

# **Learning Strategies and Students' Academic Performance in Secondary Schools in Makadara Sub County, Nairobi City County, Kenya**

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## **ABSTRACT**

The purpose of this study was to analyse the influence of learning strategies on students' academic performance in secondary schools in Makadara Sub County, Nairobi County. The main objective of the study was to determine the influence of strategic plan on students' academic performance in secondary schools in Makadara Sub County, Nairobi City County. The study was guided by the Education Production Function Theory by Mace (1979). Descriptive survey design targeting 23 principals, 92 Head of departments and 2885 form four students was use. The sample size was made up of 23 principals, 92 Head of departments, and 226 students. Qualitative and quantitative data were obtained from the study and analysed using the descriptive and statistical techniques. The study established that time management greatly influenced students' academic performance proving a significant positive correlation with time management. Secondary schools in Makadara Sub County conducted continuous assessment on termly, monthly and weekly basis. The assessments were in the form of test, class work, and project at the end of the topic. The students were organized in groups, whole class and individually. The study further found out that class attendance greatly influenced academic performance. There is a positive correlation between continuous assessment and academic performance. Secondary schools in Makadara Sub County have schools rules which are observed by more than half of the students and punishment administered to the law breakers. Discipline influenced students' academic performance to a great extent and had a positive significant effect on academic performance. The teachers informed their students about the content of work in each subject area from the syllabus with moderate syllabus coverage. The strategies adopted included; creation of more time, strict class attendance, topical timetable starting from as early as 6.30 am in

the morning, afternoon and weekend remedial plus giving outlines to students for self-study. Syllabus coverage very greatly influenced students' academic performance and also had a positive correlation with academic performance. Secondary schools in Makadara Sub County attained average performance in KCSE. The study recommends that schools should ensure frequent continuous assessment in order to improve students' academic performance. I deliberately chose this topic because I am a teacher by profession and my current station is Aquinas high school in Makadara Sub County. This gave me the advantage of familiarity with topic and ease in collection of data.

**Key words:** *Academic performance, strategic planning, strategy, influence*

## 1.0 INTRODUCTION

### Study Background

Strategic planning emerged in public education as a management tool in the mid-1980s. The term appeared in educational publications for the first time around 1984, and by 1987 an estimated five hundred school districts around America were using some type of strategic planning (Conley, 1992). Two professional organizations, the American Association of School Administrators (AASA) and the Association for Supervision and Curriculum Development (ASCD), promoted strategic planning in education through publishing and widely disseminating two strategic planning handbooks written by national consultants Shirley McCune (*Strategic Planning for Educators*, 1986) and Bill Cook (*Strategic Planning for America's Schools*, 1988).

McCune and Cook proceeded to lead strategic planning workshops for educators around the country under the sponsorship of the two associations, with Cook graduating over four hundred "certified strategic planners" from his AASA-approved program. Educational Leadership, the professional organ of the ASCD, dedicated its April 1991 issue to strategic planning. Today the Educational Resources Information Center (ERIC) lists over 340 titles written since 1989 under the subject of "strategic planning," which address strategic planning in a variety of educational settings, including schools, universities, and libraries.

The need for effective strategic planning has intensified because of the constraints in resources and increased expectations for accountability from external agencies such as state governments (Welsh, 2005). In order to effectively meet these challenges, school districts must interpret these regulations and policies and then develop system-wide action plans to effectively put them into practice. Solutions now require detailed blueprints for systemic change that identify strategic performance indicators and benchmarks. These plans require that administrator, teachers, counsellors and other related professionals work collaboratively to identify and improve positive academic and behavioural supports across the curriculum with simplicity and commitment (Quinn, 2000). Therefore, professional collaboration is critical.

Results Based Management has gained currency in Kenya especially with the adoption of Sessional Paper No. 1 of 2005 of the Republic of Kenya. The introduction for strategic plans for schools means embracing strategic management approach. The requirement for strategic plans and service charters for schools is mandatory in order to practice Result-Based Management and operating ethos. Secondary schools in Kenya provide the base for further training and future career development.

They basically aim at increasing knowledge of economic production, its relationship with the social context and the natural environment.

The management of secondary schools should be strategized hence the need for strategic management program which can enhance result based operations. Strategic management planning provides overall direction to the institution and is closely, related to the field of organization studies. It has been observed that long-term coordinated strategy was necessary to give an organization structure, direction and management for quality outcomes. For identity, schools that operate strategic management programs have shared visions, shared mission statements formulated corporately, with independent variables in-built on which the respective schools hook shared goals that branch out to objectives and guide their ultimate activities. They do this through developed strategic plans (ROK, Sessional Paper No. 1 of 2005).

In education, strategic alignment between the institution and its environment to maintain “strategic consistency” is essential (Arieu, 2007). It is required that secondary school principals should identify their key potential resources and evaluate whether these resources fulfil the criteria in terms of; Valuable, Rare, In-imitable and Non-substitutable. When a school has resources that are valuable, it stands a chance of employing value-creating strategy, by either outperforming its competitors or reduce its own weaknesses (Johnson *et al* 2007). It is therefore important for secondary schools to scan the environment continuously and formulate a strategy that will withstand the test of time; hence enjoy sustainable competitive edge.

The strategy formulation in itself, however, is not effective when the plan is not implemented. Therefore, both formulation and implementation of the strategic plan must complement each other in order to realise the full benefits that come with strategic plan.

Secondary schools in Kenya fall into two categories, public and private. The public secondary schools are funded and managed through a board of management (BOM) and Parents Teachers Associations (PTA). The private schools on the other hand are established and managed by individual proprietors or organizations. The public schools are divided into national, extra county, county and sub- county levels. The objectives of secondary school education are to prepare students to make a positive contribution to the development of society, and to acquire attitudes of national patriotism, self-respect, self-reliance, cooperation, adaptability and a sense of purpose and self-discipline (Sifuna, 1990). Effective schools identify core values and beliefs about learning that function as explicit foundational commitments to the students and the community.

Secondary schools in Nairobi have been experiencing a number of challenges that threaten their long term sustenance. These challenges include but are not limited to inadequate number of teachers, high population of students, rising cost of teaching and learning materials, scarcity of land for expansion, rising cases of indiscipline, rising competition, declining academic performance among others. These challenges can be contained amicably when secondary schools in Nairobi implement strategic plans.

A directive was issued by the Kenyan government in 2004 to all public schools that required each institution to formulate a five year school strategic plan. In its efforts to implement this, the

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government took all the schools' principals and Board of Management for a workshop to be trained on how the plan was to be carried out. It is now more than a decade, yet some schools have never changed their management practices. A number of schools in Makadara Sub County are yet to develop a strategic plan while others simply copied and pasted strategic plans of better performing schools. Few hired services of experts to formulate plans for them which the schools launched with a lot of hype. This has raised questions as to why this difference exists, yet it is a ministerial requirement that all schools formulate strategic plans with a time frame of 3-5 years and action plans for each year. It is against this background that this study sought to analyse the influence of strategic plan on students' academic performance in secondary schools in Makadara Sub County in Nairobi County.

## **2.0 LITERATURE REVIEW**

### **2.1 Influence of Time Management on Performance**

Time management is the act or process of planning and exercising conscious control over the amount of time spent on specific activities, especially to increase the effectiveness, efficiency or productivity. It is also, a necessity in any project development as it determines the project completion time and scope. Campbell, Corbally and Nystrand (2013) explained that most administrators spent about 36.5 percent of their time on organizational maintenance tasks and only 17.4 percent of their time on tasks related to the academic program. The principal should set some priorities. Without established priorities principals and other teachers tend to respond to every demand regardless of its nature or by whom it is being pressed as though each is of equal importance.

Mbaka (2012) noted that school heads should monitor timetable making and the allocation of periods to the teaching staff. The time allocation in teaching and learning has been identified as a contributing factor to a schools' performance. The study further observed that within limits, the more hours allowed for instruction in a subject, the higher the achievement. Mbaka (2012) further noted that there was a lot of wastage of students' learning time in schools which led to inadequate syllabus coverage in preparation for national examinations leading to poor performance. School heads should therefore ensure no time is lost during the opening weeks of every school term calendar.

According to MOE (2013), the school managers should have good time management skills. This will help to avoid stress and facilitate management of the school in an effective and efficient manner. This will result in good planning and scheduling time for pupils` and teachers. Olembo, Wanga and Karagu (2012) on curriculum and instruction argued that, the school programme includes the numerous activities and process which relate directly to the instructional goals of the school and to the means intended to achieve those goals. In this connection time management among teachers helps them to allocate appropriate time for each activity, set time for planning by identifying the specific objectives of the curriculum and instructions, and get time to organize by scheduling master timetable and class timetables.

A report on performance by the KNEC as quoted in Mutea (2012) cited lack of adequate revision time as a major factor that influenced KCSE performance. KEMI (2011) asserted that time as school managers, resources such as time has to be used prudently in order to achieve set goals which are

directed towards students' achievement in KCSE. Time management seem to be an issue among secondary schools in Makadara since most of the time students are pushed to be in the right place at the right time which may be contributing to poor performance.

