INFLUECE OF SCHOOL BASED INCENTIVES FOR TEACHERS ON STUDENTS ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN KISUMU WEST SUB COUNTY, KENYA

BY

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DECLARATION

DECLARATION BY THE CANDIDATE

This research is my original work and has not been presented for the award of a degree in any other University or any other award.

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DEDICATION

This work is dedicated with love to my sons George Kyle and Hezron Angugo.

And to

My late grandmother Christine Nyagudo, who oriented me to the world of education and planted in me moral values concerning the way to God and the walk He demands

ABSTRACT

The achievement of students in the Kenya Certificate of Secondary Education has varied from school to school over time. This is in disregard to the fact that the Government has been according teachers similar training in colleges and universities on one hand and pays them similar amount of package corresponding with their scales, on the other hand. In the year 2015, the difference between the mean of the top school and the last school in Kisumu West Sub County was 6.66, in 2016 it was 8.64 and in 2017 it was 8.39. In Kisumu Central and Kisumu East Sub Counties, the difference in the year 2017 was 5.988 and 2.685 respectively. This disparity raises concerns among the education stakeholders on the incentive underlying teacher input. Motivation theorists believe that performance is a result of concerted effort which has been induced by some incentive. Preliminary survey in 2017 reveal that all schools subject their teachers to incentives. The purpose of this study was therefore to establish school-based incentives for teachers and their influence on students academic achievement in public secondary schools in Kisumu West Sub County. The objectives of the study were; to determine the influence of monetary, intangible non-monetary incentives for teachers and of tangible non-monetary incentives for teachers on the achievement of students in public secondary schools in Kisumu West Sub County. A conceptual framework was used to guide the study. The study adopted descriptive survey and correlation research designs. The target population consisted of 30 public secondary schools with 354 teachers, 30 Principals and 5 Curriculum Support Officers. Through Yamane's formula, 187 teachers, 27 Principals and 4 CSOs were selected as the study sample. Simple random sampling was used to get the teachers while purposive sampling was used to get the principals and CSOs for the study. Questionnaire were used to collect data from teachers and principals, while interview schedule was used to collect data from CSOs. Face validity of instruments was ascertained by experts in the Department of Educational Management and Foundations. Reliability of instruments were determined through test-re-test method, with the coefficient r=0.784 considered acceptable. Qualitative data obtained from interviews and document analysis was analyzed through thematic analysis. Quantitative data from questionnaire was analyzed by means of descriptive statistics and Pearson's correlations. The study found that monetary incentives for teachers is positively and moderately related to students academic achievement ($r= +0.36$, $p<0.001$), tangible non-monetary incentives are positively and strongly related students academic achievement ($r= +0.805$, $p<0.001$) while intangible non-monetary incentives for teachers have no significant relationship with students academic achievement ($r= +0.002$, $p=0.454$). The study concludes that tangible non-monetary incentives motivate teachers significantly hence high influence on students academic achievement, monetary incentives for teachers influence students academic achievement moderately while intangible non-monetary incentives have no significant influence on teacher motivation and students academic achievement in public secondary schools in Kisumu West. This study may be useful to school managements and administrators designing teacher motivational activities.

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LIST OFABBREVIATIONS AND ACRONYMS

BOM	- Board of Management
CSO	- Curriculum Support Officer
EFA	- Education For All
FPE	-Free Primary Education
HOD	- Head of Department
INSET	- In Service Education and Training
MOE	- Ministry of Education
OECD	-Organization for Economic Cooperation and Development
PT. XYZ	- Indonesian startup Technology Company
SCDE	- Sub County Director of Education
SSA	- Sub Saharan Africa
TSC	- Teachers Service Commission
UNICEF	-United Nations International Children's Educational Fund
UNESCO	-United Nations Educational, Science and Cultural Organization
USAID	- United States of America International Development

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CHAPTER ONE

INTRODUCTION

Introduction presents the background of the study, statement of the problem, purpose and objectives of the study, research hypotheses, significance of the study, scope, limitations and assumptions of the study, the conceptual framework and definition of terms.

1.1 Background to the Study

Education has been declared as a basic human right (Committee on the Rights of the Child, 1989) that must be accorded to each and every school age child, hence basic education forms the foundation for secondary and tertiary education and training (USAID, 2011; Boissiere, 2004). The right to education has been reaffirmed internationally (UNICEF, 2001), and Article 28 of the United Nations Convention on the rights of the child states that every child has a right to education no matter what his or her circumstances. World over, nations have developed statutes to embrace this Article (Article 28). To this end, the Government of Kenya reintroduced Free Primary Education (FPE) in 2003, and subsequent Free Day Secondary Education (FDSE) in 2008 (SACMEQ, 2011). The introduction of EFA has presented a new problem within education sector: the pressure on resources, particularly the teachers. Teacher shortage has therefore caused workload problems on existing staff, which has culminated into increased stress, thus low morale, and in most cases low performance (Lewin, 2005). Most learning institutions have therefore embarked on school-based initiatives to help in improving students' academic performance, by offering various incentives to teachers to enhance motivation.

Teachers constitute the core of the education system and their importance in student academic achievement has been widely confirmed by many studies (Rivkin, Stephen,

Ertik& John, 2000; Lewin, 2005). Traditional inputs like teaching and learning materials have been shown to have no measurable impact in student achievement when skills and motivation is lacking among the teaching staff (Glewwe, et al. 2003). Teacher effectiveness is dependent on various factors such as working conditions, organization structure, training and development, security of tenure and, perhaps most importantly, reward for the job, that is, salary and wages, and other non-monetary compensations or incentives. Although the attractiveness of the reward package depends on personal perceptions, Bratton and Gold (2007) asserts that rewards considered better are able to attract and retain better performers. Teachers are motivated to work hard and attain better academic performance if they believe that better engagement terms are put in place for them by the learning institution. However, engagement terms and incentives put in place by different learning institutions to motivate teachers are yet to be identified and empirically determined (Bratton and Gold, 2007).

Money is relentlessly sought by the wealthy people to gain more status and to entrench their class (Lai, 2009). Salary has been found by many researchers (like Lopez, 2002; Bokomey, 2007, and Chan, 2008) as an important component of employee compensation not only because it satisfies the basic physiological needs of a human being but also because it serves as a basis for comparison against similar positions and roles in other organizations. However, in order to gauge the overall attractiveness of an organization's total remuneration packages, indirect compensations are frequently considered by many employees (Lai, 2009). Most organizations are today resorting to indirect monetary incentive to align employees' behavior with organizational goals. This is due to the increased cost of living and the need to attract and retain top performers in the organization, and organizations have also found this to be an effective way of motivating and rewarding

top performers (Hewitt Associates, 2007; 2008). According to Chan (2008), there are four most commonly used indirect monetary compensation schemes, task related rewards, performance related rewards, competency related rewards, and seniority based rewards.

There is a nascent but growing body of literature on the role played by teacher incentives on student academic achievement. Duflo and Hanna (2005) randomly sampled 60 schools in rural India and provided them with financial incentives to reduce absenteeism. They found that teacher absence rate was significantly lower in treatment schools (22 percent) compared to control schools (42 percent) and that student achievement in treatment schools was 0.17 higher than in control schools. Springer, et al. (2010) evaluated a three-year pilot initiative on teacher incentives in the Metropolitan Nashville School System from 2006 to 2009 school year. Pegging performance levels at between 80% and 90%, they found there was no significant treatment effect on student achievement and on measures of teachers' response such as teaching practices.

Wekesa and Nyaroo (2013) investigated the effect of monetary compensation on performance of public secondary school teachers in Eldoret Municipality Kenya with the target population being all teachers employed by the Teachers Service Commission (TSC) within Eldoret municipality in Uasin Gishu County. This was composed of 14 secondary schools, 160 teachers and 14 head teachers from Eldoret municipality. The findings were that majority of the teachers in public secondary schools were uncomfortable with the compensation policies in place because the package was too small or minimal to meet their basic needs. At the same time, majority of the teachers strongly disagreed that the reward system offered by TSC was motivating, and none of the respondents responded to whether they acquire intrinsic motivation from intangible non-monetary rewards like recognition,

status symbols and praise, implying that such intangible non-monetary incentives never exist in the TSC motivation policy. The current study was specific on school based incentives, that is, monetary, tangible non-monetary and intangible non-monetary incentives and how they influence students academic achievement in public secondary schools in Kisumu West. The study took cognizant of the TSC Code of Conduct (2015) Regulation 17 on unjust enrichment. It states that a teacher shall not accept monetary gifts (incentives) exceeding Ksh 20,000. However, it indicates acceptable gifts that include personal gifts from relatives or friends and rewards for performance.

Teacher effectiveness is dependent upon the level of motivation derivable from teaching duties (Bratton & Gold, 2007). Although the reward system for teachers is universally provided by the government, the reason why some teachers exert more effort and produce better academic performance may only be attributed to individual school-based incentives. Glewwe, Ilias, and Kremer (2010) reported results from a randomized evaluation that provided 4th through 8th grade teachers in Kenya with group incentives based on test scores and found that while test scores increased in program schools in the short run, students did not retain the gains after the incentive program ended. Tumaini (2015) explored the contribution of non-monetary incentives to teachers' retention in Korogwe urban in Tanzania. The study involved four (4) public secondary schools in Korogwe District, and utilized mixed methods. The findings revealed that teachers' promotion is still a big challenge in public secondary schools, as the result very few teachers were satisfied while the majority of teachers were not satisfied with the promotion management. Moreover, non-monetary incentives seem to influence teachers' retention positively and negatively as the findings indicated that those who were satisfied with the incentives

remained in schools while, those who were not satisfied quit the teaching profession. The extent to which school based (or institution based) tangible non-monetary incentives for teachers influence academic achievement of students needed therefore to be established.

Employee recognition is a channel through which employers express gratitude toward employees for their (employees) good work attitude, effort, contribution, or outstanding performance (Lai, 2009). Fisher (2007) avers that many employees quit their jobs because their employers do not recognize their exemplary performance. The social rewards serve to satisfy the needs for affiliation, esteem, and self-actualization (in the Maslow's hierarchy of need ladder). Lumumba (2012) sought to assess the extent to which non-monetary incentives motivates Sacco society staff in Front Office Saving Accounts (FOSAs) in Nairobi County. The study aimed to establish the influence of promotion on employees' motivation; the extent to which teamwork motivates staff; the extent to which career development motivates staff, and to assess the effect of fringe benefits in motivating staff. The study found that various fringe benefits affect the employee motivation most followed by job promotion, then career development while teamwork had the least effect. The current study aimed at assessing the influence of intangible non-monetary incentives for teachers separately and how they influence academic achievement of students in public secondary schools in Kisumu West.

According to the Kenya Certificate of Secondary Education (KCSE) examination results for 2015, 2016 and 2017 received by the 30 schools from Kisumu West Sub County, a very wide gap exists between the top public secondary schools and the last schools (Table 1.1) compared to the two neighboring Sub Counties of Kisumu Central and Kisumu East (Tables 1.2 and 1.3 respectively).

Table 1.1: Kisumu West KCSE performance of 10 Schools

School	Entrants	Mean Score 2017	Mean Grade	Mean Score 2016	Mean Score 2015
TOP FIVE					
School A	249	10.935	A-	10.970	10.415
School B	152	8.987	B	8.067	8.919
School C	97	7.284	C+	7.377	7.092
School D	184	7.082	C+	6.489	6.592
School E	87	6.872	C+	6.607	6.265
LAST FIVE					
School F	25	3.920	D+	4.305	4.386
School G	27	3.780	D+	3.540	3.640
School H	28	3.286	D	4.039	3.753
School I	10	3.100	D	2.987	NEW
School J	22	2.545	D	2.333	NEW

Source: SCDE's Office Kisumu West 2018

From Table 1.1, the difference in the mean score between the top school and the last school in the year 2015 KCSE Examination was 6.775, in the year 2016 it was 8.637 and in 2017 KCSE Examination it was 8.390. The deviation between the means of the top five and the last five schools in the year 2015 KCSE Examination was 4.454, in the year 2016 Examination it was 4.461 and in the year 2017 it was 4.906. This indicates a very big disparity compared to the neighboring sub county of Kisumu Central where the difference between the mean of the top school and the last school in 2015 KCSE Examination was 6.137 in the year 2016 it was 5.851 and in 2017 KCSE Examination it was 5.988. The deviation between the means of the top five and the last five schools in 2015 KCSE Examination was 3.406, in the year 2016 the deviation was 3.513 and in the year 2017 it was 3.467 (Table 1.2 on page 7). In Kisumu East Sub County the difference between the mean of the top school and the last school in 2015 KCSE Examination was 2.498, in the

year 2016 Examination it was 2.667 and in the year 2017 the difference was 2.685. The deviation between the means of the top five schools and the last five schools in the year 2015 was 1.622, in the year 2016 the deviation was 1.321 and in the year 2017 the deviation was 1.657 (Table 1.3 on page 8).

