



INFLUENCE OF MANAGERIAL COMPETENCIES ON PERFORMANCE MEASUREMENT IN PUBLIC SECONDARY SCHOOLS IN KENYA

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ABSTRACT

In Kenya, provision of quality teaching and learning in secondary schools faces major challenges which include inadequate funding, management and supervision of teaching and learning process. This has been echoed in various policy papers including; Sessional paper no.14 of 2012 on Educational reforms and training, Sessional paper no.1 of 2019 policy framework for Education, training and Research for sustainable development, National Education Sector Strategic Plan (2018-2022). Secondary school managers are chosen among the practicing teachers on the basis of their experience and their job group. They are not given special training apart from the induction services they attend organized by the KEMI and other professional bodies. With principals appointed by TSC in Siaya County, the performance of secondary school in KCSE has been on downward trend in the past five years. Therefore, there was need to undertake the study to investigate the influence of managerial competencies on performance measurement in public secondary schools in Kenya. The objective of the study was to determine the performance measurements applied in secondary schools in Siaya County. The study adopted concurrent triangulation within the mixed method approach. The study was conducted in Siaya County and the study population consisted of all 243 school principals, 260 deputy school principals and 243 Board of Management Chairmen. A saturated sampling was used to sample all the 243 principals, 260 deputy principals and 243 Board of Management Chairmen for the study. Questionnaires, interview schedule and documentary analysis were employed to collect data. Validity was addressed with help of candidate's supervisors. Ten percentage of the study population was set aside for pilot study. Quantitative data was analyzed through the use of descriptive statistics, such as frequencies, percentages and means. Qualitative data from in-depth interviews and documentary analysis was analyzed thematically in line with the research objectives and reported in narrative and direct quotations of respondents. Reliability of the questionnaire was tested using Cronbach's alpha. The findings for this study revealed that the result dimension both financial and non-financial indicate sub-dimensional in nature were ranked highly 37 performance indicators had a mean between 0.978 and 0.448. This showed that school managers in this study demonstrated use of wide range of performance indicators. All the indicators meet the alpha. Both result and determinant indicators were run on the financial indicator. 97.16% of school had showed bias for monitors of revenue and cost reduction was ranked at 41% on the determinant indicative enrolment was ranked highly by 81.17 followed by admission which was ranked at 76.68%. The study recommended there is need for the performance models applied to be broad validated universally acceptable and prioritized in consultation with all education stakeholders.

Keywords:

School, Management, Teachers, Performance, Measurement

INTRODUCTION

Education significantly contributes to development as espoused in sustainable development goal number four on inclusivity, equity, and quality. Education promotes lifelong learning opportunities for all. Education and training is a key area of focus in the social pillar of education vision 2030. Education aims at developing learners intellectually and that sharpens and defines a country's culture and principles that guide approaches to life in all its dimensions. It is seen as the most effective process for creating values for civil justice and democratic society. UNESCO, Global Partnership in Education (2014), Iroegbu (2017) exposed that investing in Education is critical for sustainable, peaceful and resilient society. Education must impact skills for self-reliance and be basic in transference of knowledge that address health, food security, gender inequality and climate change.

Branch et. al., (2013), posits that much research has demonstrated that retention and the quality of education depends primarily on the way schools are managed, more than the abundance of available resources, the capacity of schools to improve teaching and learning is strongly influenced by the quality of the leadership provided by the school manager. In a study carried out in Latin America by UNICEF (2000), it found out that about 50,000 pupils in grade 3 and 4 did not have materials to use in class because of ill equipped library (Madani, 2019). They were more likely to score lower grades in examinations compared to pupils from schools with adequate classroom materials. Institutions which are properly managed provide learning and teaching experience leading to retention of both teachers and learners (Madani, 2019).

