performance. However, when separated, the study established that only social-based co-curricular activities had a negative and significant effect on the academic attainment of students while other co-curricular activities such as sports, cultural and political activities did not significantly impact learners' performance.

In Kenya, Kirimi *et al* (2018) conducted a study on the influence of co-curricular activities on the development of holistic learners in public secondary schools in Kiambu County, Kenya. The study was informed by the holistic development theory. The study employed mixed methodology and concurrent triangulation design that enabled the researcher to triangulate the findings. . Stratified, purposive and simple random sampling techniques were used to select the required sample size which consisted of 360 respondents. Questionnaires were administered to teachers and students while interview guides were used for the principals. Qualitative data was analyzed thematically while quantitative data was analyzed using descriptive and

inferential statistics (Correlation Coefficient with the help of SPSS version 23). Pearson product moments correlation coefficient (r) was used to test for strength of association at 95% confidence level. The findings revealed that there was a correlation between curriculum implementation dynamics and the development of holistic learners in secondary schools of Kiambu county Kenya. Co-curricular activities were found to have negative correlation with the development of learner's spirituality, cognitive, personality, self-efficacy, inter-personal values among other aspects of a holistic learner. However, there was a strong and positive correlation between engagement in co-curricular activities and the development of holistic learners in Kiambu County. The study concluded that in public secondary schools in Kiambu County, co-curricular activities employed are correlated with the development of holistic learners. The current study partially focused on the influence of social-based co-curricular activities on students' academic performance. The researcher was determined to identify the skills the students acquire as they involve in social-based co-curricular activities and whether they impact on their academic performance.

Finally, Anyango (2012) assessed the relationship between involvement in co-curricular activities and the academic achievement of learners in Kisumu County. The emphasis was primarily on the impact of drama and music on learners' academic achievement. The descriptive survey design was employed with a sample comprising of 360 learners. To collect data, a questionnaire was used whereas the analysis was done utilizing frequencies and percentages. The hypotheses were tested with the use of correlation analysis. Evidence from the research showed that involvement in co-curricular activities had a negative effect on the academic performance of learners. Notably, the association between participation and educational attainment was

negative. Similarly, there was a negative link between involvement in social-based co-curricular activities (music and drama) and the academic achievement of learners. The implication was that learners' participation in clubs, games and music festivals negatively impacted their academic achievement. The current study therefore aimed at partly establishing the influence of learner participation in social based co-curricular activities on their academic performance.

2.5 Community - based Co-curricular Activities and Academic Performance

Community-based co-curricular activities are those that emphasize the benefit of the community and the interaction with community members outside of the school. In a study seeking to determine the relationship between academic performance and community partnerships found that regardless of students background and prior achievement, volunteering activities positively influenced student grades, course credits completed, attendance, behavior, and school preparedness(Fujita, 2016). Participation of learners in such activities is expected to contribute to their holistic development as well as nurture a positive relationship with the community members. Fujita (2016) analysed to ascertain if learners' participation in community service influenced their academic performance. The study used a questionnaire to collect data from students enrolled in grades six and eight. The findings indicated that learners' participation in community service positively influenced their academic performance.

Fujita, (2016) examined the effect of co-curricular activities on academic performance of American students in their basic education. The study was descriptive and used grade six to eight students and observed that student participation in community service improved academic performance, while playing a musical questionnaire does not improve academic performance. Bekomson *et al.*, (2020) evaluated the impact of the community – based co-curricular activities on self-efficacy of the secondary

students in Nigeria. The study used a questionnaire and surveys a large sample of students in a public secondary school. The study results revealed that interest in co-curricular activities significantly influenced social self-efficacy, academic self-efficacy, language self-efficacy, moral self-efficacy and overall self-efficacy

Shiundu and Omulando (1992) observe that in traditional Africa context, the early modes of education were meant to support man control his environment and master the forces of nature. Education and teaching prior to the coming of Europeans, was characterized by four main features, that was; vocational-specific in that it prepared the youth for specific roles in the society, closely linked to the community's everyday social life and was used for molding character and providing high moral qualities of the youth. In addition, in most African communities, the cultural patterns prepared children for adult life through play, work and oral literature among others. The researcher aimed at looking at different community co-curricular activities that students in Kapenguria Sub County engaged in and how they influenced the academic status of the partakers.

Further, Annu and Sunita (2014) delved into the impact of the involvement of students in community-based co-curricular activities on their academic success. The research was conducted among high school learners in Uttar Pradesh, India. The sample was 120 learners that were in the 13 to 16 years age category. A questionnaire was utilized in the collection of data whole analysis was in terms of percentage and t-test analysis. The findings indicated that participation in community-based co-curricular activities positively influenced the performance of learners in academics. Among the benefits of participating in community service included higher academic attainment, regular school attendance and increased connectedness to the school.

In west Pokot County in Kenya, Kiproto (2022) carried out a research on school co-curricular activities in promotion of peace education in public day secondary schools. The purpose of the study was to investigate how school co-curricular activities affected the provision of peace education in public secondary schools in West Pokot County, Kenya. The study adopted a pragmatist research paradigm and a descriptive survey research design. A sample size of 30% of principals and teachers constituted 24 and 198 respectively from a total population of 81 principals and 661 teachers in the County. Based on Yamane formula for sample size calculation, 385 students were sampled from a total of 10,035 students in West Pokot County. The schools were selected using stratified random sampling technique while purposive sampling was used to select the principals who participated in the study. Simple random sampling was used to select students and teachers.

Data was collected using questionnaires for teachers' respondents, interviews for principals and focus group discussions, for student respondents. Quantitative data was analyzed using descriptive statistics and chi square test while qualitative data was analyzed thematically based on the emerging themes. The study established that; school co-curricular activities promoted peace. Conflict resolution and peace keeping are some of the skills that students need to acquire to fit and benefit the community at large. The current researcher realized that, Kipruto (2022) had interest in co curricula activities that promoted peace keeping in the community but for him he focused on its influence on academic performance of students while the current study focused on the influence of learner participation in co-curricular activities on their academic performance.

Evidently, not much has been done in the literature on the impact of engagement in co-curricular activities on the academic achievement of learners. Most of the studies

that have been carried out on the link between engagement in community service and academic achievement are outside Kenya. Besides, the studies are either at junior high school or university level with limited focus on secondary schools. Therefore, the current research study aimed at addressing the gap through empirical research and literature search. Through these, the study was able to establish that a relationship exists between participation in community-based co-curricular activities and the academic performance of learners in public secondary schools in Kapenguria sub-county, West Pokot County.

2.6 Related Studies

The extant literature has tried to establish the link between involvement in co-curricular activities and learners' academic performance. There are, however, several gaps that the study intends to fill. For instance, the influence of education-based co-curricular activities on academic performance, the studies have been done in West Africa (Adeyemo, 2010) and the United States (Ritchie, 2018; Champoux, 2016; Fredrick's & Eceles). in Pakistan, Rathore *et al*, 2018; (Romica & Philip, 2020) and in Malaysia, (Shamsudin *et al*, 2014) it is evident that few studies on educational co-curricular activities has been done in East Africa and especially in Kenya.

In particular, the studies on sport- based co-curricular activities have reported contrasting findings with several studies reporting positive effects (Manlove, 2014; Kapelinyang & Lumumba, 2017; Itankan & Akke 2019; Ayesha & Ahmad, 2020), negative effects (Mullen, 2016; Bagaya & Sekabembe, 2011) and no effects at all (Qurban *et al.*, 2018; Kiptala and Okero, 2014). From varied studies done on sports based especially in Pakistan, indicates that it is the most popular co-curricular activity that has been studied giving contrasting findings. These contrasting finding helps unravel the nature of the sport- based co-curricular activities and its effects while

emphasizing more on the local Kenyan context and particularly in public secondary schools in Kapenguria sub-county, west Pokot.

Concerning the effect of social- based curricular activities, studies have reported on the positive effect on academic achievement (Ahmad *et al.*, 2015; Bashir & Hussain, 2012; Craft, 2012) and negative effect (Sebum, *et.al*, 2018 and Amar *et al*, 2019). With a few studies done in Kenya on social based co-curricular activities. There is more emphasis on music and drama thus these studies provide a foundation from which the current study can draw from. Furthermore, the literature on the influence of social-based co-curricular activities on learners' academic performance has majorly been done outside Kenya. Such studies include those done in United States (Craft, 2012), Pakistan (Daniyal *et al.*, 2012; Bashir & Hussain, 2012) and in Bangladesh (Sabuj, *et.al*, 2018)

Concerning the effect of community – based co-curricular activities, studies have observed positive linkages to academic achievement and school attendance (Fujita, 2016), self – efficacy (Bekomson *et al.*, 2020). The effect of education – based co-curricular activities has led to grade point averages (Ritchie, 2018; Champoux, 2016; Adeyemo, 2010) and predicted academic adjustment and civic engagement (Fredricks & Eccles, 2016). Furthermore, not much has been done on the link between community-based co-curricular activities and the academic performance of learners in public secondary schools.

In West Pokot, among a few studies done in the area concerning co-curricular activities is by Kipruto (2022) who only focused on the influence of co-curricular activities on promoting peace education. Most of the literature reviewed was on studies done on co-curricular activities as a whole. There was no categorization of the

activities. Most studies are only done in universities other than secondary schools which are the focus of the study. The knowledge gap is addressed by broadening the scope of co-curricular activities by focusing not only on physical activities such as sports but by examining aspects of community-based, social-based and education-based co-curricular activities that have received limited attention in the literature.

2.7 Chapter Summary

The review of related literature offers key insights on learners' participation in co-curricular activities and the possible link with academic performance. The bulk of the studies on learners' participation in co-curricular activities and the resulting influence on academic performance have been done in the European and Asian context with a few studies in the African context. Other than this, for most of the studies, co-curricular activities are synonymous with sport-based activities such as athletics, football and basketball. As such, scholars have not exhaustively examined social-based, community-based and education-based co-curricular activities. Besides, while examining the link between co-curricular activities and academic performance, emphasis is usually on a particular subject such as Physics and mathematics as opposed to the overall academic performance. In addition, most of the studies have been carried out in institutions of higher learning hence there is a limited account on the participation of learners in community-based co-curricular activities at the secondary schools' level.

Generally speaking, there are varying and contradicting arguments on the influence of learner participation in co-curricular activities on academic performance. These ranges from positive, moderate, negative or even no influence at all.

The current study therefore aimed at establishing the truth about whether learner participation in co-curricular activities influence academic performance in public secondary schools in Kapenguria sub-county, west Pokot county

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Methodology is an essential component of research that provides direction for issues of investigation. This chapter presents in details the methodology utilized to conduct the study and the research design. It also gives an account of the study site, target population, study sample, data collection instruments, validity and reliability of the instruments, data collection procedures, data presentation and analysis and finally ethical considerations.

3.2 Research Design

Research design is an outline that ensures the information collected effectively addresses the study problem (Cooper & Schindler, 2008). The study used a descriptive survey research design with convergent mixed methods approach. The study sought to describe the phenomena of interest and was appropriate for the research since a large amount of data could be gathered to give detailed information about the issue under investigation. This design allowed the study to generate a lot of new and specific information about the area under study, increasing the study's ability to develop more practical insights that lead to the development of more reasonable and sustainable recommendations (Gatara, 2010). Since the current study intended to establish the influence of learner participation in co-curricular activities on learners' academic performance in secondary schools in Kapenguria sub-county, West Pokot, convergent mixed methods approach was deemed appropriate.

3.3 Study Area

The research was undertaken in West Pokot County which has four sub-counties: South Pokot, North Pokot, Central Pokot and West Pokot. The respondents for the

research were drawn from the Kapenguria sub-county in West Pokot Sub County. The location was ideal for the research because there is limited research on the influence of co-curricular activities on learners academic performance in Kapenguria sub-County, West Pokot County making this study vital to fill the knowledge gap. The researchers' familiarity with location was ideal since it helped in accessing schools and eased data collection which ensured study feasibility. To encourage and motivate learners in this region to participate in co-curricular activities the researcher had to establish the influence of how they affect each other. Despite the limited time, establishment was to be made whether participating in co-curricular activities would have an impact on academic performance. This called for the researcher to find out the influence of the co-curricular activities on academic performance of learners in public secondary schools. Taking cognizance of these factors, there is a possibility of curricular and co-curricular activities competing for both learners and teachers' attention.

3.4 Target Population

Target population, is defined as the group of individuals or participants with the specific attributes of interest and relevance (Mensah and Eric, 2017). The target population consists of the totality or aggregate of the observations with which the researcher is concerned. According to the records obtained from Kapenguria Sub-County Education Office (2019), there are 50 public secondary schools in Kapenguria Sub - County. It was established that the 50 public secondary schools each have four teachers in charge of education-based, sport-based, social-based and community-based co-curricular activities. The study, therefore, targeted the 50 public secondary schools, 826 Form three students, 200 teachers of co-curricular activities and 50 principals. It summed up to a total of 1076 respondents. The study focused on Form

three learners since they have been in school long enough to give a detailed account of their participation in co-curricular activities and how it influenced their academic performance.

3.5 Sampling Techniques and Sample Size

A sample is a significant percentage of the study population sufficient for research (Creswell, 2017). The sample's characteristics can be generalized to represent the entire population from which it was drawn (Best & Kahn, 2016). Mostly, studies are limited by time, expenses, and accessibility to respondents, thus requiring the use of samples that are representative of the entire population (Cohen, *et.al*, 2017). The study obtained data from single-sex schools, boarding and mixed day schools from Kapenguria sub-county, West-Pokot County.

The study purposively selected 9 public secondary schools from a total 50, representing 18% of the total number of schools which is in line with Mugenda & Mugenda's (2003) who recommend 10%-30% of the population. The study also used purposive sampling to sample four co-curricular teachers in each sampled school, making a total of 36 teachers. The study sampled one principal from each school totaling to 9 principals. Orodho (2012) deems purposive sampling as the most appropriate when seeking an expert opinion from participants with information on the study problem.

The sample size was determined using the 'return sample size method' as propounded by Bartlett *et al*, (2001) and emphasized by Mugenda and Mugenda (2003):

$$n = \frac{Z^2 p(1 - p)}{d^2}$$

Where:

n = the desired sample size.

Z = the corresponding standard score with the probability of error at 0.05 and a confidence level of 95%, which is 1.96

p -: The occurrence level of the phenomenon under study and is equal to 0.5 where the occurrence level was not known

d -: The selected probability of error of the study corresponding with a 95% confidence level, in this case, 0.05

Substituting for the values:

$$n = \frac{1.96^2 0.5(1 - 0.5)}{0.05^2} = 384$$

However, since the study's target population (1076) is less than 10,000, the final sample size estimate could be adjusted as Mugenda (2003) recommended.

$$f_n = \frac{n}{1 + \frac{n}{N}}$$

Where:

f_n = is the sample size when the population is less than 10,000

n = the sample size when the population is above 10,000

N = the population of the target sub-population

Substituted for the values:

$$n = \frac{384}{1 + 384/826}$$

$$n = 232$$

Using simple random sampling, the study sampled 232 students from the 9 public secondary schools. This constituted 28.1 % of the total number of students and the respondents were picked using simple random. Stanley and Gregory (2001) indicate that a sample size of 10%-30% of the population is generally acceptable hence the sample for the study was deemed adequate.. The researcher used the lottery method where the Form three learners were required to draw a paper from a sample of papers labelled either 'included' or 'not included'. The students were to pick one at a time from a container and those who picked 'include' were recorded and included as part of the sample. Table 3.1 highlights the sampling frame.

Table 3.1: Target Population and Sample Size

Category	Population	Sample	Percentage	Sampling technique
Schools	50	9	18%	Purposive
Principals	50	9	18%	Purposive
Teachers	200	36	18%	Purposive
Students	826	232	28.1%	Simple random

Source: Researcher, 2021

3.6 Research Instruments

The study used a questionnaire and interview guide to gather information.

3.6.1 Students' Questionnaire

The student questionnaire was organized into five sections. Section one provided the demographic data. The second, third, fourth and fifth sections gathered information on the education-based, sport-based, social-based and community-based co-curricular activities that the schools offer and how often students engage in these co-curricular activities. The questionnaire included both open-ended and closed ended questions. The close-ended questionnaire used a Likert-type rated the level of

agreement/disagreement with the items with a scale: **SA**=Strongly Agree, **A**= Agree, **NS** = Neutral, **D**= Disagree, **SD** = Strongly Disagree

3.6.2 Teachers' Questionnaire

The teachers' questionnaire was organized into five sections. The first section included background information with a focus on gender, highest academic qualification and teaching experience. The second section included questions touching on second, third, fourth and fifth sections on the education-based, sport-based, social-based and community-based co-curricular activities that the schools offer.

3.6.3 Interview Guide for Principals

An interview guide was used in data collection to get expert knowledge and perspectives on learners' participation in co-curricular activities and their academic performance from the school principals. The interview guide enhances the free flow of information and facilitates the collection of information necessary to meet the exact goals of the study (Duibhir & Duibhir, 2018). In addition, through the use of probing questions, interviews enabled the researcher to collect the necessary data. An interview guide also eliminates many sources of bias common in other questionnaires.

The interview guide for principals was divided into five sections. The first section encompassed the background information, including gender, highest academic qualification and teaching experience. The second, third, fourth and fifth section included questions touching on the education-based, sport-based, social-based and community-based co-curricular activities and how they relate to learners academic performance. The section consisted of open ended questions only.

3.7 Validity and Reliability of the Research instruments

Validity addressed the critical issue of the relationship between a concept and its measurement. It was also concerned with the issue of the authenticity of the cause-and-effect relationships (internal validity), and their generalizability to the external environment (external validity). Reliability is an indication of the stability and consistency with which the questionnaire measures the concept and helps to assess the goodness of a measure (Sekaran & Bougie, 2010).

3.7.1 Validity of the Research instruments

Validity is the instruments ability to measure what is intended meaningfully and describe the construct meaningfully (Cooper & Schindler, 2014). Face validity refers to the likelihood that the respondents will comprehend the questions in the research instruments. A pilot study was undertaken to improve face validity, then, responses to each item were analysed to detect any misunderstandings and inconsistencies.

On the other hand, content validity was achieved by incorporating content experts' opinions comprising the supervisors, Moi University. The suggestions and advice offered served as the foundation for adjusting the questionnaire items and making them more adaptable to the research. Finally, criterion validity was carried out on the questionnaires by randomly pilot testing two physical education teachers and twenty students from Holy Rosary girls' school and Weiwei boys' secondary school from West Pokot Sub County to ascertain the clarity of the questions. The schools that were used in the pilot study were excluded from the main study.

3.7.2 Reliability of the Research instruments

Reliability is the consistency of measurement by research questionnaires if replicated (Kothari, 2017). Strategies to enhance the reliability of research results include;

objectively scoring results, training of researchers, and using a reasonable rating scale (Dillman, Hao and Millar, 2017).

It is essential to check the data collection tools before gathering data to ascertain their practicability, Research instruments must be tested for reliability to ensure that the instrument produces consistent and stable results over time and across different conditions or observers. This consistency indicates the instrument's precision and helps determine the trustworthiness of the data collected (Creswell, 2012). As such, this was done using a test- retest method. The questionnaires were taken to the selected respondents and collected after their response. The data was then analysed. After correction of the tools, they were taken back to the same respondents for refilling after an interval of two weeks. The data was then collected and analyzed again. The findings were analysed and compared between the first and second admission of the questionnaires. The test of the consistency was done by the use of Cronbach's alpha for internal consistency. The Cronbach's alpha for internal consistency entails a one test administration to check the covariance or variance among the items to make sure that the questionnaire is reliable. Cronbach alpha coefficients from 0.7 to 0.9 are considered ideal for the reliability test (Blumberg, Cooper and Schindler, 2008).