Table 1.2: Kisumu Central KCSE performance of 10 schools

School	Entrants	Mean Score 2017	Mean Grade	Mean Score 2016	Mean Score 2015
TOP FIVE					
School A	265	9.728	B+	9.342	9.386
School B	225	8.683	B	8.925	8.242
School C	212	7.925	B-	7.324	7.600
School D	191	7.372	C+	7.040	7.272
School E	119	6.630	C+	7.000	6.710
LAST FIVE					
School F	43	5.238	C-	5.227	5.011
School G	52	4.885	C-	4.958	4.862
School H	76	4.803	C-	4.365	4.638
School I	62	4.339	D+	4.023	4.419
School J	77	3.740	D+	3.491	3.249

Source: SCDE's office Kisumu Central 2018

From Table 1.2, the difference in the mean between the top school and the last school in the year 2015 KCSE Examinations is 6.137, in the year 2016 the difference was 5.851 and in the year 2017 it was 5.988. On the other hand, the deviation between the means of the top five and the last five schools in the year 2015 Examination was 3.406, in the year 2016 the deviation was 3.513 and in the year 2017 it was 3.467. These indicate smaller disparity among the schools in Kisumu Central compared to Kisumu West Sub County (Table 1.1 on page 6)

Table 1.3: Kisumu East KCSE performance of 10 Schools

School	Entrants	Mean Score 2017	Mean Grade	Mean Score 2016	Mean Score 2015
TOP FIVE					
School A	105	5.685	C	4.953	4.784
School B	113	5.566	C	4.422	4.719
School C	70	5.514	C	4.390	4.443
School D	37	5.101	C-	4.389	4.144
School E	77	4.922	C-	4.365	4.125
LAST FIVE					
School F	29	4.310	D+	3.838	3.528
School G	24	3.958	D+	3.607	3.351
School H	38	3.816	D+	3.419	2.603
School I	26	3.423	D	2.762	2.339
School J	23	3.000	D	2.286	2.286

Source: SCDE's Office Kisumu East 2018

From Table 1.3 the difference in the mean between the top school and the last school in 2015 KCSE Examination is 2.498, in the year 2016 the difference was 2.667 and in the year 2017 it was 2.685. In this sub county, the deviation between the means of the top five and the last five schools in 2015 KCSE Examination was 1.622, in the year 2016 the deviation was 1.321 and in the 2017 it was 1.657. These indicate much smaller disparity among the schools in Kisumu East Sub County compared to Kisumu West Sub County (Table 1.1 on page 6)

These disparities remain unexplained in the wake of present subsidies that are being provided by the Kenyan Government in terms of tuition fees (Secondary Education Tuition Support), CDF and County Government bursaries. The government has also been

providing qualified teachers in accordance to student population per school. Academic achievement of students is largely attributed to effort put in by the teacher, and therefore management of schools should ensure that teachers are motivated appropriately.

According to Nyakundi (2012), compared with other professions, teachers across various countries, school contexts, and subject fields exhibit higher levels of emotional symptoms. Citing Dai and Sternberg (2004), Nyakundi (2012) states that high levels of job dissatisfaction, stress, and burnout negatively influence motivation and job performance of teachers. Teachers who report low levels of motivation tend to perceive their students' motivation levels as low too. Yet teachers are arguably the most important group of professionals for our nation's future. There was therefore need to establish how different managements of secondary school ensure that teacher motivation is kept high through the provision of school-based incentive schemes.

1.2 Statement of the Problem

Good academic performance in any examination is only achievable through effective teaching and learning. However, disparities in academic performance noted among public secondary schools in Kisumu West Sub County in the past three years raise a lot of concern among the stakeholders in education. Preliminary survey I carried out in Kisumu West Sub County in 2017 revealed that all schools subject their teachers to incentives in order to motivate them for improved output. These incentives appear in three forms; monetary incentives, tangible non-monetary incentives and intangible non-monetary incentives.

The role played by teachers is most important in lessons delivery and student evaluation, and this role relies a lot on the level of teacher motivation. Incentives have been applied in

organizations to enhance worker motivation so that performance of the organization is improved. Teachers Service Commission rewards teachers in public secondary schools uniformly according to graduated scales, and no special incentives or rewards are given to teachers who achieve exemplary performance, neither is there penalties met on low achieving teachers, in their schools. There has been no effort made to establish reasons why teachers who have had similar training in same colleges or universities can post different performances as has been witnessed from National examination results each year, although this could be attributed to teacher motivation. This study therefore sought to establish the influence of the three forms of school based incentives (monetary, tangible non-monetary and intangible non-monetary) provided to motivate teachers on students' academic achievement in public secondary schools in Kisumu West Sub County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to establish the influence of school based incentives for teachers on students' academic achievement in public secondary schools in Kisumu West Sub County, Kenya

1.4 Objectives of the Study

The objectives of this study were to:

1. Determine the influence of monetary incentives for teachers on student academic achievement in public secondary schools in Kisumu West Sub County
2. Establish the influence of tangible non-monetary incentives for teachers on student academic achievement in public secondary schools in Kisumu West Sub County
3. Determine the influence of intangible non-monetary incentives for teachers on student academic achievement in public secondary schools in Kisumu West Sub County

1.5 Research Hypotheses

The study adopted the following hypotheses so as to enable it achieve the above stated objectives:

1. Ho_1: There is no significant relationship between monetary incentives for teachers and students academic achievement in public secondary schools in Kisumu West Sub County.
2. Ho_2: Tangible nonmonetary incentives for teachers have no significant influence on students' academic achievement in public secondary schools in Kisumu West Sub County.
3. Ho_3: There is no significant relationship between intangible non-monetary incentives for teachers and students' academic achievement in public secondary schools in Kisumu West Sub County.

1.6 Significance of the Study

Following was the significance of the study:

1. This study will be beneficial to the administrators of public secondary schools who desire good academic achievements, because they (administrators) would obtain appropriate tips on how to motivate the teaching staff in their endeavors to make students excel in examinations.
2. The parents who are always called upon to pay for remedial lessons necessary for offering financial incentives will benefit from the study because this work would provide insight information on why students from other institutions perform better due to school based incentives.

3. This research is intended to benefit teachers who are the main consumers of school based incentives, by emphasizing to them the desires and objective of the learning institutions which necessitates the introduction of such incentives.

1.7 Scope of the Study

Following was the scope of the study:

1. The study was confined to public secondary schools in Kisumu West Sub County, Kenya.
2. The survey focused on the investigation of the influence of school based incentives for teachers on the academic achievement of students in public secondary schools in Kisumu West Sub County.
3. The types of school based incentive schemes looked into were monetary incentives, tangible non-monetary incentives, and intangible non-monetary incentives.

1.8 Limitations of the Study

The following were the study limitations:

1. The use of questionnaire on teachers and principals limited their responses since they were compelled to answer questions according to the researcher's choices.
2. Data for the study was collected from teachers, principals and CSOs but not parents and guardians with whom students live. The views of parents concerning academic achievement of students would have added a lot of important materials to the study.

3. The entry behavior of students at Form One may play part in influencing achievement, yet this study gauged student achievement based on effectiveness of teaching by the teachers in public secondary schools.

1.9 Assumption of the Study

The following were the assumptions of the study:

1. Teachers in public secondary schools often put varying efforts in order to achieve set targets for the purpose of winning particular rewards from the school management.
2. Secondary schools provide different types of incentive schemes for the purpose of motivating teachers.
3. The incentive schemes provided by different secondary schools arouse satisfaction in teachers to varying extents. The teachers are able to exert different amounts of effort towards lesson delivery. The students achieve different academic performances depending on the amount of effort (and motivation) provided by the teachers.

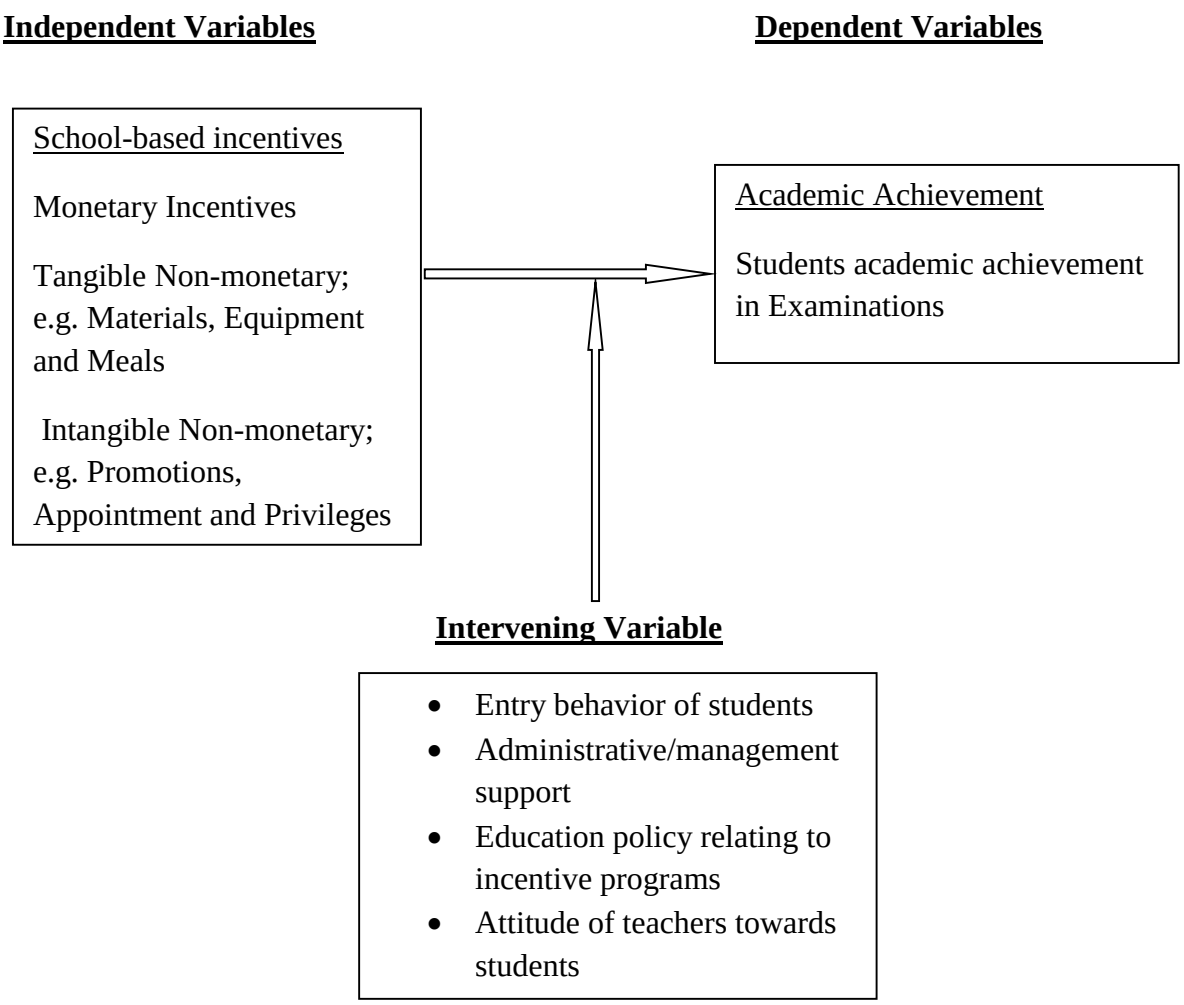
1.10 Conceptual Framework

The study was based on Holistic Operation Model espoused by Haddad, and developed by Abagi and Okwach (1997). In this model, efficiency implies that inputs are maximized in an effort to produce optimum results or output. School based incentives are the independent variable. Its sub-variables are monetary incentives, tangible non-monetary incentives and intangible non-monetary incentives. Monetary incentives are cash awards given to the teachers who achieve exemplary performance. Tangible non-monetary incentives are certificates, material awards, equipment and meals. The intangible non-monetary

incentives include appreciations, privileges given to teachers, appointments and promotions.

The students' academic achievement is the dependent variable which focuses on outputs in relation with the inputs into the education system, with outputs being looked at under the lenses of academic achievements in examinations. This outputs is dependent upon aforementioned inputs (independent variables) like monetary, tangible non-monetary, and intangible non-monetary incentives. However, for optimum output (good teacher performance) to be achieved, adequate process (intervening variables) has to be effectively put in place. These are official education policies, administrative support, entry behavior of students, and the attitude of teachers towards students. Figure 1.1 presents the conceptual framework

Figure 1.1: Conceptual Framework of the study



1.11 Definition of Operational Terms

The following terms have been used in this study:

Intangible incentives: are rewards which are not in the form of cash or material like appointment to positions, praises and certain privileges.

Monetary Incentives: are rewards offered in form of money

Non-monetary Incentives: are rewards which do not take the form of cash

School environment factors: includes physical and human resources, the curriculum, school rules and regulations, distance to school among others (Debrun, 2002).

School management: members of the school board of management including the principal

Students Academic Achievement: Teacher rating scores of students academic activities due to their position as those who impart knowledge, supervisors and evaluators.

Tangible Incentives: are material rewards, touchable, and are easily visible but not in the form of money.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the influence of the three categories of incentives for teachers on the students' academic achievement.

2.2 Monetary Incentives for teachers and Students Academic Achievement

Money is believed to be the solution to most problems in the current century (21st), since it (money) can buy almost everything - depending on the amount. For the average human being, money is used to buy basic human needs such as a house, food, clothes, and medicine, among other basic necessities. On the other hand, money is relentlessly sought by the wealthy people to gain more status and to entrench their class (Lai, 2009).

More often than not, attractive remuneration packages are offered to attract the best talented employees to an organization and to retain them in order to ensure that organizational achievement is enhanced (Lai, 2009). In the contemporary set up, firms provide monetary incentives in two ways: direct monetary incentives and indirect monetary incentives (Chan, 2008). Two of the most known monetary compensations are salary and commissions. Indirect monetary compensations (at times referred to as employee benefits) may include education reimbursement, childcare compensation, insurance schemes, and paid leave (Chan, 2008).

Salary has been found by many researchers (like Lopez, 2002; Bokomey, 2007, and Chan, 2008) as an important component of employee compensation not only because it satisfies the basic physiological needs of a human being but also because it serves as a basis for comparison against similar positions and roles in other organizations. However, in order to

gauge the overall attractiveness of an organization's total remuneration packages, indirect compensations are frequently considered by many employees (Lai, 2009). Most organizations are today resorting to indirect monetary incentive to align employees' behavior with organizational goals. This is due to the increased cost of living and the need to attract and retain top performers in the organization, and organizations have also found this to be an effective way of motivating and rewarding top performers (Hewitt Associates, 2007; 2008). According to Chan (2008), there are four most commonly used indirect monetary compensation schemes, being task related rewards, performance related rewards, competency related rewards, and seniority based rewards. Seniority based reward, which tends to be pegged on age and period of service, do not truly motivate an employee to exert more effort, while task based reward alongside competence and performance based rewards are tagged on the values of the employees and their contributions (Lai, 2009).

