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Original Article

Influence of Control Systems on Internal Efficiency in Public Secondary Schools in Nakuru County, Kenya

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Even though every public secondary school in Nakuru County, Kenya, has adopted strategic plans, internal inefficiencies in the form of poor academic performance and a low student transition rate exist. Therefore, this study aimed to examine the influence of control systems on internal efficiency in public secondary schools in Nakuru County, Kenya. This research study was guided by the 7-S model developed by McKinsey, the 10-step model developed by Bryson, and the system theory developed by Von Bertalanffy. This study employed a mixed approach and concurrent triangulation design. The study sought responses from a target population of 311 public secondary school teachers in Nakuru County, 311 principals and 11 sub-county education officials. Using stratified random sampling a total of 240 teachers, principals, and sub-county education officers were included in the sample. The study utilised questionnaires, document analysis, and interview schedules. Pearson's Correlation Coefficient was 0.76, indicating reliability. Data was analysed descriptively using SPSS (version 23). The study also employed inferential statistics, such as regression analysis and Pearson correlations. Results are presented using bar graphs, pie charts, and frequency distribution tables. The control system positively impacted the schools' internal efficiency despite the fact that most of the public secondary schools in Nakuru County had subpar supervision. According to the findings of this research, the Ministry of Education should conduct more frequent checks on implementing the control strategy to improve the organisation's overall efficiency.

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INTRODUCTION

Education is highly valued in Kenya because of its contribution to economic development, social mobility, political stability, better health outcomes, and gender equality (Muricho & Chang’ach, 2013; Kabeer, 2005). Hence, academic performance is vital in defining an individual’s and a nation’s success. Secondary education is an essential stage in students’ academic journey, and secondary schools must play a crucial role in ensuring good academic performance (Dinham, 2005). In Kenya, secondary education is mandatory, and the government has implemented policies to ensure all students have access to quality education (Nzoka & Orodho, 2014). One approach that schools can use to guide their efforts in improving academic performance is strategic planning. Strategic planning has been used in schools in developed and developing countries, improving schools (Kiprop et al., 2015). Kache (2018) explored the influence of strategic plan implementation on students’ academic performance in public secondary schools in Marsabit Central Sub-County, Kenya. The findings indicated a positive and significant influence of schools’ strategic plan implementation on students’ academic performance. Thuraniira & Mwangi (2018) studied the Influence of Strategic Plans Execution on Academic Performance in Public Secondary Schools in Tigania West Sub County, Kenya. They found that implementing strategic plans highly influences academic performance in Tigania West Sub County. A strategic plan in a school, therefore, gives the school a focus and a direction for the future by continuously adjusting to academic direction in response to changing academic circumstances (Onkundi, 2015).

Performance appraisal in an organisation has some important roles, such as helping individuals develop, enhancing the organisation’s performance and helping the organisation plan. Performance appraisal systems influence human resource systems in addition to the organisation’s strategy. An effective appraisal system will facilitate the appropriateness in choosing, training, growth and motivation of human resources. The Kenyan government brought in the performance appraisal system to change the view of organisations to have a business-like culture, where they focus on clients and achievements and improve service delivery (GOK, 2009). The role of appraisal in schools is to establish whether the performance being assigned by the principals is being implemented. In addition, all teachers were to be appraised in order to ensure that their work complements their work description. Principals were to be vetted on their performance in terms of their capability in effective service delivery, management of school funds and effectiveness in teacher supervision. Further, teachers were to be appraised on knowledge and preparedness, professional conduct, time management, use of schemes of work, and their conduct in co-curricular activities. The main goal of school appraisal is to improve teaching quality (internal efficiency) and, as a result, improve the overall quality of education (Kajilwa, 2017).

The Kenya government has widely been funding secondary school education. Moreover, Kenyan education has undergone a huge transformation, and the latest is introducing a strategic plan implementation policy for efficient and effective performance in every public institution. This implies that the internal efficiency of secondary school education was a problem of concern. In order to improve internal efficiency and, consequently, performance, many organisations, including learning institutions, are formulating

strategic plans. Implementing the control system as a strategic plan in institutions improves internal efficiency. Nevertheless, it is witnessed that internal inefficiencies in terms of poor academic performance and poor transitional rate existed in public secondary schools in Nakuru County, Kenya, even though all public secondary schools have embraced the implementation of strategic plans. Therefore, the issue was to examine the influence of control systems on internal efficiency in public secondary schools in Nakuru County, Kenya.