Table 3.2: Reliability Coefficients for the Study

Variables	Reliability Coefficient
Education-based co-curricular activities	0.702
Sport-based co-curricular activities	0.708
Social-based co-curricular activities	0.717
Community-based co-curricular activities	0.753

Source: Field Data (2020)

Table 3.2 shows the statistical values for the Cronbach's Alpha coefficient which ranged from 0.702 to 0.753 and were above the threshold of 0.7, indicating that the questionnaire was acceptable in the scale and measurements developed for the study and hence were deemed reliable.

3.8 Data Collection Procedures

Data in research refers to facts that are collected for further inquiry (Saunders, Lewis & Thornhill, 2016). Therefore, data collection techniques facilitate the researchers in systematically collecting information on the study variables from the study sample (Gill & Johnson, 2010). On the other hand, research questionnaires are the tools utilized in collecting data during the conduct of the study (Hammond & Wellington, 2013). In social sciences research, the predominant data collection techniques are observation schedules, interviews and questionnaires.

Before issuing a questionnaire to the respondents, the researcher first obtained authorization from Moi University and afterwards obtained a research permit from the National Commission for Science, Technology and Innovation. the researcher also obtained permission from the County Education Officer (CEO), to collect data from public secondary schools. The researcher then visited the marked schools and introduced himself to the principals requesting an interview and delivering the questionnaires to the schools on the appointed day before returning a week later to collect the filled questionnaires.

3.9 Data Presentation and Analysis

Data analysis is the process of bringing order, structure and interpretation to the mass of collected data. It involves the coding, editing and cleaning of data in preparation for processing. Data preparation was carried out in several significant steps which

included completeness check, data editing, coding and entry. Data conversion reduced raw form into reduced and classified forms that are more appropriate for analysis using a statistical package for the social sciences (SPSS) Programme. After these procedures, data were analysed descriptively. Descriptive statistics are procedures used to describe the basic characteristics of the variable and summarize the variable data simply and understandably. Once the descriptive analysis had been done, the information was presented through various ways such as tables, bar charts and frequency tables.

For the qualitative data generated from interviews were in the form of shorthand, data transcription mechanisms were used to translate the unstructured data into meaningful information through a combination of logical and abstract conceptualization. The processes involved the generation of themes by the identification of the patterns that were emerging from the transcripts. Next, the researcher combined the themes and then reviewed and refined them further and reported descriptively.

3.10 Ethical Considerations

The researcher obtained an introductory letter from the school of education, Moi University. After this a research permit was obtained from National commission for science, technology and innovation (NACOSTI) which enabled him to go to the field.

The study ensured that the information obtained from the respondents was protected from unauthorized access. The respondents were assured that they remained anonymous, and the data was used for research purposes only. The information was obtained through informed consent. The first step was the quest for voluntary participation where the individuals were informed of their right to choose to participate or not and, in a case, where the individual chooses not to, the researcher

had to respect the individual's decision. The researcher gave assurance to the participants of confidentiality of the research participant of the information being provided as given. The researcher remained objective throughout the data collection process and appreciated the divergent views from the respondents.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

The chapter presents the research findings, analysis interpretation and discussion of findings. The chapter begins with the description of the respondents' characteristics followed by the presentation of descriptive statistics and qualitative analysis of the study variables. It also presents the objectives of the study and explains how each objective was achieved and the results obtained.

The study had a sample size of 277 respondents from 9 schools; 9 principals, 36 teachers and 232 students. During the data collection process, the study managed to collect information and data from nine schools representing 18% of the target schools, 9 principals, that is, 18% of the target number of principals, 36 teachers, that is 18% of target number teachers, and 232 students, that is 28.09% of the target population of students. Averagely, the study had a 20.525% of the total target population which is in line with Mugenda & Mugenda (2003) stipulation of the percentage rate of the sample to be selected, which should be in the range of 10-30% of the target population.

The descriptive statistical analyses in this section used techniques that included frequency and percentages. The section used a Likert scale to measure the level of usage of the level of agreement/disagreement with the items with a scale: 1 - Not at all (N); 2 - Strongly Disagree (SD); 3 - Disagree (D); 4 - Agree (A); and 5 - Strongly Agree (SA). SA and A were combined to mean Agree, N stands for Not at all and SD and D combined to mean disagree.

4.2 Demographic Information

4.2.1 Students' Demographic Information

The study sort to examine the background characteristics of the students in order to gauge the value that can be derived from the data in terms of ability of the respondents to make informed responses and ensure the dependability of the responses. The information included the age distribution and gender of the students. The students' questionnaire required that the students indicate their demographic characteristics these characteristics are presented in Table 4.1 below.

Table 4.1: Demographic Information of the Students

Variable	Categories	N	%
Gender	Male	137	59.91
	Female	95	40.09
	Total	232	100
Age distribution for students	16 to 17 years	108	46.6
	18 to 20 years	120	51.7
	Above 20 years	4	1.7
	Total	232	100.0

Source: Field Data (2020)

Table 4.1 above shows that the study collected data from 232 students. In terms of gender, the male comprised 137 (59.91%) of the study population while females comprised 95 (40.09%) and this implies that the study reached out more to the male population. From the data, it implies that, most male students were likely to participate more in co-curricular activities as compared to female students. In addition, the statistic from the sub county education office indicated that there was low female students' enrolment to secondary schools compared to male students. The age distribution of the students indicated that 120 (51.7%) were aged between 18 to 20 years, 108 (46.6%) were aged between 16 to 17 years and 4 (1.7%) were aged 20

years and above. This means that a majority of the students were mature yet in form three. This implies that most of the learners in the study area were adult learners.

The above distribution shows that the male students outnumber the female students by approximately 10% and this translates to either low enrolment of girls in school or that there is higher number of males ready to participate in sports compared to females. The KPHC 2019 census indicate that the ratio of boys to girls of ages 14 to 22 years was 1:1 but the ratio in learning institution rises 11: 10 in favour of the boys. Further, there was a 50% significant drop in the number of girls attending schools from 22,969 persons in the ages 14 to 17 years to 11,877 persons in the ages 18 to 22 years (KNBS, 2019).

4.2.2 Teachers' Demographic Information

The background characteristics of the teachers was sought in order to gauge the value that can be derived from the data in terms of ability of the respondents to make informed responses and ensure the dependability of the responses. The information contained the gender, teaching experience and academic qualification.

Table 4.2: Teachers' Demographic Characteristics

Variable	Categories	F	%
Gender	Male	22	61.11
	Female	14	38.89
	Total	36	100
Teaching experience	1 to 6 years	23	63.89
	7 to 11 years	4	11.11
	12 and above years	9	25.00
	Total	36	100.0
Academic qualification	Diploma	7	19.44
	Degree	24	66.67
	Masters	5	13.89
	PHD	0	0
	Total	36	100.0

Source: Field Data (2020)

The distribution in Table 4.2 shows that the study collected data from 36 teachers. In terms of gender, the male comprised 22 (61.11 %) of the study population while female comprised 14 (38.89 %) and this implies that the study reached out more to the male population. This indicates that male teachers were many and more likely to have the vibrancy of actively participating in co-curricular activities by the way of helping/ guiding the learners. The table also shows that 23 (63.89 %) had less than six years of teaching experience, 4 (11.11 %) had taught for between 7 and 11 years while 9 (25.00%) had worked for over 12 years.

The findings shows that majority of the teachers are at the entry-level because more than 60% had teaching experience of less than six years. This implies that recently employed teachers were energetic and full of enthusiasms and more likely to help the learners in co- curricular activities. Therefore, they encouraged students to participate in co-curricular activities. The more experienced teachers on the other hand tend to believe that they do not need to encourage the students to participate in the co-curricular activities for them to perform well in academics. Concerning academic qualification, 7 (19.44 %) had diplomas, 24 (66.67 %) had bachelor's degree and 5 (13.89 %) had master's degree. In addition, it was observed that, majority of the teachers 66.67% had the bachelor's degree which was an indication that most secondary schools do employed teachers with a degree.

From the 9 principals interviewed, majority of them had master's degree and a few of them with bachelor's degree. Most of the principals had teaching experience between 7 and 11 years. This means that most principals have enough experience in the teaching and leadership responsibility. Therefore, from above table, the teachers and principals were in a position to direct the students accordingly in terms of academic performance and participation in co-curricular activities. None of either the teachers

or the principals had attained PhD in academic qualifications. This implies that most of the teachers and principals had the academic and teaching experience to handle the issues on co-curricular activities.

4.3 Education-based Co-curricular Activities

The questionnaire required that both students and teachers to indicate the nature of the education-based co-curricular activities their schools offered and the responses are shown below.

4.3.1 Education- based Activities Offered in Schools

The students' questionnaire required that the students to detail the nature of the education-based co-curricular activities offered in their schools. The responses are shown in table 4.3 below.

Table 4.3: Students' Responses to Distribution of Education based Co-curricular Activities Offered in their Schools.

Education based activity	Offered	Not offered
Academic clubs	84 (36.2%)	148 (63.8%)
Article writing	4 (1.7%)	228 (98.3%)
Debate clubs	48 (20.7%)	184(79.3%)
Symposiums	8 (3.4%)	224(96.6%)
Field trip	36 (15.5%)	196(84.5%)

From the table 4.3, the data shows that 84 (36.2%) of students confirmed that academic clubs are offered in their schools, while 148 (63.8%) indicated that they were not offered, 4 (1.7%) confirmed that article writing was offered in their schools, 228 (98.3%) were not offered, 48 (20.7%) confirmed that debate clubs was in their schools while 184 (79.3%) affirmed it was not offered, while 8 (3.4%) confirmed that symposiums was offered in their schools, 224 (96.6%) said that it was not offered and 36 (15.5%) confirmed that field trips were offered, while 196 (84.5%) affirmed it was not offered in their schools.

Table 4.4: Responses of Teachers on Distribution of Education-based Activities Offered in Schools.

Education based activity	Offered	Not offered
Academic clubs	8(22.2%)	28(77.8%)
Article writing	2(5.6%)	34(94.4%)
Debate clubs	10(27.8%)	26(72.8%)
Symposiums	5(13.9%)	31(86.1%)
Field trip	9(25%)	27(75%)

From the table 4.4 above, 8(22.2%) teachers affirmed that academic club was offered in their schools while 28(77.8%) stated that it was not offered, 2(5.6%) of teachers affirmed that article writing was offered in their schools while 34(94.4%) affirmed it was not offered, 10(27.7%) of teachers indicated that debate clubs were offered while 26(72.8%) said it was not offered in their schools, 5(13.9%) of teachers confirmed that symposiums were offered while 31(86.1%) said it was not offered in their schools, 9(25%) of the teachers said that field trips were offered while 27(75%) said that field trip were not offered in their schools.

The findings from table 4.3 indicate that, majority of schools offer academic clubs, followed by the debates while article writing was least offered in many schools. The presented data shows that most of the schools don't offer most of the education-based activities as indicated by the high percentages of the education-based activities not offered as indicated by the students. On the other hand, it implies that the popularity of these activities is yet to be presented in the schools in the region which may negatively influence learners' academic performance.

From table 4.4 it can be deduced that debate clubs had popularity of being offered in the schools, followed by field trips then academic clubs. However, article writing was the least offered which agrees with what students expressed in table 4.3.

Majority of the principals confirmed that academic clubs are mostly offered, followed by debate clubs then field trips in their schools. However, they also confirmed that article writing was the least education-based co-curricular activities offered in their schools. Participation in academic club, debate clubs and field trips widens the scope which the students interact with the education content. This implies that they are exposed more often to the content taught in class hence making it easy for them to relate similar concepts during exams. This in turn positively influences their academic performance. Non popular education-based co-curricular activities like article writing and symposiums present a disadvantage to students since they are unable to have an interaction with others concerning content learnt in class. This may have a negative impact on the students' academic performance.

4.3.2 Frequency of Students' Participation in Education-based Co-curricular Activities

The figure below shows the data that was collected after the students were asked on how frequent they participate in different education based co-curricular activities.

Table 4.5: Frequency of Students' Participation in Education- Based Co-Curricular Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Academic clubs	F	19	17	52	40	104
	%	8.2	7.3	22.4	17.2	44.8
Article writing	F	8	24	26	59	115
	%	3.4	10.3	11.2	25.4	49.6
Debate clubs	F	39	29	24	45	95
	%	16.8	12.5	10.3	19.4	40.9
Symposiums	F	4	20	30	31	147
	%	1.7	8.6	12.9	13.4	63.4
Field trips	F	24	18	49	31	110
	%	10.3	7.8	21.1	13.4	47.4

From the table above; 19(8.2%) students always participated in academic clubs, 17(7.3%) frequently participated in academic clubs, 52(22.4%) occasionally, 40(17.2%) rarely participated in the academic clubs while 104(44.8%) never participated in any academic clubs. In article writing; 8(3.4%) always participated, 24(10.3%) frequently participated in article writing whereas, 26(11.2%) occasionally participated, as 59(25.4%) rarely participated in it, while 115(49.6%) did not participate in article writing. In debate clubs, 39(16.8%) always participated, 29(12.5%) frequently participated in debating, whereas 24(10.3%) occasionally participated in debating club, while 45(19.4%) rarely participated in debating and 95(40.9%) never participated in debating. 4(1.7%) always participated in symposiums, 20(8.6%) frequently participated, occasionally, 30(12.9%) participated in symposiums, while 31(13.4%) rarely participated in symposiums and 147(63.4%) never participated in symposiums. Going for field trips; 24(10.3%) always participated, 18(7.8%) frequently were involved, 49(21.1%) occasionally went for field trips. 31 (13.4%) rarely went for field trips while 110(47.4%) did not participate in field trips.

The teachers were also asked to give their responses on how frequent the students participated in education -based activities. The table below shows the teacher responses on this item.

From the findings of table 4.5 of students' responses above, it is clear that most students do not participate in most education- based co-curricular activities in the schools. This is in agreement with the findings from education-based co-curricular activities offered in schools from table 4.3 by students. It indicated that the popularity of the education-based co-curricular activities was low.

Table 4.6: Teachers Responses on Frequency of Students' Participation in Education-based Co-curricular Activities.

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Academic clubs	F	9	6	2	4	15
	%	25	16.7	5.6	11.1	41.7
Article writing	F	4	8	6	9	9
	%	11.1	22.2	16.7	25	25
Debate clubs	F	4	8	10	5	9
	%	11.1	22.2	27.8	13.9	25
Symposiums	F	2	6	3	3	22
	%	5.6	16.7	8.3	8.3	61.1
Field trips	F	2	4	6	6	18
	%	5.6	11.1	16.7	16.7	50

From the above table, 9(25%) of teachers said that students always participated in academic clubs, 6(16.7%) said students frequently participated in academic clubs, 2(5.6%) confirmed students occasionally participated, 4(11.1%) teachers said that students rarely participated in the academic clubs while 15(41.7%) teachers said that students never participated in any academic clubs. In article writing; 4(11.1%) teachers affirmed that students always participated, 8(22.2%) teachers said that students frequently participated in article writing whereas, 6(16.7%) teachers said occasionally participated, as 9(25%) rarely participated in it, while 9(25%) of teachers affirmed that students did not participate in article writing. In debates, 4(11.1%) of teachers stated that students always participated, 8(22.2) teachers confirmed that students frequently participated in debating, whereas 10(27.8%) of teachers said that students occasionally participated in debating club, while 5(13.9%) of teachers said that students rarely participated in debating and 9(25%) of teachers said that students never participated in debates 2(5.6%) of teachers said students always participated in symposiums, 6(16.7%) teachers affirmed that students frequently participated, occasionally, 3(8.3%) teachers said students participated in symposiums, while 3(8.3%) of teachers said that students rarely participated in symposiums and 22(61.1%) of teachers said that students never participated in symposiums. Going for

field trips; 2(5.6%) teachers said that students always participated, 4(11.1%) teachers said that students frequently went for field trips, 6 (16.7%) teachers said students occasionally went for field trips. 6(16.7%) teachers said students rarely went for field trips while 18(50%) of teachers confirmed that students did not participate in field trips.

From table 4.6, it can be noted that, majority of students never participated in education -based co-curricular activities, especially symposiums. This may be due to, insufficient time and resources to plan and prepare for them in schools or attending them from neighboring schools. Apparently, teachers observed that students actively participated in debates. This may be due to the fact that teachers in charge were able to organize them frequently. Further, it may be the only available option in some schools for the students to participate in. This is advantageous as students improve on their prowess in language and comprehension. In agreement with teachers' observation, a study done by Romica & Philip (2020) stated that the number of teachers supporting a co-curricular activity affects the participation of the same activity by students. Therefore, in this study, the students' low involvement in education-based co-curricular activities might be due to fewer teachers who were interested in guiding them in the activities.

4.3.3 Students' Responses on Influence of Education- based Co-curricular Activities on Academic Performance

Students were asked to comment on Education based co-curricular activities and their responses were recorded in the table below.

Table 4.7: Students' Responses on Education-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Participation in education-based co-curricular activities helps improve my academic performance	F	122	78	22	5	5	232
	%	52.6	33.6	9.5	2.2	2.2	100
Participation in education-based co-curricular activities has improved my organizational abilities and makes informed decisions.	F	84	119	16	9	4	232
	%	36.2	51.3	6.9	3.9	1.7	100
Participation in education-based co-curricular activities waste my time for studying	F	8	17	40	68	99	232
	%	3.4	7.3	17.2	29.3	42.8	100
Participation in education-based co-curricular activities refreshes my mind and improves my academic performance.	F	102	109	12	5	4	232
	%	44.0	47.0	5.2	2.2	1.8	100
Education-based co-curricular activities help me to be creative in my studying habits and contribute to higher academic attainment.	F	40	107	61	16	8	232
	%	17.2	46.1	26.4	6.9	3.4	100
Participation in education-based co-curricular activities captivates my commitment to learning which contributes to my academic performance.	F	95	96	33	8	0	232
	%	40.9	41.4	14.3	3.4	0.0	100
Education-based co-curricular activities offer new knowledge and skills that are not learned in the classroom that help me improve my academic performance.	F	60	103	29	28	12	232
	%	25.9	44.4	12.4	12.1	5.2	100

The distribution in Table 4.7 shows that 200(86.2 %) of the respondents affirmed that education-based co-curricular activities improve students' academic performance. 10(4.4 %) students disagreed that with education based co-curricular activities improved their academic performance. On the other hand, 22(9.5 %) were neutral. Further, 203(87.5 %) of the respondents affirmed that education-based co-curricular activities has improved their organizational abilities, while 13(5.6%) disagreed that the education – based co-curricular activities had improve their organisational skills and 16(6.9%) were neutral. When the respondents were asked whether participation in the education-based co-curricular activity was a waste of time, 25(10.7%) agreed that the participation in education-based co-curricular activities wasted their time for

studying, 167(72 %) disagreed that participation in education-based co-curricular activities wasted their time for study, 40(17.2%) were neutral. As further indicated, 211(91 %) of the respondents affirmed that participation in the education-based co-curricular activities refreshed their minds to study improving their concentration and as a result led to improvement in their academic performance, 9(3.9%) disagreed that the participation in co-curricular activities refreshes the mind, while 12(5.2%) held a neutral opinion on the same.