## **2.2 Influence of discipline management on performance**

According to Mafabi (2013), management is the process of working with and through people to accomplish organizational goals. Management deals with the establishment of rules and regulations as well as planning activities that aim at fulfilling the objectives of a particular organization. Rules are suggested or self-imposed guides for a scientific communication for conduct or action or an accepted procedure and custom. Rules or standards of behaviour can be defined as the shared expectations of a group of people. These include what the group regards as a socially acceptable pattern of behaviour expected of every individual in the group (Harris, 2005).

According to Matsoga (2013), on discipline in schools of Botswana, he discovered the wide spread violence and misbehaviour that existed in many secondary schools. This lack of discipline, which interfered with the teaching and learning process, manifested itself in various ways including bullying, vandalism, alcohol consumption and substance abuse, truancy, inability or unwillingness to do class work at home. Theft was also identified as a common activity among secondary school students. An example was cited in 2003 where students of one of the secondary school in Botswana, broke into a biology lab to steal ethanol (Banda, 2014). Some of these students lost their lives, and others lost their sight. In another secondary school, a 19-year-old boy committed suicide after fighting with another student over a borrowed plate (Maleke, 2013).

Ideally, in Kenya schools set rules and regulations for the proper governing of the various lifestyles of students containing the dos and don'ts (Okumbe, 2008). Regulations are authoritative orders with a course of law intended to promote order and efficiency in an organization. Lupton and Jones (2002), also concurred with Okumbe (2008), and argued that effective schools demonstrate sound inclusive practices, which includes emphasizing school rules and regulations, collaborative leadership and their good practice. The school rules and regulations therefore prescribe the standard of behaviour expected of the teachers and the students. However these researchers did not say anything on the effect of school rules and regulations on students' academic performance and thus a need for this study.

According to Adams (2013), schools rules and regulation are among the strategies designed to instil good conduct of students. This implies self-control, orderliness, good behaviour and obedience to school authority (Adams, 2013). Also on admission schools especially at secondary level, students are given prospectuses, which spell out some of the expectations (Adams, 2013). These rules and regulations specify in most cases what school members should do and what they should not do.

Despite this expectation, in most secondary schools in Makadara Sub-County, students break these rules and regulations with wide spread indiscipline acts such as sneaking out of schools, taking of alcoholic drinks, participating in frequent strikes with closure of schools and suspension of students

that affect students' academic performance. Hence this study seeks to determine the influence of discipline management on performance among secondary schools in Makadara Sub-County.

### **2.3 Continuous assessment tests and academic performance**

According to Obanya (2008), assessment involves the systematic collection of data on all aspects of an educational endeavour. This means that the data collected about students' academic achievement is used on a continuous basis in a systematic way, to make meaningful decisions on what should happen. Graume and Naidoo (2011) have also indicated that, "in a global economy, assessment of students achievement is changing mainly because in an ever changing knowledge based society, students would not only be required to learn and understand the basics but also to think critically, to analyze and to make inference for making decisions. It is therefore critical that CAs could utilize strategies that are able to measure the changing students' abilities and attitudes.

In Nigeria, Omoifo (2006), claimed that, assessment strategy in many schools is summative, final, administrative rigorous and content driven rather than formative, diagnostic; private, suggestive and goal oriented as such can be regarded as grading. In Kenya, a study carried by Kwaka, Dennis and Kirima (2012) on teachers assessment practice in enhancing preference mathematics among secondary school students in Mombasa districts, Kenya revealed that: Teachers assessed students mainly for formative and summative reasons and those who used diagnostic assessment produced better scores at the end of term examination, hence recommended that it should be used continually.

### **2.4 Syllabus coverage and academic performance**

Barr and Dreeben (2003), outlined the basic content of a teaching syllabus as; topics to be taught at various levels in the school, specific behavioural objectives which should indicate knowledge to be acquired after the teaching of any given topic, content of the topics selected for inclusion in the syllabus and materials and suggested activities for teaching listed topics. The time on task literature indicates that opportunity to learn and student performance are increased in classrooms where teachers maintain the continuity of the lesson (Guice, 2009). Good, Grows, and Beckerman (2008), asserts that the number of textbook pages covered by different fourth-grade mathematics classes is significantly related to achievements gained. National council for Curriculum and Assessment from Canada carried out a study on syllabus coverage in secondary school in February, 2010 and found that in schools where the content of the syllabus were adequately covered , students performed well (NCCA, 2010).

In Nigeria Dimka (2011), in their research, time frame and syllabus completion of senior secondary mathematics in Omuku, Nigeria; revealed that time allocation is a strong factor for syllabus completion of mathematics subjects and had a relationship on the students' academic performance. In Kenya Shikuku (2009), discovered that content coverage has a major effect on how much children learn in first grade even when initial aptitude is satisfactorily controlled. The secrets of top KCSE secondary schools in Kenya reveals that many schools work outside of the normal class hours, some schools complete their syllabus as early as January, allowing candidates to revise for KCSE exams for a whole year (Daily nation 28th February 2012).

## **Theoretical framework**

### ***Education Production Function Theory***

The study was guided by the Education Production Function Theory proposed by Mace (1979). Analysis of the role of school resources in determining achievement begins with the “Coleman Report,” the U.S. government's monumental study on educational opportunity released in 1966 (Coleman et al. (1966). That study's greatest contribution was directing attention to the distribution of student performance -- the outputs as opposed to the inputs. The underlying model that has evolved as a result of this research is very straightforward: The output of the educational process - the achievement of individual students - is directly related to inputs that both are directly controlled by policy makers (e.g., the characteristics of schools, teachers, curricula, and so forth) and are not so controlled such as families and friends and the innate endowments or learning capacities of the students. In the production function theory, education process is looked at as where inputs are converted to outputs. Education is a kind of industry where people enter as raw materials and come out as finished products. The function shows relationship between two or more variables. These variables are time management, continuous assessment, discipline and syllabus coverage which are part of the schools' strategic plan. In equation form production function can be represented by:

$A = f(C, D, E, T \text{ and many others}),$

Where

A= students' academic performance

C= time management

D=continuous assessment

E=discipline

T=syllabus coverage

Schools' mission statement, continuous assessment, benchmarking and syllabus coverage are key elements of schools' strategic plan to affect students' academic performance. Many schools are having mission statements which guide their activities and programs especially students' academic performance, continuous assessment as a strategy is also used by many schools to help students familiarize themselves with examinations, hence boost their academic performance. Benchmarking strategy enables schools to compare themselves with others in different academic programs, thus motivating students to work harder hence achieve good academic performance. Syllabus coverage as a variable empowers the students' to prepare adequately for the final examination hence help them perform better.

The strength of this theory is that it explains exactly how the study variables (continuous assessment and syllabus coverage) contribute to academic performance. However, the weakness of the theory is that it fails to show how management of time and discipline influence students' academic performance.

### ***Koontz Planned Strategy Theory***

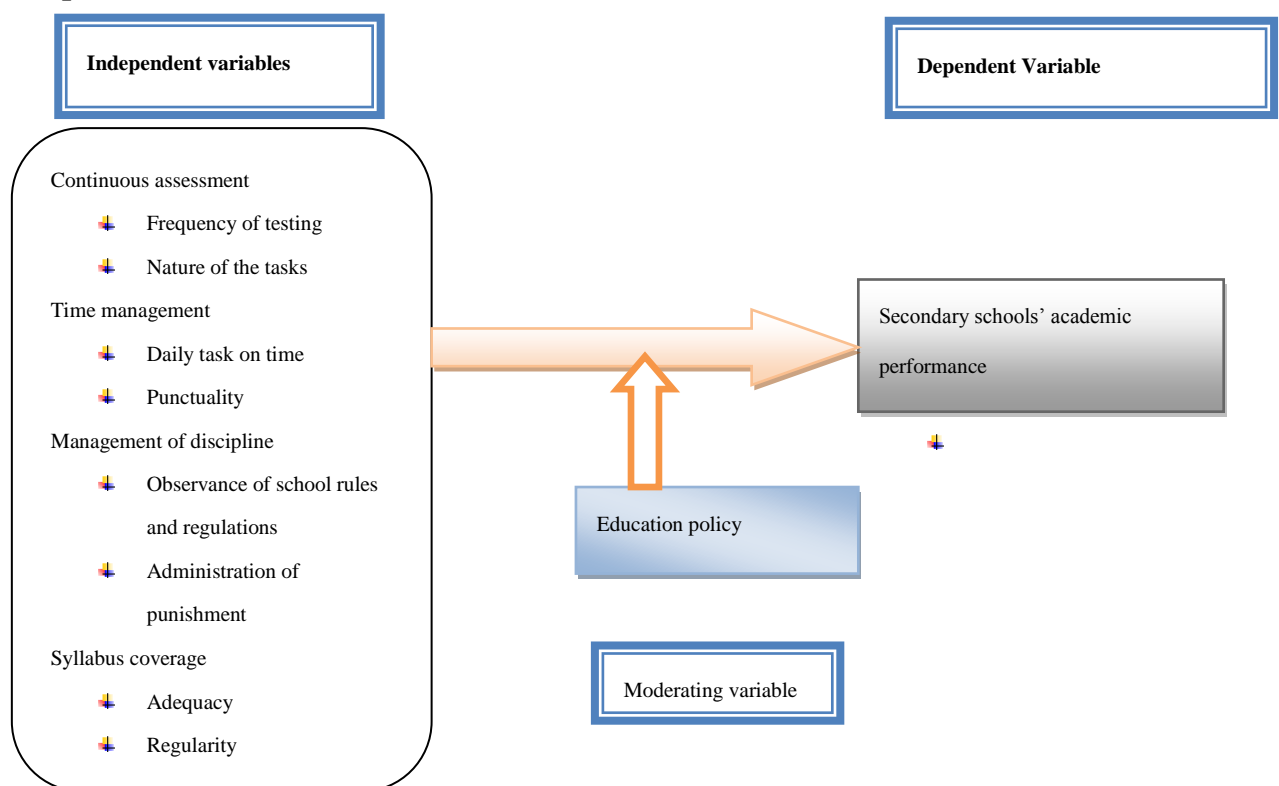
This study was also guided by Koontz Planned Strategy Theory. This theory was founded by Koontz (2008) a management guru who advocated for every responsible manager running the affairs of his