In Africa, Measurement and assessment is an essential element of teacher competencies. Few studies have been carried out on teacher competencies in educational assessment of students (Mpofu & Maphalala, 2018). According to Day & Sammons (2016) such features include: Commitment to success for all; flexibility and responsiveness; common vision; Environment of interesting learning; objective and effective disciplinary procedures. According to Otoo et al., (2018) the most effective programmes were: foster connectedness; increasing the trust placed in students; Provide tasks with immediate tangible benefits; institutions with diverse curricula student needs. Research around the world has shown that low expectations for student achievement permeate educational systems, (Muraki and Woods, 2007)

In East Africa, Uganda government has developed competency profile for primary school teachers (MOEST, 2012; Birugi, 2013). Due to importance attached to teacher competency worldwide, Uganda has developed competency profile for primary school teachers MOEST, (2014). The profile was to help stakeholders direct their efforts appropriately in their quest for teacher improvement. Research by Nzilano (2014), on teacher competencies of pre-service teachers on teaching practice revealed that there are limited competencies among pre-service teachers in Tanzania. This research failed to recognize manifest competencies. The present study assessed manifest competencies of practicing teachers. Mosha, (2015) observed that teachers 'knowledge competency was a factor affecting students' academic achievement in English language in Zanzibar rural and urban secondary schools.

In Kenya, all head teachers are currently undergoing a management course at the Kenya Management Institute (KEMI) to improve on their management skills. The management areas that KEMI exposed in school management areas are twenty seven in numbers of which fifteen are under coaching, four under mentorship and eight under induction. They are as follows; communication skills, institutional financial management, public procurement ,assets and Disposal Act, Legal framework in education, Financial literacy skills, Personal health and Wellbeing, Conflict and resolution, Norms and Values, Knowledge management, preparation for exit, professional audit, Career progression development, Learners Safety and protection and Curriculum, skills to be imparted during the training included; flexibility and adaptability data management, creativity, emotional intelligence and technical acumen. Emerging issues addressed included; climate change, global warming and migration, ethical social dynamic technology, (Republic of Kenya, 2012; Kamutu, 2018; MOE, 2020).

The Kenyan government committed in Education Bill 2012, that learners from marginalized communities will not be discriminated and hindered from attaining their highest level of education (Republic of Kenya, 2012). The school service environment has also contributed to learning in many important ways. When identifying quality schools, researchers point at specific features within the school systems that lead to efficiency and effectiveness.

According to Mobegi et. al., (2010), Mutuku (2012), managers should take up their roles as quality assurance officers and lead educationist in their schools as stated in the TSC Code regulation 42(2), 17(1,2,3,4), 71, 108, 88(1) TSC Code of regulation in the Basic Education Act 2013. The schools should adopt appraisal forms for the employees, tailored to improve quality and involve observational techniques that ensure it captures results from multiple learning methods. Institution managers ought to come up with creative ways to increase revenue to reduce the financial burdens students and parents carry. This is geared towards improving pupil absenteeism, indiscipline and dilapidated or inadequate learning facilities. The schools are also advised to engage with quality assurance officers often, to provide technical assistance on schools matters and public relations. The head of institutions need to have regular consultations with the Teachers Service Commission (TSC) to address issues of staffing that may affect learning activities. Head of institutions should come up with creative techniques of mobilizing of resources to help in learner's retention and effect quality education through old students' community and well-wishers (Achoka, 2007).

In Siaya County, Quality Assurance Assessment Report by Rarieda Sub county in Siaya county showed that most schools have dilapidated infrastructure that cannot sustain teaching and learning (Rarieda Sub county Director Report, 2018). Thus, it is necessary to understand the importance of school managers because for students to perform well, schools need school managers who are transformational. The school manager has to provide adequate facilities, quality human resources, adequate finances, good curriculum management, quality communication resources and maintenance of discipline. Further, the school manager has to motivate his charges at the school. The parents, local community, and education officials have to be engaged in order to produce students who have attained improved academic performance. Thus, the school principal is a catalyst of the force that leads us to better student's academic achievement (Morales-Doyle, 2017).

Key performance measurements have been applied in various areas which include use of NEMIS on students enrolments, New-funding model which apply means and test instruments, Establishing artificial intelligence with chat GPT, University worldwide ranking, Judiciary performance appraisal tools, Government Institution compliancy to performance contracting, assessment of performance of key economic sectors eg economic output by activities and percentage contribution to GDP by activities (Ambani, 2023).