When asked about creativity, 147(63.3%) of the students affirmed that participation in co-curricular activities helped improve their creativity in learning, 24(10.3%) disagreed with the statement, while 61(26.4%) were neutral. As indicated by the distribution, 191(82.3 %) of the respondents affirmed that participation in co-curricular activities helped captivate their commitment to learning hence improve their academic performance, 33(14.2%) held a neutral opinion, while 8(3.4%) disagreed with the statement. Finally, 163(70.3 %) of respondents affirmed that education-based co-curricular activities conferred opportunities for students to gain new knowledge and skills that are not learnt in the classroom that helped them improve their academic performance, 40(17.3%) dis-affirmed that educational- based co-curricular activities offers new knowledge and skills that are not learnt in the classroom, while 29(12.5%) held a neutral opinion.

From the findings above, it is evident that majority of the learners affirmed that educational based co-curricular activities were of help both in academic performance and organisation abilities, that is 200(86.2%) and 203(87%) learners respectively, which is in agreement with Adeyemo, 2010 about the relationship between participation in education- based co-curricular activities and academic performance. His study indicated that participation in education-based co-curricular activities

significantly influenced learners' achievement in Physics, which was his area of interest. Most of the learners were also in agreement when they affirmed that the activities were refreshing and helped them to perform well academically. In particular, the debating competition could help strengthen one's verbal skills in language learning and help in identifying challenges which when dealt with led to improvement on weak areas in learning as they indicated in table 4.3. The student's interaction is also helpful as it encourages knowledge sharing and thus helps in peer – learning.

The findings of the study also confirmed that most learners 167(72%) disagreed with the fact that education based co- curricular activities were a waste of time. Besides, a large percentage of 211(91%) supported the idea of education based co-curricular activities enable them to learn new skills which cannot be learned in the classroom. This positively influenced their academic performance. In agreement with this, Needleman (2001) found out that many co-curricular activities teach real-world skills, such as journalism, photography, or debate, which can lead to lifelong interests and careers. Most of the studies found that children who participate in these activities are more successful academically than those who do not.

4.3.4 Teachers' Responses on Influence of Education-based Co-curricular Activities on Students' Academic Performance

Once the teachers had elaborated on the nature and frequency of participation and involvement in education-based co-curricular activities, the teachers were asked to indicate the levels of agreement on the influence of participation in education-based co-curricular activities on academic performance and their responses are found in Table 4.4.

Table 4.8: Teachers' Responses on Education-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Students' morale in and out of class presentation after participation in education-based co-curricular activities.	F	2	32	2	0	0	36
	%	5.6	88.9	5.6	0.0	0.0	100
Learners exhibit increased interest in studies after engaging in education-based co-curricular activities	F	9	17	6	4	0	36
	%	25.0	47.2	16.7	11.1	0.0	100
Learners actively engaging in education-based co-curricular activities outperform those who do not participate	F	2	10	10	8	4	36
	%	05.6	27.8	27.8	22.2	11.1	100
Participation in education-based co-curricular activities enhance teamwork and influences collective learning	F	14	14	6	1	1	36
	%	38.9	38.9	16.7	2.8	2.8	100
Participation in education-based co-curricular activities enhances time management skills among learners which positively impacts their academic performance.	F	8	21	5	1	1	36
	%	22.2	58.3	13.9	2.8	2.8	100

Table 4.8 presents teachers' responses on the impact of the education-based co-curricular activities on students' academic performance. The table above shows that, a majority, of 34(94.5 %) of the teachers affirmed that participation in education-based co-curricular activity tends to increase the students' morale, while 2(5.6 %) were neutral on the impact. Most of the teachers, 26(72.2 %) affirmed that learners who participated in the education-based co-curricular activities exhibit increased interest in learning and studying, 6(16.7 %) held a neutral notion on the issue, while 2(5.6 %) not agree on the increased interest in learning and studying by the students. As further indicated, 12(33.4 %) of the teachers affirmed that students who actively participate in education-based co-curricular tended to outperform those who did not, with 10(27.8 %) being neutral to the issue while 12(33.3 %) disagreed with the

statement. Regarding teamwork, 28(77.8 %) of the teachers indicated that participation in the education-based co-curricular activities enhanced teamwork among students and thereby influenced collective learning, 6(16.7 %) held a neutral opinion on the same, while 2(5.6%) disagreed on the enhanced teamwork. Finally, majority of 29(80.5 %) of the teachers affirmed that participation in an education-based co-curricular activity tended to enhance learners' time management skills which positively impacts their academic performance, 5(13.9%) were neutral, while 2(5.6 %) disagreed with the statement.

From the findings above, teachers, 34(94.5 %) confirmed that students participating in education -based co-curricular activities have an increased interest and morale to study thus increasing their chances to perform well in academics. The principals were also in agreement when they said that students who participated in education- based co-curricular activities were motivated and encouraged. They in turn actively participate in classroom activities which eventually improved their academic performance. This is also evident from the findings as majority of teachers 26(72.2%) confirm that, education- based co-curricular activities also boosts learners' interest for the learners to study. This automatically had a positive impact on their academic performance. In addition, most of the principals supported the views that learners participating in education based co-curricular activities and their academic performance. For instance, one of the principals stated that;

“Majority of those who participate in co-curricular activities also had improvements in the academic index in classwork”

Participation in the education – based co -curricular activities therefore tended to instil social attachment of membership to particular group structures where individuals share values and norms. From the findings, majority of the teachers 28(77.8%) stated that education- based co-curricular activities improves the learners'

teamwork skills. It enables them to work in groups and achieve the set targets and goals as a team. Thus, the peer group influence subsequent activity choices such as collaborative and cooperative learning and this shapes their academic success. Astin (1996) stated that peer groups were the strongest single source of influence on cognitive and affective development in schools. Peers often act as a support network, both for academic and personal matters, thereby influencing student development. With their participation in the education – based co-curricular activities, students are better able to get to appreciate their peers through personal bonding and mutual trust and commitment. This creates opportunity to develop mentoring or coaching relationships, develop personal relationships with peers who share similar interests, and possibly interact with other adults from the school or community who provide support for the activity.

4.4 Sports Based Co-Curricular Activities

The questionnaire required that the students to state the nature of the sport-based co-curricular activities they are involved or participated in and teachers to confirm what sports were offered in schools.

4.4.1 Sports based Co-curricular Activities Offered in Schools

The sports activities that the researcher intended to get data on included; netball, volleyball, football, handball, basketball, table tennis and athletics. The students and teachers were asked whether they participated or the sports were offered in their respective schools.

Table 4.9: Students Response on the Distribution of Sports-based Co-curricular Activities Offered in Schools.

Sports based activity	Offered	Not offered
Netball	15 (6.5%)	217 (93.5%)
Volleyball	18(7.8%)	214 (92.2%)
Football	55(23.7%)	177 (76.3%)
Handball	28 (12.1%)	204 (87.9%)
Basketball	18 (7.8%)	214 (92.2%)
Table tennis	8 (3.4%)	224 (96.6%)
Athletics	84 (36.2%)	148 (63.8%)

From the table above, 15(6.5%) students said that netball was offered, while 217(93.5%) said that it was not offered in their school, 7.8%(18) of students affirmed that volleyball was offered while 214(92.2%) of students said that it was not offered in their school, 55(23,7%) of students said that football was offered 177(76.3%) of students said was not offered in their school, for handball, 28(12.1%) said it was offered while 204(87.9%) said that it was not offered, 18(7.8%) of students agreed that basketball was offered,214(92.2%) of students said it was not offered. For table tennis, 8(3.4%) students said it was offered while 224(96.6%) of students confirmed that it was not offered. 84(36.2%) students said athletics was offered, 148(63.8%) students said athletics was not offered in their school.

The teachers were also asked about the sports offered in their schools and the table below shows their responses.

Table 4.10: Teachers Response on the Distribution of Sports Based Co-Curricular Activities Offered in Schools.

Sports based activity	Offered	Not offered
Netball	3(8.3%)	33(91.7%)
Volleyball	3(8.3%)	33(91.7%)
Football	9(25%)	27(75%)
Handball	4 (11.1%)	32(88.9%)
Basketball	2 (5.6%)	34(94.4%)
Table tennis	6 (16.7%)	30(83.3%)
Athletics	9(25%)	27(75%)

The table 4.8 indicates that, 3(8, 3%) teachers stated that both netball and volleyball were offered while 33(91.7%) teachers said both netball and volleyball were not offered in their schools, 9(25%) teachers said that football is offered while 27(75%) teachers affirmed that it was not offered. 4(11.1%) teachers said handball was offered, 32 (88.9%) teachers affirmed that it was not offered. Wwhen asked about basketball, 2(5.6%) affirmed that it was offered, 34(94.4%) of teachers stated that it was not offered. For table tennis, 6(16.7%) said it was offered in their schools, 30(83.3%) of teachers said it was not offered. Finally, 9(25%) of teachers affirmed that athletics was offered while 27(75%) said it was not offered in their schools.

From table 4.9 of students, findings indicate that athletics and football are the most popular sports offered in schools though the representation was still low. These findings relate to the previous data on the gender of the respondents where by the male students were more than female; therefore, this agrees with the popularity of football and athletics. This indicated that the sports were mostly played by the male students. Few students affirmed that handball, volleyball, basketball, netball and table tennis are offered in their schools, this could be due to complexity, and lack of resources to be used in the game, which made it a hurdle for the school to offer. Lack of expertise for the sport could also have contributed to the sport not being popular or offered.

The findings from table 4.10 of teachers indicate that, both football and athletics are the sports that are mostly offered in the schools. This is in agreement with students' responses, where it was confirmed that athletics followed by football were the most offered sports- based activities in schools. These findings imply that the availability of resources of the games mentioned is the reason why the schools offer them. On the other hand, handball, volleyball, basketball, netball and tablet tennis were less popular

according to the teachers. This was also evident from the students' responses. This implies that these sports-based co-curricular activities were not offered due to lack of expertise and resources required for the sports.

When the principals were asked about the sports being offered in their schools, majority of them affirmed that football was mostly offered and mostly played by boys compared to girls. Further, the principals said that handball, volleyball, basketball and netball are not popularly offered in their schools due to lack of resources to implement the games. Moreover, a good number of the principals confirmed that table tennis was a sport activity least offered in their schools which was in concurrence with the results of the students from table 4.9 of students.

4.4.2 Frequency of Participation in Sports-based Co-curricular Activities in Schools

Table 4.11: Students Response on Frequency of Participating in Sports-based Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Netball	F	15	10	55	11	141
	%	6.5	4.3	23.7	4.7	60.8
Volleyball	F	20	25	60	98	29
	%	8.6	10.8	25.9	42.2	12.5
Football	F	100	65	36	31	0
	%	43.1	28.0	15.5	13.4	0
Handball	F	0	70	42	80	40
	%	0	30.1	18.2	34.5	17.2
Basketball	F	26	17	98	76	15
	%	11.2	7.3	42.2	32.8	6.5
Table tennis	F	13	46	88	57	28
	%	5.6	19.8	37.9	24.6	12.1
Athletics	F	124	60	18	18	12
	%	53.4	25.8	7.8	7.8	5.2

Table 4.11 above shows that, 15(6.5%) of students always participated in netball, 10(4.3%) frequently participated in netball, 55(23.7%) occasionally participated in netball, 11(4.7%) rarely participated and 141(60.8%) did not participate at all.

Volleyball participation involved 20(8.6%) who always participated, 25(10.8%) frequently participated, 60(25.9%) occasionally participated, 98(42.2%) who rarely participated and 29(12.5%) who never participated in volleyball. When asked about how often they participated in football, 100(43.1%) of the students said they always participated, 65(28.0%) of students frequently participated in it, 36(15.5%) students said occasionally participated in it, 31(13.4%) said they rarely participated and none never participated.

For handball, none of the students always participated in it, 70(30.1%) frequently participated in it, 42(18.2%) occasionally participated in it, while 80(34.5%) rarely participated and 40(17.2%) never participated in the handball. When asked about basketball; 26(11.2%) always participated in it, 17(7.3%) of the students said they frequently participated in basketball, 98(42.2%) said that they occasionally participated in it, 76(32.8%) rarely participate in the game while 15(6.5%) never participated in the game at all. In table tennis, 13(5.6%) said that they always took part in it, 46(19.8%) of the students affirmed that they frequently participated in the sport, 88(37.9%) occasionally took part in table tennis, 57(24.6%) rarely participated while 28(12.1%) did not participate at all. Finally, when they were asked how often they participate in athletics; 124(53.4%) always participated, 60(25.8%) of the students said that they frequently participated in the sport, 18(7.8%) said that they occasionally participated in athletics 18(7.8%) rarely participated and 12(5.2%) never participated.

Teachers were asked on how frequent students participated in sports- based activities and their responses were recorded in the table below.

Table 4.12: Teachers' Response on Frequency of Students' Participation in Sports-based Co-curricular Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Netball	F	2	4	8	10	12
	%	5.6	11.1	22.2	27.8	33.3
Volleyball	F	1	4	12	10	9
	%	2.8	11.1	33.3	27.8	25.0
Football	F	16	10	6	4	0
	%	44.4	27.8	16.7	11.1	0
Handball	F	10	9	5	3	9
	%	27.8	25.0	13.9	8.3	25.0
Basketball	F	2	3	9	9	13
	%	5.6	8.3	25.0	25.0	36.1
Table tennis	F	4	9	9	6	8
	%	11.1	25.0	25.0	16.7	22.2
Athletics	F	6	14	8	6	2
	%	16.7	38.9	22.2	16.7	5.6

Table 4.12 presents that, 2(5.6%) of teachers responded that students always participated in netball, 4(11.1%) frequently participated in netball, 8(22.2%) occasionally participated in netball, 10(27.8%) rarely participated and 12(33.3%) did not participate at all. Volleyball participation, 1(2.8%) teacher stated that students always participated in the game, 4(11.1%) said they frequently participated, 12(33.3%) affirmed that students occasionally participated, 10(27.8%) said they rarely participated and 9(25%) said that the students never participated in volleyball. When asked about how often the students participated in football, 16(44.4%) of the teachers said students always participated, 10(27.8%) of teachers said students frequently participated in it, 6(16.7%) of teachers said occasionally students participated in it, 4(11.1%) of teachers said students rarely participated and 0(0.0%) participated. For handball, 10(27.8%) of teachers said that student always participated in it, 9(25%) of teacher said students frequently participated in it, 5(13.9%) of teachers affirmed students occasionally participated in it, while 3(8.3%) of teachers said students rarely participated and 9(25%) never participated in handball. When asked about basketball; 2(5.6%) said students always participated in it, 3(8.3%) of teachers said students

frequently participated in the game, 9(25%) said that students occasionally participated in it, 9(25%) said students rarely participate in the game while 13(36.1%) affirmed students never participated in the game at all. In table tennis, 4(11.1%) of teachers said that students always take part in it, 9(25%) of teachers affirmed that students frequently participated in the sport, 9(25%) of teachers said that students occasionally took part in table tennis, 6(16.7%) said that students rarely participated while 8(22.2%) responded that students did not participate at all. Finally, when they were asked how often the students participate in athletics; 6(16.7%) said students always participated, 14(38.9%) of teachers said that students frequently participated in the sport, 8(22.2%) said that students occasionally participated in athletics 6(16.7%) said that students rarely participated and 2(5.6%) said that students never participated in athletics at all.

From table 4.12 of students' table above, it shows that majority of the students frequently participated in athletics followed by football. This is because of the popularity of the game in the schools, as the data from the list of the sporting activities being offered showed. This implies that the motivation of these sports is high and therefore most students are attracted to them. On the other hand, handball, volleyball, basketball netball and table tennis were the sporting activities that had fewer students participating in them. This implied that the students lacked motivation or accessibility of the right equipment for the sports.

The findings from table 4.13 for teachers implied that students' frequency in participation of different sports depends on the popularity of the game, or the sports that are offered in their schools. This is evident from the findings when both the students and teachers were asked to comment on the games offered in their schools. This was also strongly supported by the principals as most of them confirmed that

football was a popular game as most students especially boys participated in it. The student's urge to participate in different sports could be due to availability of teachers who could train the sporting activities, teachers' enthusiasm of playing and training various sporting activities contributed largely to students' participation.

4.4.3 Students' Responses on Influences of Sports-based Co-curricular Activities on Academic Performance

The students were asked to indicate the levels of agreement on the influence of participation in sport-based co-curricular activities on academic performance and their responses presented in Tables 4.13.

Table 4.13: Students' Responses on Sport-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Participation in Sport - based co-curricular activity helps improve my academic performance	F %	55 23.7	121 52.2	24 10.3	13 5.6	19 8.2	232 100
Participation in Sport - based co-curricular activity has improved my organizational abilities and helps me makes informed decisions.	F %	54 23.3	129 55.6	37 15.9	4 1.7	8 3.4	232 100
Participation in Sport - based co-curricular activity waste my time for studying	F %	11 4.7	33 14.2	42 18.1	58 25.0	88 37.9	232 100
Participation in Sport - based co-curricular activity refreshes the mind and improve my academic performance	F %	63 27.2	128 55.2	25 10.8	9 3.9	7 3.0	232 100
Sport - based co-curricular activity helps improve my creativity and contribute to higher academic attainment	F %	77 33.2	83 35.8	45 19.4	19 8.2	8 3.4	232 100
Participation in Sport - based co-curricular activities captivates my commitment to learning	F %	39 16.8	101 43.5	55 23.7	21 9.1	16 6.9	232 100
Sport - based co-curricular activities offer new knowledge and skills that are not learned in the classroom	F %	61 26.3	103 44.4	20 8.6	26 11.2	22 9.5	232 100

The data in Table 4.13 shows that 176(75.9 %) of the students affirmed that sport-based co-curricular activities improved academic performance, 32(13.8 %) disagreed that sport- based co-curricular activities improves academic performance, while

24(10.3%) held a neutral opinion on the same. Further, 183(78.9 %) of the respondents affirmed that sport-based co-curricular activities has improved their organizational abilities, 37(15.9 %) were neutral on the issue, while 12(5.1 %) disaffirmed that sport- based co-curricular activities improves organisational abilities. When the students were asked whether participation in the sport-based co-curricular activities was a waste of time, 146(62.9 %) disagreed that participation in the sport-based co-curricular activities waste valuable time for study, 44(18.9 %) affirmed that participation in the sport – based co-curricular activities was a waste of time, while 42(18.1 %) were neutral.

As further indicated 191(82.4 %) of the students affirmed that participation in a sport-based co-curricular activity tend to refreshed their minds and by extension improved academic performance, 16(6.9 %) disaffirmed that the participation in sport- based co-curricular activities refreshed one's mind, while 25(10.8 %) were neutral. When asked about creativity, 158(69%) of the students affirmed that participation in co-curricular activities improved creativity in learning, 45(19.4%) were neutral to the effect of the participation, while 27(11.6 %) disagreed that sport – based co-curricular activity doesn't impact on creativity. As indicated by the distribution, 140(60.3%) of the students affirmed that participation in the co-curricular activity helps activate their commitment to learning, 55(23.7 %) held a neutral opinion on the commitment to learning, while 37(17%) disagreed that sport – based co-curricular activities activates commitment to learning. 164(70.7 %) of students affirmed that sport-based co-curricular activity confers opportunities for students to gain new knowledge and skills, 48(20.7 %) disaffirmed that sport – based co-curricular activity offers opportunities for gaining new knowledge that are not offered in the classroom, while 20(8.6 %) held a neutral.