Monetary incentives provide the flexibility for the recipients to spend the money in whichever way they (employees) want it, and it is mostly useful when they (employees) expect the same kind of reward the next year (or period) should they exert similar effort in their work (Lai, 2009). Employees whose performances are based on key results or performance indicators like salespersons; executives, etc. normally benefit most from this arrangement. School based incentives for teachers are mostly designed following similar criterion (Magnusson & Nyrenius, 2011). However, documented literature focusing on the influence of monetary incentives on students' academic achievement seems to reveal inconsistent findings.

Fryer (2013) analyzed a school based randomized trial in over 200 New York City public schools designed to better understand the impact of teacher incentives. Findings revealed

no evidence that teacher incentives do not increase student academic achievement, attendance, or graduation on one hand, nor evidence that these incentives change student or teacher behavior on the other hand. If anything, teacher incentives may decrease student achievement, especially in larger schools.

Muralidharan and Sundararaman (2011) presented results from a randomized evaluation of a teacher performance pay program implemented across a large representative sample of government-run rural primary schools in the Indian state of Andhra Pradesh, India. At the end of 2 years of the program, students in incentive schools performed significantly better than those in control schools by 0.27 and 0.17 standard deviations in mathematics and language tests, respectively. We find no evidence of any adverse consequences of the program. The program was highly cost effective, and incentive schools performed significantly better than other randomly chosen schools that received additional schooling inputs of a similar value.

Fryer (2010) conducted randomized incentive experiments in public schools in four urban school districts of Chicago, Dallas, New York City, and Washington, D.C. during the 2007/2008 and 2008/2009 school years. There was variation in what educational inputs (like attendance or reading a book) or outputs (like grades) were rewarded, and how often and the amount students were paid. Overall, the study distributed $ 6.3 million in incentive payments to roughly 38,000 students in 261 schools. One finding was that incentives offered for educational outputs, such as better grades, are less effective than incentives for educational inputs, such as attendance, good behavior, or wearing uniforms. Again, one possible reason is that students can control inputs directly but, even if they are motivated by rewards, may not know how to turn their efforts into success. Overall, while the results

point in some interesting directions, they seem to show that the use of these kinds of incentives in education is not (yet) cost effective. However, the target for incentives in this study focused on students while the present study evaluated the influence of monetary incentives for teachers on the performance of students.

Similarly, in Africa, Narsee (2012) sought to discover whether a well-designed reward programme would result in the motivation of employees in Pretoria, South Africa. Questionnaires were used for data collection from a sample of 180 respondents through a self-administered on-line survey. Statistical analysis was conducted on the data which involved both descriptive and inferential statistics. The results indicated that both organizations and employees recommend financial benefits as being the most important reward category. However, there was more of a preference from employees for career development, coaching/mentoring and work life balance than there was from the organizations. The foregoing study, however, demonstrates how incentives to teachers have suffered a dearth of information.

Chitimwango (2016) assessed the effect of rewards system on the performance of teachers in three secondary schools in Kasama district of Zambia. The study employed both qualitative and quantitative techniques of data collection and data was analyzed using descriptive analysis. In terms of preferred types of reward system, the study revealed that, monetary incentive that is performance-based ranked the highest (51%), followed by monetary monthly incentive (32%) and social care 15%. Chitimwango (2016) however did not indicate how monetary incentives is perceived by teachers to be influencing students' academic performance in public secondary schools.

Adebajo (2018) explored how different types of incentives (monetary, near monetary and non-monetary incentives) influence the "effort" of public school teachers as perceived by the students in public secondary schools in Lagos, Nigeria using a novel measurement tool, the teaching effectiveness survey, to measure the teachers' outcomes. The results show that monetary incentives and near monetary incentives have no significant effect on effort while non-monetary incentives have a significant negative effect on the effort of teachers. This could imply that the issues underlying the current state of productivity of Public school teachers in Lagos State run deeper than remuneration or accountability. However, Adebajo (2018) analyzed students' perceptions while the need to focus on the perceptions of teachers was equally critical. This, therefore, informed the drive for the present study.

Chakandinakira (2016) explored the role of school-based teacher financial incentives on student academic achievement in Zimbabwe. This research adopted a qualitative approach and as such, collection of primary and secondary data was done using multiple data collection techniques. Techniques included interviews with key informants, focus group discussions and open ended questionnaires in selected secondary schools. Results from this study revealed that improving teacher motivation through school-based incentives had been central to improved student achievement. In schools where teacher incentive system was practiced pass-rates increased, with a sudden decline when teacher incentives were banned. Banning or lack of properly designed incentive systems, where teachers were consulted, was seen as negatively affecting student achievement in selected secondary schools of Makoni District. However, while Chakandinakira (2016) used qualitative data collection methods, the current study used quantitative methods. This enabled the

researcher to quantify perceptions of teachers regarding influence of monetary incentives to teachers on students' academic achievement.

Yego (2013) covered the influence of reward systems on employees' output. The research used a descriptive survey research design of turbo division; simple random sampling to select the respondents. The total targeted population of 434 permanent teachers (from both secondary and primary schools) in the division was identified from which a sample size of 130 was selected. The study findings were interpreted to mean that in the current setting, pay was the most important factor that influenced employee output ($p = 0.004$, $\beta = 0.674$). Whereas Yego (2013) involved populations from both primary and secondary schools, there was need to use a homogenous population such as teachers from secondary schools alone. The current study involved secondary school teachers, with similar work environment and characteristics.

Wekesa and Nyaroo (2013) investigated the effect of monetary compensation on performance of public secondary school teachers in Eldoret Municipality Kenya with the target population being all teachers employed by the Teachers Service Commission (TSC) within Eldoret municipality in Uasin Gishu County. This was composed of 14 secondary schools, 160 teachers and 14 head teachers from Eldoret municipality. Cross-sectional descriptive survey approach was adopted, and a simple random sampling technique used to select 114 teachers on whom questionnaires were used for data collection. Purposive sampling method was used to select principals, on whom interview schedules were used to conduct interviews. Descriptive statistics was used for data analysis, and the findings were that majority of the teachers in public secondary schools were uncomfortable with the compensation policies in place because the package was too small or minimal to meet their

basic needs. At the same time, majority of the teachers strongly disagreed that the reward system offered by TSC was motivating, and none of the respondents responded to whether they acquire intrinsic motivation from intangible non monetary rewards like recognition, status symbols and praise, implying that such intangible non monetary incentives never exist in the TSC motivation policy.

Much as the above study (Wekesa & Nyaroo, 2013) investigated the effect of compensation on performance of public secondary school teachers in Eldoret Municipality Kenya with the target population being all teachers employed by the teachers service commission (TSC) within Eldoret municipality in Uasin Gishu County, it failed to investigate any school based incentive schemes offered by individual public secondary schools. Only then can the difference in performance being posted by different schools be explained, given that each teacher who is employed by TSC receives same treatment in as far as compensation is concerned. There is therefore need to investigate the influence of school based monetary incentives (to teachers) on students' academic performance (e.g. in KCSE Examinations). However, this study takes into consideration the government policy on extra levies that can be charged for purposes of motivation (MOE Circular, 2004).

2.3 Tangible Non-monetary Incentives for teachers and Academic Achievement

The use of non-monetary incentives to motivate employees and boost performance has gained immense momentum in recent times. Tangible non-monetary incentives are as important as monetary incentives, and when carefully designed and implemented, these incentives pegged on performance can be very effective in boosting academic achievement and productivity.

It must also be noted that employees need social acknowledgement for something good that they have achieved. Tangible non-monetary incentives serve this purpose probably better than monetary incentives as the latter is, firstly, a socially unacceptable manner of seeking recognition from peers and, secondly, people are uncomfortable and are unlikely to display their monetary rewards in front on others (Incentive federation, 2005).

Finally, employees tend to view monetary incentives as part of the total remuneration package (Incentive Federation, 2005). According to a study done by Wirthlin Worldwide aimed at finding out how employees spent their recent monetary incentive found that 29% of the employees used the money to settle bills, while 11% used the incentive to purchase household goods. This is an indication that monetary incentives have limited impact on the employees as it is spent on daily necessities and derivation of money is easily forgotten thus losing the effectiveness as a motivator (American Incentive Services, 2008). Tangible non-monetary incentives go beyond this.

In India, Gunawan and Febrianto (2014) sought to establish the impact of monetary and non-monetary incentives on employees' motivation in Pt XYZ' finance function in Surabaya by distributing questionnaires to 102 employees. The sampling method used was simple random sampling. The data were analyzed using Multiple Linear Regression Analysis. The results show that monetary incentives, tangible non-monetary incentives, and intangible non-monetary incentives have significant impact on employees' motivation. When analyzed individually, tangible non-monetary incentives are the only factors having no significant impact on employees' motivation. In addition, the result indicates that intangible non-monetary incentives are the most influential factors affecting employees' motivation in PT XYZ's Finance function. Critical to note from this study is that it focused

on employees in a distribution firm, yet little attention has been paid to how tangible non-monetary incentives motivate teachers in secondary schools.

Jalava, Joensen and Pellas (2014) examined the effects of non-financial incentives on test performance among more than a thousand sixth graders in Swedish primary schools. It found significant differences in test scores between the intrinsically motivated control group and three of four extrinsically motivated treatment groups. The only treatment not increasing test performance is criterion-based grading on an A-F scale, which is the typical grading method. However, Jalava, et al (2014) focused on a population from primary schools. The need to pay attention to perceived influence of non-financial incentives on teachers performance in secondary education therefore informed the present study.

Ampofo (2012) investigated the effects of motivation on employee performance in Ghana Education Service. The research design used for the study was cross-sectional study. A set of questionnaires consisting of both closed and open ended questions were used to collect data from 120 teachers as respondents. The relationship between motivation and teacher performance at Asante Akyem Senior High Schools and the causes of poor performance of teachers were also captured by the study. The data collected was analyzed using SPSS version 12 and the results were presented using tables, percentages, frequencies, pie charts and bar graphs. The findings of the study indicated that opportunity for further studies, flexibility in job design, promotion to higher rank and empowerment are available in Ghana Education Service but there is no realistic policy implementation in Ghana Education Service. Much as the focus in this study was on non-tangible incentives for teachers, there is also need to investigate the influence of school based tangible non-monetary incentive schemes on teachers.

Olubusayoa, Ayodotun, and Olokundun (2014) examined the effect of incentives packages on employees' attitudes towards work. A descriptive research method was adopted for this study using one hundred twenty valid questionnaires which were completed by members of staff of four (4) selected government parastatals in Ogun State, South-West Nigeria using stratified and systematic sampling technique. The data collected were carefully analyzed using percentage supported by standard deviation to represent the raw data in a meaningful manner. The results show that strong relationship exists between incentives packages and employees' attitudes towards work and the workers are not satisfied with the present incentives packages. The summary of the findings indicates that there is strong correlation between the tested dependent variable and independent construct. Still, the population targeted by this study was employees in government parastatals, yet similar attention needed to be paid to teachers in secondary schools too.

Tumaini (2015) explored the contribution of non-monetary incentives to teachers' retention in Korogwe urban of Tanzania. The study involved four (4) public secondary schools in Korogwe District, and utilized mixed methods. Purposive and stratified sampling procedures were used to select a sample of 65 respondents. The findings revealed that teachers' promotion is still a big challenge in public secondary schools, as the result very few teachers were satisfied while, the majority of teachers were not satisfied with the promotion management. Moreover, non-monetary incentives seem to influence teachers' retention positively and negatively as the findings indicated that those who were satisfied with the incentives remained in schools while, those who were not satisfied, quitted the teaching profession. Whereas Tumaini (2015) related non monetary incentives with teacher

retention, the current study looked at perceived influence of the same on students' academic performance.

Similarly, Ukki (2013) examined to what extent non-financial incentives are utilized in relation to the teacher's motivation using 70 respondents from four public secondary schools in Zanzibar. Non-financial incentives include career development and professional growth, participation in decision making, recognition and respect, effective supervision and effective communication, generally are the kinds of incentives that do not require direct payments of cash. Results revealed that most of the teachers accept that non-financial incentives had great contribution towards motivation, also the results show that the level of employment of non-financial incentives in most public secondary schools was inadequate.

Adhiambo (2013) investigated the effect of institutional teacher reward systems on students' performance in Kenya Certificate of Secondary Education in Rongo Sub County, Kenya. Specifically, the study aimed at assessing the influence of managements' use of monetary rewards on teachers, teachers' bench marking strips, individual based and group based rewards and teachers promotion in Rongo Sub County on students' performance in KCSE examination. A descriptive research design was adopted for the study on a population comprising 22 Principals, 22 deputy principals and 199 teachers in 22 secondary schools in Rongo Sub County of Migori County, where a sample of 44 respondents were selected for data collection using questionnaires. This study analysed qualitative data using content analysis while quantitative data was analyzed using descriptive statistics like frequencies, means, standard deviation and percentages, and presented in bar graphs, charts and tables.

Adhiambo (2013) found that monetary rewards had increased competition among the teachers. Since teachers' competition and students' performances are directly related, an increase in competition led to increase in students' performance. The study also found that there is a link between teachers' bench marking programmes and students' performances. These programmes do influence the students' performance in KCSE examinations. However, the study also reveals that in majority of the sampled schools, there are no clear programmes on how to run benchmarking practices and so the lack of fairness. This led to decreased number of teachers involved in such programmes hence a source of demotivation. Finally, it was also found that teachers' individual based and group based rewards greatly affect student's performances due to the drive teachers have in teaching effectively.

Much as Adhiambo's (2013) investigated the effect of institutional teacher reward systems on students' performance in Kenya Certificate of Secondary Education, the inclusion of benchmarking as a reward system contaminates the meaning of incentive programmes for teachers. These are part of school management's academic programmes and strategies aimed at enhancing student performance by comparing individual school performances with other better performing schools and thereafter getting to understand the missing clues. Institutional reward based programmes are better looked at from the view of what would make the teaching staff to exert more effort towards the attainment of better academic achievement for students.