Key performance indicators in school performance include student achievement discipline referrals, attendance rates cumulatively, Graduate rates, teachers satisfaction, Financial performance, supplier performance, services quality, pressure utilization, Admission Growth rate, enrolment, student competition rate, paying workers income, benefit gained in academic program among others like the Ministry of Education and Teachers Service Commission have not made comprehensive effort to develop or broader uniform performance measurement models (Osman et al., 2012).

PROBLEM STATEMENT

Intervention by Kenyan Government through Ministry of Education in terms of policies, legal framework and changes in the educational system to improve on managerial competencies and performance measurement has been of critical concern. The performance of public secondary schools in Siaya County has been on a reducing trend for the past five years (2015 – 2020). The estimated performance level in Siaya County public secondary schools ranges from mean score of 3.467 in worst case scenario to a mean of 6.7282 in the best case. It is assumed that in the best-case scenario, there is no further drop in performance beyond the reported, while in the worst-case scenario, performance continue in a linear fashion (Siaya County Education report on KCSE performance 2015 – 2020). It is apparent that, the aforementioned critical challenge exists despite education sector claim of the largest share of national budget. Application of performance measurement should define educational sector complexity efficiently effectively minimize controversy and accurately, determine and develop comprehensive performance standard. In view of the importance of managerial competencies to the attainment of quality performance and educational goal, this study sought to investigate the influence of managerial competencies on performance measurement in secondary schools.

THEORETICAL FRAMEWORK

This study was guided by the result and determinant model for performance measurements and managerial competencies model for managerial competencies. The result dimension consisted of finance and competition as sub dimension and performance measures or indicators included market share, customer or stakeholder satisfaction for competitiveness and liquidity indicator market ratio, for finance. Determinants dimensions have four sub-dimensions namely: quality of services, which consists of communication, friendliness comfort, and security indicators, Flexibility sub-dimension consisted of (delivery of service, volume flexibility indicators), resource utility sub dimension consisted of productivity and efficiency indicators and innovation sub-dimension

consisted of performance of individual innovation as performance indicators. The result dimension prioritizes the organization goals. The determinant dimension was conceptualized as a leading indicator. This study involved 37 performance indicators from the result and determinant dimension. Performance measurement enabled management to monitor employee performance and provide feedback on the setting of goals among others (Souza & Beuren, 2018).

Armstrong (2012) stated that the managerial competencies model or framework consisted of five dimension namely; maximization of unit(Director role and producer role), Consolidation and community(Monitor and Coordinating role), Human resource monitor, and Adaptive and change role (innovation and broker role) and guided by the following skills; Interpersonal skill, intrapersonal skill, leadership skill, communication skill, operational and technical skill, talent skill, Emotional intelligence skill, conflict resolution problem solving and supervisory skill. The maximization of the output dimension, consolidation and community dimension, Human resource dimension, and adaptive and change dimension were conceptualized as leading competencies. The studies involved twenty-two competencies from the aforementioned competencies dimension. The advantages of management competencies are to allow for the institutionalization of skills. The absence of a skill set symbolizes a significant shortfall in that competency area; the framework allowed for context unique to efficiency (Geva & Rosen, 2018). Managerial excellence and competencies anchor the centre of the framework and provide descriptive aspirational overreaching focal point encompassing specific competencies areas; Diversity, Equity, Inclusive sound managerial excellence, and critical to the roles outlined in five competencies impacted positively on performance (Cardy & Selvarajan, 2006). Theoretical framework was relevant to this study because performance measurement and management competencies can be used to determine and align the mission and vision of a learning institution.