The above findings indicate that; majority of the students 176(75.9 %) affirmed that sport-based co-curricular activity improved their academic performance. This is in agreement with the teachers' data when they related the student's participation in sports and their morale in studying and 29(80.5 %) of the teachers admitted that participation in sport-based co-curricular activities increased the students' morale in studying which contributes to good academic performance. This can also be supported by the study of Veliz and Shakib (2014) who discovered that sport provided experiences that build character and social skills that could indirectly translate to enhance academic outcomes. Moreover, a more narrowly defined explanation concerning the positive academic outcomes; where students indirectly accrue from athletic participation. Because interscholastic sport facilitates involvement in other forms of participation in school-relevant activities, athletes developed a sense of identification with the school. Thus, students who have a stronger connection, or identification with school, will benefit academically because of their psychological connection with the school mission. On the other hand, Zuckerman and Foubert (2014), disagreed with this opinion from his study that found out that students who involved in athletic activities scored lower grades. This is due to the number of hours they spent in athletic activity per week which leads to a decline in the students' academic performance.

The outcomes also affirm that, majority of the students, 191(82.4%) agreed that sport based co-curricular activities help to refresh their minds and in extension they perform well. In addition, most of them 158(69%) agreed that sports based co-curricular activities sharpens their creativity and contributes to higher academic performance.

Marsh and Kleitman (2005) supports learners' idea as they claim that, students who participate in athletics interact with peers, work for the best interest of the team, and

learn to follow instructions and may contribute to the student athletes' development of self-identity. Thus, it confirms that actually sports are very fundamental to the academic performance of the students. In addition to this, teachers also agreed that, sport-based activities improved students' morale in studying as indicated in table 4.13. Majority of them were in agreement that sports have a positive impact on students' academic performance. This was also agreed upon by majority of the principals who indicated that sport boosts the morale of the students, by increasing their self- esteem which later was transferred to classwork of learners and they were able to perform well in academics.

“The winning mentality helps their self – esteem when it comes to classwork. They translate the same to learning process. Indiscipline cases reduce too as they are actively engaged in school. It also helps manage time well as no time is wasted.”

In addition to the teachers' perceptions and opinions, majority of principals added that, sports really help learners in terms of discipline and therefore they are able to participate in classroom activities actively.

The findings also indicate that, a good number of learners agreed that sport- based co-curricular activities do help them in refreshing and being creative. The skills learnt in the specific sports can be transferred to classroom work and the students are able to apply it with ease in academics. This was strongly supported by the principals as they affirmed that sport- based co-curricular activities sharpened the participation and involvement of learners in classwork.

4.4.4 Teachers Responses on Influence of Sports-based Co-curricular Activities on Students' Academic Performance

Once the teachers had elaborated on the nature of participation and involvement in sport-based co-curricular activities by the students, the teachers were asked to indicate

the levels of agreement on the influence of participation of students in sport-based co-curricular activities on academic performance and their responses are found in Tables 4.14.

Table 4.14: Teachers' Responses on Learners' Participation on Sport-based Co-curricular Activities and their Influence on Academic Performance.

Variable		SA	A	N	D	SD	Total
Students' morale increases in and out of class after participation in sport-based co-curricular activity	F	8	21	5	2	0	36
	%	22.2	58.3	13.9	5.6	0.0	100
Learners exhibit increased interest in studies after engaging in Sport-based co-curricular activities	F	4	20	2	10	0	36
	%	11.1	55.6	5.6	27.8	0.0	100
Active students outperform those not involved in Sport-based co-curricular activities	F	1	10	13	6	6	36
	%	2.8	27.8	36.1	16.7	16.7	100
Participation in Sport-based co-curricular activities enhance teamwork and influences collective learning	F	15	17	2	2	0	36
	%	41.7	47.2	5.6	5.6	0.0	100
Participation in Sport-based co-curricular activity enhances time management skills among learners which improves their academic performance	F	8	28	0	0	0	36
	%	22.2	77.7	0.0	0.0	0.0	100

The distribution in Table 4.14 concerns the teachers' responses on the influence of learner participation in sport-based co-curricular activities on students' academic performance. The data show that 29(80.5 %) of the teachers affirmed that participation in sport-based co-curricular activities increased the students' morale in class and outside of class presentation as they participate in sport-based co-curricular activities, 2(5.6 %) were neutral on the impact, while 5(13.9 %) disagreed on the issue of morale. Further, 24(66.7 %) of the respondents admitted that learners who participate in the sport-based co-curricular activities exhibit increased interest in learning and studying, 2(5.6 %) held a neutral notion on the issue, while 10(27.8%) disagreed with the statement. As further indicated, 11(30.6%) of the respondents

affirmed that students who actively participate in sport-based co-curricular activities tend to outperform those who do not, with 13(36.1 %) remaining neutral while 16(33.4%) disagreed with the statement.

Regarding teamwork, 31(88.9 %) of the respondents indicated that participation in the sport-based co-curricular activities enhances teamwork among students and thereby influenced cooperative learning, 2(5.6 %) held a neutral opinion, while 2(5.6%) disagreed on the statement. Finally, all 100% (36) of the respondents affirmed that participation in sport-based co-curricular activities tends to enhance learners' time management skills which improve their academic performance.

The findings indicate that, 29(80.5%) of teachers confirmed that sport -based co-curricular activities enhanced students' morale in academics. Also 24(66.7%) of teachers assert that sports increased learners' interest in academics. They actively participate both in classroom as in the field. The findings support the results of the study of Rona *et al* (2017), which revealed that there was a significant relationship between participation in sports and academic success of the student-athletes. The study also deduced that participation in sports improved athletes' perceptions on academic excellence, mental processes and becoming more logical and patient. This was evident when the students said that they feel refreshed after participating in sports and therefore their interest is heightened in academics.

31(88.9%) of teachers agreed that sports -based co-curricular activities enabled students develop teamwork skills. This in return promotes the aspect of collaborative learning among students. It was agreed that the skills they learnt in the field could be converted to classwork and they could use the techniques in working out classroom demands. The teachers were confident that this eventually boosts their academic

performance. A majority of the principals also had a strong opinion on the same as they agreed that learners who participate in sports had the ability to socialize well and easily with others hence making it possible for peer learning.

Veliz & Shakib, (2012) supports these opinions when they observed during extracurricular activities, that students are better able to get to know other peers and adults through personal bonding and mutual trust and commitment. Students involved in extracurricular activities have the opportunity to develop mentoring or coaching relationships, develop personal relationships with peers who share similar interests, and interact with other adults from the school or community who provide support for the activity

Rules and regulations in different sports may motivate school athletes to do well in their courses. In addition, involvement in sports and other extracurricular activities may integrate students into their schools, providing a greater sense of belonging and increasing visibility and status among other students and teachers. Student-athletes may therefore feel more attached to their schools and teachers and more engaged in their classrooms, all of which can contribute to academic success.

This is in agreement with a majority of the learners who affirmed that sports activities enabled them to gain new skills and knowledge that they can apply in their academic studies and enable them to perform well. Finally, participation and achievement in sports may promote self-confidence and well-being. Sports thus encouraged students to persevere in advanced courses by integrating them into their schools and instilling the drive and confidence to succeed (Pearson *et al*, 2009)

Some of the respondents were not sure of whether non- participation or participation was could result into good performance, 79(34.1%). Views were in agreement with Kiptala and Okero (2003) study which stated that there was no significant relationship between students' involvement in co-curricular activities and their academic achievement. This can be an indication that some learners do not have a clear understanding of the relationship between sports and academic performance, as there is no clear indication whether there is a direct linkage of participating in sports and performing well in academics.

Participation in the sport-based co-curricular activity inculcates a winning mentality to the student and thus helped develop self-esteem and helped reduce disciplinary cases by actively engaging the students in a co-curricular activity. This can translate into a learning process by itself as well as a pro-active and pre-emptive strategy to managing disciplinary issues. Participation in sport - based co-curricular activities contribute to academic success in several ways. First, the emphasis on success and hard work may increase students' desire to succeed in school and enhance an academic orientation. Involvement in sport activities provides a greater sense of belonging and attachment to the school and ensures learning. Students who are more successful in sports than in academics are able to command the recognition and respect of their peers, which is associated with more positive psycho-social outcomes.

4.5 Social based Co-curricular Activities

Data on social based co-curricular activities and how they influence students' academic performance was sought and presented under this sub-section..

4.5.1 Social Based Co-Curricular Activities Offered in School

The questionnaire required that the students and teachers to state the nature of the

social-based co-curricular activities they were involved in and the responses are shown below.

Table 4.15: Students Responses on the Distribution of Social-based Co-curricular Activities Offered in Schools.

Social based activity	Offered	Not offered
Music	184(79.3%)	48(20.7%)
Drama clubs	181(78.0%)	51(22%)
Scouting and guiding	95(40.8%)	137(59.2%)

Table 4.15 presents the responses of students when they were asked whether the list of social based activities were offered in their schools. From the data it shows that majority of students 184(79.3%) affirmed that music was offered while 48(20.7%) students said that it was not offered in their school. Also, when asked of drama clubs, 181 (78.0 %) stated that they were offered, while 51(22.0%) of them stated that they were not offered in their schools. When asked about scouting and guiding 95(40.8%) said that they were offered while 137(59.2%) said that they were not offered.

The teachers also were asked to state whether the social based co-curricular activities were offered in their schools. The table below shows the distribution of the responses given.

Table 4.16: Teachers' Response on the Distribution of Social-based Co-curricular Activities Offered in Schools.

Social based activity	Offered	Not offered
Music	30(83.3%)	6(16.7%)
Drama clubs	25(69.4%)	11(29.6%)
Scouting and guiding	18(50%)	18(50%)

From table 4.16, majority of teachers 30(83.3%) said that music was offered 6(16.7%) of teachers said it was not offered in their schools. 25(69.4%) affirmed that drama clubs were offered, while 11(29.6%) of teachers stated that drama was not offered in

their school. When asked about scouting and guiding, 18(50%) said that it was offered, 18(50%) said that it was not offered.

Table 4.15 indicates that at least all the social based activities were offered in schools in Kapenguria sub county, with music being the most popular with 184(79.3%) followed by drama. This could be because these activities boost student's morale, after being refreshed during their participation. This can be an implication that, most students have a liking for music due to trips accompanied to it especially during music festivals and competitions. However, scouting and guiding seems to be less popular as it had the lowest percentage of 40.8% this could be due to lack of awareness of the activity and lack of expertise among teachers to guide learners.

Table 4.16 indicates that music and drama were most popular social- based co-curricular activities offered in schools. This implies that, since majority participated in music and drama, their drive to participate could be due to an increased interest in music and drama. This most likely influences their academic performance. Majority of the principals who were interviewed were in agreement with both the students and teachers stating that music was the most offered social- based co-curricular activity followed by drama. The principals affirmed that students who participated in socio-based co-curricular activities were able to improve their social and interaction skills that later on enable them to improve on their academic performance. Sherry (2016) in her study stated that performing arts and drama in education was significant as students attained required learners' competencies and values. This implies that music and drama attracted most learners, due to availability of motivation in terms of mentors and also availability of time for learners to participate and teachers to guide.

4.5.2 Frequency of Students' Participation in Social-based Co-curricular Activities

The following table shows the students opinion on how often they participate in social based co-curricular activities.

Table 4.17: Students Response on Frequency of Participating in Social-based Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Music	F	126	84	11	11	0
	%	54.3	36.2	4.7	4.7	0
Drama clubs	F	100	25	60	18	29
	%	43.1	10.8	25.9	7.8	12.5
Scouting and guiding	F	86	65	36	31	14
	%	37.1	28.0	15.5	13.4	6.0

The findings above show that; 126(54.3%) of students always participated in music, 84(36.2%) students frequently participated in music, 11(4.7%) occasionally participated in music, while 11(4.7%) rarely participated. 100(43.1%) of students always participated in drama, 25(10.8%) students frequently took part in drama, 60(25.9%) students occasionally took part in drama, 18(7.8%) of students rarely participated in drama, 29(12.5%) never participated in drama. for scouting and guiding, 86(37.1%) always participated in scouting and guiding, 65(28.0%) students frequently participated in the scouting and guiding, 36(15.5%) students occasionally took part in scouting and guiding, 31(13.4%) rarely participated in it and 14(6%) never participated.

Table 4.18: Teachers Responses on Frequency of Students Participating in Social-based Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Music	F	9	9	8	6	4
	%	25	25	22.2	16.7	11.1
Drama clubs	F	4	9	10	8	5
	%	11.1	25	27.8	22.2	13.9
Scouting and guiding	F	5	9	12	6	4
	%	13.9	25	33.3	16.7	11.1

The findings above show that; 9(25%) of teachers suggested that students always participated in music, 9(25%) of teachers also said that students frequently participated in music, 8(22.2%) of teachers observed that students occasionally participated in music, while 6(16.7%) of teachers said students rarely participated in music while 4(11.1%) said that students never participated. 4(11.1%) of teachers said that students always participated in drama 9(25%) teachers said students frequently participate in drama, 10(27.8%) teachers observed students occasionally took part in drama, 8(22.2%) teachers observed that students rarely participated in drama, 5(13.9%) teachers observed students never participated in drama. for scouting and guiding, 5(13.9%) teachers observed that students always took part in the activity, while 9(25%) teachers said students frequently participated in the scouting and guiding, 12(33.3%) teachers observed that students occasionally participated scouting and guiding, also 6(16.7%) teachers said students rarely participated scouting and guiding while 4(11.1%) said that students never participated in scouting and guiding.

The findings of table 4.17 convey that majority of students participated in music as a social based activity. 126(54.3%) always participated, 84(36.2%) frequently participated and 11(4.7%) occasionally participated in music. Majority of the students stated that they often participate in drama club since it was seasonal competitions secondary schools. Scouting and guiding had most of the students participating. Social- based co-curricular activities enable them to learn to be productive citizens to our country and promote citizenship. Participation of students in this social- based activities enable them to interact with others in different schools during the competitions, which could help them to improve in their discussions and teamwork during their studies thus improving their academic performance. This was possible because of the scouting movement presently in Kenya is done through camping and

training whose main objective is to enhance, support, and develop boys and girls into well rounded individuals with exemplary character, Romica & Philip (2020) that was witnessed in the raising and lowering of the Kenyan and school flags on Mondays and Fridays on assemblies and occasional camping that is done during school competitions.

From table 4.18, It was clear that students often participated in music, drama and scouting and guiding as indicated in the table, however a few of them rarely participated in these socio-based activities. This could be as a result of the fact that most of the social based activities involve the students travelling away from school and therefore, they are enthusiastic in participating in these activities. The motivation of going for trips and mingling with others might be the contributing factor. Additionally, the acquired skills in turn positively influence their academic performance. In addition, majority of the principals interviewed affirmed that social based activities enhance the students' social skills. Through these social meetings, peer learning is also enhanced and the students are able to explore educational content in addition to regular content taught in class. This is in congruent with the study carried out by Chanda *et al* (2024), who claimed that co-curricular activities contribute to the social and emotional well-being of learners, which is closely linked to academic success. Co-curricular activities are integral to the academic performance of learners as they support the development of critical life skills, reinforce academic learning through practical application, and enhance social and emotional well-being.

4.5.3 Students Responses on Influence of Social- based Co-curricular Activities on Academic Performance

The students were asked to indicate the levels of agreement on the influence of participation in social-based co-curricular activities on academic performance and their responses were presented in Tables 4.19.

Table 4.19: Students' Responses on Social-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Participation in Social-based co-curricular activity helps improve my academic performance	F	67	112	16	19	18	232
	%	28.9	48.3	6.9	8.1	7.8	100
Participation in Social-based co-curricular activity has improved my organizational abilities and makes informed decisions.	F	78	110	20	21	3	232
	%	33.6	47.4	8.6	9.1	1.3	100
Participation in Social-based co-curricular activity wasted valuable time for studying	F	12	32	40	69	79	232
	%	5.2	13.8	17.2	29.7	34.1	100
	%	5.6	18.5	32.8	18.1	25.0	100
Participation in Social-based co-curricular activity refreshes the mind and improves my academic performance	F	58	118	23	18	15	232
	%	25.0	50.9	9.9	7.8	6.4	100
Social-based co-curricular activity helps improve my creativity and contribute to higher academic attainment	F	83	97	35	13	4	232
	%	35.8	41.8	15.1	5.6	1.7	100
Participation in Social-based co-curricular activities captivates my commitment to learning which contribute to my academic performance	F	41	94	56	17	24	232
	%	17.7	40.5	24.1	7.3	10.4	100
Social-based co-curricular activities offer new knowledge and skills	F	68	96	36	16	16	232
	%	29.3	41.4	15.5	6.9	6.9	100

The responses in Table 4.19 show that 179(77.2%) of the students affirmed that social-based co-curricular activities improve students' academic performance, 37(16.0%) disagreed that social – based improved academic performance, while 12(6.9 %) held a neutral opinion. Further, 188(81.0 %) of the students affirmed that social-based co-curricular activities has improved their organizational abilities,

20(8.6%) were neutral on the issue, while 24(10.4 %) disagreed that social- based co-curricular activities improves academic performance. When the students were asked whether participation in the social-based co-curricular activities is a waste of time, 148(63.8 %) disagreed, 44(19%) affirmed that participation in the social – based co-curricular activities is a waste of time, while 40(17.2 %) were neutral on the matter.

As further indicated 176(75.9 %) of the students affirmed that participation in a social - based co-curricular activities tend to refresh their minds and by extension improve academic performance, 23(14.3 %) disagreed that the participation in social- based co-curricular activity refreshes one's mind, while 23(9.9 %) were neutral. When asked about creativity, 180(77.6 %) of the students affirmed that participation in social - based co-curricular activities tends to improve creativity in learning, 17(7.3%) were neutral, while 35(15.1 %) disagreed. As indicated by the responses, 135(58.2%) of the students affirmed that participation in the co-curricular activities helped activate their commitment to learning, 56(24.1 %) held a neutral opinion on the commitment to learning, while 41(17.6 %) disagreed. 164(70.7 %) of students affirmed that social-based co-curricular activities conferred opportunities for students to gain new knowledge and skills, 32(13.8 %) disagreed, while 36(15.5 %) held a neutral opinion.

The findings show that, majority of the students 179(77.2%) agreed that participation in social based co-curricular activities improved their academic performance. Extracurricular activities boost the adolescents' connectedness with their schools, which, in turn, boost their academic performance. An important objective of the total learning process is the integration of knowledge. Extracurricular activities are said to be integrative in nature because they tie together many areas of knowledge and experience. They don't provide abstract and isolated pieces of learning, but rather

synthesize many aspects of real-life situations (Mehmood *et al* 2012). Therefore, socio- based co-curricular activities that students participate in enable them to integrate the skills learned to classroom and improve their academic performance.