The current study aims at establishing the influence of tangible non-monetary incentives for teachers on the academic achievement of students in public secondary schools in Kisumu West Sub County.

2.4 Intangible Non-monetary Incentives for teachers and Academic Achievement

Incentives that fall under this category are either social related or job related. Social related incentives are recognitions that employers make toward employees, basically referred to as employee recognition. Employee recognition is a channel through which employers express gratitude toward employees for their (employees) good work attitude, effort, contribution, or outstanding performance (Lai, 2009). Motivating employees through recognition involves no cost to the organization, and is sometimes offered alongside tangible incentives. Fisher (2007) avers that many employees quit their jobs because their (employers) do not recognize their exemplary performance. Social rewards serve to satisfy the needs for affiliation, esteem, and self-actualization (in the Maslow's hierarchy of need ladder).

Yavuz (2004) sought to demonstrate to what extent non-monetary incentives are utilized in the public sector of Turkey and whether non-monetary incentives have the potential to increase the motivation of public employees as much as the monetary incentives. A survey study was administered at the General Directorate of Investment and Enterprises, under the Ministry of Culture and Tourism. According to the results of the study, most of the employees think that the level of utilization of the non-monetary incentives in their organization is inadequate. Also, the findings suggest that they value non-monetary incentives as much as monetary incentives. However, this study used a population of employees from General Directorate of Investment and Enterprises, under the Ministry of Culture and Tourism. There was therefore need too for a similar study to be conducted on a population from teachers in public secondary schools.

Kirunda (2004) assessed the effect of performance-based rewards on the performance of

teachers in private secondary schools in Kampala district. The study was based mainly on Primary data in form of questionnaires, interviews and documentary reviews of the selected literature. The study employed both qualitative and quantitative techniques of data collection and data was analyzed using descriptive and correlational statistics with Pearson Product Correlation Coefficient and Regression analysis. The findings revealed that, the most commonly used types of performance-based rewards in private secondary schools are: public appreciation, promotion, packages/presents, and duty allowances and overtime pay. It was also established that performance-based rewards affect the performance of teachers by motivating them and increasing their productivity and efficiency. Although this study seems to take similar approach as the present study, the target population was obtained from private secondary schools. The current study will target public secondary schools.

Lumumba (2012) sought to assess the extent to which non-monetary incentives motivates Sacco society staff in Front Office Saving Accounts (FOSAs) in Nairobi County. The study aimed to establish the influence of promotion on employees' motivation; the extent to which teamwork motivates staff; the extent to which career development motivates staff, and to assess the effect of fringe benefits in motivating staff. The study adopted a cross section survey design on all FOSAs operating-in Nairobi County. The study used a simple random sampling method to select a sample size of 110 respondents from 278 FOSA staff. Structured questionnaires were used for data collection, and the data was analyzed using descriptive statistical method and multiple regressions. The study found that various fringe benefits affect the employee motivation most followed by job promotion, then career development while teamwork had the least effect.

While the above study (Lumumba, 2012) sought to assess the extent to which non-monetary incentives motivates Sacco society staff in Front Office Saving Accounts organizations, the study failed to differentiate the different blocks of non-monetary incentives widely available and offered to workers as motivators; fringe benefits are tangible non-monetary incentives while career development schemes are intangible non-monetary incentives. The current study aimed at assessing the different categories of incentives for teachers separately and how they influence students academic achievement in public secondary schools.

Further, the target population of Lumumba's (2012) study consisted of elements from different organizations (different FOSAs) with differing work environments, while the current study obtained its target population from one employer (the TSC) which offer similar work environment and at the same time, governed by similar education policy, similar remuneration and compensation policy, and similar employment code of conduct. The homogeneity exhibited by the population in the current study made it better case to be researched in than Lumumba's (2012) study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers research design, area of study, study population, sample and sampling procedure, description of data collection instruments, validity and reliability of research instruments, data collection procedure and data analysis process and finally, ethical considerations of the study.

3.2 Research Design

A research design constitutes the collection, measurement and analysis of data (Saunders, 2009). This study adopted a descriptive survey design. This study adopted a descriptive survey because, according to White (2010), it uses both qualitative and quantitative data in order to find the solution to what is being studied. This type of research design attempts to describe systematically, a situation, problem, phenomenon, or provides information about an issue, or describes attitudes towards an issue (Kumar, 2005). Correlational design was also suitable for the study because the study aimed at describing how school based incentives for teachers influence the performance of students in public secondary schools in Kisumu West Sub County. Thus, the researcher was able to describe the relationship between the two variables, that is, school based incentives for teachers and performance of students.

3.3. Area of Study

The area under study was Kisumu West Sub County. The Sub County lies between 34.40 degrees E and 34.764 degrees E longitude; while its latitude is between 0.077 degrees S and 0.723 degrees S. It borders Seme Sub County to the West, Luanda Sub County to the

North and Kisumu Central Sub County to the East. The area has a population size of 172,821, with 85,697 being males and 87,121 females (KNBS, 2019); with a land area of 212.90 km^2. The main commercial activity in the area is small scale maize farming, alongside fruit farming (mangoes, avocado, and guavas, among others). The mean temperature ranges from a minimum of 18^oC to a maximum of 25^oC, with an annual average of 20°C**.** Annual rainfall ranges between 1,500mm and 2,100mm per annum (Kenya Inter-Agency Rapid Assessment, 2014).

Kisumu West Sub County was selected for the study because records from Kisumu County Education Office indicate that there was a lot of disparities in performance of end of education cycle examinations for students (in KCSE) amongst schools in the area, something which had not been explained given that all these schools are located in the same geographical location.

3.4 Target Population

Target population refers to the total number of subjects or the total environment of interest to the researcher (Oso &Onen, 2008). The target population comprised of thirty (30) secondary public schools in Kisumu West Sub County that included 30 Principals, 354 teachers, and 5 curriculum support officers (CSO). Principals were targeted because they are the administrators of the learning institutions with the responsibility of setting up appropriate performance management environment. The teachers, on the other hand, were targeted because they are the ones whose teaching could be possibly influential in enhancing performance of students. The CSOs are the ones in charge of the supervision of curriculum implementation in their respective zones of the sub county.

3.5 Sample Size and Sampling Technique

The sampling technique is the methodology used in a study to select the sample size from the target population. It describes the approach that is used to select the sample and how an adequate sample size is determined (Kombo, 2006). This study adopted Yamane's (1967; cited in Israel, 2013) formula to calculate the sample size as shown below:

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

Where *n* is the sample size, *N* is the population size, and *e* is the level of precision (0.05). Thus, the sample for teachers was:

$$\mathrm{n} = \frac{354}{1+354\ (0.05)^2} = 187$$

Similarly, by following the same formula, 27 Principals and 4 SCOs officers were sampled to participate in the study.

Table 3.1: Sampling Technique and Sample Frame

Respondents	Target Population	Sample size	Percent
Principals	30	27	90.00
Teachers	354	187	52.82
CSOs	5	4	80.00
Total	389	218	56.04

The researcher used random sampling method to select 4 CSOs used as key informants: the CSOs in charge of performance in all the 5 zones in Kisumu West Sub County, who provided information concerning performance of students in public secondary schools.

3.6 Instruments of Data Collection

The study relied on both primary and secondary data in order to obtain the wide range of information required for this analysis that was both qualitative and quantitative.

The researcher used three instruments for data collection. These were: questionnaire, semi-structured interview schedules and document analysis guide

3.6.1 Questionnaire Principals and Teachers

The researcher developed a questionnaire to be used in collecting data from teachers and Principals. These were composed of closed ended questions soliciting specific answers from the respondents. Questionnaires are useful, according to Oso and Onen (2009), because they can be a relatively cheap and quick way of obtaining information.

3.6.1.1 Principals' Questionnaire

The researcher administered questionnaires on 27 principals to seek their opinion on the influence of school based incentives for the teachers on students academic achievement (Appendix I).

3.6.1.2 Teachers' Questionnaire

The researcher administered two kinds of questionnaires on 187 teachers. One kind sort to get their opinions on the influence of school based incentives given to them on students academic achievement and the other sort to get their rating of students academic achievement in their schools (Appendix II).

The respondents were left with the questionnaires by the researcher after which the researcher collected them after one week, and cleaned them for the purpose of data analysis. The significance of this method was that it enabled the researcher to draw short simple

questions, which were closed ended requiring short and precise answers from the respondents (Tsai, Lin, & Sai, 2001).

3.6.2 Document Analysis

The researcher gained information by assessing written documents such as teachers' work plans, the end term academic performance of students, the performance of students in mock examinations, and documented minutes of meetings convened to deliberate on incentive schemes for teachers in the school. These documents were important in providing written evidence of factual details of the study phenomena, that is, school based incentives for teachers and academic achievement of students. Written evidence enabled the researcher to support quantitative data obtained by study questionnaires.

Document analysis can provide an objective and historical source of data for a research study (Oso &Onen, 2009). Orodho (2006) contends that documents can be used to corroborate evidence from other sources and specify events and issues in greater detail than available through other data gathering methods.

3.6.3 Interview Schedule

In order to triangulate the information, the researcher obtained from analyzed documents and data collected using study questionnaires, an interview was conducted using interview schedule with four key informants, being CSOs randomly sampled from the five zones in the sub county. The CSOs are the ones in charge of the Sub County Quality Assurance. The questions were presented to the interviewees by the researcher, where respondents were allowed to explain their responses in full. The researcher in this case probed further to ensure that the information received was accurate and to the point.

An interview is a personal exchange of information between an interviewer and an interviewee (Ruane, 2008). Ragin & Amoroso (2011) indicated that interviews reveal how people in the research setting make sense of their lives, work, and relationships with the study phenomena (Appendix III).

3.7 Validity and Reliability

According to Cresswell (2003) reliability relates to the concern for consistency while validity relates to the concern for truth.

3.7.1 Validity

Mugenda and Mugenda (2003) notes that validity is the degree to which the results obtained from the analysis of the data actually represent the phenomenon under study. Face validity of research instruments was attained by assessing the questionnaire items during their construction. For content validity, questions were discussed with the supervisor before giving them to two independent lecturers from the School of Education, Maseno University for verification and to clear any lack of clarity and ambiguity. These lecturers examined the instruments to assess the relevance of the questions with the objectives of the study.

3.7.2 Reliability

Reliability is a measure of the degree to which a research instrument yields consistent results after a repeated trial (Amin, 2005). To attain instrument reliability, test- retest was conducted through pilot study in four secondary schools which were not in the actual study. The pilot study involved five teachers from each public secondary school (making up 20 teachers) and one principal from each secondary school: this gave a total of 24 respondents for pilot study. The test – retest was conducted on these purposely selected 24 respondents, where the researcher allowed a period of two weeks to elapse before the second test was

conducted. A coefficient of 0.784 was got for the teachers questionnaire implying that the study instruments were capable of yielding consistent responses from the sampled respondents (Nunnaly, 1978).

3.8 Data Collection Procedures

The researcher obtained a research permit from Maseno University Ethics Review Committee (MUERC), and then took a copy to the County Director of Education and the Sub County Education Office. Permission was then sought from the Principals whose schools were covered by the study to grant permission for the collection of data. The questionnaires were thereafter left to the sampled teachers and principals during the first visit, and then during the second visit, filled questionnaires were collected by the researcher. The sampled CSOs were interviewed using the interview schedule. Relevant documents for analysis were taken from the deputy principals and heads of departments.

3.9 Data Analysis Procedures

The qualitative data was analyzed using Thematic Analysis, according to Braun and Clarke (2006). This involved categorizing generated interview data into themes in accordance with research objectives and reported in narrative forms alongside quantitative presentations.

Quantitative data was analyzed by use of descriptive and inferential statistics. The use of structured questionnaires enabled the researcher to quantify quantitative data using frequency distribution, percentages and association of variables in the study population and answers to questions that could be counted and expressed numerically. Likert scale was analyzed by tallying to get the frequencies and individual mean rating per statement relating to the influence of the incentives given to the teachers. The sum of the individual

means was used to get the average mean for each category of incentives. To establish influence, the quantitative data was analyzed through correlation analysis. According to Dancey & Reidy (2004), data from an experimental study that compares relationship between two or more groups of variables is analyzed using correlational analysis. Data from teachers rating on students academic achievement was addressed against data on monetary incentives, tangible non-monetary incentives and intangible non-monetary incentives scores.

3.10 Ethical Considerations of the Study

Research ethics refers to the moral principles guiding research from its inception through to completion and publication of results, according to The British Psychological Society (2010). In this regard, the researcher observed the following: respect for the autonomy and dignity of persons, scientific value, social responsibility, and maximizing benefit while minimizing harm. The participants (teachers, principals and CSOs) were informed in advance about the anonymity and confidentiality in investigations in order to make them feel free to express their views. Confidentiality was also maintained when the information was examined and was used for this study only and care was taken to ensure that the information collected could not harm any participant. The researcher assured the respondents that, data obtained would be used for academic purposes only (Cohen et al., 2006). The researcher took cognizant of the TSC Code of Conduct (2015) Regulation 17 on unjust enrichment. It states that a teacher shall not accept monetary gifts exceeding Ksh 20,000. It also indicates acceptable gifts that include personal gifts from relatives or friends and rewards for performance.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the study as guided by the study objectives. It includes findings on response return rate, demographic characteristics of the respondents, academic performance and finally the findings presented as per the objectives of the study. The findings are presented in the form of frequency counts, percentages and means.

4.2 Response Return Rate

The study sought response from principals and teachers in different schools on the influence of school based incentives for teachers on students academic achievement in public secondary schools in Kisumu West Sub-County, Kenya. The number of principals and teachers that were expected to participate in the study were a total of 214. However, during the data collection process, not all the total expected responses were achieved. The return rate is presented as indicated in Table 4.1

Table 4.1 Response Return Rate

Respondents	Expected	Achieved	Percent
Principals	27	20	74.07
Teachers	187	170	90.91
Total	**214**	**190**	**88.79**

Table 4.1 presents the findings on questionnaire response return rate from the sampled principals and teachers. The table indicates that out of the total 187 teachers, 170 (90.91%) returned completely filled in questionnaires while 20 out of the sampled 27 principals (74.07%) returned their completed questionnaires. This was much above 50% that is

recommended by Mugenda and Mugenda (2003). This implies that the data collection process was well covered and thus the sample response is adequate for analysis.