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unit using strategies as a guide to attain goals set. These guides were ultimately aimed at governments through teachers. Some governments have made it compulsory for schools to formulate strategic plans in line with the national strategic plan, for example; in Australia, the government has gone a step ahead and made a guideline of what schools should include in their strategic plan (State of Victoria, 2010) and the United Kingdom government passed the 1988 Education Reform Act which gave the responsibility of planning to schools (Giles, 1995) as cited in (Njagi et al., 2013).

The Kenya government regularly formulates and implements strategic plans which provide direction in regard to resource targeting and program implementation (MOE Strategic Plan, 2006 – 2011). Despite the importance of a good strategic plan the Kenyan government has and having put in place policies and guidelines on strategic planning in public secondary schools, very few schools have adopted it (Achoka, 2007). This sentiment is echoed by a survey by Ngware et.al (2006), who noted and showed that over 60% of schools in the country do not have strategic plans. In a school scenario, extensive resolutions, roadmaps and plans are formulated by the governing body, the board of governors in discussion with the school principals. This is lauded by Andrews (1980) who argues that boards of governors are in a great position to contribute on the strategic planning and formulation. Among other benefits of strategic plans to a school are that the school develops clear and agreed upon vision, mission, goals and objectives. The target areas are put in a clear way and the means to achieve them. Tony (2009) adduced to this reality by stipulating that it helps to communicate the set goals to all members and stakeholders. It is therefore necessary to display the motto, vision, mission, goals and objectives in conspicuous places where all the stakeholders can see and read. Felix (2007) on the other hand opines that strategic plans provides a base upon which progress can be measured. This is important for monitoring and evaluation since key action areas are measured on predetermined standards. It helps to build strong teams in management staff who have a clear vision of how the school will be in future.

**Conceptual framework**





### **3.0 METHODOLOGY**

#### **3.1 Objectives of the study**

The general objective of this study is to investigate the influence of strategic plan on performance in secondary schools in Makadara Sub County in Nairobi County.

The following were specific objectives that guide this study;

- (i) To determine the extent to which time management influences students' academic performance in Makadara Sub County.
- (ii) To assess how schools' continuous assessment strategy influences students' academic performance in Makadara Sub County.
- (iii) To determine how management of discipline influences students' academic performance in Makadara Sub County
- (iv) To establish the extent to which schools' syllabus coverage strategy influence students' academic performance in Makadara Sub County

#### **3.2 Description of study area**

Makadara Sub County is one of the densely populated districts in Nairobi County with a total population of 218,164. The Sub County covers an area of 20.3 square kilometres. Administratively the Sub County is divided into 4 wards that include Makongeni/Mbotela, Viwandani, Maringo/Hamza and Harambee. The Sub County has a total of 23 secondary schools that comprises of 10 public schools and 13 private schools. The public schools are Aquinas, Buruburu, Highway, Huruma, Makongeni, Nile Road, Ofafa Jericho, Our Lady of Mercy South 'B', St Anne's and St Patricks. Private schools were Apostolic Carmel, Crescent Girls, New Jogoo boys, New Jogoo Girls, N.P.C Academy, St Marys ,St Michael's, Wamy boys ,Bright star and Church Army. Majority of the residents are small scale business operators. While the major challenge facing the residents is unemployment (Makadara Sub County records, 2015).

#### **3.3 Limitations**

The major limitation of the study was the inability to get in touch with some principals and HODs who were not in school for most of the days during the study. Most principals would only assist fellow principal researchers and delegated once they realised the researcher was a teacher, To overcome this, teachers and deputy principals were used to give their opinions since it is believed that they have information on their schools' operations. Accessibility to private schools was hard forcing the researcher to leave the questionnaires with the secretary or a teacher then collect later. Some took

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almost a month to return the questionnaires. One teacher misplaced them once and the researcher had to replenish.

### 3.0 METHODOLOGY

This study used a descriptive design to analyse the influence of strategic plan on performance in secondary schools in Makadara Sub County in Nairobi County. Descriptive design is a research design used to assess facts, opinion, attitudes about a phenomenon in this current undertaking. Bryman and Bell (2003) assert that quantitative data is data in numerical form which can be put into categories, or in rank order, or measured in units of measurement. Descriptive design is usually the best methods for collecting information that demonstrate relationships and describe the world as it exists. In most cases, researchers use descriptive studies to obtain pertinent and precise information concerning the current status of a phenomenon and make valid general conclusions from the facts established. Furthermore, the researcher found this design useful due to its ability to collect descriptive data from the respondents by interviewing them from the field and through observation. This design also allows one to administer questionnaires to a sample of individuals in the study.

All people under consideration in any field of inquiry constitute a universe or targeted population (Kombo and Tromp, 2006). The study targeted 23 secondary schools in Makadara Sub County that comprised of 23 principals, 92 head of departments (HoD's) and 2885 students form four students. This gave a target population of 3000 (Makadara Sub County Human Recourse Office, 2015). The principals were targeted because they are key members of strategic planning while HoD's are in a better position to explain how their departments execute the strategies. The form four students were considered suitable because they have been learning in the institutions for the last three years and hence more knowledgeable about the influence of strategic planning on students' academic performance.

The sample size for the clients in this study was determined using the formula below:

$$n = \frac{Z^2 N \cdot \pi \cdot (1 - \pi)}{(N - 1) \cdot \varepsilon^2 \cdot \pi^2 + Z^2 \cdot \pi (1 - \pi)}$$

n = minimum size of the sample.

N = is the total population in which the sample should be drawn (The population is 3000)

Z = is drawn from a normal rule of quantity, under the assumption of data that is normally distributed. For an interval of confidence up to 95% (it means that for one threshold  $\alpha = 5\%$ ), Z is of 1.96.

$\varepsilon$  is the wanted accuracy by the researcher, matching with the error margins judged acceptable. Regarding this research, it is considered that  $\varepsilon$  as equal to 5%.

The summing up shows that the size is directly proportional to the quantity  $\pi (1 - \pi)$

$\pi = 0.5$  (it means  $1 - \pi = 0.5$ ) gives the most elevated variance consequently leading to the most elevated size).

I can then be allowed to use  $\pi = 0.5$ :

$$n = \frac{1.96^2 (3000) .05(1 - 0.5)}{(3000 - 1) .05^2 .05^2 + 1.96^2 .05(1 - 0.5)} = 387.07$$

As Lunch (2011) recommends that when the sample size is close to that of the population, the following summing up can be used for its reduction.

$$n = \frac{n}{1 + n/N} = \frac{387.07}{1 + 387.07/3000} = 341$$

Based on the target population the tabulated sample size from the above formula is 341. The sample size was made up of 23 principals, 92 HODs and 226 students. Stratified and simple random sampling was used to select form four students into the study while census sampling was used to select HODs.

In this study, a questionnaire and interview guide were used to collect primary data. A questionnaire was used to collect data from the students and the HODs while an interview guide was used to obtain data from the school principals. According to Bryman and Bell (2003) questionnaire is a tool used to collect data where carefully selected, orderly, self administered questions are used. It was more efficient in that it requires less time for respondents to give information, permitted respondents to remain anonymous in their responses and it was easy to administer.