The data correspondingly indicate that most of the students 188(81.0%) agreed that socio- based activities help in organisational abilities. This is also evident with a majority of the principals' opinions, they affirmed that when learners cooperate in social- based co-curricular activities and are well coordinated, then they can benefit from participating in them. In support of this, one of the principals said;

“Well – organized activities could positively assist learners in acquiring skills such as problem – solving, organizational as well as communication skills.”

These skills in turn influence the academic performance as the students are able to apply them in classwork during the learning process.

The principals further emphasized that Whether students have the opportunity to perform in theatre productions or help out behind the scenes, participating in drama competition not only engages with the creative side of the brain, but it also provides an ideal balance in students' patterns of study. This is in agreement with Ayesha *et al* (2024) they focused on; effects of co-curricular activities on character development of students. Their study findings indicated that these activities were real in steering students away from developing undesirable habits, fostering a sense of responsibility, honing special skills, shaping personality, and instilling self-confidence and leadership qualities, which will contribute to personal growth and valuable experiences that have a positive impact on their academic performance. Besides a majority of the principals further asserted that these activities help them to gain new knowledge they would not be able to acquire while in class.

4.5.4 Teachers Responses on Influence of Social- based Co-curricular Activities on Students' Academic Performance

The Likert-type scale was used which rated the level of agreement/disagreement with the items with a scale: 1 - Not at all (N); 2 - Strongly Disagree (SD); 3 - Disagree (D); 4 - Agree (A); and 5 - Strong Agree (SA). With the aid of these statistical techniques, the study reduced the large data sets into numerical scores which are presented in the information presented in the following table.

Table 4.20: Teachers' Responses on Students' Participation on Social-based Co-curricular Activities and their Influence on Academic Performance.

Variable		SA	A	N	D	SD	Total
Students' morale increases in and out of class after participation in social-based co-curricular activity	F	2	30	4	0	0	36
	%	5.6	83.3	11.1	0.0	0.0	100
Learners exhibit increased interest in studies after engaging in social - based co-curricular activity	F	2	28	2	4	0	40
	%	5.6	77.8	5.6	11.1	0.0	100
Active students outperform those not involved in Social - based co-curricular activities	F	0	10	16	2	8	40
	%	0.0	27.8	44.4	5.6	22.2	100
Participation in Social - based co-curricular activity enhances teamwork and influences collective learning	F	10	22	4	0	0	40
	%	27.8	61.1	11.1	0.0	0.0	100
Participation in social-based co-curricular activities enhances time management skills among learners	F	9	25	0	2	0	40
	%	25.0	69.4	0.0	5.6	0.0	100

The responses in Table 4.20 concerns the teachers' responses on the influence of learner participation in social - based co-curricular activities on students' academic performance. The distribution shows that 32(88.9%) of the teachers affirmed that participation in social - based co-curricular activities increased the students' morale in and outside of class presentation which improves academic performance, 4(11.1 %) disagreed on the issue of morale, none disagreed. 30(83.4 %) of the teachers affirmed that learners who participated in the social - based co-curricular activity exhibit

increased interest in learning and studying, 2(5.6 %) held a neutral notion on the issue, while 4(11.1 %) disagreed. 10(27.8%) of the teachers affirmed that students who actively participated in social - based co-curricular outperformed those did not with 16(44.4%) remained neutral while 10(27.8 %) disagreed. Concerning teamwork, 32(88.9 %) of the teachers indicated that participation in the social - based co-curricular activities enhances teamwork among students and thereby influenced cooperative learning, 4(11.1%) held a neutral opinion. Finally, 34(94.4 %) of the students affirmed that participation in social - based co-curricular activities enhanced learners' time management skills which improves their academic performance, 2(5.6 %) were neutral and none disagreed.

The findings above imply that majority of the teachers 32(88.9%) agreed that social-based co-curricular activities boosted students' morale in performing well in academics. It was affirmed by the teachers when they were asked about the performance of the learners who participated in social- based co-curricular activities and 30(83.4 %) of the teachers affirmed that learners who participated in the social - based co-curricular activities exhibited increased interest in learning and studying. This was also confirmed by the principals when they were asked to comment on the relationship between the socio-based co-curricular activities and performance. Most of them agreed with the learners and teachers when they said social -based co-curricular activities participation made learners more active in class which boosted the academic performance.

“Success in co-curricular activities motivates students to also do well academically. The times the school has excelled in sports, we have also had exemplary results in classwork”

This was also evident from the principals' interview as some of them stated that social based co-curricular activities really played great role on the learners' performance,

their reasoning in heightened and sharpened leading to admirable learners academically.

Generally speaking, most teachers opined that participation of students in social-based co-curricular activities influenced learners' academic performance. Further, most of the principals observed that social-based co-curricular activities are very vital and those learners who participated in them did perform exceedingly well academically.

One of the principals said;

“If these students are well guided, they become more advantaged than the rest. They have the ability to explore in a wide range of content making their growth to be all round.”

Another principal added that;

“As they visit other institutions and interact with their friends from other schools, they share ideas and ways of improving their performance. Their interaction also helps open their understanding about diversity.”

This is also echoed by Normah *et al*, 2017 in their study of eliminating shyness through co-curricular activities towards enhancing the career development of engineering students. They found out that co-curricular activities such as debate, choir, sports team, physical activities and exercise, career and technical student organizations and entrepreneurship clubs and societies are found to be the core activities that can enhance the social and communication skill, participation in the teaching and learning, self-esteem and career development of shy students. This was also supported by Ayesha *et al*, 2024 who affirmed that social based co-curricular activities impart new virtues during games and interactions with people from different regions and cultures. These activities play a significant role in developing teamwork

habits, instilling a spirit of cooperation, and fostering harmony and brotherhood among participants.

Majority of the teachers 34(94.4%) affirmed that students who were involved in social based activities acquire time management skills. This enabled them to balance between the co-curricular activities and academics. This was echoed by a majority the principals who said that social based activities enable the students to be active in both co-curricular and academics, thus a good balance is established. The social-based co-curricular activities had several benefits that include student interactions thus allowing for a conducive environment for peer learning, skill acquisition in terms of problem – solving among other things. Student participation in the social- based co-curricular activities enables the students to develop supportive networks within the school ecosystems and this provide a challenging setting for students. These activities offer a place to develop additional skills and recognition that extend beyond academic achievement.

Student participation enables the students to get attached to their schools and more engaged in their classrooms, all of which can contribute to educational success. Participation in the social- based co-curricular activities synthesized many aspects of real-life situations and carries out in vital way the objectives of present-day democratic life. Participation in social-based co-curricular activities improves academic performance by encouraging learners to explore a wide range of content – creation. This promotes all-around growth and helps enhance their levels of thinking thus making them more creative and enhancing their reasoning capacity.

4.6 Community- based Co-curricular Activities

The community based co-curricular activities that were researched on, concerning their influence on academic performance to the students and data collected, included; red-cross, tree planting and garbage collection exercises.

4.6.1 Community -Based Co-curricular Activities Offered in School

The questionnaire required students and teachers to state the nature of the community -based co-curricular activities, they are involved or participated in and the responses were as shown below.

Table 4.21: Students' Responses on the Distribution of Community based Co-curricular Activities Offered in their Schools.

Social based activity	Offered	Not offered
Red cross activities	25(10.8%)	207(89.2%)
Tree planting	45(19.4%)	187(80.6%)
Garbage collection exercise	67(28.9%)	165(71.1%)

From the table above, 25(10.8%) of students affirmed that red cross activities are offered, while 207(89.2%) said that red cross activities were not offered in their schools. 45(19.4%) of them affirmed that tree planting activities was offered 187 (80.6%) of students said that tree planting was not offered in their schools. 67(28.9%) students said garbage collection program was offered while 165(71.1%) said that it was not offered in their school.

Table 4.22: Teachers' Responses on the Distribution of Community based Co-curricular Activities Offered in their Schools.

Social based activity	Offered	Not offered
Red cross activities	6(16.7%)	30(83.3%)
Tree planting	5(13.9%)	31(86.1%)
Garbage collection exercise	24(66.7%)	12(33.3%)

From the table, the data indicate 6(16.7%) of teachers said red cross activities were offered in their schools, while 30(83.3%) of teachers said that it was not offered. 5(13.9%) of teachers said tree planting program was offered in their schools, 31(86.1%) of teachers said that tree planting was not offered in their schools. 66.7%(24) said that garbage collection was offered in schools while 12(33.3%) of teachers said that it was not offered in their schools.

The findings in table 4.21 for students indicate that most of the schools do not offer most of the community- based activities. When the students were asked about the community-based activities offered, a large number of them, 28.9% (67) said garbage collection is offered. For the teachers, among the three community -based activities, most schools offer garbage collection program as indicated by the finding; 66.7% (24) of teachers. This can be deduced as the diverse climatic conditions might be the reason why trees were not planted, also lack of facilities and resource persons to train the students in Red Cross activities hinders the popularity of the activity. This is in agreement with the results from table 4.22 for teachers who said that few schools offer community -based co-curricular activities. This might be due to lack of necessary information about the activities. Also, it can be due to lack of time as more time is spent on academics. Fredricks & Eccles (2016) indicated that participation in community -based co-curricular clubs predicted academic adjustment, educational status and civic engagement later on in life. The students in Kapenguria sub-county should be encouraged to participate in these activities so as to fully benefit from them. Fredrick & Eccles (2016) observed that students who participated in this community -based activities were enthralled and committed to their studies thus enhancing their academic performance. In addition, the principals affirmed that community- based co-curricular activities were not popular in their schools especially red cross and tree

planting. However, they confirmed that garbage collection is offered as it has been made a practice for students which are sometimes extended to the community from time to time.

4.6.2 Frequency of Students' Participation in Community- based Activities

Table 4.23: Students Responses on Frequency of Participation in Community-based Co-curricular Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Red cross activities	F	25	36	45	66	60
	%	10.8	15.5	19.4	28.4	25.9
Tree planting	F	35	45	32	33	87
	%	15.1	19.4	13.8	14.2	37.5
Garbage collection exercise	F	56	61	38	50	27
	%	24.1	26.3	16.4	21.6	11.6

The table shows; 25(10.8%) of students always participated in red cross activities, 36(15.5%) of students frequently participated in red cross activities, 45(19.4%) of students occasionally participated in the activity, 66(28.4%) of students rarely participated in red cross activities while 60(25.9%) students never participated in the red cross activities. When asked about how often they participated in tree planting; 35(15.1%) of students confirmed that they always took part in planting tree exercise, 45(19.4%) said they frequently participated, 32(13.8%) said they occasionally participated, while 33(14.2%) of students said that they rarely participated in tree planting and 87(37.5%) said they never participate in tree planting activities. On garbage collection exercise, the students 56(24.1%) always participated in the activity, 61(26.3%) frequently participated, 38(16.4%) occasionally participated, while 50(21.6%) rarely participated in garbage collection and 27(11.6%) did not participate at all.

Table 4.24: Teachers Responses on Frequency of Students Participating in Community- based Co-curricular Activities.

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Red cross activities	F	6	6	5	6	13
	%	16.7	16.7	13.9	16.7	36.1
Tree planting	F	9	8	12	7	2
	%	25	22.2	33.3	19.4	5.6
Garbage collection exercise	F	12	9	8	9	2
	%	33.3	25	22.2	25	5.6

The table above shows that; 6(16.7%) teachers observed that students always participated in red cross activities, also 6(16.7%) teachers said that students frequently participated in red cross activities, 5(13.9%) teachers said that occasionally students participated in the activity, 6(16.7%) teachers said that students rarely participated in red cross activities while 13(36.1%) teachers observed that students never participated in the red cross activities. When asked about how often the students participated in tree planting; 9(25%) stated that students always take part in planting tree exercise, 8(22.2%) said that the students frequently participated, 12(33.3%) said that students occasionally participated, while 7(19.4%) said that students rarely participated in tree planting and 2(5.6%) said that students never participated in tree planting activities. On garbage collection exercise, 12(33.3%) of them said that students always participated in the activity, 9(25%) said that students frequently participated, 8(22.2%) observed that occasionally students participated in garbage collection, while 9(25%) said that students rarely participated in garbage collection and 2(5.6%) said that students did not participate at all.

From the findings in table 4.23 it can be noted that, a reasonable number of students rarely participated in Red Cross activities. This is an indication that there is a gap in community based co-curricular activities. There is a need for advocacy of these activities. More resource persons should be deployed in the schools to talk about and

train students in Red Cross. Further, a reasonable number of students, 87 (37.5%) said that they rarely participated in tree planting activities. This could be as a result of seasonal rains that are experienced in the area, discouraging the students to participate in this activity.

For garbage collection, a majority of students 117(50.4%) participated in it. This is a clear indication that the students have the enthusiasm of keeping the environment clean. The community members might have seen the advantages of students' involvement and therefore provided a conducive environment for the students to perform their duties. Lack of knowledge, sensitisation and advocacy on community-based co-curricular activities and its involvement might also another contributing factor to low involvement of students in these activities. This negatively influences learner academic performance due to limited exposure. This is evident from the study of Wanjiku *et al* (2020), when they claimed that many stakeholders in the education program believe that co-curricular activities consume academic time and unnecessarily. They further observed that most schools did not frequently involve students in co-curricular activities and hence influencing students' academic performance.

Table 4.24 for teachers show that, most students participate in garbage collection as confirmed by the teachers' observations, especially the low percentage of 5.65(2) that recorded those students never participated in the activity. This is confirmed by the students' response on how they often participated in the activity as only 11.6% of them did not participate in garbage collection. This implies that students have awareness of keeping the environment clean and safe. This contributes to performance of environmental subjects like agriculture. This was strongly supported by a majority of the principals who affirmed that students who participated in community-based

activities were able to relate the knowledge from the field to classroom work thus improving their academic performance. This implies that learners have a positive attitude to participate in community- based co-curricular activities which will eventually boost their morale in academics.

4.6.3 Students Responses on Influences of Community- based Co-curricular Activities on Academic Performance

The student's responses on the influence of participating in community -based co-curricular activities and how their involvement affects their academic performance were sought. Table 4.25 below indicates their responses and relation to community -based co-curricular activities.

Table 4.25: Students' Responses on Community-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Participation in Community-based co-curricular activity helps improve my academic performance	F %	59 25.4	105 45.3	24 10.3	29 12.5	15 6.5	232 100
Participation in Community-based co-curricular activity has improved my organizational abilities and helps me make informed decisions.	F %	62 26.7	122 52.6	36 15.5	8 3.5	4 1.7	232 100
Participation in Community-based co-curricular activity wastes valuable time for studying	F %	20 8.6	23 9.9	49 21.1	64 27.6	76 32.8	232 100
	%	5.6	16.8	24.1	34.9	18.5	100
Participation in Community-based co-curricular activity refreshes the mind and improve my academic performance	F %	61 26.3	98 42.2	38 16.4	19 8.2	16 6.9	232 100
Community-based co-curricular activity helps improves my creativity and contribute to higher academic attainment	F %	61 26.3	95 40.9	24 10.3	28 12.1	24 10.3	232 100
Participation in Community-based co-curricular activities captivates my commitment to learning	F %	53 22.8	103 44.4	36 15.5	28 12.1	12 5.2	232 100
Community-based co-curricular activities offer new knowledge and skills that are not learned in the classroom	F %	63 27.2	85 36.6	44 19.0	20 8.6	20 8.6	232 100

The responses in Table 4.25 shows that 164(70.7 %) of the students affirmed that community-based co-curricular activity improves students' academic performance, 44(19.0%) disagreed that community-based co-curricular activities improved academic performance, while 24(10.3%) held a neutral opinion. Further, 188(73.9%)

of the students affirmed that community-based co-curricular activity has improved their organizational abilities and helped them make informed decisions, 37(15.5%) were neutral, while 12(5.1%) disagreed. When the students were asked whether participation in the community-based co-curricular activity is a waste of time, 140(60.4%) disagreed, 43(18.7%) affirmed that participation in the community-based co-curricular activity is a waste of time, while 49(21.1%) were neutral.

As further indicated 159(68.5%) of the students affirmed that participation in a community-based co-curricular activities refreshed their minds and by extension improved academic performance, 35(15.1%) disagreed, while 38(16.4 %) were neutral. When asked about creativity, 156(67.2%) of the students affirmed that participation in co-curricular activities improved creativity in learning and contribute to higher academic attainment, 24(10.3%) were neutral, while 52(22.4 %) disagreed. As indicated by the distribution, 156(67.2 %) of the students affirmed that participation in the co-curricular activities helped activate their commitment to learning, 36(15.5%) held a neutral opinion, while 40(17.3%) disagreed. More than 148(63.8%) of students affirmed that community-based co-curricular activity confers opportunities for students to gain new knowledge and skills that are not learnt in the classroom, 40(17.2%) disagreed, while 44(19.0%) held a neutral opinion.

It is observed from the findings that, majority of the learners, 164(70.7%) affirmed that participation in community- based co-curricular activities improve their academic performance. This is evident from the learners' responses. Similarly, majority of the principals agreed to the fact that those students who participated in community- based co-curricular activities had boosted morale in the study that contributed to positive academic performance. This is supported by Annu and Sunita (2014) who suggested

that involvement of students in community-based co-curricular activities positively influenced their academic performance. They added that the benefits of participating in community service included higher academic attainment, regular school attendance and increased connectedness to the school. Students who actively participate in community- based co-curricular activities were able to connect with the immediate community members therefore strengthening the bond between the community and schools.

Additionally, when the principals were asked, most of them said that those students who participated in community- based co-curricular activities were likely more to perform better academically than those did not.

One of them said;

“Their involvement is hands – on approach which helps the learners to fully understand what they are doing. Participating in the community activities is more like putting to theory and actual involvement makes the student to understand the content better”.

Majority of the students 188(73.9%) agreed that community- based co-curricular activities enable them to acquire organizational skills and ability to plan in their academics. This is in agreement with Bekomson *et al.*, (2020) in their study that evaluated the impact of the community – based co-curricular activities on self-efficacy. The study revealed that interest in co-curricular activities significantly influenced social self-efficacy, academic self-efficacy, language self-efficacy, moral self-efficacy and overall self-efficacy. Therefore, students who participate in community- based activities are bound to develop varied skills that will be beneficial in their future life.

Majority of the principals who commented that involvement in these activities enabled students to be steady and have a clear choice of future decisions concerning their careers;

“The activities help shape the future careers of the students and help them to be responsible”.

A large percentage of 140(60.4%) learners disagreed that participating in community based co-curricular activities is a waste of time; this implies that their involvement in community-based activities came with several benefits. For instance, participating in red cross activities enabled learners to gain skills that to give back to the community by volunteering to provide services to the people in need. Garbage collection is a key way of making the environment to be safe for habitation; this is extended to the school environment which is a key contributor to good academic performance.

The benefits for community-based co-curricular activities include inculcating environmental awareness and its importance to the students as well as student responsiveness to the societal needs, promoting resource conservation and environmental protection and promoting community health. These is evident from the findings; Many of the students, 156(67.2%) who affirmed that community- based co-curriculum activities helped them to refresh their minds with their extension in performance.

Co-curricular activities introduce responsibility to the students, impart practical skill into what they have learned, and involve them in appreciating the learning content while exposing them to the outside world including scholarships. 156(67.2%), of the learners agreed that community based co-curricular activities helped to shape and improve their creativity skills.