THEORETICAL LITERATURE

This study was guided by two theories, namely: 7-S's model developed by McKinsey (1982) and the open system theory by Von Bertalanffy (1956)

The 7-S's model

The 7-S model is used in strategic plan implementation, per what McKinsey (1982) says. This model, known as 7-S, has seven aspects: strategy, structure, staff, systems, styles, skills, and finally, shared values. Based on this model, for a school to perform well, there is a need for seven features to be aligned and reinforced for the model to help identify what is required to be realigned to enhance internal efficiency in the school. According to Pearce and Robinson (2007), a strategy can be defined as a plan or method selected to bring about an anticipated future. According to various authors, strategy is a fundamental administration tool that is multi-dimensional thought. Further, strategy acts as the link between the organisation's resources, skills, and opportunities, the risks that may be faced and the purposes anticipated. The strategy is usually meant to modify the existing situation of the organisation to the new location as depicted by the goals, under the effect of restrictions on the abilities (Kaplan, 2005).

Through the 7-S model, education institutions, especially public secondary schools, will be informed on a structure required for strategic plan implementation. Ministry of Education made strategic planning compulsory in all public institutions, including secondary schools, to

improve internal efficiency and performance. Even though some organisation models' effectiveness ends, the McKinsey 7-S Framework has persisted. It was established by Peters and Waterman, who were workers of the McKinsey Company. The 7-S model will help secondary schools to better their performance, examine the likely results of impending changes in the school, match departments and processes during acquisition or merger, and finally ascertain how best to implement certain strategies. The model addresses the implementation of strategic plans in communal institutions in the current investigation.

System Theory

Ludwig Von Bertalanffy established this theory in the year 1956, and he was a biology specialist. However, the theory was later valid throughout all areas of study. Institutions like schools are termed communal systems that involve two or more people working in unison in a way that is coordinated to achieve set goals (Norlin, 2009). This means that the following features characterise a school: it consists of people, its goals are directed, it attains goals through harmonised efforts, and it interacts with the external environment. Every school is an open system; however, the magnitude of their contact with the environment varies. Referring to Scott (2008), schools ought to arrange themselves to combat nearby powers.

The school as a system makes use of different types of inputs from the environment, namely, human, financial, information and physical types of resources. The human aspect in the school comprises the school Board of Management skills, staff abilities, and labour, among others. The financial resource is the capital the schools use to fund ongoing and long-term projects and operations. The physical aspect involves materials, supplies, facilities, and equipment. Information flow includes curricula, knowledge, data, and any other information used in the school. The administration's role in the transformation process entails combining and coordinating various resources in the school to attain school goals. This procedure involves the internal

running of the institution and its prepared administration system.

METHODOLOGY

This research was done at public secondary schools in Nakuru County in the Rift Valley region of Kenya. It covers an area of approximately 7,495 square kilometres and has a population of over 2 million people, according to the 2019 Kenya Population and Housing Census (KNBS, 2019). The county headquarters is in Nakuru town, the fourth-largest urban centre in

Kenya. The county has approximately 344 institutions and 311 public secondary schools. This study employed a mixed approach and concurrent triangulation design. This study targeted every public secondary school teacher in the county of Nakuru. The county has 11 sub-counties. The county's entire sum of secondary schools was 311, with a populace of 11 sub-county officials, 311 head teachers and 3168 teachers (County Director of Education, 2016), and it comprises the target population.

Table 1: Target Population

Sub-county	Number of Schools	Number of teachers	Number of principals
Njoro Sub-county	37	379	37
Molo Sub-county	31	315	31
Gilgil Sub-county	35	357	35
Kuresoi North and Kuresoi South Sub-county	56	570	56
Rongai Sub-county	38	387	38
Nakuru East and Nakuru West Sub-county	25	254	25
Subukia Sub-county	22	224	22
Naivasha Sub-county	34	346	34
Bahati Sub-county	33	336	33
Total	311	3168	311

Source: County Director of Education, Nakuru County (2016)

The study utilised stratified sampling methods to choose the sample. Referring to Kombo and Tromp (2006), a typical sample would be 10- 30 per cent of the targeted population. Consequently, sub-counties chosen for the research were five sub-counties as a sample frame; these sub-counties were randomly selected. Moreover, the selected schools for the investigation were 30. Furthermore, 30 heads and 5 sub-county officers were selected. During the next sampling phase, the investigator randomly chooses 15% of teachers in selected institutions as participants to fill out the study instruments (questionnaires).