CONCEPTUAL FRAMEWORK

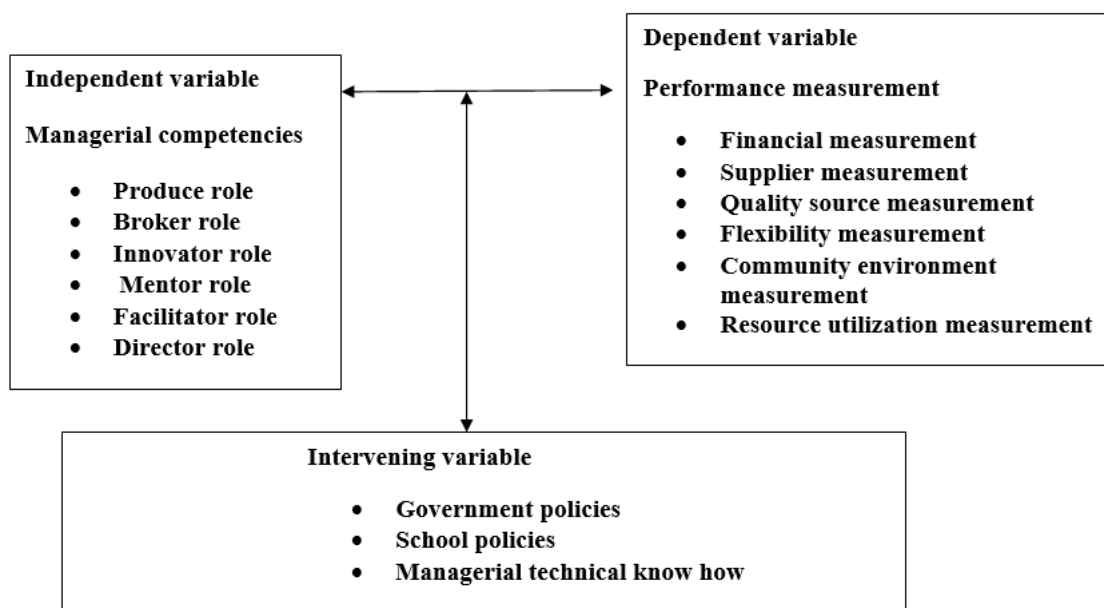


Fig. 1. Conceptual frameworks showing interplay of Dependent Variable, Independent Variable and Intervening Variable. Source (Researcher, 2023).

METHODOLOGY

The study adopted a concurrent triangulation design within mixed method approach. In this design, the investigator collected both qualitative and quantitative data at the same time during the study. Quantitative data was analyzed using both descriptive statistics (frequency, mean and percentages) while inferential statistics was analyzed using correlational method (Pearson product moment) (Creswell, 2014). The study population was carried in all the 243 public secondary schools in Siaya County. The target population consisted of 746 respondents in schools from Siaya County. Of the respondents, 243 were school principals, 260 Deputy School Principals and 243 Board of Management Chairmen who are charged with the management of schools. Secondary schools are considered appropriate because they have clear and similar organizational structures hence the results can be generalized without much error, as the population is relatively homogenous. 10% of 243 principals set aside for piloting. A pilot study conducted to improve external validity of the instruments while internal validity of the constructs investigated by subjecting the survey data to suitability tests (Cohen, 2005). In this study, reliability of the questionnaire tested using Cronbach's alpha. In the interpretation of the reliability of results, the maximum Cronbach's alpha coefficient is to 1.0 (Tavakol, & Dennick, 2011).

The tests were conducted using Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin measure of adequacy sampling (KMO Index) (Zeynivandnezhad et. al., 2019).

The researcher obtained a permit from the National Council of Science, Technology and Innovation (NACOSTI). County Education Officer (CEO) for Siaya County also provided consent before the study commenced. After this stage, the researcher booked appointments with school Principals according to their timetables and administered the questionnaires to teachers, students and Principals. Since respondents are literate, they requested to fill the Questionnaires individually. The researcher was administering all questionnaires randomly in the selected public secondary schools in Siaya County (Ridder, 2017). The primary quantitative and qualitative data collected from the field was first edited to remove glaring errors and isolate incomplete questionnaires. Coding was done and entered into Statistical Package for Social Science Computer Programme version 22.0 to assist in the analysis of the data (Orodho, 2013). In quantitative analysis, Quantitative Data Analysis Matrix was used and thematic framework for the analysis used for qualitative analysis (Goldsmith, 2021).