Quantitatively, the findings for each objective were tabulated, frequencies tallied, charts and diagrams drawn. In some instances, measures of central tendencies such as, mean, mode, median and percentages was computed and interpreted in the light of the data collected and the objectives of this study. Inferential statistical analysis, specifically correlation analysis was used to determine extent of relationship between strategic implementation and students' academic performance. Ultimately, triangulation and cross-checking literature review was done and interpretation done so as to formulate laws and come up with relevant conclusions and recommendations of the study. The quantitative data was analysed using statistical techniques with the help of IBM SPSS<sup>®</sup> version 21. This software was preferred by the researcher because of its merits of record keeping and the capacity to process data. Bannister (2005) asserts that analysis enables researcher to make conclusions thus, execute judgment on the occurrence of a given phenomenon. Qualitative data was coded and results presented using descriptive methods.

The validity was ensured by having objective questions included in the questionnaire. This was achieved by pre-testing the instrument to be used to identify and change any ambiguous or offensive questions and technique. Two procedures were used to assess validity in this study. That is, triangulation which is a qualitative cross-validation method and cross-checking findings with the

literature reviewed. Triangulation involves comparing the information obtained during the research study to determine whether or not there is corroboration. The procedure aims at searching for the convergence of the information. Cross-checking findings with literature review involved bringing the literature reviewed to bear on the findings of the research so as to determine if the data is a true reflection of the variables under scrutiny. This helped in making the inferences based on the current findings accurate and meaningful.

Reliability was ensured by pre-testing the research instruments using 10 respondents so as to retain the number sample size of the study that is already small. The ten respondents were randomly sampled from among two schools in Makadara Sub County. An ambiguity that was detected in any of the questions was corrected.

An appropriate criterion for qualitative research was used to avoid error due to inaccuracy of the instrument, error due to inaccuracy of scoring the findings by the researcher and the unexplained error (that is, random error) which may render the research instrument yielding inconsistent results or data after repeated trials. To assess reliability of the data, the test-retest method was administered. The same instrument was applied twice to the same group of subjects (after seven days). Then, there was correlation of the scores from both testing periods. In cases where the ‘coefficient of reliability’ was high, the instruments were considered to have high test-retest reliability and therefore it was considered valid for the research.

#### **4.0 RESULTS AND DISCUSSION**

##### ***Influence of Time Management on Students’ Academic Performance***

The first objective of the study was to determine how time management influenced students’ academic performance. The findings from the field are presented in this section. The researcher wanted to know from the students, HODs and principals whether their schools had a timetable, accessibility of the timetable, punctuality of the students and the extent to which time management influenced students’ academic performance.

The students were asked to indicate whether they had timetable in their schools; the students unanimously said that they have a time table in their school. This depicts that all the important activities in the schools in Makadara Sub County are planned for as indicated by the presence of a timetable in all the schools.

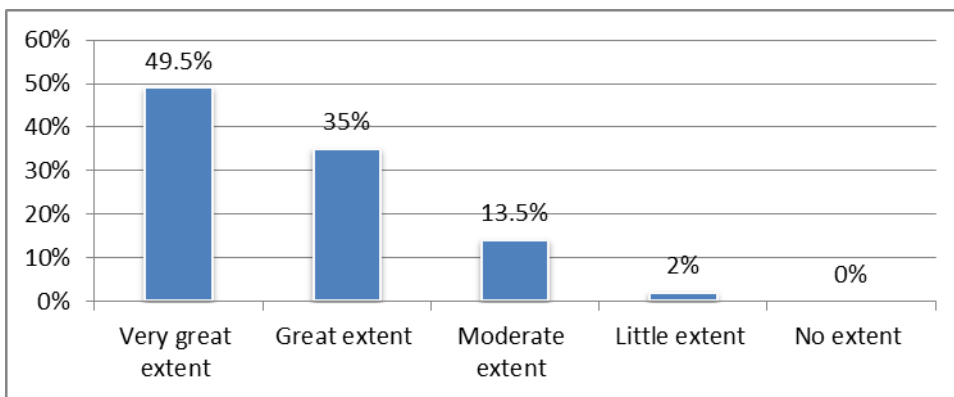
The study sought to know the HODs opinion on the presence of timetable in their schools; the HODs unanimously said that they have a time table in their school. This implies that all the important activities in the schools in Makadara Sub County are planned for as indicated by the presence of a timetable in all the schools. The findings concur with that of Olembo, Wanga and Karagu (2012) who observed that the school programme includes the numerous activities and process which relate directly to the instructional goals of the school and the means intended to achieve those goals. In this connection time management among teachers helps them to allocate appropriate time for each activity, set time for planning by identifying the specific objectives of the curriculum and instructions, and get time to organize by scheduling master timetable and class timetables.

The students were further asked to indicate whether the school time table was easy to access by every student; the students unanimously indicated that the time table in their school was easily accessible. This shows that the times tables the schools in Makadara Sub County were placed in strategic places in the classrooms and the inside cover of desks where every student could access.

The study sought to know the HODs response on the accessibility of the time table in the schools; the HODs unanimously indicated that the time table in their school was easily accessible. This implies that the times tables in the schools in Makadara Sub County were placed in strategic place which every student was accessible to.

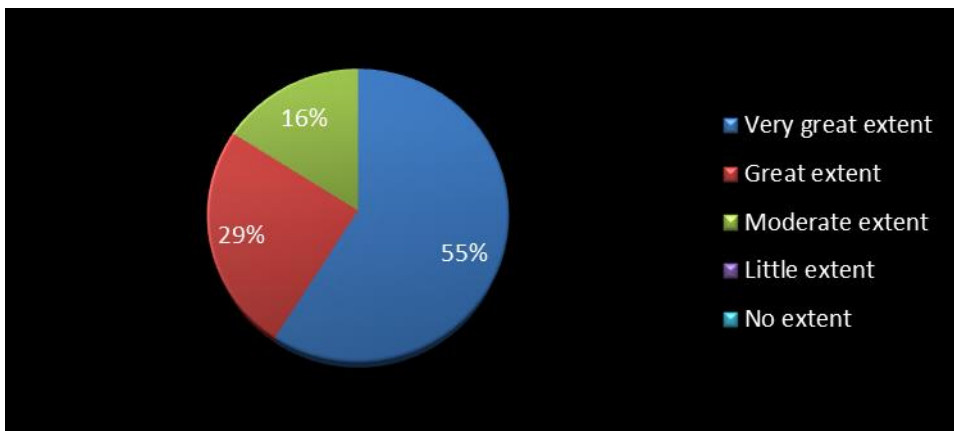
**Figure 1** *Students’ response on their punctuality*

**Figure 1** *Students’ response on the influence of time management on academic performance*



As shown in Figure 1, the majority of the respondents 49.5% of the students indicated that time management very greatly influences their academic performance. Thirty five percent (35%) indicated that time management greatly influences their academic performance, 13.5% said time management moderately influences their academic performance while 2% said time management had little influence on their academic performance. This implies that time management very greatly influenced academic performance in secondary schools in Makadara district.

**Figure 2:** *Management and academic performance*

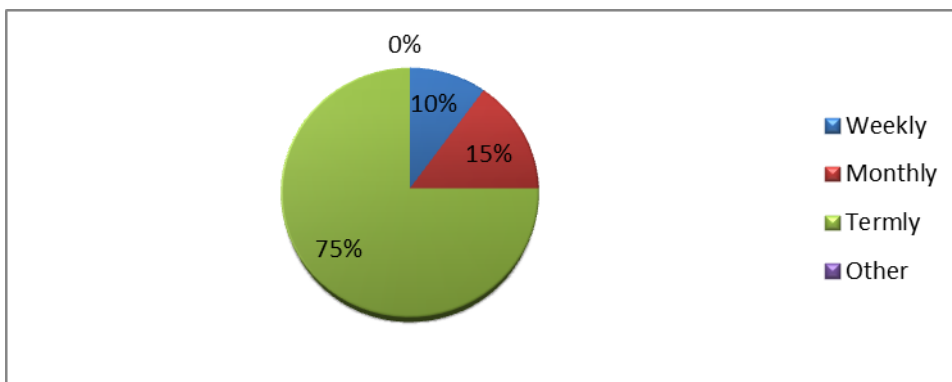


This indicates that time management very greatly influences students' academic performance. The majority of the principals (90%) indicated that time management very greatly influence students' academic performance. The findings are congruent with that of KEMI (2011) who found that time as school managers, resources such as time has to be used prudently in order to achieve set goals which are directed towards students' achievement in KCSE.