There was a total of 311 public secondary schools with 3168 teachers. Since there are 11 sub-counties, the researcher selected 30%, which translates to 5 sub-counties. Sample public secondary schools were selected from sampled sub-counties, whereby names of the secondary schools within sampled sub-counties were written, folded, and put into a basket, and later, 30 papers were picked representing sampled schools

in the proportion of the number of schools within the sub-county. Thus, respondents were selected from 30 public secondary schools. The respondents for the study were teachers, principals, and sub-county education officers in Nakuru County.

From *Table 2*, a total of 240 respondents (30 principals, 205 teachers and 5 sub-county education officers) were selected as the sample group for the study. A total of 205 questionnaires were administered to the respondents. In addition, 35 respondents were anticipated to be interviewed, comprising principals and sub-county education officers. The study utilised questionnaires, interview schedules and document analysis in data collection.

Rongai Sub-county public secondary schools were used to test the instruments because they were not included in the sampled sub-counties. Two public secondary schools were chosen for the pilot, and questionnaires were distributed to 14

teachers within the sampling schools. Supervisors helped this improve research tool content validity. To improve the research tool's reliability, the investigator and supervisors measured the pilot

study tools' constancy analytically. Cronbach's Alpha coefficient assessed instrument dependability. The researcher found a satisfactory

Table 2: Sample frame

Sub-county	No. of schools (N)	Sampled schools (n) $n = \frac{10}{100} \times N$	No. of principals	Sampled principals $n = \frac{10}{100} \times N$	No. of teachers	Sampled teachers $n = \frac{15}{100} \times N$
Molo	31	3	31	3	303	45
Gilgil	35	4	35	4	235	35
Kuresoi North & Kuresoi South	56	6	56	6	258	39
Nakuru East and Nakuru West sub-counties	25	4	25	4	362	54
Bahati	33	3	33	3	215	32
Total	182	30	311	30	1373	205

Source: Researcher (2017)

Cronbach's Alpha correlation of 0.76, near 0.80. 0.80 is ok (Mugenda & Mugenda, 1999). According to Kombo and Tromp (2006), respondents prefer research instruments administered once to test reliability.

Data was analysed descriptively using SPSS (version 23). The study also employed inferential statistics, such as regression analysis and Pearson correlations. Results are presented using bar graphs, pie charts, and frequency distribution tables.

RESULTS AND DISCUSSION

Control System and Internal Efficiency

This section was to answer the question, to what extent does a control system influence internal efficiency in public secondary schools in Nakuru County, Kenya? *Table 3* shows the school mission and vision description in public secondary schools in Nakuru County, Kenya.

Table 3: School mission and vision

	N	Mean	SD
QT8 Students are frequently reminded of their core business in school and are encouraged to remain focused	138	4.3636	.73328
QT19 Principals collaborate with teachers in setting school goals and also motivate them towards attaining school goals and Objectives	138	3.9697	1.03255
QT14 There is clarification of the school vision and mission to staff, learners, and parents	138	3.8788	1.04057
QT17 The staff inspire learners to set academic performance target at the beginning of the term	138	3.8485	.89447
QT15 The staff set attainable and genuine goals in academic performance	138	3.6970	.79957
QT16 Teachers compare the goals made by the learners at the commencement of the term and the results at the end of the term in order to recognise reasons for failure to achieve set goals.	138	3.1818	1.00166

Source: Researcher (2018)

According to *Table 3*, the mean score obtained from HODs and teachers on individual items related to the influence of strategic plan implementation on control systems in schools