4.3 Demographic Characteristics of Respondents

The demographic characteristics of the study respondents assessed were distribution by gender, age, level of academic training and years of experience of the sampled principals and teachers. Table 4.2 presents the gender of the respondents.

Table 4.2: Gender of the respondents

Gender	**Principals**		**Teachers**	
	Frequency	**Percent**	**Frequency**	**percent**
Males	15	75	95	55.88
Females	5	25	75	44.12
Total	**20**	**100**	**170**	**100**

Table 4.2 illustrates that 75% of the sampled principals were males while 25% were females. Similarly, 55.88% of the sampled teachers were males while 44.12% were females. This suggests that principals who manage the schools in Kisumu West are mostly of male gender. However, the teachers who manage form four students are well balanced between both genders giving the confidence that the results obtained from the study is non-bias on gender.

The second aspect of demographic characteristics assessed was the age distributions of the sampled principals and teachers. Table 4.3 on page 42 presents the distribution of respondents by age.

Table 4.3: Age of the Respondents

Age	Principals		Teachers	
	Frequency	**Percent**	**Frequency**	**percent**
20 - 30	0	0	11	6.47
31 - 40	1	5	64	37.65
41 and above	19	95	95	55.88
Total	**20**	**100**	**170**	**100**

Table 4.3 illustrates that 95% of the sampled principals were 41 years and above in age while five percent were between 31 and 40 years: none of them were below 31 years. Similarly, 55.88% of the sampled teachers was 41 years and above in age while 37.65% were between 31 and 40 years, and 6.47% were between 20 and 30 years in age. This implies that the principals and teachers in secondary schools in this area are of mature age and could be able to comprehend circumstances that would result into teacher motivation within a school.

The other demographic characteristics of the sampled principals and teachers were the level of academic training. Table 4.4 presents the distribution of respondents by academic training.

Table 4.4: Level of Academic Training

Training Level	Principals		Teachers	
	Frequency	**Percent**	**Frequency**	**percent**
Diploma	2	10	62	36.47
Degree	14	70	98	57.65
Masters	3	15	8	4.80
PhD	1	5	2	1.18
Total	**20**	**100**	**170**	**100**

Table 4.4 illustrates that 70% of the sampled principals had degree level of training, 15% had masters and five percent had PhD. 10% of the principals had diploma level of training. Similarly, 57.65% of the sampled teachers had degree level of training; 36.47% had diploma level; 4.80% had masters level, while 1.18% of them had PhD training. These findings suggest that the sampled principals and teachers have fairly advanced levels of training, thereby giving an indication that they are competent in delivering sufficient services for the enhancement of academic achievement of students.

The last part of the demographic characteristics of respondents assessed the years of experience held by the sampled principals and teachers. Table 4.5 presents the distribution of respondents by years of experience.

Table 4.5 Distribution of respondents by Years of Experience

Years of experience	**Principals**		**Teachers**	
	Frequency	**Percent**	**Frequency**	**percent**
Less than 2 years	0	0	0	0
3 – 4 years	0	0	5	2.94
5 – 6 years	0	0	71	41.76
Above 7 years	20	100	99	58.24
Total	**20**	**100**	**170**	**100**

Table 4.5 illustrates that all the sampled principals have had above seven years of teaching experience. On the other hand, 58.24% of the sampled teachers have had over seven years of experience, while 41.76% have had between 5 and six years of experience, and 2.94% had between three and four years of experience. This is an indication that principals and teachers who are directly involved in managing performance of students have had adequate years of teaching experience. They were therefore in better positions to understand the

factors that could motivate teachers into exerting more efforts in ensuring that students' performance is enhanced.

4.3 Students' Academic Performance

The students academic performance in public secondary schools in Kisumu West sub county for the year 2018 is shown in Table 4.6.

Table 4.6: 2018 KCSE Performance in Kisumu West Sub County

Mean Score	Frequency (f)	Percent (%)
1.00 - 3.00	7	25.9
3.01 - 5.00	17	63.0
5.01 - 7.00	2	7.4
7.01 - 9.00	1	3.7
Total	**27**	**100.0**

From Table 4.6, it was observed that 7 schools (25.9%) had very low performance in 2018 KCSE examinations with a mean score between 1.00 and 3.00, 17 schools had low performance of mean score ranging from 3.01 to 5.00, 2 schools had average performance between 5.01 and 7.00 and only 1 school had high performance between 7.01 and 9.00. This performance indicates that 88.9% of schools in Kisumu West Sub County perform below average (i.e. mean of 6.0)

Teachers constitute the core of the education system and their role is most important in lesson delivery and student evaluation. The teachers were presented with questionnaires to rate the academic achievement of their students. They rated academic achievement with the statements as; **1= Never; 2= Rarely; 3= Sometimes; 4=Often; 5=Always.**

The results are shown in Table 4.7:

Table 4.7: Teachers Responses on Students Academic Achievement

Statement in relation to	**Frequency and (%)**					**n=170**	
Students Performance	**1**	**2**	**3**	**4**	**5**	**Mean**	**SD**
Students in my school consistently do homework	11(6)	18(11)	129(76)	12(7)	0(0)	2.84	0.64
Students in my school consult teachers in learning subject areas	3(2)	14(8)	146(86)	7(4)	0(0)	2.92	0.44
Students continuous assessment indicate improved effort	21(12)	17(10)	127(75)	5(3)	0(0)	2.68	0.73
End year result of students in my school are a reflection of the within year teaching	9(5)	16(9)	133(78)	12(7)	0(0)	2.87	0.60
A teacher can be encouraged by the kind of result output after a teaching cycle	15(9)	19 (11)	130(76)	6(4)	0(0)	2.75	0.66
Peer teaching is effective in our school	45(26)	46(27)	72(42)	7(4)	0(0)	2.24	0.89
Individual revision is used effectively for enhanced academic outcomes	1(1)	39(23)	127(75)	3(2)	0(0)	2.78	0.47
Overall Mean						**2.73**	**0.63**

Interpretation Key:

1.00 – 1.44:	Very Poor
1.45 – 2.44:	Poor
2.45 – 3.44:	Average
3.45 – 4.44:	Good
4.45 – 5.00:	Very Good

Table 4.7 illustrates that teachers rate student academic achievement in Kisumu West Sub County as average (M= 2.73; SD=0.63). Students consistency in doing homework is average (M=2.84; SD=0.64) with 7% of the sampled teachers indicating that students

consistently do their homework, 76% indicating that the students do homework only sometimes, 11% indicated that students rarely do homework and 6% that students never do homework. These homework or assignments given to the students are meant to initiate further reading so as to improve performance. This rating shows that a number of students are yet to take these assignments positively for enhanced academic achievement. On students consultation, 4% of the sampled indicated that students consult teachers in learning subject areas often, 86% indicating that students consult teachers only sometimes, 8% that the students consult rarely and 2% noting that the students never consult teachers in the learning subject areas giving an average mean (M=2.92; SD=0.44). Consulting teachers on areas not properly understood during lesson time is key because it allows a teacher to give individual attention to the student hence improve on their weak areas. On whether students continuous assessment indicate improved effort, 12% of the sampled teachers indicated that it does not, 10% noted that this rarely indicates improved effort, 75% of the teachers noted that this is the case sometimes and 3% agreed that it is often the case giving an average mean (M=2.68; SD=0.73). When asked if end year result of students are a reflection of the within year teaching, 7% of the sampled teachers indicated that it is often the case, 78% noted that this is the case sometimes, 9% said it is rarely the case and 5% noted that this is never the case giving an average mean (M=2.87; SD=0.60). When asked whether they can be encouraged by the kind of result output after a teaching cycle, 9% of the sampled teachers indicated that they are never encouraged, 11% indicated that they are rarely encouraged, 76% indicated that this only encourages sometimes and 4% that they are often encouraged giving an average mean (M=2.75; SD=0.66). On whether individual revision is used effectively for enhanced academic outcomes, 75% of the

sampled teachers indicated that this is the case sometimes and 2% indicated that it is often the case. On the other hand, 23% of the teachers noted that this is rarely the case and 1% that it is never the case, giving an average mean (M=2.78; SD=0.47). When asked whether peer teaching is effective in their schools, 26% of the sampled teachers noted that it is never effective, 27% indicating it is rarely effective, 42% that it is only effective sometimes and only 4% indicated that peer teaching is often effective, giving a below average mean (M=2.24; SD=0.89). Students need to be encouraged to share academic concepts through peer teaching. In overall terms therefore, the teachers in Kisumu West Sub County rate the students academic achievement as average (M=2.73; SD=0.63). The small standard deviation denotes less variability of the scores in the distribution. It is the means derived from Table 4.7 (page 45) that was correlated with the teachers responses on the influence of school based incentives for teachers on students academic achievement.

4.4 Monetary Incentives for Teachers and Students' Academic Achievement

The first objective of the study investigated the influence of monetary incentives for teachers on students' academic achievement. The respondents (teachers) were presented with statements on how monetary incentives motivate teachers in order to put more effort in their work and enhance students academic achievement. They were asked to rate the extent to which they believe the same is applicable or true as: **1= Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.** The data obtained was presented in terms of frequencies and percentages. Mean (*M*) of the items as obtained through descriptive statistics were also presented as shown in Table 4.8 on page 48.

Table 4.8: Teacher rating of Monetary Incentives in their schools

Incidence of	Frequency and (%)					n=170
Monetary Incentives	**VH**	**H**	**M**	**L**	**VL**	**Mean**
Offering teachers overtime cash incentives	41(24)	41(24)	33(19)	32(19)	23(14)	3.26
Offering cash for extra lessons taken	67(39)	73(43)	19(11)	7(4)	4(3)	4.13
Offering cash for each subject passed by students	73(43)	75(44)	10(6)	5(3)	7(4)	4.19
Offering cash rewards for early completion of the syllabus	7(4)	15(9)	43(25)	56(33)	49(29)	2.26
Offering cash for most disciplined class	14(8)	22(13)	39(23)	50(29)	45(26)	2.47
Cash rewards for leading subject teachers	41(24)	44(26)	32(19)	24(14)	29(17)	3.26
Cash rewards for non-absenting teachers	4(2)	19(11)	43(25)	56(33)	48(28)	2.26
Cash rewards for more workload	70(41)	77(45)	9(5)	7(4)	7(4)	4.16
Monetary rewards for punctual teachers	7(4)	15(9)	43(25)	56(33)	49(29)	2.26
Monetary rewards for social and cooperative teachers	4(3)	19(11)	36(21)	60(35)	51(30)	2.21
Overall Mean						**3.05**

Table 4.8 illustrates that the sampled teachers consider the following as motivating them to a very large extent; offering cash for extra lessons taken – 39%VL, 43%H, 11%M, 4%L and 3%VL with a mean of 4.13, offering cash for each subject passed by students – 43%VH, 44%H, 6%M, 3%L and 4%VL with a mean of 4.19 and cash rewards for more workload – 41%VH, 45%H, 5%M, 4%L and 4%VL giving a mean of 4.16. The three have very high means indicating that they significantly motivate the teachers to put more effort for improved academic achievement. On the same note, offering teachers overtime cash incentives - 24%VH, 24%H, 19%M, 19%L and 14%VL with a mean of 3.26 and cash reward for leading subject teachers – 24%VH, 26%H, 19%M, 14%L and 17%VL with a

mean of 3.26 motivate the teacher to a large extent for improved academic achievement. The following items of monetary incentives showed low means indicating that the teachers rated them to have low significance when it comes to teacher motivation; offering cash rewards for early completion of syllabus – 4%VH, 9%H, 25%M, 33%L and 29%VL with a mean of 2.26, offering cash for most disciplined class – 8%VH, 13%H, 23%M, 29%L and 26VL with a mean of 2.17, cash reward for non-absenting teachers – 2%VH, 11%H, 25%M, 33%L and 28%VL with a mean of 2.26, monetary reward for punctual teachers – 4%VH, 9%H, 25%M, 33%L and 29%VL giving a mean of 2.26 and monetary reward for social and cooperative teachers – 3%VH, 11%H, 21%M, 35%L and 30%VL with a mean of 2.21. The overall mean rating by the sampled on monetary incentives was 3.05. This indicates that majority of the teachers in Kisumu West Sub County agree that school based monetary incentives motivates them to exert more effort for improved students academic achievement.

The sampled principals were also presented with statements on how monetary incentives motivated teachers to put more effort in their work and were asked to rate the extent to which they believe the same is applicable or true as: **1= Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.** The data obtained was presented in terms of frequencies and percentages and the Mean (*M*) of the items obtained through descriptive statistics are presented in Table 4.9 on page 50.