### **Influence of continuous assessment (CA) on student academic performance**

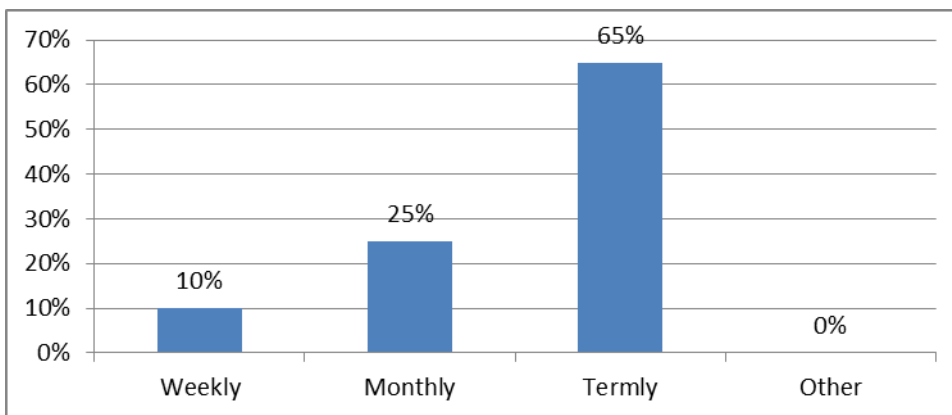
The second objective of the study was to assess how schools' continuous assessment strategy influences students' academic performance. The findings from the field are presented in this section. The researcher wanted to know from the students, HODs and principals whether schools had a program for administering CA to students in schools, the type of tasks given to students in those CAs and how this contributed to the student's academic performance.

**Figure 3: Students' Response on how often CA is conducted**



Frequency of assessment is fundamental in determining the how well the students have internalized the concepts covered within the week, month or a term. The more frequent learners are assessed the better it is for both the learner and teachers to know the areas that have not been adequately covered or even properly understood by learners so as to develop better strategies to improve performance. This finding concurs with that of Kwaka, Dennis and Kirima (2012) who revealed that mathematics teachers in Mombasa district assessed students mainly for formative and summative reasons and those who used diagnostic assessment produced better scores at the end of term examination.

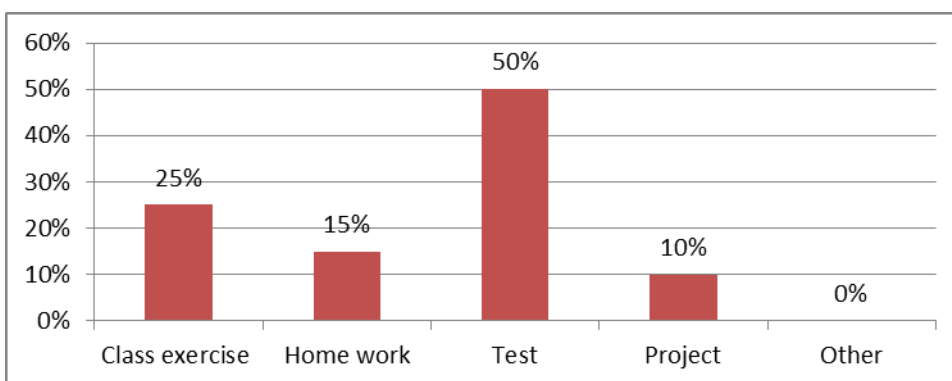
**Figure 4: HODs' Response on how often CA is conducted**



This result reveals that most schools have termly tests administered to students; however other testing arrangements were not indicated by both students and HODs. From the interviews of principals, a 100% of them agreed that they have a set program for conducting CA in their schools which included weekly, monthly and termly programs.

The researcher further asked students, HODs and principals to indicate common tasks given in the CAs. The tasks are various types of assignments or work which students are given by their teachers in or out of class. Students’ responses are shown in Figure 5

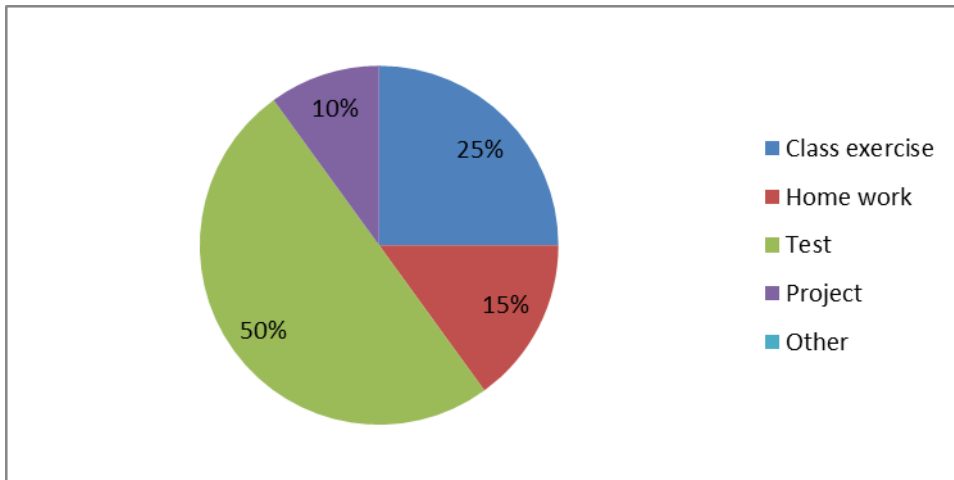
**Figure 5 Students’ response on the type tasks given during CA**



This indicated that testing was the commonly used means of assessing students in Makadara Sub County.

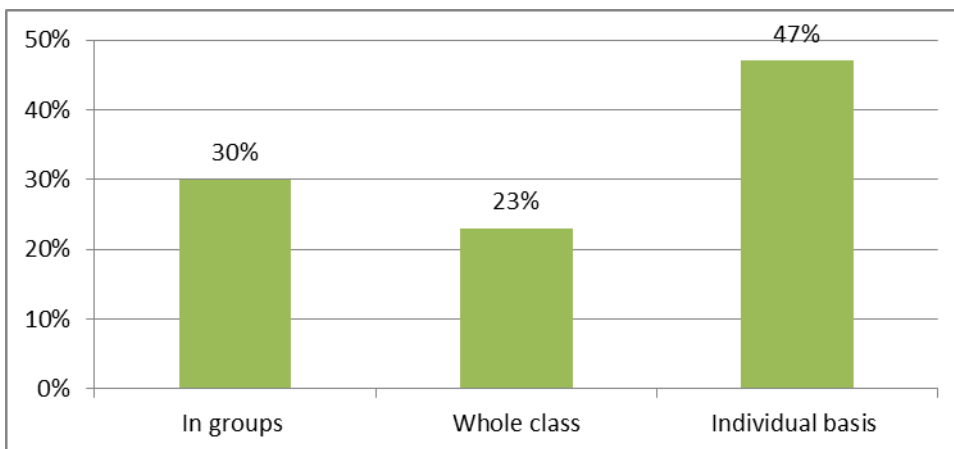
The enquiry into the HODs response on the type of tasks given during CA; the findings are summarized in Figure 6

**Figure 6: HODs’ Response to the Type of Task given during CA**



This implies that a majority of teachers do prepare tests that are administered to students during their usual assessment. The study findings from the interviews revealed that the majority of the principals (83.5%) pointed out that tests are the commonly used assessment tools as continuous assessment tests (CATs) which are properly scheduled and managed by dean of studies, HODs and subject teachers. The findings are in line with the argument of Ellington and Earl (2007) who indicated that CA assessment can take many forms including periodic tests, on-going assessment of practical or situational assessments. The study further sought out how students' worked on the assignment given to them. They were to indicate either in groups, a whole class or on individual basis. The response per method was recorded in Figure 7.

**Figure 7: How students' worked on the assignment**

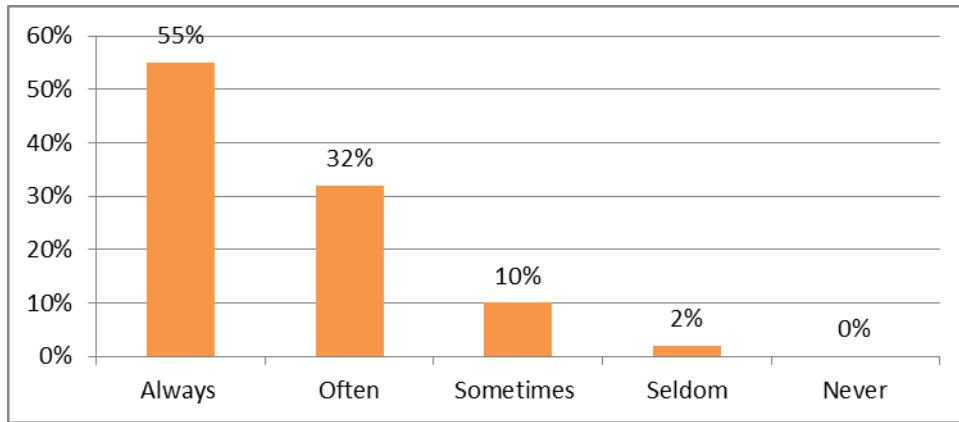


As shown in Figure 9, the majority of the students (47%) indicated that they worked individually on the assignments given to them. Thirty percent (30%) said they work on the assignments in groups while the remaining 23% of the respondents said they work on the assignment as entire class.