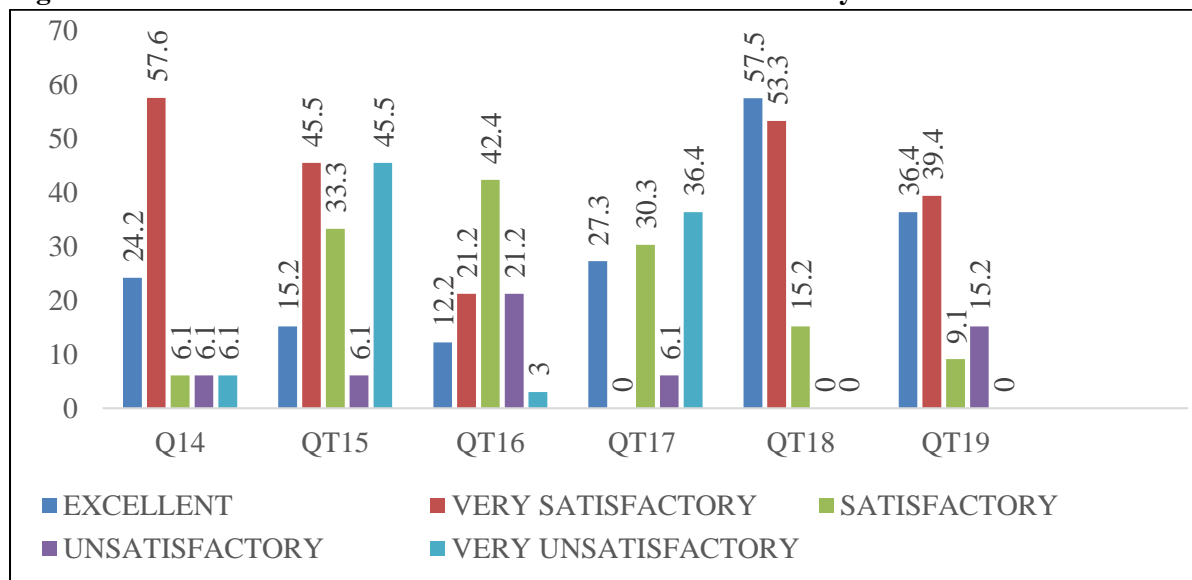
stretches from 3.1818 to 4.3636. The highly ranked item was 'Students are reminded of their core business in school and are encouraged to remain focused'. Alternatively, the sub-factor

with the lowest mean score among the set of questions on the control system under the vision and mission statement was ‘Teachers compare the goals made by learners at the commencement of the term and results at the end of the term in order to recognise reasons of failure to achieve set goals’.

The findings from the interview conducted on principals in public secondary schools in Nakuru County established that all public secondary schools in Nakuru County have vision and mission statements, and all of the respondents interviewed know it very well. Alternatively, public secondary schools in Nakuru County have not translated the content of both vision statements and mission statements to their

performance because of continuous poor performance and low graduation rates in these secondary schools. According to the study by Pearce and Robinson (2011), a successful strategic planning process depends on the values that the organisational mission can achieve in the course of the systematic and far-reaching assessment of internal abilities of environment and external environment, long-term objectives and strategies choices, and finally operating objectives that ought to be put in action, monitored, and controlled. From the result of the research, it is apparent that the supervision of the operation of the vision and mission statement is lacking in approximately 82% (representing 25 schools) of the public secondary schools in Nakuru County.

Figure 1: School mission and vision in relation to internal efficiency



From *Figure 1*, it was approximated that 138 respondents agreed that students are reminded of their core business in school and are encouraged to remain focused, which translates to 100%. The role of the vision statement contained in the strategic plan is to provide direction, reason, and procedure for doing things (Shahin, 2011). Therefore, it is expected that the administration should remind teachers, students, and other stakeholders that every strategy in the school should align with its vision. On the contrary, the sub-factor on the explanation of vision and mission to the staff, learners, and parents had

87.9% of the respondents agreeing with it, and 12.2% were not satisfied (QT14).

Some schools (12.2%) have not enlightened stakeholders on the school vision, which is why school strategies on performance are not connected to the school vision. Conversely, the lowest ranked item is ‘Teachers compare the targets made by the learners at the commencement of the term and results at the end of the term in order to recognise reasons for failure to achieve set goals.’ This means that some of the teachers (67.9%) in public secondary schools in Nakuru County rarely have set targets or have set targets

but are not supervised. As for control systems and internal efficiency, all the items were above the mean score of 3. According to Nwagwu (2004, as cited in Akinfolarin et al., 2016)), the role of management is to monitor and supervise all the staff activities and the programs in the organisation (school). The main reason for staff

supervision is to ensure that they comply with established laws and set goals through quality assurance, quality control and standards maintenance further, the findings of Ezekwensili (2007, as cited in Akinfolarin et al., 2016) indicated that schools have not had thorough supervision.