Table 4.9: Principals Rating of Monetary Incentives for teachers

Incidences of	Frequency and (%)					n=20
Monetary Incentives	**VH**	**H**	**M**	**L**	**VL**	**Mean**
Offering teachers overtime cash incentives	5(25)	5(25)	4(20)	3(15)	3(15)	3.30
Offering cash for extra lessons taken	8(40)	8(40)	2(10)	1(5)	1(5)	4.05
Offering cash for each subject passed by students	9(45)	8(40)	1(5)	1(5)	1(5)	4.15
Offering cash rewards for early completion of the syllabus	1(5)	1(5)	5(25)	7(35)	6(30)	2.20
Offering cash for most disciplined class	2(10)	3(15)	5(25)	5(25)	5(25)	2.60
Cash rewards for leading subject teachers	5(25)	5(25)	4(20)	3(15)	3(15)	3.30
Cash rewards for non-absenting teachers	1(5)	2(10)	5(25)	5(25)	7(35)	2.25
Cash rewards for more workload	8(40)	9(45)	1(5)	1(5)	1(5)	4.10
Monetary rewards for punctual teachers	1(5)	2(10)	5(25)	6(30)	6(30)	2.30
Monetary rewards for social and cooperative teachers	1(5)	2(10)	4(20)	7(35)	6(30)	2.25
Overall Mean						**3.05**

In Table 4.9, offering teachers overtime cash incentives – 25% VH, 25% H, 20%M, 15%L and 15% VL with a mean of 3.30, showing that majority of the sampled principals agree that this motivates the teachers to exert more effort in their work. Offering cash for extra lessons taken – 40% VH, 40% H, 10%M, 5% L and 5% VL with a mean of 4.05. Offering cash for each subject passed by students – 45% VH, 40% H, 5%M, 5% L and 5% VL with a mean of 4.15. Cash rewards for more workload – 40% VH, 45% H, 5% M, 5% L and 5% VL with a mean of 4.10. The high means for the three items (4.05, 4.15 and 4.10) indicate that the sampled principals consider them as highly motivating to the teachers. On the contrary, the following were rated by the principals as having low motivation; offering

cash reward for earl completion of syllabus – 5% VH, 5%H, 25% M, 35% L and 30% VL with a mean of 2.20, cash reward for non-absenting teachers – 5% HH, 10% H, 25% M, 25% L and 35% VL with a mean of 2.25, monetary reward for punctual teachers – 5% VH, 10% H, 25% M, 30% L and 30% VL with a mean of 2.30 and monetary reward for social and cooperative teachers – 5% VH, 10% H, 20% M, 35% L and 30% VL with a mean of 2.25. The overall mean rating by the sampled principals on monetary incentives for teachers was 3.05. This indicated that majority of the principals in Kisumu West Sub County agree that school based monetary incentives motivates them to exert more effort for improved students academic achievement.

From Table 4.8 and 4.9, it noted that there is a general agreement by both the sampled teachers and principals that teachers are motivated highly to exert more effort for improved academic achievement by the following monetary rewards; offering cash for extra lessons taken, offering cash for each subject passed by students and cash reward for more workload, each registering means above four. The following were rated to motivate teachers lowest by both the teachers and principals; offering cash rewards for early completion of the syllabus, cash reward for non-absenting teachers, monetary reward for punctual teachers and monetary reward for social and cooperative teachers, all with means of 2.30 and below.

The level of student academic achievement as rated by teachers and presented in Table 4.7 (page 45) was subjected to correlational analysis against the teacher rating on monetary incentives presented in Table 4.8 (page 48) to determine the relationship between school-based monetary incentives for teachers and students academic achievement. The outcomes have been presented in Table 4.10.

Table 4.10: Teacher Outcomes on influence of monetary incentives on student academic achievement in Kisumu West Sub-county (n=170)

		School based Monetary incentives	Student academic achievement
School based Monetary incentives	Pearson Correlation	1	.360**
	Sig. (2-tailed)		.000
	N	169	169
Student academic achievement	Pearson Correlation	.360**	1
	Sig. (2-tailed)	.000	
	N	169	169

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.10 indicates that school based monetary incentives for teachers is positively and moderately related to students academic achievement (r= +0.360; p <0.001). This means 13% of the positive change in students academic achievement can be explain by influence of school based monetary incentives given to the teachers. Given that the relationship is statistically significant, the hypothesis that, "there is no significant relationship between school based monetary incentives for teachers and student academic achievement in public secondary schools in Kisumu West Sub-county" was rejected. This tends to concur with the responses given by the CSOs during their interview as reported below.

> The CSOs were asked to comment on the academic performance of Public Schools in Kisumu West Sub County. CSO1 said, "In this sub county there are those schools that perform so well, taking many students to the Universities and those whose performance are low." She said, "In my Zone there are schools that take as many as over 100 students to the University and those where no single student makes it to the University. In her opinion, good academic performance comes when students, teachers and parents do their parts. "Majority of these schools that perform well have parents that are so supportive," she said. "This is because certain school programs like remedial teaching, extra lessons to complete the syllabus and even bench marking require support from parents." On monetary incentives to teachers, the officer said, "Schools that perform well design their timetables to accommodate extra lessons and remedial lessons. The teachers who are engaged in these programs are given some financial support." All the CSOs interviewed were aware that school managements offer monetary incentives to motivate outstanding performance among the teachers. They indicated that the TSC has a code of

> regulations that guides on monetary incentives for teachers. The MOE also allows school management to discuss with the parents and agree on any extra levies to be charged in school particularly on remedial lessons. Some schools use some of this money to motivate their teachers so as to enhance academic performance.

The findings of this study seem to concur with Chitimwango (2016) who assessed the effect of rewards system on the performance of teachers in three secondary schools in Zambia. It found that monetary incentive that is performance-based ranked the highest. Similarly, Muralidharan and Sundararaman (2011) established in a study in India that students in incentive schools where incentives were given, performed significantly better than those in control schools by 0.27 and 0.17 standard deviations in math and language tests, respectively. Similarly, Fryer (2013) also established that teacher incentives do increase student performance, attendance, or graduation in a study on 200 New York City public schools.

However, findings in the present study seem to contrast Adebajo (2018) who revealed in a study done in Nigeria that the issues underlying the state of productivity of public school teachers run deeper than remuneration or accountability. Moreover, Narsee (2012), in a study on whether a well-designed reward programme would result in the motivation of employees in Pretoria, South Africa established that there was more of a preference for career development, coaching/mentoring and work life balance.

4.5 Tangible Non-Monetary Incentives and Students' Academic Achievement

The second objective sought to find out how tangible non-monetary incentives to teachers influence students' academic achievement. The sampled teachers were presented with statements related to tangible non-monetary incentives and were requested to state the extent they believed such incentives lead to teacher motivation for enhancement of

students' academic achievement as: **1=Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.** The Mean (*M*) of the items obtained through descriptive statistics is presented in Table 4.11.

Table 4.11: Teacher rating of Tangible Non-Monetary Incentives in their schools

Incidence of Tangible	**Frequency and (%)**					**n=170**
Non-monetary Incentives	**VH**	**H**	**M**	**L**	**VL**	**M**
Offering of dinners in luxurious hotels	109(64)	61(36)	0(0)	0(0)	0(0)	4.64
Securing special clothes, stationary, beddings, furniture and cutlery to teachers	20(12)	24(14)	52(31)	40(24)	34(20)	2.74
Offering of tokens, plaques, food material to teachers	2(1)	7(4)	19(11)	78(46)	64(38)	1.85
Paid up trips and outings away from work stations	24(14)	29(17)	49(29)	37(22)	31(18)	2.34
Open parties sponsored by the institution	19(11)	24(14)	41(24)	41(24)	45(27)	2.87
Providing equipment, tools and machinery to outstanding teachers	39(23)	34(20)	39(23)	30(18)	28(16)	2.59
Offering to meet retraining expenses for teachers	158(93)	12(7)	0(0)	0(0)	0(0)	4.93
Giving certificates to performing teachers	45(26)	50(29)	32(19)	26(15)	17(10)	3.47
Overall Mean						**3.18**

Table 4.11 illustrates that provision of tangible non-monetary incentives to teachers motivate teachers to varying extent. Offering dinners in luxurious hotels, 64%VH, 36%H, 0% M, L and VL giving a mean of 4.64 and offering to meet retraining expenses for teachers, 93%VH, 7%H with a mean of 4.93. These show unanimous agreement by the teachers that the two are very motivating incentives to them leading to more effort in their work. Securing special clothes, stationary, beddings, furniture and cutlery to teachers, 12% VH, 14% H, 31% M, 24% L, 20% VL with a mean of 2.74. This average mean indicates a

diverse opinion by the teachers on the level of motivation. Offering tokens, plaques and food material to teachers, 1% VH, 4% H, 11% M, 46% L and 38% VL giving a mean of 1.85 indicating that most teachers rate this as having low motivation. Paid up trips and outings away from work stations, 14% VH, 17%, 29% M, 22%, L and 18% VL with a mean of 2.34 indicating that teachers rate this as having average motivation. Open parties sponsored by the institution, 11%VH, 14%H, 24%M, 24%L and 27%VL with a mean of 2.87. More than half of the teachers consider this as motivating lowly and very lowly. Providing equipment, tools and machinery to outstanding teachers, 23%VH, 20%H, 23%M, 18%L and 16%VL with a mean of 2.59 indicating diverse opinion among the teachers on the extent to which this motivates them. Giving certificates to performing teachers, 26%VH, 29%H, 19%M, 15%L and 10%VL giving a mean of 3.47 indicating that majority of the teachers agree that giving certificates motivates to put more efforts in their work. The overall mean rating by teachers on tangible non-monetary incentives was 3.18. This indicates that the teachers in Kisumu West Sub County consider tangible non-monetary incentives as highly motivating to them to put more effort in their work leading to improved students academic achievement.

The sampled principals were presented with statements related to tangible non-monetary incentives and were requested to state the extent they believed such incentives lead to teacher motivation for enhancement of students' academic achievement as: **1=Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.** The Mean (*M*) of the items obtained through descriptive statistics is presented in Table 4.12 on page 56.

Table 4.12: Principals Rating of Tangible Non-Monetary Incentives for teachers

Incidence of Tangible	Frequency and (%)					n=20
Non-monetary Incentives	**VH**	**H**	**M**	**L**	**VL**	**M**
Offering of dinners in luxurious hotels	13(65)	7(35)	0(0)	0(0)	0(0)	4.65
Securing special clothes, stationery, beddings, furniture and cutlery to teachers	2(10)	3(15)	6(30)	5(25)	4(20)	2.70
Offering of tokens, plaques, food material to teachers	1(5)	1(5)	2(10)	8(40)	8(40)	1.95
Paid up trips and outings away from work stations	13(65)	6(30)	1(5)	0(0)	0(0)	4.60
Open parties sponsored by the institution	3(15)	3(15)	6(30)	4(20)	4(20)	2.85
Providing equipment, tools and machinery to outstanding teachers	2(10)	3(15)	5(25)	5(25)	5(25)	2.60
Offering to meet retraining expenses for teachers	18(90)	2(10)	0(0)	0(0)	0(0)	4.90
Giving certificates to performing teachers	5(25)	6(30)	4(20)	3(15)	2(10)	3.45
Overall Mean						**3.46**

Table 4.12 indicates that the sampled principals rate the fallowing items as motivating the teachers to larger extent; offering dinners in luxurious hotels, 65%VH, 35H with a mean of 4.65, paid up trips and outing away from work stations, 65%VH, 30%H, 5%M with a mean of 4.60 and offering to meet retraining expenses for teachers, 90%VH, 10%H with a mean of 4.90. On the other hand, they rated the following to motivate teachers to a smaller extent; securing special clothes, stationary, beddings, furniture and cutlery to teachers, 10%VH, 15%H, 30%M, 25%L and 20%VL with a mean of 2.70, proving equipment, tools and machinery to outstanding teachers, 10%VH, 15%H, 25%M, 25%L and 25%VL with a mean of 2.60 and open parties sponsored by the institution, 15%VH, 15%H, 30%M 20%L and 20%VL with a mean of 2.85. Majority of the sampled principals rated giving of certificates to performing teachers as motivating highly, 25%VH, 30%H, 20%M, 15%L

and 10%VL giving a mean of 3.45. On the contrary majority of the principals rated offering tokens, plaques, food material to teachers as having low motivation to the teachers, 5%VH, 5%H, 10%M, 40%L and 40%VL with a mean of 1.95. The overall mean rating by sampled principals on tangible non-monetary incentives was 3.46 indicating an affirmative opinion that tangible non-monetary incentives motivate teachers to put more effort in their work.

Both the teachers and principals agree on the following aspects of tangible non-monetary incentives s motivating teachers to a large extent enhancing student academic achievement in public secondary schools in Kisumu West Sub County; offering teachers dinner in luxurious hotels and offering to meet retraining expenses for teachers, both with means of above four. Similarly, both the teachers and principals rated offering of tokens, plaques and food materials to teachers as having low motivation, with means of below two. On the other hand, the teachers and the principals differ significantly on the extent to which paid up trips and outings away from work stations motivate teachers. While the principals rate this highly with a mean of 4.60, the teachers rate it lowly with a mean of 2.34. This is an indication that the administrators and the teacher may sometimes differ on how the look at issues affecting motivation and academic performance.

The hypothesis was tested through correlational analysis between the teachers mean responses on the tangible non-monetary incentives and their rating on students academic achievement as indicated on table 4.7 on page 45. The findings were presented in Table 4.13 on page 58

Table 4.13: Teacher Outcomes on influence of tangible non-monetary incentives on student academic achievement in Kisumu West Sub-county (n=170)

		School based tangible non-monetary incentives	Student academic achievement
School based tangible non-Monetary incentives	Pearson Correlation	1	.805**
	Sig. (2-tailed)		.000
	N	169	169
Student academic achievement	Pearson Correlation	.805**	1
	Sig. (2-tailed)	.000	
	N	169	169

**. Correlation is significant at the 0.01 level (2-tailed).

The finding of the study (Table 4.13) shows that school-based tangible non-monetary incentives for teachers are positively and strongly related to students' academic achievement in public secondary schools ($r = +0.805$; $p<0.001$). This means that 65% of the positive change in students academic achievement can be explained by the influence of school based tangible non-monetary incentives given to the teachers. Given this relationship, the hypothesis that, "tangible non-monetary incentives for teachers have no significant relationship between school based tangible non-monetary and student academic achievement in public secondary schools in Kisumu West Sub-county" was rejected. This finding tends to reflect what was indicated by the CSOs in an interview as reported below.