HODs were asked by the researcher to give their comment on how often they mark and provide feedback to students on various tasks they give them. Their responses are recorded on Figure 8

**Figure 8: HODs' response on how teachers mark and provide feedback**





From the findings teachers mark and provide feedback promptly to students, hence are able to track the progress of their students. The study further sought to find out the opinion on the contribution of CA to the students’ academic performance. This was to provide information on the extent to which continuous assessment influenced student academic performance the findings are summarized in Figure 9

**Figure 9: Students’ response on the influence of CA on academic performance**

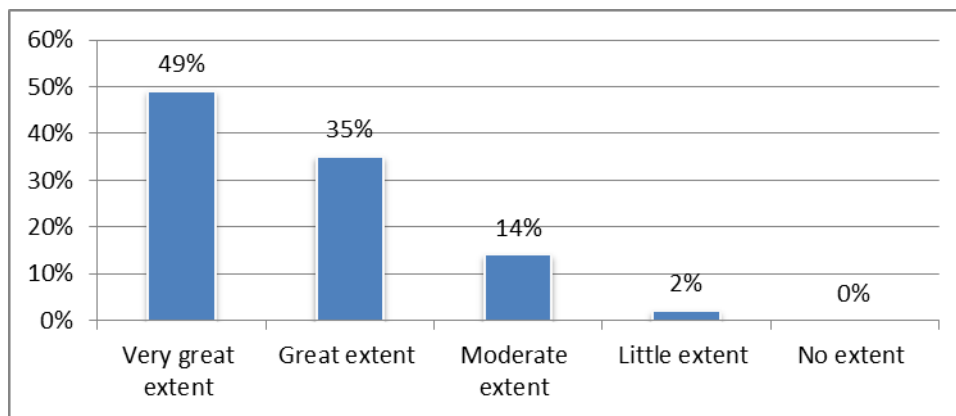
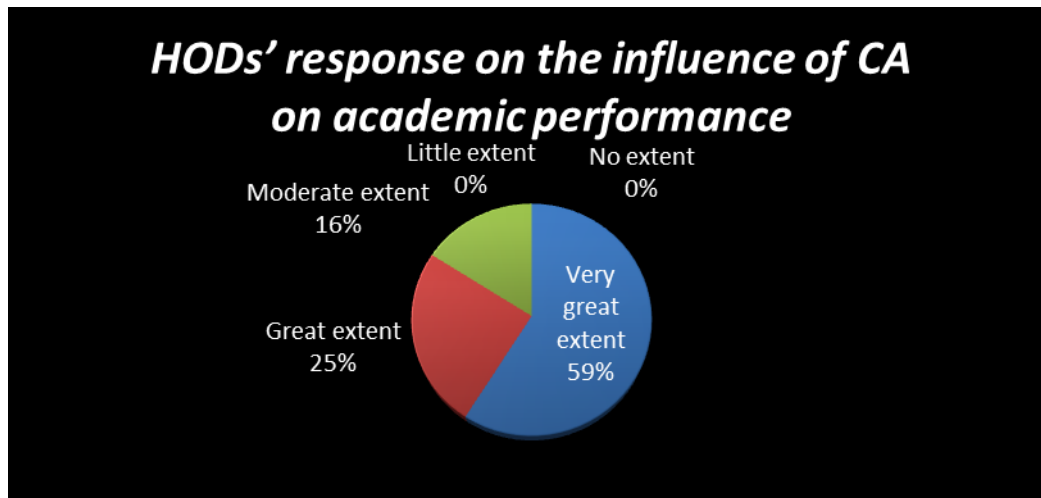


Figure 9 above shows, 49% of the students indicated that the CAs very greatly influences their academic performance, thirty five percent (35%) indicated that CA greatly influences their academic performance, 14% said CA moderately influences their academic performance while 2% said CA had little influence on their academic performance. Continuous assessment exposes the students on the questions to expect in the exams and how to respond to such questions in case they are brought in the exams hence CA has a very great influence on the students’ academic achievement.

**Figure 10: HODs’ response on the influence of CA on academic performance**



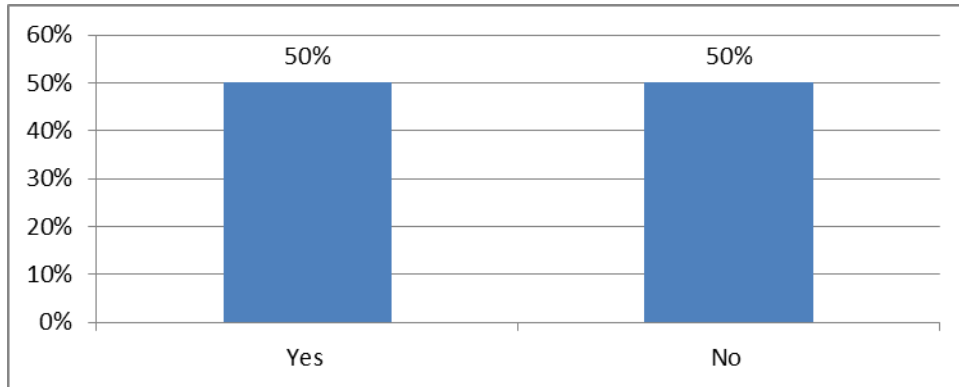
From the HOD's response the majority of the HODs (59%) indicated that CA contributes positively to students' academic performance while a minority 16% indicated that it moderately influence students' academic performance. This depicts that CA very greatly influences students' academic performance. From the principals' opinion the majority 98.7% indicated that CA immensely influence students' academic performance, they pointed out that it creates confidence in the students in tackling and handling examinations, make them revise continuously, enable them to evaluate the value added progress in students, thus make necessary intervention which eventually leads to better academic performance. They further posit that CA boosts memory relating the task and learnt material, gives them confidence in handling major exams and creates an opportunity for continuous revision. They also indicated that CA makes the students to familiarize themselves with most tested questions, thus prepare them to the main exam. These findings is in line with Kwaka, Dennis and Kirima (2012) who carried out a study on teachers assessment practice in mathematics among secondary school students in Mombasa districts Kenya, they revealed that those who continuously assessed their students produced better scores at the end of term examination by 30%.

### **Influence of discipline on students' academic performance**

The students were asked to indicate whether they had school rules in their schools; the students unanimously affirmed that they had school rules. This shows that secondary schools in Makadara Sub County made some effort to create order in the school.

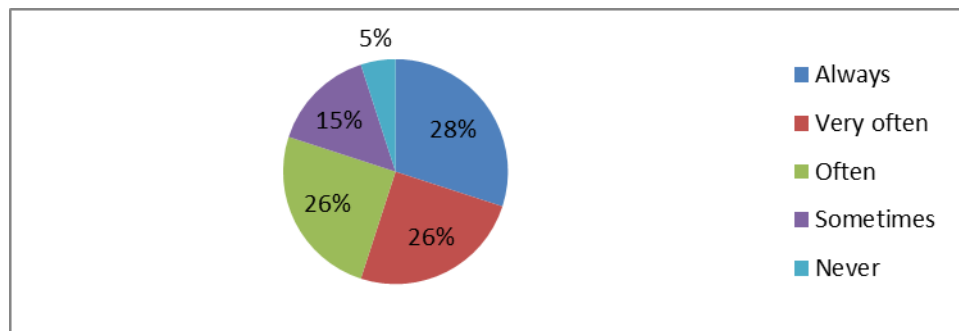
The study sought to know the HODs opinion on the presence of school rules in their schools; the HODs unanimously indicated that they have school rules in their schools. This implies that secondary schools in Makadara Sub County had some order due to the presence of rules to be followed. The findings confirms that of Adams (2013) who established that schools rules and regulation are among the strategies designed to instil good conduct of students. This implies self-control, orderliness, good behaviour and obedience to school authority. Also on admission schools especially at secondary level, students are given prospectuses, which spell out some of the expectations. These rules and regulations specify in most cases what school members should do and what they should not do. The study sought to know whether the rules were being followed; the findings are summarised in Figure 10 below.

**Figure 11: HODs' response on the observance of school rules**



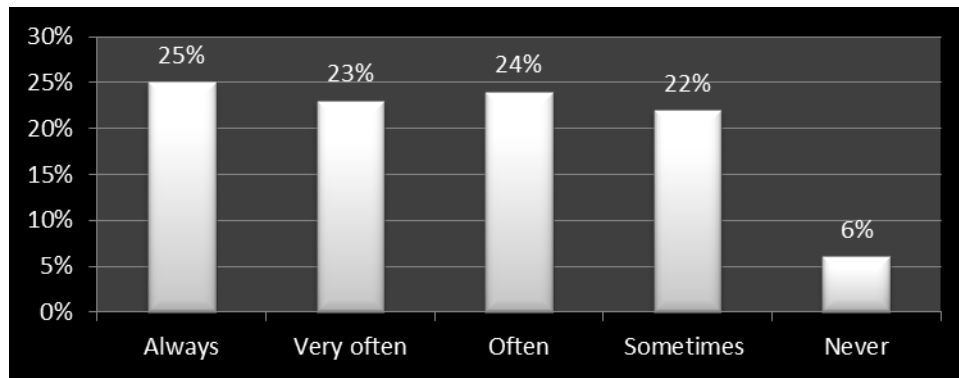
The study sought to know the HODs response on adherence to the school rules by the students; the findings are summarised in Figure 11. As shown in Figure 14, half (50%) of the HODs indicated that the school rules were not being followed while the half of the HODs said the school rules were being followed. This implies that discipline is an issue among secondary schools in Makadara Sub County. The findings are congruent with that of Matsoga (2013) who discovered the wide spread violence and misbehaviour that existed in many secondary schools. This lack of discipline, which interfered with the teaching and learning process, manifested itself in various ways including bullying, vandalism, alcohol consumption and substance abuse, truancy, inability or unwillingness to do class work at home. Theft was also identified as a common offense among secondary school students.