4.6.4 Teachers' Responses on Community- based Activities on Students' Academic Performance

Table 4.26: Teachers' Perception on Community-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Students' morale increases in and out of class after participation in community-based co-curricular activity	F %	2 5.6	20 55.6	6 16.7	8 22.2	0 0.0	36 100
Learners exhibit increased interest in studies after engaging in community - based co-curricular activity	F %	2 5.6	28 77.8	2 5.6	4 11.1	0 0.0	36 100
Active students outperform those not involved in community - based co-curricular activities	F %	0 0.0	10 27.8	16 44.4	2 5.6	8 22.2	36 100
Participation in community - based co-curricular activity enhances teamwork and influences collective learning	F %	12 33.3	20 55.6	4 11.1	0 0.0	0 0.0	36 100
Participation in community-based co-curricular activity enhances time management skills among learners	F %	2 5.6	25 69.4	0 0.0	9 25.0	0 0.0	36 100

Table 4.26 shows that 61.2% (22) of teachers agreed that community- based activities improved students morale in studying, 22.2% (8) did not agree while 16.7% (6) had a neutral opinion. When they were asked their opinion on the relationship between community- based activities and students increase in studies; 83.4% (30) of respondents affirmed that community- based co-curricular activities increases students interest in studies, 11.1% (4) disagreed with that notion while 5.6% (2) did not have a stand. Moreover 27.8% (10) of the teachers affirmed that those students who participated in community- based co-curricular activities outperformed in academics than those who did not. Similarly, majority of teachers 88.9% (32) acknowledged that students participating in community -based co-curricular activities enhanced their skills in teamwork which enhanced peer learning and thus collaborative learning took place, none disagreed while 11.1% (4) were neutral of the opinion. Finally, when the teachers were asked on time management skills and students' performance in

academics; 75% (27) of them affirmed that community -based activities promoted time management skills in students, however, 25% (9) of the teachers disagreed.

The findings show that majority of teachers 61.2% (22) agreed that community- based co-curricular activities improved students' morale of learning in academic thus improving their outcomes. Similarly, majority of students had affirmed that community- based co-curricular activities boosted their morale in performing well in academics. Majority of teachers 83.4% (30) also agreed that participating in community- based co-curricular activities increased the students' interest in academics. This was strongly supported by the principals when they said that community- based co-curricular activities enabled to boosted the students' interest in learning process, most teachers 88.9% (32) affirmed that, participating in community-based co-curricular activities enabled the students to learn from each other and with each other enhancing team work and collaborative learning. Interacting with the society as they involved themselves in the community -based co-curricular activities enables the students to meet mentors, volunteers and specialists who mentored them in various fields. This empowered the students and helps them to gain knowledge and skills that was important in their future life. It also helped them with the development of problem-solving, organizational and communication skills and thus brings out a holistic individual at the end of learning. Chanda *et al* (2024) in their study also agreed that co-curricular activities offer a platform for students to apply the theoretical knowledge gained in class to real-world scenarios, enhancing their understanding and retention of academic concepts. The ability of learners getting to participate in the community- based co-curriculum- activities, enabled them to practice what they learned in the classroom in the community, hence enhancing community service learning. 63.8% (148) also agreed that community based co-

curricular activities enables them to learn new knowledge that they would not be able to learn in the classroom. Siddiky (2019), in his study the findings were in harmony with teachers about involvement in community -based co-curricular activities facilitates brain development, knowledge acquisition, personality development, and civic development of the students. This enhances the development of all-round students.

This was strongly supported by some students who affirmed that a lot is being learnt when they participate in community based co-curricular activities

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter provides the summary of the findings, conclusions that the study arrived at, followed by the recommendations of the study. The chapter then gives the suggestions for further study. This study examined the influence of learners' participation in co-curricular activities on academic performance in public secondary schools in West Pokot County, Kenya. The summary of the findings was presented on the basis of objectives of the study, which include the influence of learner participation in education- based, sports based, social based and community based co-curricular activities on academic performance in public secondary schools in West Pokot county.

5.2 Summary of the Findings

5.2.1 Education Based Co-Curricular Activities

The study focused on education- based co-curricular activities that were offered in public secondary schools in Kapenguria Sub-County, West Pokot County. These activities included; academic clubs, article writing, debates, symposiums and field trips. A reasonable number of the learners said that their schools offered academic clubs 84(36.2%), followed by debates 48(20.7%) while article writing 4(1.7%) was the least offered followed by symposiums 8(3.4%) in most of the schools. The numbers were still very low and indicated very low participation. In agreement with the students, teachers observed that debates were popularly offered in the schools followed by field trips then academic clubs. However, article writing was the least offered which is in agreement with what the students stated. In support of this, the principals who were interviewed said that academic clubs were mostly offered

followed by debates then field trips while article writing and symposiums were least offered.

Generally, majority of the schools under study did not offer most of the education-based co-curricular activities as indicated by the high percentages of the education - based activities not offered.

Most students did not participate in most education-based co-curricular activities across the schools especially article writing and symposiums. Only a few students participated in academic clubs, debates and field trips as indicated by students, teachers and principals

Majority of the learners affirmed that education based co-curricular activities were helpful both in academic performance and organizational abilities, that is 200(86.2%) and 203(87%) learners respectively, in addition, a majority of the learners were also in agreement when they affirmed that the activities were refreshing and helped them to perform well academically. The findings confirmed that most learners disagreed on education based co- curricular activities being a waste of time. A large percentage of students supported the idea of education based co-curricular activities enabled them to learn new skills which could not be learned in the classroom and acquired time management skills to improve academic performance.

34(94.5 %) confirmed that students who participated in education- based co-curricular activities had an increased interest in their studies thus increasing their chances to perform in academics. The interviewed principals were also in agreement when they said that students who participated in education -based co-curricular activities were motivated and encouraged by participating in education based co-curricular activities.

They in turn actively participate in classwork which eventually improves their academic performance. This is also evident from the findings as majority of teachers confirm that, education-based co-curricular activities boost learners' interest to study. This automatically has a positive impact on their academic performance. Further, majority of the teachers 28(77.8%) said that education- based co-curricular activities improves the learners' teamwork skills. It enables them to work in groups and achieve the set targets and goals as a team. These impacts positively on their academic performance. Finally, teachers affirmed that participation in education-based co-curricular activities tend to enhance learners time management skills which positively impacts their academic performance.

In support of this majority of the interviewed principals were in agreement that students who participated in education-based co-curricular activities were motivated and encouraged. They in turn actively participated in classroom work which eventually improved their academic performance.

5.2.2 Sports Based Co-Curricular Activities

Sports based co-curricular activities that were focused on in the study included; netball, volleyball, football, handball, basketball, table tennis and athletics. It was found out that athletics and football were the most popular sports offered in schools as indicated by students with 84(36.2%) and 55(23.7%) respectively. Handball, volleyball, basketball, netball and table tennis were less offered according to the students, teachers and principals. This was due to lack of adequate resources and expertise for the sports.

The teachers stated that students' frequency in participation of different sports depended on the popularity of the game, or the sports that were offered in their

schools. This was also strongly supported by the principals as most of them confirmed that athletics was the most popular game followed by football as most students especially boys participated in.

On academic performance, a majority of the students 176(75.9 %) affirmed that participation in sport-based co-curricular activities improved their academic performance. This is in agreement with the teachers' data when they related the students' participation in sports and their morale in studying and 29(80.5 %) admitted that participation in sport-based co-curricular activities increased the students' morale of studying which contributes to good academic performance. Further, majority of the students, 191(82.4%) agreed that sports based co-curricular activities helped to refresh their minds and by extension perform well. In addition, most of them agreed that sports based co-curricular activities sharpened their creativity. Majority of them were in agreement that sports have a positive impact on students' academic performance. This was also in agreement with majority of the principals who indicated that sports boosted the morale of the students, by increasing their self- esteem which later is transferred to classwork of learners and they are able to perform well in academics. A good number of learners agreed that sports-based activities do help them in refreshing their mind and being creative. This was strongly supported by the principals as they affirmed that sports -based co-curricular activities sharpened the participation and involvement of learners in the classwork.

On the other hand, 29(80.5%) of teachers confirmed that sports- based co-curricular activities enhances students morale in academics. Also, teachers asserted that sports increased learners' interest in academics. 31(88.9%) of teachers agreed that sports-based activities enables students with teamwork skills therefore influencing co-

operative learning. All the 36(100%) of the teachers said that participation in sport-based co-curricular activities enhanced learners time management skills which improved performance. A majority of the principals also had a strong opinion on the same as they agreed that learners who participated in sports had the ability to socialize well and easily with others hence making it possible for peer learning.

5.2.3 Social Based Co-Curricular Activities

The researcher sought to find data on and how The social based co-curricular activities influence students' academic performance includes; music, drama and scouting and guiding. It was noted that all the social based co-curricular activities were offered in schools. This was confirmed by both the students and teachers. Majority of the principals who were interviewed were in agreement with both the students and teachers in stating that music, drama and scouting and guiding were offered and popular among students. On participation of learners in social based co-curricular activities, students, teachers and principals were in agreement that there was high participation in these activities. The principals affirmed that students who participated in socio- based co-curricular activities were able to improve their social and interaction skills that later on enable them to improve on their academic performance. In addition, it was confirmed that a majority of the students participated in music as a social -based co-curricular activity.

Further it was noted that, majority of the students 179(77.2%) agreed that participation in social based co-curricular activities improved their academic performance. The data correspondingly indicate that most of the students 188(81.0%) also agreed that socio- based activities help in organizational abilities. This is also evident with the principals' opinions, as they also affirmed that when learners

cooperate in the social- based activities are coordinated well they can benefit from participating in them. Besides majority of students asserted that these activities help them to gain new knowledge they would not be able to acquire while in class.

On the other hand, majority of teachers 32(88.9%) agreed that social based activities boosted students' morale in performing well in academics. It was further found ut that learners who participate in the social - based co-curricular activity exhibit increased interest in learning and studying. This was also confirmed by the principals. Majority of teachers 34(94.4%) affirmed that students who were involved in social based activities acquire time management skills. This enables them to balance between the co-curricular activities and academics. This was echoed by the principals who said that social based activities enable the students to be active in both co-curricular and academics, thus a good balance is established.

5.2.4 Community Based Co-Curricular Activities

The community based co-curricular activities findings of the items that were researched on included; red-cross, tree planting and garbage collection activities. A reasonable number of students 67(28.9%) said that garbage collection activity was the most offered compared to other community- based co-curricular activities.

The findings showed that majority of the learners, 164(70.7%) affirmed that participation in community -based co-curricular activities improved the academic performance. Majority of students 188(73.9%) agreed that community- based co-curricular activities enabled them to acquire organizational skills and ability to plan in their academics. A reasonable number of learners disagreed that participating in community based co-curricular activities is a waste of time. Many of the students, 156(67.2%) affirmed that community-based co-curriculum activities helps them to

refresh their mind which extended to their academic performance. Most learners also agreed that community based co-curricular activities helped to shape and improve their creativity skills.

On the other hand, majority of teachers 22(61.2%) agreed that community- based activities improved students morale of learning in academic thus improving their outcomes. Majority of teachers 30(83.4%) also agreed that participating in community- based activities increased the students' interest in academics. This was strongly by majority of the principals when they said that community- based co-curricular activities boost the students' interest in learning process. They said that these students who participated in community based co-curricular activities were likely to perform better than those who did not. Correspondingly, most teachers 32(88.9%) affirmed that, participating in community- based co-curricular activities enables the students to learn from each other and with each other hence enhancing team work and collaborative learning. Teachers also agreed that community based co-curricular activities enables students acquire new knowledge and skills that they would not be able to learn in the classroom.

Participation in community based co-curricular activities boosts the students' interest in the learning process. Students who participated in community-based co-curricular activities were most likely to perform better than those who did not.

5.3 Conclusions

Based on the findings, the study makes the following conclusions:

Academic clubs, debates and field trips were the most offered education-based co-curricular activities in schools while article writing was the least offered followed by

symposiums as indicated by students, teachers and principals. On participation, it was clear that a majority of the students did not participate in most education-based co-curricular activities across the schools especially article writing and symposiums. Only a few students participated in debate clubs, academic clubs and field trips as indicated by the students, teachers and principals.

The education based co-curricular activities impacts on the academic performance by directly influencing the learner's intellectual capabilities thus helping them to explore and integrate new knowledge and skills. In addition, a majority of learners affirmed that education-based co-curricular activities helped them academically and in organizational abilities. The activities were refreshing and helped them perform well academically, helped them to learn new skills which cannot be learnt in the classrooms and acquire time management skills which improves their academic performance.

Further, the study concluded that students participation in education-based co-curricular activities have an increased interest in morale to study thus increasing their chances to perform in academics, boost learners interest to study, improve learners teamwork skills and enhance time management skills which positively impacts their academic performance. Further, it provided conducive atmosphere for peer and cooperative learning to occur and helped increase students' morale and interest in learning. Other avenues for learning are in students' interaction which helps promote knowledge sharing and thus deepening learning. It was concluded that students who participated in education based co-curricular activities were motivated and encouraged. They in turn actively participated in class work which positively improved their academic performance.

The study concluded that athletics and football were the most popular sports- based co-curricular activities offered in schools while handball, volleyball, basketball, netball and table tennis were less offered due to lack of adequate resources and expertise for the sports.

The study concluded that students frequently participated in athletics followed by football. On the other hand, handball, volleyball, basketball, netball and table tennis were the sports that were less participated. It was also concluded that participation in sports-based co-curricular activities influenced student's academic performance. It improved their morale in studying, helps refresh their mind and by extension they perform well. Students stated that it sharpens their creativity. On the other hand, teachers confirmed that participation in sports-based co-curriculum activities enhances students' morale in academics, increased learners' interest in academics, enables them to acquire team work skills hence influencing co-operative learning and enhances learner's time management skills which improve academic performance. It was concluded that sports boosted the morale in students by increasing their self-esteem which later was transferred to classwork of the learners as they were able to perform well in academics. They also said that learners had the ability to socialize well and easily with others hence making it possible for peer learning.

On offering of social-based co-curricular activities, the study concluded that, all the social based co-curricular activities including; music, drama and scouting and guiding were offered in schools. There was high participation in all social based co-curricular activities as stated by the students, teachers and principals. Principals affirmed that students who participated in social based co-curricular activities were able to improve their social and interaction skills that later on help them improve in their academic

performance. Students agreed that participation in social based co-curricular activities improve their academic performance, helps in organizational skills and helps them to acquire new knowledge and skills which they would not learn in classrooms. On the other hand, teachers said that learners' participation in social-based co-curricular activities boosts their morale in performing well in academics, increased interest in learning and studying and helped them acquire time management skills which enable them to balance between the co-curricular activities and academics. The principals indicated that social-based co-curricular activities enabled the students to be active in both co-curricular activities and academic thus a good balance was established. It also enhances creativity and thus increases their reasoning capacity.

The study concluded that, garbage collection was the most offered compared to other community based co-curricular activities (Red Cross and tree planting). On influence academic performance, the study concluded that participation in community-based co-curricular activities improved learner's academic performance. They enable them acquire organizational skills, ability to plan in their activities, helps them refresh their mind which extends to their academic performance and helps them shape and improve their creativity skills. Teachers stated that community- based co-curricular activities improves students' morale, increase their interest in academics, participation in peer learning and imparting practical knowledge and skills and enables the students to learn from each other hence enhancing teamwork and collaborative learning. Principals were of the opinion that participation in community based co-curricular activities boosts the students' interest in the learning process. It was also concluded that students who participated in community-based co-curricular activities were most likely to perform better than those who did not. The community based co-curricular activities influenced academic performance by encouraging student's participation in

peer learning and imparting practical knowledge and skill. It also exposed the student to several skills that included problem-solving, organization and communication. However, there is less sensitisation and advocacy done on community -based activities.

5.4 Recommendations

Based on the findings of this study and the conclusion, the study made the following recommendations:

1. Since most of the education-based co-curricular activities were not being offered and especially article writing and symposium, principals and teachers should be proactive in planning, managing and organization of the education-based co-curricular activities in the schools. These can be done at the local and international level regularly to improve interest and develop the intellectual capacity of students.
2. Principals should seek to expand and improve the existing physical facilities for sports in the schools and teachers should be trained on various sports activities enable them guide learners
3. Principals and teachers should seek to introduce and promote more clubs and societies which are in addition to the existing ones, in order to promote students' involvement. This may include public speaking, poetry and photography clubs.
4. In regard to the community-based co-curricular activities, the schools' administration should offer students opportunities to participate in Red Cross training, tree planting and garbage collection.

5.5 Suggestions for Further Research

Further research related to this study could be carried out on the effectiveness of co-curricular activities on the holistic development of the students.

REFERENCES

- Acquah, B. Y., & Anti Partey, P. (2014). The influence of co-curricular activities on students' performance in economics. *Journal of Educational Management*, 6, 147-160.
- Adeyemo, S. A. (2010). The relationship between students participation in school-based extra-curricular activities and their achievement in physics. *International Journal of Science and Technology Education Research*, 1(6), 111-117.
- Aduda, D. (2003). Teachers to get arrears in July: New curriculum to be implemented this month as earlier scheduled. *Daily Nation*.
- Agnes Wanjiku Kamau *et al*, (2020). Influence of Participation in Competitive Co-Curricular Activities on Self-Concept of Secondary School Students in Kenya. *International Journal of Sports Science* 2020, 10(5)
- Ahmad, M., Rahman, M. F., Ali, M., Rahman, F. N., & Al Azad, M. A. S. (2015). Effect of Extra-Curricular Activity on Student's Academic Performance. *Journal of Armed Forces Medical College, Bangladesh*, 11(2), 41-46.
- Amar *et al*, (2019). *Engagement in Co-curricular Activities and its Relationship Regarding Academic Performance: Study towards KIRKHS Students Perception*
- Amukowa, W. (2013). A call to reform secondary schools in Kenya.
- Angeline A. Subang, (2022). Co-Curricular Activities, Physical Activity Motivation and Sports Performance of High School Athletes. *Psych Educ*, Document Anglican College, Fletcher Bishop Tyrrell Anglican College. [online] Bishop Tyrrell Anglican College. Available at: <http://www.btac.nsw.edu.au/2016/10>
- Annu, S., & Sunita, M. (2014). Extra-curricular Activities and Student's Performance in Secondary School. *International Journal of Technical Research and Education*.
- Anyango, V. (2012). *Influence of co-curricular activities on academic achievement of public primary school pupils in Kisumu municipality Kisumu county, Kenya* (Doctoral dissertation, University of Nairobi, Kenya).
- Arriba, M., Lucas, C. M., Goto, K., & Labrador, R. N. (2018). Engaging Filipinx Americans in Higher Education to Foster Student Success. *JCSCORE*, 4(2), 1-37.
- Ashfaq, M. (2021). *Function of sports and co-curricular activities on academic achievement in secondary*
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of college student personnel*, 25(4), 297-308.
- Astin, A. W. (1985). Involvement the cornerstone of excellence. *Change: The Magazine of Higher Learning*, 17(4), 35-39.
- Azevedo, R. (2020). Reflections on the field of metacognition: Issues, challenges, and opportunities. *Metacognition and Learning*, 15(2), 91-98.