Table 4: Control System and Internal Efficiency

		N	Mean	SD
QT22	School targets set for performance evaluation are suitable, and they help in the achievement of strategic goals.	138	3.9091	.83241
QT20	School staff knows the tasks and processes needed for the school's successful implementation of the strategic plan.	138	3.9091	.75561
QT29	Teachers believe that the elements embraced by the school for managing and controlling evaluation performance are appropriate and constant	138	3.8485	1.02175
QT30	Effective communication and agreement-building techniques are used to build effective associations with all stakeholders inside the institution community.	138	3.7576	.85648
QT28	There is adoption of key performance indicators in my school, which is associated with goals and success aspects of the strategic plan implementation.	138	3.7273	1.02626
QT21	Teachers are given information that is interactive in nature, which permits performance monitoring all the way through the period, consequently creating corrective acts in order to facilitate the school to attain its goals before finalising the outcome.	138	3.6364	.84889
QT25	I do get formal and informal information that is crucial to monitoring my performance assessment (targets).	138	3.5758	1.07721
QT27	I do get diagnostic information, which permits me to assess performance subsequent to the outcome being completed.	138	2.5758	.95733
QT23	The school takes into account the organisational dynamics and the environment that it operates in to facilitate the evaluation of performance to be altered depending on these aspects.	138	3.3333	1.09507
QT24	School staff receives formal communication on the strategic plan implementation through direct communication from the school administration.	138	3.3030	1.14457

Per *Table 4*, the school control system has mean scores ranging from 3.3030 to 3.9091. In addition, the mean score of all the items was 3.6576. This is rated as above average. This implies that a control system in public secondary schools in Nakuru County exists. This shows the extent of school administration involvement in the control system in some activities in relation to internal efficiency in public secondary schools in Nakuru County. The item with the highest mean score was two: 'School target set for performance evaluation are suitable and helps in the achievement of strategic goals' and 'School staff knows tasks and

processes that are required for the successful strategic plan implementation by the school' with the mean score of 3.9091. The item with the lowest mean score was 'School staff receives formal communication through on the strategic plan implementation through direct communication from the school administration', with a mean score of 3.3030. The average mean score for the control stem was 3.6577, which is above the average mean score of 3.000. This implies that although the school control system in public secondary schools exists, its effectiveness is inconclusive because most schools' control

system is above average. Still, academic performance (mean score of 3.235) and internal efficiency in most of the public secondary schools in Nakuru County is below average. The problem in the performance evaluation system can be due to the school administration's inability to align measurements and the strategy implemented.

The findings show that the staff can easily establish performance because of feedback and feed-forward information on strategic plan implementation. On the contrary, the result of this study tends to agree with the study by Ferreira and Otley (2006), which established that feedback controls are very common among companies associated with issues of operations.

Further, according to the interview conducted in public secondary schools in Nakuru County, principals agreed that they have undertaken benchmarking in their respective schools. The following were responses from the principals;

Benchmarking has aided in the improvement of the transition rate in our school; initially, we had 10 students attaining a mean grade of C+ and above and after benchmarking from one of the performing schools, the students obtaining a mean grade of C+ and above rose to 30 (Principal from a School from Kuresoi North Sub-County)

We have done some benchmarking on several occasions to improve academic performance and infrastructure, and it has assisted in improving both academic performance and infrastructure (Principal from Nakuru Town West Sub-County).

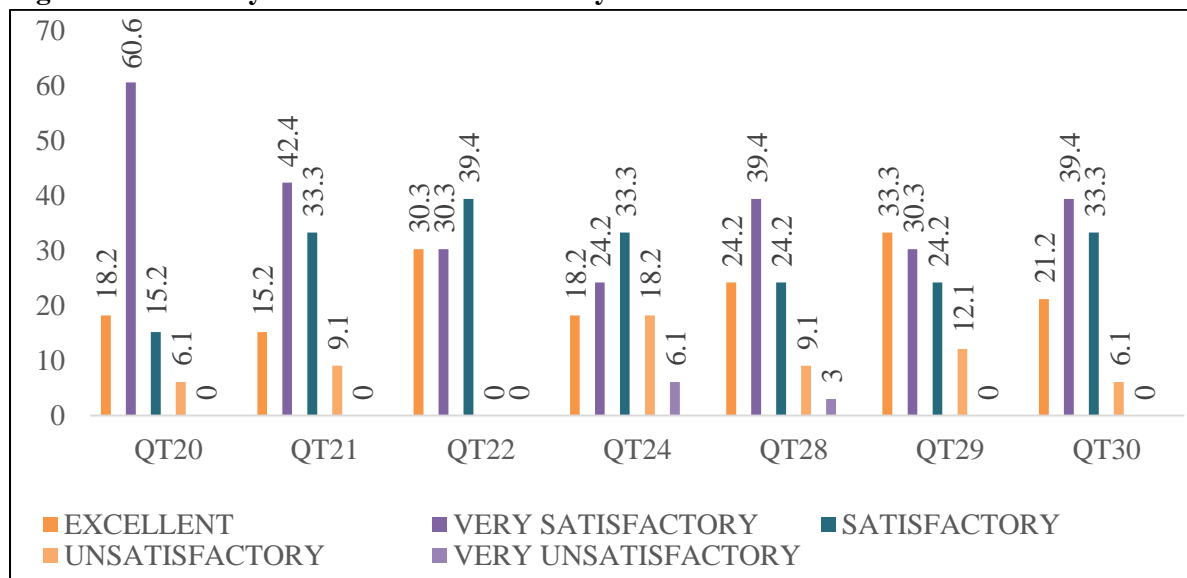
Benchmarking is one of the best tools we have been using to enhance internal efficiency in our school; for the last three years, we have eliminated grades D+ and below (Principal from Rongai Sub-County).