**Figure 12: Students' response on administration of punishment to the law breakers**



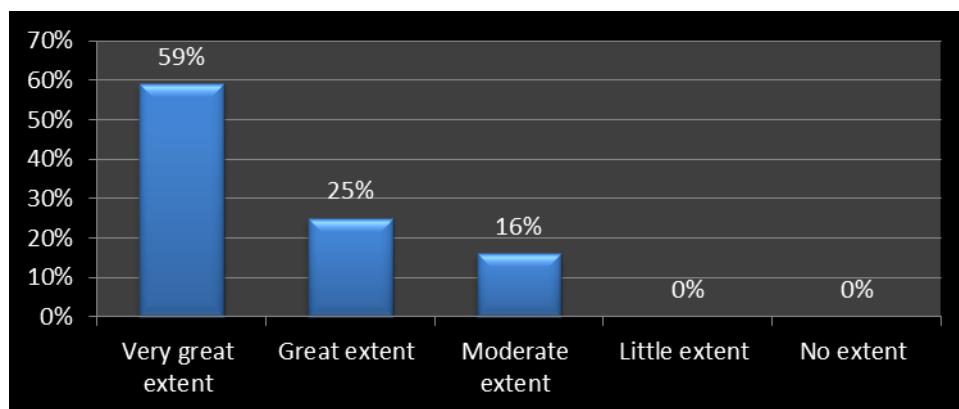
The study sought to find out the students' response on how often punishment was being administered to the law breakers in the schools; the findings are summarised in Figure 12 above. Figure 15 shows that the majority of the students (28%) said that punishment was always administered to the law breakers, 26% said their punishment was administered very often, 26% said that punishment was often administered, 15% said that punishment was sometimes administered while 5% said that punishment was never administered to the law breakers. This indicates that the law breakers were being punished among secondary schools in Makadara Sub County.

**Figure 23: HOD' response on administration of punishment**



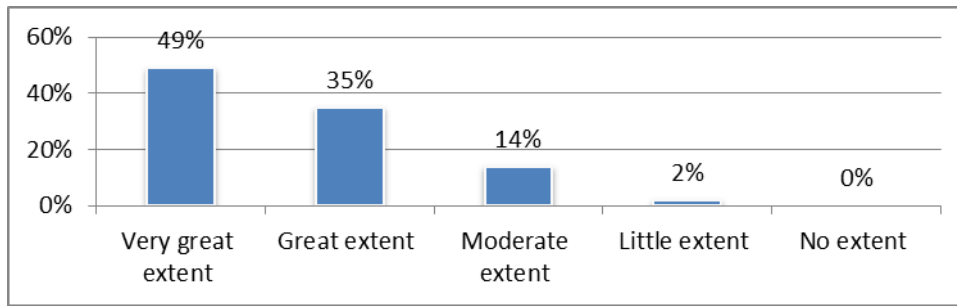
The study sought to know HODs' response on the administration of punishment to the law breakers; the findings are summarised in Figure 13 above. As shown in Figure 13, the majority of the HODs (25%) said that punishment was always administered, 24% said that punishment was often administered, 23% said that punishment was very often administered, 22% said that punishment was sometimes administered while 6% said that punishment was never administered. This indicates that the law breakers were being punished among secondary schools in Makadara Sub County. However, corporal punishment has been banned in all secondary schools in Kenya, leaving the schools to look for alternative ways of administering punishment to the law breakers.

**Figure 14:** *Students' opinion on the influence of discipline administration on academic performance*



From Figure 14, 59% of students indicated very great extent, 25% indicated great extent, while 16% said moderate extent. These results therefore revealed that a majority of the students indicated that discipline administration has influence on their academic performance.

**Figure 15:** *HODs' opinion on the influence of discipline administration on academic performance*

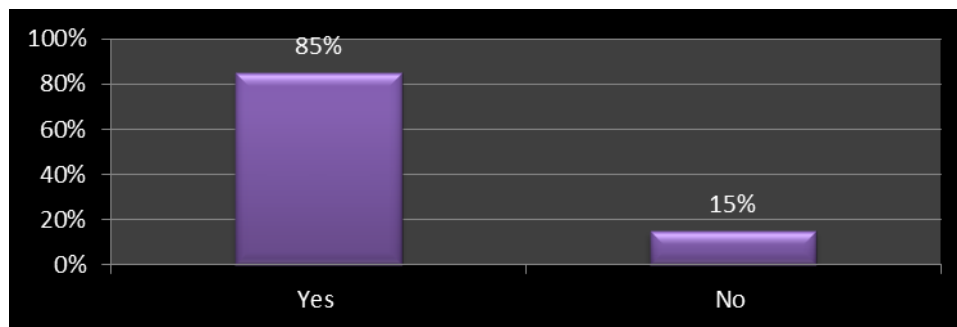


The study enquired into the HODs opinion on the influence of discipline administration on students’ academic performance; the findings are summarized in Figure 15. From Figure 15, the majority of the HODs (49%) said that discipline administration very greatly influenced students’ academic performance, 35% said discipline administration greatly influenced students’ academic performance while 2% said syllabus coverage had little influence on students’ academic performance. This depicts that discipline administration very greatly influenced students’ academic performance. From the principals’ interview it was noted that the discipline committee ensures maintenance of discipline through formulation of school rules and punishes offenders. The findings concurs with that of Obuya (2010) who found that schools that maintained discipline realized better performance compared to the schools that never observed discipline.

**Influence of syllabus coverage on students’ academic performance**

The study sought in the study to establish the extent to which schools’ syllabus coverage strategy influence students’ academic performance. The students were asked to indicate whether teachers inform them about the content to cover in each subject area from the syllabus. This was to validate the presence of the syllabus in the school. The responses are shown in Figure 16 below.

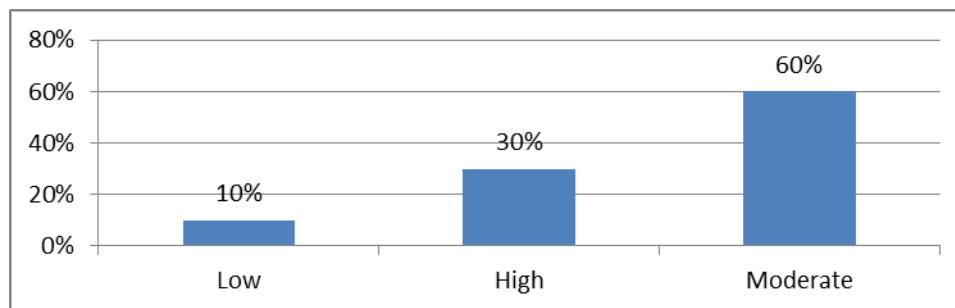
**Figure 16: Students’ response on the presence of syllabus in their schools**



From Figure 16, 85% of the students indicated that teachers inform them about the content of work in each subject area from the syllabus while 15% said they are never informed about the content of work in each subject area from the syllabus. This was a clear indication that there was a syllabus guide in most schools known to the students. The outline normally helps the students to read a head of their teachers and for adequate preparation to face examinations. HODs’ responses on the availability of syllabus guide in their department.

The study also sought to know the HODs' response on the presence of syllabus in their schools; HODs' responses unanimously indicated that there was syllabus guide in their department. This finding is important because it revealed that all the schools had a guide that informed teaching and learning. A similar observation was made by Barr and Dreeben (2003) who assert the basic content of a teaching syllabus as; topics to be taught at various levels in the school, specific behavioural objectives which should indicate knowledge to be acquired after the teaching of any given topic, content of the topics selected for inclusion in the syllabus and materials and suggested activities for teaching listed topics.