- Bagaya, J., & Sekabembe, B. (2011). Influence of Involvement in Sports on Students' Involvement in Academic Activities at Ndejje University. *Makerere Journal of Higher Education*, 3(2).
- Bartlett, J., Kotrlik, J., Higgins, C., & Williams, H. J. P. R. (2001). Exploring factors associated with research productivity of business faculty at National Association of Business Teacher Education. Published Report.
- Bashir, Z., & Hussain, S. (2012). The Effectiveness of Co-curricular Activities on Academic Achievements of Secondary School Students in District Abbottabad Pakistan-A Case Study. *Journal of Education and Practice*, 3(1), 44.
- Behrendt, M., & Franklin, T. (2014). A review of research on school field trips and their value in education. *International Journal of Environmental and Science Education*, 9(3), 235-245.
- Bekomson, A. N., Amalu, M. N., Mgbani, A. N., & Kinsley, A. B. (2020). Interest in Extra Curricular Activities and Self Efficacy of Senior Secondary School Students in Cross River State, Nigeria. *International Education Studies*, 13(8), 79-87.
- Best, J. W., & Kahn, J. V. (2016). *Research in education*. Pearson Education, India.
- bin Rashid, A. R., Hayeehasa, A., Akbari, B., Ahmad, F., bin Mohd Zain, M. F., bin Sabarudin, S. S., & binti Jamaudin, N. (2019). Engagement in Co-curricular Activities and its Relationship Regarding Academic Performance. *Methodology*, 11, 11.
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2008). *Business research methods* (Vol. 2). London: McGraw-Hill Higher Education.
- Brown, R. (2015). Extracurricular activity: How does participation encourage positive youth development. *University of Nevada Cooperative Extension Fact Sheet*, 1(1), 32-99.
- Bundervoet, T., Dávalos, M. E., & Garcia, N. (2021). The Short-Term Impacts of COVID-19 on Households in Developing Countries. Policy Research Working Paper 9582. The World Bank
- Champoux, K. (2016). Do extracurricular activities promote better academic performance and heightened sense of school connectedness in college athletes (Doctoral dissertation, State University of New York College at Fredonia).
- Chanda *et al*, 2024. *The Effect of Co-Curricular Activities on Learners Academic Performance: A Case of Selected Secondary Schools in Lusaka District, Zambia*
- Cohen, L., Morrison, K., & Manion, L. (2017). Mixed methods research. In *Research Methods in Education* (pp. 59-78). Routledge.
- Cooper, D. R., & Schindler, P. S. (2008). *International edition: business research methods*. New Delhi: McGraw-Hill.
- Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods*. The McGraw–Hill Companies.

- Craft, S. W. (2012). *The impact of extracurricular activities on student achievement at the high school level*.
- Creswell, J. W. (2012). Educational research: planning. *Conducting, and Evaluating*.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Daniyal, M., Nawaz, T., Hassan, A., & Mubeen, I. (2012). The effect of co-curricular activities on the academic performances of the students: a case study of the islamia university of bahawalpur, pakistan. *Bulgarian Journal of Science & Education Policy*, 6(2).
- Darling, N., Caldwell, L. L., & Smith, R. (2005). Participation in school-based extracurricular activities and adolescent adjustment. *Journal of leisure research*, 37(1), 51-76.
- Dearman, S. G. (2017). School Sanctioned Extra-curricular Activities and Academic Achievement: A Quantitative Study of Hours of Extra-curricular Participation and the Impact upon GPA and ACT Score. *ProQuest LLC*.
- Dillman, D. A., Hao, F., & Millar, M. M. (2017). Improving the effectiveness of online data collection by mixing survey modes. *The SAGE handbook of online research methods*, 220-238.
- Foreman, E. A., & Retallick, M. S. (2012). Undergraduate involvement in extracurricular activities and leadership development in College of Agriculture and Life Sciences Students. *Journal of Agricultural Education*, 53(3), 111–123
- Fredricks, J. A., & Eccles, J. S. (2016). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental psychology*, 42(4), 698.
- Fujita, K. (2016). The effects of extracurricular activities on the academic performance of junior high students. *Undergraduate Research Journal for the Human Sciences*, 5(1), 1-16.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, H. (1992). *Multiple intelligences* (Vol. 5, p. 56). Minnesota Center for Arts Education.
- Gatara, T. H. (2010). Introduction to Research methodology, Nairobi. *The Olive Marketing and Publishing Company*.
- Gilman, R., Meyers, J., & Perez, L. (2014). Structured extracurricular activities among adolescents: Findings and implications for school psychologists. *Psychology in the Schools*, 41(1), 31-41.
- Girch, S. M. (2015). The Relationship between Participation in School-Sponsored Extra-curricular Activities, Attendance, and Academic Performance.

- Granger, C. J. (2014). *The influence of extra-curricular activities on student performance perceived by texas rural high school principals with successful extra-curricular programs*. Lamar University-Beaumont.
- Ibiam, N., & Enendu, M. O. (2015). Extra-curricular Activities and their Influence on Academic Performance of Students in Michael Okpara University of Agriculture, Umudike. *Journal of Sustainable Development in Education (JSDE)*, 1(1), 103-116.
- Itankan, W. A., & Bakke, M. M (2019). *The analysis of relationship between co-curricular activities (Sport) and students Achievements in Senior Secondary School Mathematics in Southern part of Taraba State-Nigeria*.
- Januarto, K. R., Hartono, M., & Rumini, R. (2020). Evaluation of Physical Education Program through Intracurricular, Co-curricular, Extracurricular Activities at Junior High Schools in Tuban District. *Journal of Physical Education and Sports*, 9(3), 298-305.
- Kamau, A. W., Rintaugu, E. G., & Bulinda, M. H. (2020). Influence of Participation in Competitive Co-Curricular Activities on Self-Concept of Secondary School Students in Kenya. *International Journal of Sports Science*, 10(5), 105-111.
- Kapelinyang, R. P., & Lumumba, K. P. (2017). Determinants of Academic Performance in Public Secondary Schools in Kapenguria Division-Kenya: Assessing the Effect of Participation in Selected Co-Curricular Activities. *African Journal of Education, Science and Technology*, 4(2), 164-174.
- Kariyana, I., Maphosa, C., & Mapuranga, B. (2012). The Influence of Learners' Participation in School Co-curricular Activities on Academic Performance: Assessment of Educators' Perceptions. *Journal of Social Sciences*, 33(2), 137-146.
- Kimengi, I.N., Kiptala, W. & Okero, R. (2014). Students' Co-Curricular Participation Perception and Academic Performance in Kenyan Secondary Schools. *Journal of Educational Policy and Entrepreneurial Research*, 1(3): 31- 39.
- Kiptala, I. N. K. W., & Okero, R. (2014). Students' Co-Curricular Participation Perception and Academic Performance in Kenyan Secondary Schools. *Journal of Educational Policy and Entrepreneurial Research*, 1(3), 31-39.
- Kisango, B. (2016). *Factors Influencing Students' Participation in Co-Curricular Activities in Public Secondary Schools in Lamu County Kenya* (Doctoral dissertation, University of Nairobi).
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Kothari, C. R. (2017). *Research Methodology methods and techniques* second edition.
- Kumar, P. P., & Kumar, S. B. (2012). Role of Co-curricular Activities on Academic Performance of Students: A Case Study in some Secondary Schools of Burdwan District in West Bengal, India. *International Journal of Innovative Research and Development*, 1(9), 213-223.

- Leung, C. H., Ng, C. W. R., & Chan, P. O. E. (2011). Can Co-Curricular Activities Enhance the Learning Effectiveness of Students?: An Application to the Sub-Degree Students in Hong Kong. *International Journal of Teaching and Learning in Higher Education*, 23(3), 329-341.
- Lyoba, S. M., & Mwila, P. M. (2022) Effectiveness of Extracurricular Activities on Students' Learning Processes in Public Secondary Schools in Sikonge District, Tanzania. *Asian Journal of Education and Social Studies* 28(2): 27-38.
- Ma, C., & Shek, D. T. L. (2014). Prevalence and psychosocial correlates of after-school activities among Chinese adolescents in Hong Kong. *Frontiers in public health*, 2, 159.
- Ma. Romica , Phillip G. (2020). Effects of Extra Curricular and Co-curricular Activities to the Academic Performance of Intermediate Pupils. *A-JBHE FULL ISSUE* (Vol 5, No. 1, s.2020)
- Manlove, K. J. (2014). The impact of extracurricular athletic activities on academic achievement, disciplinary referrals, and school attendance among Hispanic female 11th grade students (Doctoral dissertation).
- Mensah, H.K., & Oteng-Abayie, E.F. (2017). General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling Nestor Asiamah Africa Centre for Epidemiology, Accra, Ghana. University of Science and Technology, Kumasi, Ashanti, Ghana. *The Qualitative Report* 22, (6)4, 1607-1622
- Miguel, E., & Mobarak, A. M. (2021). *The Economics of the COVID-19 Pandemic in Poor Countries* (No. w29339). National Bureau of Economic Research.
- Moore, Stuart D. *A qualitative case study: A study on the relationship between soft skills and participation in co-curricular activities at two rural Kansas high schools*. Diss. Southwestern College (Kansas), 2016.
- Morgan, H. (1996). An analysis of Gardner's theory of multiple intelligence. *Roeper Review*, 18(4), 263-269.
- Mugenda, O. M., & Mugenda, A. G. (2012). *Research methods* dictionary.
- Mugenda, O., & Mugenda A.(2003). *Research methods: quantitative and qualitative approaches*
- Muhammad, S. Kiazai, A & Farooq, M, (2022). A Study on Effects of Co-Curricular Activities on Academic Achievements of Secondary School Students in District Quetta. *Sir Syed Journal of Education & Social Research*, Vol. 5, Issue 1,
- Mullen, M. (2016). An investigation into whether there exists a positive relationship between a child's level of extracurricular activity participation and their academic performance. *The STeP Journal*, 3(1), 92-110.
- Muthike, W. N., Mwaruvie, J., & Mbugua, Z. K. (2017). Influence of School Policies on Students' Participation in Curricular Activities: A Case of Public Secondary Schools in Aberdare Central Region, Kenya. *International Journal of Innovation and Research in Educational Sciences*. 4(5), 2349–5219

- Needlman, R. F. (2001). Extracurricular activities. Retrieved from <http://www.drspock.com/article/0,1510.html>.
- Nelson-Addy, L. (2017). The impact of extra-curricular activities on student engagement: in what ways does participation in symposium affect higher prior attaining students' engagement in English? (Doctoral dissertation, University of Oxford).
- Ó Duibhir, P., & Duibhir, P. Ó. (2018). Appendix B: Interview Schedule for Irish/French Immersion Teachers. In *Immersion Education* (pp. 199-200). Multilingual Matters.
- Ogoch, G, & Thinguri, R. (2013). An Evaluation of the Effectiveness of Co-curricular Policy in Developing Talent Among the Youth in Secondary Schools in Transmara Kenya. *Journal of Education and Practice*, 4(26), 77-80.
- Okumu, R., Ronoh, A., & Maithya, P. (2017). Correlating Students' Participation in Music and their Academic Performance in Public Secondary Schools in Kenya. *School Bulletin*, 3(4), 170-175
- Olson, C. A. (2015). Can Music Education Help At-Risk Students? Study Finds Positive Testimony Substantial but Quantitative Research Lacking. *Teaching music*, 16(3), 20.
- Omabe, N. S., K Onderi, H. N., & Mwebibi, B. (2017). Implications of Co-Curricular Activities on Quality Education in Public Secondary Schools in Zambia *Advances in Social Sciences Research Journal*, 4(1) 106-120
- Ongonga, J. O., Okwara, M. O., & Okello, T. M. (2010). Sports and Secondary Education in Kenya. *International Research Journals*, 1(11), 607-617.
- Orodho, J. A. (2012). *Techniques of writing research proposals and reports in education and social sciences*. Nairobi: Kanezja Publishers.
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*.
- Qurban, H., Siddique, H., Wang, J., & Morris, T. (2018). The Relation Between Sports Participation and Academic Achievement: the Mediating Role of Parental Support and Self-esteem. *Journal of Human Psychology*, 1(1), 27.
- Rathore, K., Chaudhry, A. Q., & Azad, M. (2018). Relationship between CCA and Exam Performance: Mediating Role of Attendance. *Bulletin of Education and Research*, 40(1), 183- 196
- Ritchie, G. M. (2018). The Impact of Academic Co-Curricular Activity Participation on Academic Achievement: A Study of Catholic High School Students.
- Rona M., Rodolfo I., Merites B., Academic Achievement as Influenced by Sports Participation in Selected Universities in the Philippines, *Education*, Vol. 7 No. 3, 2017, pp. 53-57. [doi: 10.5923/j.edu.20170703.03](https://doi.org/10.5923/j.edu.20170703.03).

- Sabuj, M. M. I., Datta, R. K., & Rafiq, M. N. (2018). The effect of extracurricular activities on the academic performance of the university students: Evidence from Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur, Bangladesh. *International Journal of Science and Business*, 2(3), 372-387.
- Sauerwein, M., Theis, D., & Fischer, N. (2016). How youths' profiles of extra-curricular and leisure activity affect their social development and academic achievement. *IJREE–International Journal for Research on Extended Education*, 4(1).
- Saunders, M. N. (2011). *Research methods for business students*, 5/e. Pearson Education India.
- Saunders, M. N., Lewis, P., Thornhill, A., & Bristow, A. (2015). Understanding research philosophy and approaches to theory development.
- Shadrack Kipruto Morogo, 2022. School Co-curricular Activities in Promotion of Peace Education in Public Day Secondary Schools in West Pokot County, Kenya. *East African Scholars J Edu Humanit Lit VOL 5*
- Shamsudin, S., Ismail, S. F., Al-Mamun, A., & Nordin, S. K. B. S. (2014). Examining the effect of extracurricular activities on academic achievements among the public university students in Malaysia. *Asian social science*, 10(9), 171.
- Shelley. (2016). The importance of drama and performing arts in education | Bishop Tyrrell
- Siddiky, M. R. (2019). Developing Co-Curricular Activities And Extra-Curricular Activities For All-Round Development Of The Undergraduate Students: A Study Of A Selected Public University In Bangladesh. *Pakistan Journal of Applied Social Sciences*, 10(1), 61–82. <https://doi.org/10.46568/pjass.v10i1.101>
- Silliker, S. A., & Quirk, J. T. (2017). The effect of extracurricular activity participation on the academic performance of male and female high school students. *The School Counselor*, 44(4), 288-293.
- Stanley E. G., & Gregory M. M. (2001). Achieving World Class Supply Chain Alignment: Benefits, Barriers and Bridges” A Compiled Research Report.
- Sulaiman, A. A., Shehu, H., & Hussaini, N. (2017). Impact of physical facilities on discipline, extra-curricular activities and teaching and learning in Mable secondary schools, Uganda. *Jurnal Psikologi Malaysia*, 31(1).
- Tan, D. L., & Pope, M. L. (2017). Participation in co-curricular activities: Nontraditional student perspectives. *College and University*, 83(1), 2.
- Tarkar, P. (2020). Impact of COVID-19 pandemic on education system. *International Journal of Advanced Science and Technology*, 29(9), 3812-3814.
- Wanjiku. A *et al* (2020). Influence of Participation in Competitive Co-Curricular Activities on Self-Concept of Secondary School Students in Kenya.

- Zacherman, A., & Foubert, J. (2014). The relationship between engagement in co-curricular activities and academic performance: Exploring gender differences. *Journal of Student Affairs Research and Practice*, 51(2), 157–169. Available at <http://dx.doi.org/10.1515/jsarp-2014-0016>.
- Zaman, F. (2017). Positive Impact of Extra-curricular Activities on University Students in Lahore, Pakistan. *International Journal of Social Sciences and Management*, 4(1), 22-31.

APPENDICES

Appendix I: Introduction Letter

Dear respondent,

I am Clement Loshangole Rotich, a student pursuing a Master of Education in Curriculum Studies at Moi University. My research is on, ***The influence of learners' participation in co-curricular activities on academic performance in secondary schools in Kapenguria Sub-county west Pokot county, Kenya.*** I'm requesting you to take a few minutes of your time to answer the attached questionnaire. The information provided in this questionnaire will be treated with utmost confidentiality and will only be used for academic purposes. Tick inside the box provided and for an explanation use the space provided . Thanks.

Yours faithfully,

Clement Rotich Loshangole

CELL PHONE: 0710146789

Appendix II: Students' Questionnaire

Dear respondents,

Instructions

This questionnaire is intended to gather insights about the influence of co-curricular activities on students' academic performance in public secondary schools in Kapenguria sub-county, west Pokot county. Kindly do not write your name or that of your school. Kindly fill in the blank or tick (✓) appropriately.

SECTION ONE: DEMOGRAPHIC INFORMATION OF THE STUDENTS

1. a) Gender?

Male ☐

Female ☐

b) Age

16 to 17 years ☐

18 to 20 years ☐

Over 20 years ☐

SECTION TWO: EDUCATION-BASED CO-CURRICULAR ACTIVITIES

2(a). Does your school offer the following education based co-curricular activities?

(tick yes or no)

	YES	NO
Academic clubs	☐	☐
Article writing	☐	☐
Debating	☐	☐
Symposiums	☐	☐
Field trips	☐	☐

(b). Indicate how often you engage in the following education-based co-curricular activities in your school.

Statement	Always	Frequently	Occasionally	Rarely	Never
Academic clubs					
Article writing					
Debate clubs					
Symposiums					
Field trips					

(c). The statements in the table below relate to the influence of participation in education-based co-curricular activities on academic performance. Please indicate your level of agreement to the statements listed below using 5-point Likert scale. In

this rating, **SA**=Strongly Agree, **A**= Agree, **N** = Neutral, **D**= Disagree, **SD** = Strongly Disagree

Statement	SA	A	NS	D	SD
Participation in education-based co-curricular activities helps to improve my academic performance.					
Participation in education-based co-curricular activities has improved my ability to organize ideas and make informed decisions.					
Participation in education-based co-curricular activities wastes my time for studying.					
Education-based co-curricular activities refresh my mind to improve my academic performance.					
Education-based co-curricular activities help me to be creative in my studying habit which contributes to higher academic attainment.					
Participation in education-based co-curricular activities captivates my commitment to learning, which contributes to my academic performance.					
Education-based co-curricular activities offers knowledge and skills that are not learnt in the classroom that help me improve my academic performance.					

SECTION THREE: SPORT-BASED-CO-CURRICULAR ACTIVITIES

3(a). Which sport-based co-curricular activities does your school offer (*tick all that applies to you*)?

	YES	NO
Netball	☐	☐
Volleyball	☐	☐
Football	☐	☐
Hand ball	☐	☐
Basketball	☐	☐
Table tennis	☐	☐
Athletics	☐	☐

(b). Indicate how often you engage in the following sport-based co-curricular activities in your school.

Statement	Always	Frequently	Occasionally	Rarely	Never
Netball					
Volley ball					
Football					
Hand ball					
Basket ball					
Table tennis					
Athletics					

(c). The statements in the table below relate to the influence of participation in sport-based co-curricular activities on academic performance. Please indicate your level of agreement to the statements listed below using 5-point Likert scale. In this rating, **SA**=Strongly Agree, **A**= Agree, **N**= Neutral, **D**= Disagree, **SD** = Strongly Disagree

Statement	SA	A	NS	D	SD
Participation in sport-based co-curricular activities helps to improve my academic performance.					
Participation in sport-based co-curricular activities has improved my ability to organize ideas and helps me make informed decisions.					
Participation in sport -based co-curricular activities wastes my time for studying.					
Sport-based co-curricular activities refresh my mind to improve my academic performance.					
Sport-based co-curricular activities help me to be creative in my studying habit which contributes to higher academic attainment.					
Participation in sport-based co-curricular activities captivates my commitment to the school which contributes to my academic performance.					
Sport-based co-curricular activities offers knowledge and skills that are not learnt in the classroom that help me improve my academic performance.					