However, from the findings, the internal efficiency has not improved. According to

Bitange et al. (2013), the respondents agreed that benchmarking has increased the number of students obtaining grades of C+ (plus) and above. This means that with benchmarking, there is the likelihood of increasing school enrolment rate and later increasing the number of students who enrol in universities and tertiary institutions, and consequently be part of the course towards achieving millennium development goals. Moreover, benchmarking is probable to increase the retention rate, such that the number of students enrolled is the same as the number of students graduating. Therefore, benchmarking as a control system tool enhances internal efficiency, according to Bitange et al. (2013); however, the findings from this study reveal that if benchmarking is utilised well, it can influence internal efficiency. Further, according to the study by Bitange et al. (2013), benchmarking significantly influences school academic performance. This implies that better utilisation of benchmarking in schools will lead to increased academic performance.

It is established that 138 respondents, representing 100%, agreed with item QT22. Nevertheless, the item with the lowest mean score (3.6576) is the one that states school staff receives formal communication through the strategic plan implementation by direct communication from the school administration (QT24), with 75.7% (representing 104 respondents) of the respondent being satisfied that it is being practised in their school, while the rest disagreed. It is approximated that 87.8% (representing 121 individuals) of the respondents were of the opinion that there is the adoption of key performance indicators in their school, which is associated with goals and success aspects of the strategic plan implementation (QT28). In comparison, 12.2% (representing 17 respondents) are of a different view. There is a shift from resource-based management to results-based management in state institutions through strategic plans (Dinu, 2007).

Figure 2: Control system and internal efficiency



The findings on item QT29 (Teachers believe that the elements embraced by the school for managing and controlling evaluation performance are appropriate and constant) had approximately 87.9% (representing 124 respondents) of the respondents agreeing with it and 12.1% disagreeing. According to Ndiritu (2007), a reporting system can also be used to enhance a periodical appraisal of the implementation of policies in the field. The feedback obtained from evaluation and control is used to adjust the strategies or choices of strategies (UNESCO, 2010).

The second objective was to establish the influence of school control systems on internal efficiency in public secondary schools in Nakuru County, Kenya. The sub-factor of school vision and mission with the highest mean score was item QT18 in *Figure 1* (Students frequently reminded

of their core business in school and encouraged to remain focused), with a mean score of 4.3636. On the other hand, the item with the lowest mean score was QT16 (Teachers compare the objectives made by learners at the commencement of the term and the end of the term to recognise reasons for failure to achieve set goals) with a mean of 3.1818. The average mean score of the sub-factors of the vision and mission statements is 3.8235, which is above the average score of 3.5, and this implies that the vision and mission statements of the school are mostly being used by public secondary schools in Nakuru County, Kenya, as means of enhancing internal efficiency.

Table 5 shows the inferential statistics on the relationship between control systems and internal efficiency in public secondary schools in Nakuru County, Kenya.

Table 5: Control system and internal efficiency relationship

	R	R Square	B	Sig
Control system	.192	.037	.324	.014

Source: Researcher (2018)

From *Table 4* above, the control system can predict 3.7% of the internal efficiency (academic performance). Further, the control system significantly influences internal efficiency in public secondary schools in Nakuru County. According to item QT31 (How can you rate the effectiveness of control systems in enhancing

internal efficiency in your school?) in the questionnaire, it is apparent that the control system's effectiveness was low. Therefore, for the effectiveness of strategic plan implementation, there was a need for control systems to be effective and agrees with the findings of Felista (2014), which established that there is a necessity

to control strategy implementation and assess the strategies on how is being implemented in relation to the timeframe.