**Figure 17: HODs' response on target for syllabus coverage**

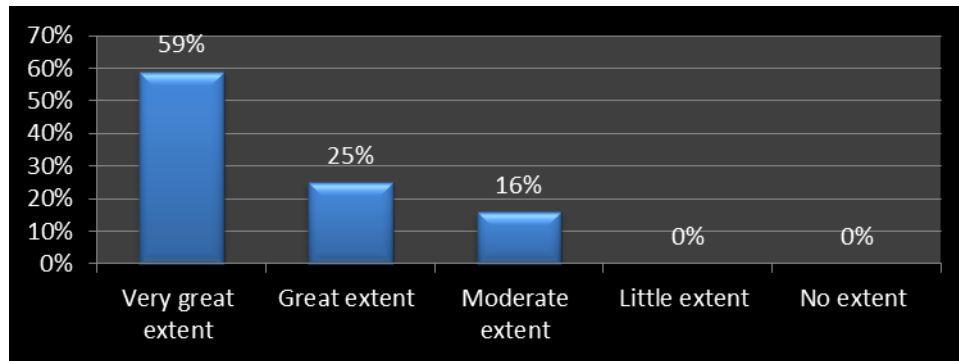


The study further asked the HODs to indicate whether they had set a target for syllabus coverage in the current year and also indicate their set means score target. The responses were as in Figure 17

As shown in Figure 17, a majority of the HODs (60%) indicated that they had set targets for syllabus coverage within departments. Thirty percent (30%) said high while 10% said low. This implies that in majority of the departments syllabus coverage was halfway complete.

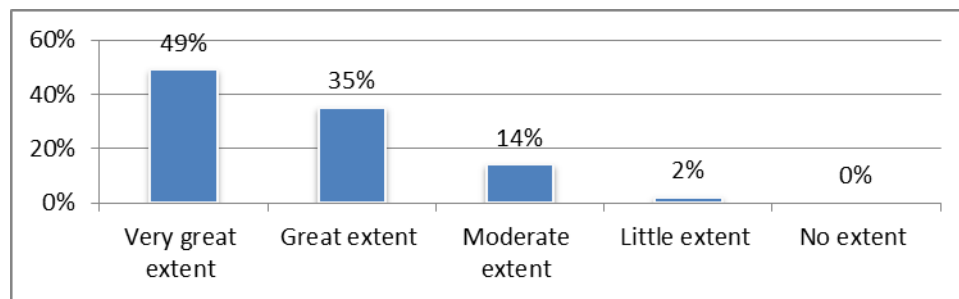
A majority (90%) of the principals indicated that they intended to complete by mid of June and a few indicated by September. The principals also indicated their subjects mean score target for 2016 which ranged from 5.00-10.68. Among the strategies highlighted by the respondents was creation of more time, strict class attendance, tropical timetable starting from as early as 6.30 am in the morning, afternoon remedial and weekend remedial and giving outlines to students for self study. Bodo (2013) found out that most schools Kiambu County covered their syllabus on time which gave room for revision leading improved performance.

**Figure 18: Students' opinion on the influence of syllabus on academic performance**



The students were further asked to indicate their opinion on the influence of syllabus coverage on their academic performance; the findings are as in Figure 18. From Figure 18, 59% of students indicated very great extent, 25% indicated great extent, while 16% said moderate extent. These results therefore revealed that a majority of the students indicated that syllabus coverage has influence on their academic performance.

**Figure 19: HODs' opinion on the influence of syllabus on academic performance**



The study enquired into the HODs opinion on the influence of syllabus coverage on students' academic performance; the findings are summarized in Figure 19. From Figure 19, the majority of the HODs (49%) said that syllabus coverage very greatly influenced students' academic performance, 35% said syllabus coverage greatly influenced students' academic performance while 2% said syllabus coverage had little influence on students' academic performance. This depicts that syllabus coverage very greatly influenced students' academic performance.

From the principals' interview it was noted that the principals ensures that the strategy for syllabus coverage is adhered to by teaching to the set target in order to set the pace for the rest, they supervise the curriculum implementation through inspecting students note books and provide the necessary resources to the teachers and students. They again asserted that their schools' syllabus coverage strategies greatly influence students' academic performance by ensuring adequate time for revision creates confidence on students' thus good academic performance. These findings concurs with (Guice, 2009) who said that the number of textbook pages covered by different fourth grade mathematics classes was significantly related to the achievements gain.

### Academic performance

The study sought to finding out the students' academic performance in KCSE, the findings are summarized in the Table below

**Figure 20: KCSE performance**

Year	Mean
2012	6.076
2013	5.978
2014	6.091
2015	5.882

As shown in Table above, the highest academic performance of secondary schools in Makadara Sub County was in 2014 with an average mean score of 6.091, however, the academic performance has been fluctuating from time to time as shown in Table 3. This implies that secondary schools in Makadara Sub County have been attaining average performance over the years.

### Inferential analysis: correlation

Having described the study variables using descriptive statistics, the study sought to establish the nature of the relationship of both dependent and independent variables using inferential statistical analysis. To evaluate the strength of the relationship, a correlation analysis was used. The researcher run the correlation matrix in order to check whether there was association between variables and also checked whether there was a co-linearity within the variables. Pearson product moment correlation coefficient ( $r$ ) was used to aid in establishing correlation between the study variables of interest. Correlation coefficient shows the magnitude and direction of the relationship between the study variables. The correlation coefficient varies over a range of +1 through 0 to -1. When  $r$  is positive, the regression line has a positive slope and when  $r$  is negative, the regression line has a negative slope; a 95% confidence level of used.

**Figure 23: Correlation analysis results**

Correlations		Y
X 1	Pearson Correlation	.926*
	Sign. (2-tailed)	.003



	N	218
X 2	Pearson Correlation	.881* *
	Sign. (2-tailed)	.002
	N	218
X 3	Pearson Correlation	.730* *
	Sign. (2-tailed)	.007
	N	218
X 4	Pearson Correlation	.702* *
	Sign. (2-tailed)	.01
	N	218
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (1-tailed).		

Key Y= Academic Performance X1= Continuous assessment X2= Syllabus coverage X3= Time management X4= Discipline

As shown in the table above, the findings of the correlation analysis indicates that there is a positive correlation between continuous assessment and academic performance ( $r=.926$ ,  $p$  value= $0.003$ ). Therefore, an increase in use of continuous assessment led to an increase in academic performance. Regarding syllabus coverage, the correlation coefficient was also positive ( $r = .881$ ,  $p$ -value  $< 0.002$ ). This means that an increase in syllabus coverage led to an increase in academic performance. Results of the study also showed that there is a significant positive correlation between time management and academic performance ( $r=.730$ ,  $p$  value= $0.007$ ) implying that an increase in use of time management improved academic performance. Discipline also had a positive significant effect on academic performance ( $r=.702$ ,  $p$  value= $0.01$ ). This implies that an increase in discipline led to an increase in academic performance. It is important to note that continuous assessment had the greatest effect on academic performance.

## 5. 0 CONCLUSION AND RECOMMENDATIONS

The study concludes that secondary schools in Makadara Sub County have school time tables which are accessible to all the students in the schools. Majority of the students were not punctual. Time management very greatly influenced students' academic performance. There is a significant positive correlation between time management and academic performance.

Secondary schools in Makadara Sub County conducted continuous assess which were carried out on termly, weekly and monthly basis. The assessments were carried out in the form of test, class work, and project at the end of the topic. The assessment were organized in groups, a whole class and individually. The study further found out that CA very greatly influence students' academic

performance. There is a positive correlation between continuous assessment and academic performance

Secondary schools in Makadara Sub County have schools rules which are observed by half of the students and punishment always administered to the law breakers. Discipline influenced students' academic performance to a very great extent and it had a positive significant effect on their academic performance.

The teachers informed their students about the content of work in each subject area from the syllabus with moderate syllabus coverage. The strategies that were laid down to cover the syllabus included; creation of more time, strict class attendance, tropical timetable starting from as early as 6.30 am in the morning, afternoon and weekend remedial, holiday homework and giving outlines to students for self-study. Syllabus coverage very greatly influenced students' academic performance. Syllabus coverage also had a positive correlation with academic performance. Secondary schools in Makadara Sub County attained average performance in KCSE.

Based on the findings the recommends the following:

- a) There is need for secondary schools in Makadara Sub County to focus more on the continuous assessment as it is one of the strategies that had the greatest influence on academic performance. weekly assessment should be introduced in all the secondary schools so as to familiarize the learners' with questions that are likely to come in the examination and how to approach such questions promptly.
- b) There is need to reinforce the punctuality of students by school administrators since time wasted is never recovered. Schools administrators need to ensure that the students are in the right place at the right time so as to have adequate time to cover the syllabus and conduct the continuous assessments.
- c) There is need for school administrators to create awareness of the schools rules and strictly adhere to those rules. However, punishment should not be the only way of correcting mistakes in the behavior of the students, rather guidance and counseling should be prioritized so as to understand the challenges that students have with the schools rules.
- d) There is need for schools to create more time for effective syllabus coverage in order to boost students' confidence in handling exams.

This study needs to be replicated in both public and private schools in other Sub Counties in the country in order to compare the results on how to mitigate the problem of low students' academic performance focusing on the schools' strategic plans. A study may be carried out on the barriers to effective implementation strategic plan in secondary schools in Kenya.

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