SECTION FOUR: SOCIAL-BASED CO-CURRICULAR ACTIVITIES

4(a). Which of these social-based a co-curricular activities does your school offer (*tick all that apply to you*)?

	YES	NO
Music	☐	☐
Drama clubs	☐	☐
Scouting & guiding	☐	☐

(b). Please indicate how often you engage in the following social-based co-curricular activities in your school.

Statement	Always	Frequently	Occasionally	Rarely	Never
Music					
Drama clubs					
Scouting and guiding					

(c). The statements in the table below relate to the influence of participation in social-based co-curricular activities on academic performance. Please indicate your level of agreement to the statements listed below using a 5-point Likert scale. In this rating, **SA**=Strongly Agree, **A**= Agree, **N** = Neutral, **D**= Disagree, **SD** = Strongly Disagree

Statement	SA	A	NS	D	SD
Participation in social-based co-curricular activities helps to improve my academic performance.					
Participation in social-based co-curricular activities has improved my ability to organize ideas and make informed decisions.					
Participation in social -based co-curricular activities wastes my time for studying.					
Social-based co-curricular activities refresh my mind to improve my academic performance.					
Social-based co-curricular activities help me to be creative in my studying habit which contributes to higher academic attainment.					
Participation in social-based co-curricular activities captivates my commitment to the school which contributes to my academic performance.					
Social-based co-curricular activities offers knowledge and skills that are not learnt in the classroom that help me improve my academic performance.					

SECTION FIVE: COMMUNITY-BASED CO-CURRICULAR ACTIVITIES

5(a). Which community-based co-curricular activities does your school offer (*tick all that apply to you*)?

	YES	NO
Red Cross activities	☐	☐
Tree planting	☐	☐
Garbage collection exercise	☐	☐

(b). Please indicate how often you engage in the following community-based co-curricular activities.

Statement	Always	Frequently	Occasionally	Rarely	Never
Red cross activities					
Tree planting					
Garbage collection exercise					

(c). The statements in the table below are related to the influence of participation in community-based co-curricular activities on academic performance. Please indicate your level of agreement to the statements listed below using a 5-point Likert scale. In this rating, **SA**=Strongly Agree, **A**= Agree, **N** = Neutral, **D**= Disagree, **SD** = Strongly Disagree

Statement	SA	A	NS	D	SD
Participation in community-based co-curricular activities helps to improve my academic performance.					
Participation in community-based co-curricular activities has improved my ability to organize ideas and make informed decisions.					
Participation in community-based co-curricular activities wastes my time for studying.					
Community-based co-curricular activities refresh my mind to improve my academic performance.					
Community-based co-curricular activities help me to be creative in my studying habit which contributes to higher academic attainment.					
Participation in community -based co-curricular activities captivates my commitment to the school which contributes to my academic performance.					
Community-based co-curricular activities offers knowledge and skills that are not learnt in the classroom that help me improve my academic performance.					

Appendix III: Teachers' questionnaire

Dear respondents,

Instructions

This questionnaire is intended to gather insights on influence of learners' participation in co-curricular activities on academic performance in public secondary schools in Kapenguria sub-county, West Pokot County. Kindly fill in the blank or tick (✓) appropriately. For open-ended questions, use the space provided.

SECTION ONE: DEMOGRAPHIC INFORMATION OF THE TEACHERS

1. a) Kindly indicate your gender?

Male ☐

Female ☐

b) What is your teaching experience?

1 to 6 years ☐

7 to 11 years ☐

12 and above (specify) ☐

c) Kindly indicate your highest academic qualification?

Diploma ☐

Degree ☐

Masters ☐

PhD ☐

Others ☐

SECTION TWO: EDUCATION-BASED CO-CURRICULAR ACTIVITIES

2. a) Which of these education-based co-curricular activities does your school offer (tick all that apply to you)?

	YES	NO
Academic clubs	☐	☐
Article writing	☐	☐
Debating	☐	☐
Symposiums	☐	☐
Field trips	☐	☐

(b). Please indicate how often students in your school engage in the following education-based co-curricular activities.

Statement	Always	Frequently	Occasionally	Rarely	Never
Academic clubs					
Article writing					
Debating					
Symposiums					
Field trips					

c) The statements below relate to the academic gains of learners' participation in education-based co-curricular activities. Please indicate your level of agreement to the

statement listed below using a 5-point Likert scale. In this rating, **SA**=Strongly Agree, **A**= Agree, **N** = Neutral, **D**= Disagree, **SD** = Strongly Disagree

Statement	SA	A	NS	D	SD
Students' morale in class and outside of class presentations improves as they participate in education-based co-curricular activities.					
Learners' exhibit increased interest in study after engaging in education-based co-curricular activities.					
Learners actively engaging in education-based co-curricular activities outperform those who do not participate.					
Participation in education-based co-curricular activities enhances teamwork among learner thereby positively influencing collective learning					
Participation in education-based co-curricular activities enhances better time management skills among learners which positively impacts on their academic performance.					

SECTION THREE: SPORTS BASED CO-CURRICULAR ACTIVITIES

3.a) Which of these sport-based co-curricular activities does your school offer (*tick all that apply to you*)?

	YES	NO
Netball	[]	[]
Volleyball	[]	[]
Football	[]	[]
Handle ball	[]	[]
Basketball	[]	[]
Table tennis	[]	[]
Athletics	[]	[]

b) Please indicate how often students in your school engage in the following sports-based co-curricular activities.

Statement	Always	Frequently	Occasionally	Rarely	Never
Netball					
Volleyball					
Football					
Handball					
Basketball					
Table tennis					
Athletics					

c) The statements below relate to the academic gains of learners' participation in sport-based co-curricular activities. Please indicate your level of agreement to the

statement listed below using a 5-point Likert scale. In this rating, **SA**=Strongly Agree, **A**= Agree, **N**= Neutral, **D**= Disagree, **SD** = Strongly Disagree

Statement	SA	A	NS	D	SD
Students' morale in class and outside of class presentations improves as they participate in sport-based co-curricular activities.					
Learners' exhibit increased interest in study after engaging in sport-based co-curricular activities.					
Learners actively engaging in sport-based co-curricular activities outperform those who do not participate.					
Participation in sport-based co-curricular activities enhances teamwork among learner thereby positively influencing collective learning					
Participation in sport-based co-curricular activities enhances better time management skills among learners which positively impacts their academic performance					

SECTION FOUR: SOCIAL- BASED CO-CURRICULAR ACTIVITIES.

4.a) Which of these social-based co-curricular activities does your school offer (*tick all that apply to you*)?

	YES	NO
Music	☐	☐
Drama clubs	☐	☐
Scouting and guiding	☐	☐

b) Please indicate how often students in your school engage in the following social-based co-curricular activities.

Statement	Always	Frequently	Occasionally	Rarely	Never
Music					
Drama clubs					
Scouting and guiding					

b) The statements below relate to the academic gains of learners' participation in social-based co-curricular activities. Please indicate your level of agreement to the statement listed below using a 5-point Likert scale. In this rating, **SA**=Strongly Agree, **A**= Agree, **N** = Neutral, **D**= Disagree, **SD** = Strongly Disagree

Statement	SA	A	NS	D	SD
Students' morale in class and outside of class presentations improves as they participate in social-based co-curricular activities.					
Learners' exhibit increased interest in study after engaging in social-based co-curricular activities.					
Learners actively engaging in social-based co-curricular activities outperform those who do not participate.					
Participation in social-based co-curricular activities enhances teamwork among learner thereby positively influencing collective learning					
Participation in social-based co-curricular activities enhances better time management skills among learners					

SECTION FIVE: COMMUNITY-BASED CO-CURRICULAR ACTIVITIES

5. a) Which of these community-based co-curricular activities does your school offer (tick all that apply to you)?

	YES	NO
Red Cross activities	☐	☐
Tree planting	☐	☐
Garbage collection exercise	☐	☐

b) Please indicate how often students in your school engage in the following community-based co-curricular activities.

Statement	Always	Frequently	Occasionally	Rarely	Never
Red cross activities					
Tree planting					
Garbage collection exercise					

c) The statements below relate to the academics gains of learners participation in community based co-curricular activities. Please indicate your level of agreement to the statement listed below using a 5-point likert scale. In this rating **SA**=Strongly Agree, **A**=Agree, **N**= Neutral, **D**= Disagree, **SD**=Strongly Disagree.

Statement	SA	A	NS	D	SD
Students' morale in class and outside of class presentations improves as they participate in social-based co-curricular activities.					
Learners' exhibit increased interest in study after engaging in social-based co-curricular activities.					
Learners actively engaging in social-based co-curricular activities outperform those who do not participate.					
Participation in social-based co-curricular activities enhances teamwork among learner thereby positively influencing collective learning					
Participation in social-based co-curricular activities enhances better time management skills among learners which improves their academic performance					

Appendix IV: Interview Guide for Principals

I am undertaking a study on the influence of learners' participation in co-curricular activities on academic performance in public secondary schools in Kapenguria sub-county, West Pokot County. Your school is one of the participating schools. Kindly allow me to interview you for purposes of obtaining honest information concerning the topic under study.

SECTION ONE: DEMOGRAPHIC INFORMATION OF THE PRINCIPALS

1. Highest academic qualification?

- | | |
|---------|-----|
| Diploma | [] |
| Degree | [] |
| Masters | [] |
| PhD | [] |
| Others | [] |

2. Teaching experience?

- | | |
|------------------------------|-----|
| 1 to 6 years | [] |
| 7 to 11 years | [] |
| 12 years and above (specify) | [] |

SECTION TWO: EDUCATION BASED CO-CURRICULAR ACTIVITIES

2. a) Which education-based co-curricular activities does your school offer ?

.....

.....

.....

.....

.....

.....

.....

.....

b) How do the students who participated in the education-based co-curricular activities mentioned above perform academically compared to those who do not participate in them?

.....

.....

.....

.....

.....

.....

.....

.....

SECTION THREE: SPORTS BASED CO-CURRICULAR ACTIVITIES

3. a) Do learners who actively participate in sport-based activities significantly perform better academically than those who do not participate in them?

Yes ☐

No ☐

ii) If answered yes or no, explain.

.....

.....

.....

.....

.....

.....

.....

b) In what way does learner's participation in sport-based activities in your school enhance the learning process?

.....

.....

.....

.....

.....

.....

.....

.....

SECTION FOUR: SOCIAL BASED CO-CURRICULAR ACTIVITIES

4. a) Do learners participation in social-based activities translate to high academic performance?

Yes ☐

No ☐

ii) If answered yes or no, explain.

.....

.....

.....

.....

.....

.....

.....

b) Does involvement in social-based co-curricular activities allow learners to explore educational content in addition to the regular content taught in class?

Yes ☐

No ☐

ii) If answered yes or no, explain.

.....

.....

.....

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

SECTION FIVE: COMMUNITY BASED CO-CURRICULAR ACTIVITIES

5. How do learners' participation in community -based co-curricular activities influence the academic performance?

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

Appendix V: Research Authorization



MOI UNIVERSITY
Office of the Dean School of Education

Tel: (053) 43001-8
(053) 43555
Fax: (053) 43555

P.O. Box 3900
Eldoret, Kenya

REF: EDU/PGCM/1008/16

DATE: 5th October, 2021

The Executive Secretary

National Council for Science and Technology
P.O. Box 30623-00100

NAIROBI

Dear Sir/Madam,

RE: RESEARCH PERMIT IN RESPECT OF LOSHANGOLE
CLEMENT ROTICH - EDU/PGCM/1008/16

The above named is a 2nd year (M.Phil) student at Moi University, School of Education, Department of Educational Management and Policy Studies, School of Education.

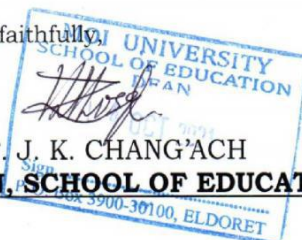
It is a requirement of his M.Phil Studies that he conducts research and produces a thesis. His research is entitled:

“Influence of Learners Participation in Co-Curricular Activities on Academic Performance in Secondary Schools in Kapenguria Sub-County, West Pokot County, Kenya”

Any assistance given to enable him conduct research successfully will be highly appreciated.

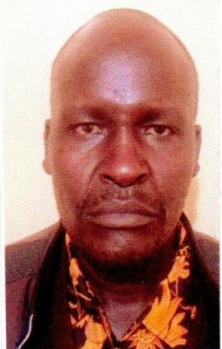
Yours faithfully,


PROF. J. K. CHANG'ACH
DEAN, SCHOOL OF EDUCATION



(ISO 9001 – 2015 Certified Institution)

Appendix VI: NACOSTI Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref: 6254	Date of: 1/Oct/2022
RESEARCH	
	
This is to Certify that Mr.. CLEMENT ROTICH LOSHANGOLE of Moi University, has been licensed to conduct research in Westpokot on the topic: INFLUENCE OF LEARNERS PARTICIPATION IN ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS IN KAPENGURIA KENYA for the period ending :	
License NACOSTI/P/21/1	
6254	 Director NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Applicant Identification	
Verification QR	
	
NOTE: This is a computer generated License. To verify the a Scan the QR Code using QR scanner	

Appendix VII: Research Authorization County Government

MINISTRY OF EDUCATION, SCIENCE & TECHNOLOGY
STATE DEPARTMENT OF BASIC EDUCATION

-Email: elimu|cdwestpokot@education.go.ke
Web: www.education.go.ke
-cdwestpokot@yahoo.com.
When replying please quote date & Ref.

COUNTY EDUCATION OFFICE
WEST POKOT COUNTY
P.O. BOX 17
KAPENGURIA.

18th October 2021.

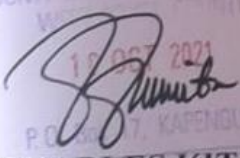
REF: WPC/EDUC/ADM/1/28 VOL.2 (112)

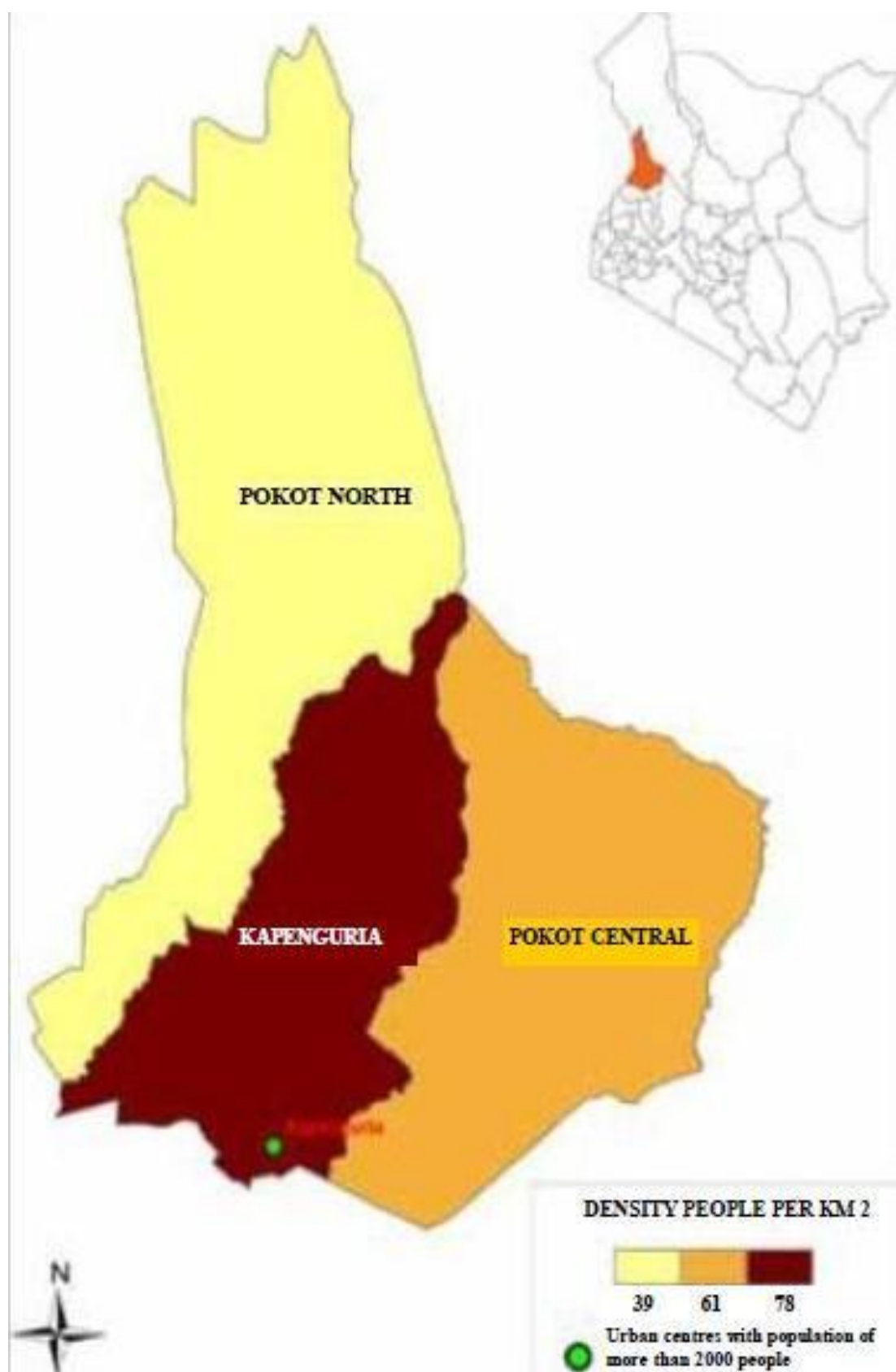
TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION -
LOSHANGOLE CLEMENT RGTICH- NACOSTI/P/21/13558

The above named person is a student at Moi University has been authorized to carry out research on *"influence of Learners Participation in co-curricular activities on academic performance in secondary schools in Kapenguria sub-county, West Pokot County, Kenya"* for the period ending 15th October, 2022.

Through this letter therefore, you are requested to accord him any necessary cooperation and assistance he may require.


 (CHARLES KITUR)
FOR COUNTY DIRECTOR OF EDUCATION
WEST POKOT COUNTY.

Appendix VIII: Map of Kapenguria Sub-County, West Pokot County

Appendix IX: Plagiarism Awareness Certificate



SR777

ISO 9001:2019 Certified Institution

THESIS WRITING COURSE

PLAGIARISM AWARENESS CERTIFICATE

This certificate is awarded to

LOSHANGOLE CLEMENT ROTICH

EDU/PGCM/1008/16

In recognition for passing the University's plagiarism

Awareness test for Thesis entitled: INFLUENCE OF LEARNERS' PARTICIPATION IN CO-CURRICULAR ACTIVITIES ON ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN WEST POKOT COUNTY, KENYA with similarity index of 4% and striving to maintain academic integrity.

Word count:32941

Awarded by

Prof. Anne Syomwene Kisilu

CERM-ESA Project Leader Date: 10/02//2025