The study by Akinfolarin et al. (2016) established that supervision of curriculum implementation has a positive correlation with the student's academic performance. This implies that student's performance in KCSE can be attributed to the level of supervision of teachers. Further, for any school to realise its set goals and objectives, it is necessary to supervise strategic plan implementers that include teachers and school administration. On the contrary, school principals are not sure whether teachers understand what that strategic plan is; the following was a response from one of the principals of a certain school:

You want teachers to respond to your questionnaires on implementing the school strategic plan, but do teachers really know what the strategic plan is? (Principal from Molo Sub-county)

In relation to the above response, it is contrary to expect teachers to implement school strategic plans effectively in order to improve school internal efficiency, yet they are not included in the strategic planning process in the schools. According to Bottom and Fry (2009, as cited in Wafula and Okibo, 2014), academic strategies of the school commenced with the setting of a vision that gives the direction, specifying school goals that are consistent with the vision and best practice framework that school principals can use in achieving set vision and meet strategic goals. Harisson (2013) established that employees who are knowledgeable about their work, as well as their involvement in the organisational success, are probable to bring into line their endeavour with the organisation's goals and later improve performance. The findings show that most teachers are not informed on strategic plan formulation and implementation, or even some have not seen the strategic plan. Therefore, it can be concluded that many teachers in public secondary schools in Nakuru County cannot link strategic plan strategies with any other strategies or measures used to improve internal efficiency.

In some cases, school principals were unaware if the school had a strategic plan or its location, especially those new in their working stations. A strategic plan is a road map of the school.

According to the interview conducted with the head teachers, there was a revelation that group cohesiveness has improved both strategic plan implementation and internal efficiency. The following was the response from one of the principals:

To some extent, introducing strategic planning in schools has led to improved teamwork through formulating and implementing strategic plans, which has also led to improved discipline in schools (Principal from a sub-county school in Kuresoi South sub-county).

This implies that the effective implementation of the strategic plan will likely improve internal efficiencies in secondary schools in Nakuru County. In all schools visited, student indiscipline was an issue (absenteeism, pregnancy, and cohabiting).

Through the interview with the principals and deputy principals, some techniques used as a control system include teachers' appraisal, teachers' attendance sheet, official examination released every month, and head of departments ensuring that the syllabus is cleared within the stipulated time, among others. However, it is not clear whether assessment methods are being supervised because it is expected that performance should improve with increased application of assessment methods; thus, the findings of this study support the findings of Ezekwensili (2007, as cited in Akinfolarin et al., 2016) who established that lack of adequate supervision had been misery surrounding education policies (strategies); further he stated that the system which is not supervised would not produce the desired outcome and also inadequate supervision in the school leads to ineffective curriculum delivery in secondary schools which may cause poor performance in academics.

During the interview with the principals, it was found that strategic plan implementation is not well supervised since none of the respondents could specifically tell who is responsible for the implementation of the strategic plan. In addition, sub-county officers were also asked whether they were responsible for supervising the implementation of the school's strategic plan, and they responded that it is the role of the Teachers Service Commission (TSC).

It was also established that the control system in school includes appraisals, class attendance checklists, professional documents (schemes of work, lesson plans, class notes and syllabus) and examinations administered to the students, among others. No one mentioned a work plan as a control system in schools where principals and deputies were interviewed. In addition, the strategic plan in half of the schools visited was stored safely after it was launched, and others lacked an evaluation matrix or evaluation page, while others had unfilled evaluation pages. This means that most of the public secondary schools in Nakuru County rarely supervise the implementation of the strategic plans. On item QT31 (How can you rate the effectiveness of control system in enhancing internal in your school?) from the questionnaire, it was established that all of the respondents in the study suggested that effective control systems in their schools have the potential to improve strategic plan implementation and consequently improves internal efficiency. Even though some respondents suggested that the lack of goodwill from the administration has rendered control systems in public secondary schools ineffective.

For the school to realise its objectives and goals, such as enhancing internal efficiency during strategic plan implementation, there is a need to evaluate and control the implementation of school strategies. The findings from the study established that the majority (60 per cent of the schools) utilise students' data (on academic performance, transition rate) to inform on curriculum implementation. This implies that most of the public secondary schools in Nakuru County rely on summative evaluation. On the contrary,

formative evaluation of strategies being implemented in the school is not commonly practised. Some schools perform formative evaluations on the curriculum implementation, such as supervision of syllabus coverage and teacher appraisal through Teacher Performance Appraisal Development (TPAD).