> The CSOs were asked to gauge the influence of tangible non-monetary incentives to teachers on students academic performance. The four of them agreed that incentives such as certificates, material awards and stationery have been used by most school managements to motivate teachers and students. One officer said, "Material awards are being used by a number of schools to appreciate exemplary performance by both teachers and students. As a teacher before I became CSO, I received cutlery and a blanket for being the best in my subject. I felt that my performance was recognized. However, most school managements do not involve the teacher to be motivated in the program prior to the reward. This, in more cases than not has brought complaints where teachers feels they have been given what they don't really need." The CSOs indicated that apart from certificates which are very common, different schools give different material awards and take their teachers for outings as a way of motivation. They agreed that such incentives are

good but if not properly designed and the teachers involved, they can create dissatisfaction and hence demotivate the teachers.

The findings that school based tangible non-monetary have high influence on motivation have also been revealed in a study in India by Gunawan and Febrianto (2014). Gunawan and colleague found out that tangible non-monetary incentives are the only factors having significant impact on employees' motivation. Similarly, Tumaini (2015) also revealed in a study done in Tanzania that non-monetary incentives seem to influence teachers' retention positively and negatively as the findings indicated that those who were satisfied with the incentives remained in schools while, those who were not satisfied, quit the teaching profession. However, findings by Jalava, et al (2014) tend to contrast revelations in the present study. They revealed in a study among Swedish primary schools that significant differences exist in test scores between the intrinsically motivated control group and three of four extrinsically motivated treatment groups.

4.6 Intangible Non-monetary Incentives and Students' Academic Achievement

The last objective assessed how intangible non-monetary incentives for teachers influence students' academic achievement among the sampled public secondary schools. The sampled teachers were presented with statements related to intangible non-monetary incentives and were requested to state the extent they believed such incentives lead to teacher motivation and enhancement of students' academic achievement as: **1=Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.** The Mean (*M*) of the items obtained through descriptive statistics is presented in Table 4.14.

Table 4.14: Teacher rating of Intangible Non-Monetary Incentives in their schools

Incidence of	Frequency and (%)					n=170
Intangible Non-Monetary	**VH**	**H**	**M**	**L**	**VL**	**M**
Recognizing effort made by teachers through offering special tasks e.g. HOS, HOD	39(23)	34(20)	39(23)	30(18)	28(16)	3.10
Public recognition made by BOM members to staffs	46(27)	53(31)	36(21)	20(12)	15(9)	3.56
Expanding job scopes to a well performing teacher e.g. Principal of a Form	0(0)	2(1)	8(5)	63(37)	97(57)	1.50
Recommending outstanding teachers for promotions	39(23)	36(21)	39(23)	27(16)	29(17)	3.17
Giving the school canteen to the staff	0(0)	0(0)	6(4)	48(28)	116(68)	1.35
Giving tenders to supply goods and services to teachers	0(0)	0(0)	0(0)	39(23)	131(77)	1.23
Staying in the school compound at subsidized rent	7(4)	15(9)	46(27)	53(31)	49(29)	2.28
Provision of INSET training to teachers	0(0)	0(0)	2(1)	34(20)	134(79)	1.22
Overall Mean						**2.18**

Table 4.14 illustrates that most intangible non-monetary incentives offered to teachers have been rated as motivating teachers to a very small extent. For instance, expanding job scopes to performing teachers – 1%H, 5%M, 37%L and 57%VL with a mean of 1.50, giving the school canteen to the staff – 4%M, 28%L and 68%VL with a mean of 1.35, giving tenders to supply goods and services to teachers – 23%L and 77%VL with a mean of 1.23 and provision of INSET training to teachers – 1%M, 20%L and 79%VL with a mean of 1.22 all indicate to the fact that teachers do not consider them as motivating enough to bring about significant academic improvement. Similarly, majority of the sampled teachers rated staying in the school compound at subsidized rent lowly – 4%VH, 9%H, 27%M, 31%L and 29% with a mean of 2.28. This meant that most teachers think being housed in the compound not a favor and should even be free. On the other hand, the teachers tended to agree that the following items have significant motivation; recognizing effort made by

teachers through offering special task – 23%VH, 20%H, 23%M, 18%L and 16%L with a mean of 3.10, public recognition by BOM members to staff – 27%VH, 31%H, 21%M, 12%L and 9%VL giving a mean of 3.56 and recommending outstanding teachers for promotion – 23%VH, 21%H, 23%M, 16%L and 17%VL giving a mean of 3.17. The overall mean rating by teachers on the extent to which intangible non-monetary incentives motivate them was 2.18. This is an indication that the teachers consider most of these incentive items as normal administrative actions with no significance in as far as motivation is concerned.

The sampled principals were presented with statements related to intangible non-monetary incentives and were requested to state the extent they believed such incentives motivate their teachers leading to enhancement of students' academic achievement as: **1=Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.** The Mean (*M*) of the items obtained through descriptive statistics is presented in Table 4.15 on page 62.

Table 4.15: Principals Rating of Intangible Non-Monetary Incentives for teachers

Incidence of	Frequency and (%)					n=20
Intangible Non-Monetary	**VH**	**H**	**M**	**L**	**VL**	**Mean**
Recognizing effort made by teachers through offering special tasks e.g. HOS, HOD	0(0)	0(0)	0(0)	5(25)	15(75)	1.25
Public recognition made by BOM members to staffs	6(30)	6(30)	4(20)	2(10)	2(10)	3.60
Expanding job scopes to a well performing teacher e.g. Principal of a Form	0(0)	0(0)	1(5)	7(35)	12(60)	1.45
Recommending outstanding teachers for promotions	5(25)	4(20)	2(25)	3(15)	3(15)	3.25
Giving the school canteen to the staff	0(0)	0(0)	1(5)	6(30)	13(65)	1.40
Giving tenders to supply goods and services to teachers	5(25)	4(20)	5(25)	3(15)	3(15)	3.25
Staying in the school compound at subsidized rent	6(30)	6(30)	4(20)	2(10)	2(10)	3.65
Provision of INSET training to teachers	0(0)	0(0)	0(0)	5(25)	15(75)	1.25
Overall Mean						**2.39**

Table 4.15 illustrates that the sampled principals rated the following items as having significant motivation to the teachers in their work; public recognition made by BOM members to staff – 30%VH, 30%H, 20%M, 10%L and 10%VL with a mean of 3.60, recommending outstanding teachers for promotion – 25%VH, 20%H, 25%M, 15%L and 15%VL with a mean of 3.25, staying in the school compound at subsidized rent – 30%VH, 30%H, 20%M, 10%L and 10%VL with a mean of 3.65 and giving tenders to supply goods and services to teachers – 25%VH, 20%H, 25%M, 15%L and 15%VL giving a mean of 3.25. On the contrary, the following were rated as insignificant in motivating teachers; recognizing efforts made by teachers through offering special tasks – 25%L and 75%VL with a mean of 1.25, provision of INSET training to teachers – 25%L and 75%VL with a mean of 1.25, expanding job scope to a well performing teacher – 5%M, 35%L and 60% giving a mean of 1.45 and giving school canteen to the staff – 5%M, 30%L and 65%VL

giving a mean of 1.40. The overall mean rating by the sampled principals on intangible non-monetary incentives was 2.39 indicating that majority of the principals in Kisumu West Sub County consider intangible non-monetary incentives as having low motivation.

Table 4.14 and 4.15 show that there is an agreement among the sampled teachers and principals that public recognition by BOM members to staff motivate teachers highest with a mean of 3.56 for the teachers and 3.60 for the principals. On the other hand, there is a disagreement on giving tenders to supply goods and services to teachers and staying in the school compound at subsidized rent. All the sampled teachers (100%) indicate that giving tenders to supply goods and services motivate teachers lowly and very lowly with a mean of 1.23 as opposed to 45% of the principals who indicated that it motivates teachers highly and very highly with a mean of 3.35. Only 13% of the teachers said that staying in the school compound at subsidized rent motivate them highly and very highly giving a mean of 2.28 while 60% of the principals indicated that this motivated the teachers highly and very highly with a mean of 3.65. Provision of INSET training to teachers is rated by both the teachers and the principals as motivating to the lowest extent with 99% (M=1.22) and 100% (M=1.25) respectively indicating this. Both see INSET training as a procedural measure that should be taken by the institutions. Generally, the principals as school administrators seem to favor the intangible non-monetary incentives because of their low cost implications as opposed to the teachers. This accounts to the difference in opinions hence the disparity shown in their rating.

The hypothesis was tested through correlational analysis between teacher response on students academic achievement as presented in Table 4.7 on page 45 and teacher rating of

intangible non-monetary incentives presented in table 4.14 on page 60. The findings were presented in Table 4.16.

Table 4.16: Teacher Outcomes on influence of intangible non-monetary incentives on student academic achievement in Kisumu West Sub-county (n=170)

		School based intangible non-monetary incentives	Student academic achievement
School based intangible non-Monetary incentives	Pearson Correlation	1	.002**
	Sig. (2-tailed)		.454
	N	169	169
Student academic achievement	Pearson Correlation	.002**	1
	Sig. (2-tailed)	.454	
	N	169	169

**. Correlation is significant at the 0.01 level (2-tailed).

The finding of the study (Table 4.16) shows that there was statistically insignificant positive correlation between school-based intangible monetary incentives in public secondary schools (r= +0.002; p= 0.454). Given that the relationship is statistically insignificant, the hypothesis that, "there is no significant relationship between school based intangible non-monetary incentives for teachers and student academic achievement in public secondary schools in Kisumu West Sub-county" was accepted. The findings partly concur with what the CSOs said in the interview conducted to seek their opinions on the influence of intangible non-monetary incentives for teachers on students' academic achievement as reported below.

> Most teachers are demoralized when they feel that their efforts are not recognized by the principal and the school management. They observed that there are cases of transfer intentions by teachers and even resignations as a result of these feelings by the teachers. To them, accommodation of teachers in the school compound greatly influences students performance because the teachers tend to have more time with the students. They indicated that the Sub County Education office has been organizing annual education days where outstanding performance by schools and teachers are appreciated and awarded.

Findings that intangible non-monetary incentives to teachers have no influence on students' academic performance contradicts most studies (Adebajo, 2018; Isanzu, 2014; Tumaini, 2015; Ukki 2013; Yego, 2013). They reveal that intangible non- monetary incentives such as promotions, career development opportunities as well as recognition among others lead to teacher motivation and students' academic performance. For instance, Adebajo (2018) showed that much more than remuneration or accountability determine motivation among public secondary school teachers in Nigeria. Similarly, Isanzu (2014) revealed a positive relationship between the provision of non-financial incentives and teacher performance among public primary schools in Tanzania. Furthermore, Tumaini (2015) too revealed that teacher promotion prospects provide motivation to teachers in Tanzania. Intangible non-monetary incentives are therefore emerging to have influence on students' academic performance.

The study findings point at the fact that two variables, monetary incentives and tangible non-monetary incentives, have significant influence on students' academic performance among public secondary schools. Their poor implementation of these may often lead to disparities in students' academic achievement. As concluded by Fryer (2013) in an analysis of a school based randomized trial in over 200 New York City public schools, poorly designed teacher incentives may decrease student achievement, especially in larger schools.

This finding shows that monetary and tangible non-monetary incentives have positive and significant influence on students' academic achievement. This concurs with findings in a study in India by Gunawan and Febrianto (2014) who analyzed the impact of monetary and non-monetary incentives on employees' motivation in Pt XYZ' finance function. Although

this was not an educational institution, findings revealed that non-monetary incentives are the most influential factors affecting employees' motivation. Similar findings regarding influence of tangible non-monetary incentives on school teachers was also shown in a study in Tanzania by Isanzu (2014). It revealed that medical services, presentable houses, transport, electricity, sufficient teaching and learning materials, availability of clean safe water, recreation and market places were the main motivators for teachers. Researchers (Ukki, 2013) in Zanzibar and Tumaini (2015) in Tanzania also made concurring findings with regard to non-monetary incentives for teachers and motivation. The former revealed that most teachers accept that non-financial incentives had great contribution towards motivation while the latter contended that non-monetary incentives seem to influence teachers' retention positively.

However, it is also critical to note that there are several studies (Adhiambo, 2013; Chitimwango, 2016; Muralidharan & Sundararaman, 2011; Yego, 2013) that have also come out with findings indicating that monetary incentives have influence on teacher motivation and students' academic performance. For instance, Adhiambo (2013) revealed in a study that assessed the effects of the institutional teacher reward systems on students' performance in Kenya that monetary rewards on teachers influence student performance. Similarly, Muralidharan and Sundararaman (2011), in a study in India, found that students in teacher pay program for performance schools performed significantly better than those in control schools by 0.27 and 0.17 standard deviations in math and language tests, respectively. Additionally, in a study among teachers in Uasin Gishu (Kenya), Yego (2013) revealed that pay was the most important factor that influenced teacher output. The foregoing therefore suggests that school based incentive for teachers and their influence on

students' academic achievement is dependent upon complementary implementation of the incentives.

From the findings of this study school management and administrators can clearly realize that school based monetary incentives and tangible non-monetary incentives have a great influence on student academic achievement. If properly designed and implemented, these incentives can account up to 78% of positive change in student academic achievement hence improved performance the national examinations. Intangible non-monetary incentives have no significant influence on teacher motivation. However, recognizing the efforts teachers make by the school management and recommending outstanding teachers for promotion are key complements in teacher motivation and retention.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary findings of the study based on the three objectives. The conclusions of the study are also made objectively with the recommendations of the study. Suggestions are also given on what the study did not accomplish and timely studies that could complement the current studies.

5.2 Summary of Findings

5.2.1 Monetary Incentives for Teachers and Students' Academic Achievement

The study findings showed that the teachers and the principals have a general agreement that the following aspects of school based monetary incentives motivate teachers highly to exert more effort for improved students academic achievement; offering cash for extra lessons taken, offering cash for each subject passed by students and cash reward for more workload, each registering means above four. They also indicated a general consensus that the following aspects school based monetary incentives motivate teachers lowest; offering cash rewards for early completion of the syllabus, cash reward for non-absenting teachers, monetary reward for punctual teachers and monetary reward for social and cooperative teachers, all with means of 2.30 and below. The findings show no difference in opinion by both the teachers and the principals in as far as monetary incentives motivate the teachers. Correlational analysis to discover the influence of school based monetary incentives for teachers on students academic achievement indicated that it is positive and moderate ($r= +0.36$; $p<0.001$). This means that 13% of positive change in students academic achievement is due to monetary incentives given to teachers.