Generally, both formative and summative evaluation are important; therefore, schools should not rely on one more than the other since formative evaluation tends to look at the process of the strategic plan implementation in the course of the school attaining its set objectives and goals (internal efficiency) and assist in the modification of the objectives or strategies which are not functioning. Furthermore, formative evaluation assists in examining strategy delivery, the quality of the strategy being implemented and the examination of personnel, context, procedures and input of the organisation or school. According to Kinuthia (2012), there is the revelation that insurance companies adopted formative and summative evaluations. The role of formative evaluation is to improve the strategy being evaluated. Most organisations evaluate strategies considering financial and operation performance; however, this study was more interested in operation performance.

According to the study by Kinuthia (2012) on strategy and evaluation practices implemented by insurance firms in Nairobi, Kenya, approximately 50% of the insurance firms adopted formal strategic evaluation, whereas 20.08% adopted informal strategic evaluation. The interview conducted in the schools in Nakuru County established that schools do not perform strategic evaluation; they only rely on performance appraisal and external evaluation from the Ministry of Education office and Teachers Service Commission since there was no evidence in the schools selected for the research of any other formal strategic evaluation.

Teachers were to be appraised on knowledge and preparedness, professional conduct, time management, use of schemes of work, and their conduct in co-curricular activities. The main goal

of school appraisal is to improve teaching quality and, as a result, improve the overall quality (internal efficiency) of education (Kajilwa, 2017). This implies that Teacher Performance Appraisal Development (TPAD) is used as a school control system. The main role of appraisal in secondary school is to improve internal efficiency. Without a measurement system in a school, it is very difficult to handle uncertainty in an environment efficiently and effectively; consequently, it may lead to poor utilisation of the resources and increase the chances of strategy failure (Vieira et al., 2009, as cited in Maria & Aparecido, 2015). According to Muhammad (2013), performance appraisal provides the performance of an individual, such that the individual opts to work better when he/ she is acquainted with how he/she is working.

Moreover, performance appraisal gives feedback to the individual on his/ her performance. It helps to form a relationship between his/ her performance and the objective of the organisation, and this can motivate the staff to do more since it enhances a better understanding of their involvement in the organisational success. Strategic evaluation gives much-required feedback that will assist individuals of an organisation to appraise and achieve their performance goals Lunenburg (2011). It assists individuals in assessing how well they are doing and the kind of modification needed in order to improve their performance (for instance, stakeholders and government authorities will be impressed).

From the interview on the item. On item ISP 11 (Does the current school management structure support the strategic plan), most principals admitted that their current school management structure supports their implementation. In spite of this, the implementation of the strategic plan in the schools in Nakuru County was not successful, and this can be revealed by school objectives and goals, which are unfulfilled. Further, they admit that incomplete school reports influence strategic evaluation and control. However, most of the schools' strategic plans in Nakuru County had

unfilled evaluation matrices. This implies that supervision of the strategic plan implementation has not been effective in public secondary schools in Nakuru County, Kenya.

From the interview of the Sub-county officers on their roles in the supervision of the strategic plan implementation in schools, one of the respondents stated that:

It is not our role to monitor and evaluate strategic plan implementation in schools, but it is the responsibility of the Teachers Service Commission (TSC) (Sub-county Officer).

This implies that the Ministry of Education does not supervise strategic plan implementation. On the other hand, the Directorate of Quality Assurance and Standards (DQAS) within the Ministry of Education is in charge of quality assurance and standards assessment in education and training institutions. According to the Teachers Service strategic plan (2015-2019), there is an overlap between TSC and Ministry of Education functions on quality assurance and standards, and this could be the reason for poor curriculum implementation supervision.

CONCLUSION AND RECOMMENDATIONS

The study established the influence of the control system on internal efficiency in public secondary schools in Nakuru County. However, the supervision of the strategic plan implementation in most of the public secondary schools was not effective. The sub-county education office is supposed to monitor school strategic plan implementation frequently to enhance efficiency in all school processes. School management ought to involve staff in the process of strategic planning. Strategic plan implementation is believed to be crucial in enhancing internal efficiency in public secondary schools with total supervision for maximum results through some practices such as performance appraisal and benchmarking, among others. Strategic plan implementation in schools was an ultimatum from the government of Kenya as a means of improving

the quality of education and achieving Millennium Development Goals and Vision 2030.

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