5.2.2 Tangible Non-Monetary Incentives for Teachers and Students' Academic Achievement

The study findings indicated that both the teachers and principals agree on the following aspects of school based tangible non-monetary incentives as motivating teachers to a large extent enhancing student academic achievement in public secondary schools in Kisumu West Sub County; offering teachers dinner in luxurious hotels and offering to meet retraining expenses for teachers. Similarly, both the teachers and principals rated offering of tokens, plaques and food materials to teachers as having low motivation. On the other hand, the teachers and the principals differ significantly on the extent to which paid up trips and outings away from work stations motivate teachers. While the principals rate this as motivating teachers highly, the teachers rate it as having low motivation. This is an indication that the administrators and the teacher may sometimes differ on how they look at issues affecting motivation and academic performance. Correlational analysis to discover the influence of school based tangible non-monetary incentives for teachers on students academic achievement indicated that there is a strong positive relationship between school based tangible non-monetary incentives for teachers and students academic achievement ($r= +0.805$; $p<0.001$).

5.2.3 Intangible Non-Monetary Incentives for Teachers and Students' Academic Achievement

The study findings indicate a general agreement among the teachers and the principals that public recognition by BOM members to staff motivate teachers highest. On the other hand, the teachers and the principals disagree on the extent to which giving tenders to supply

goods and services to teachers and staying in the school compound at subsidized rent motivate teachers. All the sampled teachers (100%) indicate that giving tenders to supply goods and services motivate teachers lowly and very lowly as opposed to 45% of the principals who indicated that it motivates teachers highly and very highly. Only 13% of the teachers said that staying in the school compound at subsidized rent motivate them highly and very highly while 60% of the principals indicated that this motivated the teachers highly and very highly. Provision of INSET training to teachers is rated by both the teachers and the principals as motivating to the lowest extent with 99% and 100% respectively indicating this. Both see INSET training as a procedural measure that should be taken by the institutions. Generally, the principals as school administrators seem to favor the intangible non-monetary incentives because of the low cost implications as opposed to the teachers. This accounts for the difference in opinions resulting to the disparity shown in their rating. The findings indicated that there is an insignificant positive relationship between school based intangible non-monetary incentives and students academic achievement ($r= +0.002$; $p=0.454$).

5.3 Conclusions

Based on the findings of the study, the following conclusions were made:

i. The influence of monetary incentives for teachers on students' academic achievement is moderate. 13% of positive change in students academic achievement is due to the influence of school based monetary incentives for teachers. The teachers exert more effort if they are awarded for more work load, extra lessons taken and for each subject the students pass in the national examinations. The study thus concludes that monetary incentives carefully

designed and teachers opinions put into account would achieve the desired outcomes.

ii. The second objective revealed tangible non-monetary incentives to teachers have influenced students' academic achievement to a great extent. There is a strong positive correlation between school based tangible non-monetary for teachers and students' academic achievement. 65% of positive change in students academic achievement is due to school based tangible non-monetary incentives for the teachers. The tangible non-monetary incentives offered in school cover a wide range of benefits that provide teacher motivation.

iii. Based on the findings of the final objective of the study, it can be concluded that intangible non-monetary incentives offered to teachers have no influence on students' academic achievement. There is statistically insignificant positive correlation between school based intangible non-monetary incentives for teachers and students' academic achievement.

5.4 Recommendations

From the study findings, the following recommendations were made:

i. From the first objective of the study, monetary incentives need to be enhanced by the school management so as to achieve the desired improvement in students academic achievement. However, it is important that the teachers get involved in the design and implementation of these incentives.

ii. From objective two of the study, it is recommended that school management expand tangible non-monetary incentives to include those that would improve work

efficiency like laptop, printers and other gargets for ICT to enhance students' academic achievement in public secondary schools

iii. From the final objective of the study, it is recommended that the scope of intangible non-monetary incentives should be expanded so as to satisfy diverse needs of the teaching staff and reduce teacher turnover in schools

5.5 Suggestions for Further Studies

The study recommends that more studies be carried out in the following areas

i. From the first objective of the study, it is suggested that a study be done on the compliance to the MOE circular on monetary incentives to teachers and whether there is need for amendment.

ii. From objective two of the study, it is recommended that a study be done on the influence of teacher involvement during design of school based tangible non monetary incentives so as to improve on teacher motivation.

iii. From the final objective of the study, the researcher recommends that a study be done on the influence of intangible non monetary incentives to teacher on their transfer intentions and resignation from the profession.

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APPENDICES

APPENDIX I: QUESTIONNAIRE FOR PRINCIPALS

To the esteemed respondent,

Kindly assist in filling in the questionnaire by ticking in the box you feel is correct. The questionnaire is meant to help the researcher in gathering data related to the influence of school based incentive schemes for teachers on the performance of students in public secondary schools in Kisumu West Sub County. The information provided will be used for academic purposes only, and will be treated with strict confidentiality.

Questionnaire Code/No.: ☐ **Date of Interview:** ☐

SECTION I. DEMOGRAPHIC INFORMATION

1. Gender: i. Male ☐ ii. Female. ☐ *(tick appropriately)*

2. Age: i. 20 – 30 ☐ ii. 31 – 40 ☐ iii. 41 and above ☐

3. Level of academic training?

I=Diploma level; ☐ ii= Degree level; ☐ iii= Masters level; ☐

Iv= Any Others (Specify) _____

4. Period of Service as Principal: 1. Less than 2 years; ☐ 2. 3 to 4 years; ☐

3. 5 to 6 years; ☐ 4. Above 7 years; ☐

SECTION II: MONETARY INCENTIVES AND PERFORMANCE

The following statements are related to monetary incentives as an inducement for teachers to put more effort and achieve good performance. Kindly rate the level of influence with the statements as: **1= Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.**

No	Statement	1	2	3	4	5
1	Offering teachers overtime cash incentives					
2	Offering cash to teachers for extra lessons taken					
3	Offering cash to teachers for each subject passed by students					
4	Offering cash rewards to the teachers who complete the syllabus early					
5	Offering cash to the most disciplined class					
6	Cash rewards for leading subject teachers					
7	Cash rewards for non-absenting teachers					
8	Cash rewards for more workload					
9	Monetary rewards for punctual teachers					
10	Monetary rewards for social and cooperative teachers (positive team work)					

SECTION III: TANGIBLE NON-MONETARY INCENTIVES

The following statements are related to tangible non-monetary incentives. Kindly rate the level of influence with the statements as: **1=Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.**

No	Statement	1	2	3	4	5
1	Offering teachers dinners in luxurious hotels					
2	Securing special clothes, stationery, beddings, furniture and cutlery to teachers					
3	Offering of tokens, plaques, food items to teachers					
4	Paid up trips and outings away from work stations					
5.	Open parties sponsored by the institution					
6	Providing equipment, tools and machinery to outstanding teachers					
7.	Offering to meet retraining expenses for teachers					
8.	Giving certificates to performing teachers					

SECTION IV: INTANGIBLE NON-MONETARY INCENTIVES

The following statements relate to the effect of school based intangible non-monetary incentives on the performance of teachers. Kindly rate (in your opinion) the level in which the intangible non-monetary incentives presented in the statements influence teacher motivation and hence academic performance of students as: **1= Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.**

No	Items	1	2	3	4	5
1	Recognizing effort made by teachers through offering special tasks eg class teacher, head of subject, HOD etc					
2	Public recognition made by BOM members to staffs					
3	Expanding job scopes to a well performing teacher eg Principal of Form 1, 2, 3 & 4					
4	Recommending outstanding teachers for promotions					
5	Giving the school canteen to the teaching staff					
6	Giving tenders for supply goods and services to teachers					
7.	Housing teachers the school compound at subsidized rent					
8.	Provision of INSET training to teachers					

APPENDIX II: QUESTIONNAIRE FOR TEACHERS

To the esteemed respondent,

Kindly assist in filling in the questionnaire by ticking in the box you feel is correct. The questionnaire is meant to help the researcher in gathering data related to the influence of school based incentive schemes for teachers on the performance of students in public secondary schools in Kisumu West Sub County. The information provided will be used for academic purposes only, and will be treated with strict confidentiality.

Questionnaire Code/No.: ☐ **Date of Interview:** ☐

SECTION I. DEMOGRAPHIC INFORMATION

1. Gender: i. Male ☐ ii. Female. ☐ *(tick appropriately)*

2. Age: i. 20 – 30 ☐ ii. 31 – 40 ☐ iii. 41 and above ☐

3. Level of academic training?

I=Diploma level; ☐ ii= Degree level; ☐ iii= Masters level; ☐

Iv= Any Others (Specify) _____

4. Period of Service: 1. Less than 2 years; ☐ 2. 3 to 4 years; ☐ to 6 years; ☐

4. Above 7 years; ☐

SECTION II: MONETARY INCENTIVES AND PERFORMANCE

Kindly rate the following statements related to monetary incentives as an inducement for teachers as: **1= Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.**

No	Statement	1	2	3	4	5
1	Offering teachers overtime cash incentives					
2	Offering cash for extra lessons taken					
3	Offering cash for each subject passed by students					
4	Offering cash rewards for early completion of the syllabus					
5	Offering cash for most disciplined class					
6	Cash rewards for leading subject teachers					
7	Cash rewards for non-absenting teachers					
8	Cash rewards for more workload					
9	Monetary rewards for punctual teachers					
10	Monetary rewards for social and cooperative teachers (positive team work)					

SECTION III: TANGIBLE NON-MONETARY INCENTIVES

Kindly rate the following statements related to tangible non-monetary incentives as an inducement for teachers as: **1=Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.**

No	Statement	1	2	3	4	5
1	Offering of dinners in luxurious hotels					
2	Securing special clothes, stationery, beddings, furniture and cutlery to teachers					
3	Offering of tokens, plaques, food items to teachers					
4	Paid up trips and outings away from work stations					
5.	Open parties sponsored by the institution					
6	Providing equipment, tools and machinery to outstanding teachers					
7.	Offering to meet retraining expenses for teachers					
8.	Giving certificates to performing teachers					

SECTION IV: INTANGIBLE NON-MONETARY INCENTIVES

Kindly rate (in your opinion) the level in which the intangible non-monetary incentives presented in the statements influence teacher motivation as: **1= Very Low; 2= Low; 3= Moderate; 4=High; 5=Very High.**

No	Items	1	2	3	4	5
1	Recognizing effort made by teachers through offering special tasks eg class teacher, head of subject, HOD etc					
2	Public recognition made by BOM members to staffs					
3	Expanding job scopes to a well performing teacher eg Principal of Form 1, 2, 3 & 4					
4	Recommending outstanding teachers for promotions					
5	Giving the school canteen to the staff					
6	Giving tenders to supply goods and services to teachers					
7.	Staying in the school compound at subsidized rent					
8.	Provision of INSET training to teachers					

SECTION V: STUDENTS ACADEMIC ACHIEVEMENT

Kindly rate academic achievement of your students with the following statements as: **1= Never; 2= Rarely; 3= Sometimes; 4= Often and 5=Always**

No	Items	1	2	3	4	5
1	Students in my school consistently do homework					
2	Students in my school consult teachers in learning subject areas					
3	Students continuous assessment indicate improved performance					
4	End year results of students in my school are a reflection of within year teaching					
5	As a teacher I get encouraged by the kind of results output after teaching cycle					
6	Peer teaching and group work is effective in our school					
7.	Individual revision is used effectively to enhance academic performance					

THANK YOU FOR OFFERING TO ANSWER THE QUESTIONS IN THIS QUESTIONNAIRE

APPENDIX III: INTERVIEW GUIDE FOR CSO

This interview schedule is meant to assist the researcher in obtaining information related to the influence of school based incentives for teachers on students academic cachievement in Kisumu West Sub County. Information gathered from this interview will strictly be used for academic work only, and the researcher will ensure confidentiality is maintained appropriately.

SCHOOL BASED INCENTIVES FOR TEACHERS AND STUDENTS ACADEMIC ACHIEVEMENT

1. As the one in charge of curriculum support and quality education, what is your overall assessment on the students academic achievement in the Public Secondary Schools in Kisumu West Sub County?

2. How would you relate students' performance in the schools in your area to the monetary incentives offered to motivate the teachers by school management?

3. With your experience as the one in charge of standards and quality of Education, what is your opinion on monetary incentives for teachers offered in Public Secondary Schools in your area of jurisdiction?

4. What are some of the tangible non-monetary incentives offered to motivate teachers in order to enhance students academic achievement in public secondary schools in your area?

5. In your opinion, how have the incentives you have mentioned impacted on the level of motivation and the academic achievement of students in public secondary schools in your area?

6. Based on your assessment what is the influence of intangible non-monetary incentives such as recognition by your office and school management, offering certain privileges like accommodation in school compound, etc. to teachers on students' academic achievement in the Sub County?

7. To what extent has the Sub County Education office been involved in recognizing exemplary performance by the teachers? In your opinion how has this impacted on the academic achievement of students in those schools?

APPENDIX IV

PERFORMANCE BY SCHOOL IN 2018 KCSE EXAMINATIONS

S/NO	SCHOOL	MEAN IN 2016 KCSE
1	S1	8.691
2	S2	5.579
3	S3	5.189
4	S4	4.620
5	S5	4.584
6	S6	4.526
7	S7	4.424
8	S8	4.226
9	S9	4.222
10	S10	3.953
11	S11	3.941
12	S12	3.826
13	S13	3.574
14	S14	3.560
15	S15	3.517
16	S16	3.508
17	S17	3.507
18	S18	3.471
19	S19	3.352
20	S20	3.153
21	S21	2.938
22	S22	2.900
23	S23	2.884
24	S24	2.729
25	S25	2.667
26	S26	2.660
27	S27	2.571

APPENDIX V: KISUMU WEST MAP