Table 1: Quantitative Data Analysis Matrix

Research Hypotheses	Independent Variable	Dependent Variable	Statistical Test
Relationship between performance measurements and managerial competency of principals in public secondary school in Siaya County.	Managerial Competency	Performance measurement	- Means - Percentage
Relationship between management competencies and performance measurements of principals in public secondary school in Siaya County.	Managerial competency	Performance measurement	- Means - Percentage - Pearson correlation - Regression analysis
Relationship between performance measurements and managerial competencies of principals in secondary schools.	Managerial competency	Performance measurement	- Means - Percentage - Pearson correlation - Regression analysis

Table 2: Phases of Thematic Analysis.

Phase	Description
1. Familiarizing oneself with the data.	Transcribing data, reading and re-reading the data, noting down the initial ideas.
2. Generating initial codes.	Coding interesting features of the data in a systematic manner across the entire data set, collating data relevant to each code.
3. Searching for themes.	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes.	Level 1: Checking if themes work in relation to coded extracts and the entire data set. Level 2: Generating a thematic 'map' of analysis.
5. Defining and naming the themes.	Ongoing analysis to refine the specifics of each theme and overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report.	The final opportunity for analysis. Selection of vivid extract examples, final analysis of

While undertaking the study, the researcher considered ethics keeping the confidentiality of all the information from the respondents, protection of the respondents’ identities, and their rights to exercise their freedom of thought.

RESULTS AND DISCUSSION

Response return rate

The study sampled 243 secondary schools from where 223 school managers, 260 Deputy Principals and 223 BOM Chairmen were administered with questionnaire and interview respectively, this is presented in Table 3.

Table 3 Response Return Rate

Category of respondent	Study Population	Sampled	Retained	%
School Managers	243	223	223	90
Deputy Managers	260	234	234	90
BOM Chairmen	242	223	223	90
Total	744	680	680	90

On the issued questionnaire and interview schedule respectively, school managers 223 (90%) 234 (90) Deputy School Mangers and 223 (90%) returned filled questionnaires and responded to interview schedule, hence giving an average of 90%. This response was acceptable since it was above 80%, according to (Creswell, 2014). The above average response rate was realized was achieved because the researcher personally reached out to learning institutions and administered questionnaires. There was 100% interview return rate because of the researcher personal initiative to make appointment with the respondents and where challenges were met new appointment were made at the convenience of the respondent.

Background Information

The background information of the respondents was investigated to ascertain the representatives and reliability of the data. Gender, age and involvement in institutional administration was captured and detailed and tabulated in the subsequent subsections.

Gender representation of the respondents

The gender bias of the informant was appropriate to help establish which gender was keen in learning institutions management. Gender presentation was analyzed to include three categories of respondent as school principals, deputy principles and BOM Chairmen. The result are tabulated in Table 4.

Table 4 Gender Respondent Representation

Gender	School Principal		Deputy Principal		BOM Chairmen	
	F	%	F	%	F	%
Male	181	81	187	79.9	180	80.7
Female	42	19	47	20.1	43	19.3
Total	223	100	234	100	223	100

Table 4 illustrates that of the school managers, male are the majority 181 (81%) while female are 42 (19%). The deputy principals' males are 79.9% (187) while the females are 47 (20.1%). As for the chairmen of Board of Management the gender was heavily skewed with male gender dominating at 80.7% (180) and female being only 19.3% (43). The implication of this finding is that gender balance in leadership in public learning institutions in Siaya County is yet to be addressed.

Respondents Age

The study made an attempt to establish the age of the respondents in order to determine the age bracket which was more responsive to the learning institution management. This was carried out in categories to involve school principals and their deputies and BOM managers. The summary of the distribution by age bracket is shown in Table 5.

Table 5 age of the school managers, Deputy School Managers and BOM Chairmen

Category	Frequency	Percentage
School Managers Age Bracket n = 223		
28 – 37 Age	10	0.04
38 – 47 Age	103	46.8
47 and above	110	49.32
Level of Education		
Diploma	42	18.82
Bachelor Degree	153	68.6
Masters and above	28	12.55
Work Experience		
Under 3 years	40	17.93
4 – 6 years	53	23.76
7 – 11 years	92	42.25

11 and above years	38	17.04
Deputy School Managers Age Bracket n = 234		
28 – 37 Age	15	0.67
38 – 47 Age	183	78.2
47 and above	26	11.1
Deputy School Managers Level of Education		
Diploma	29	12.37
Bachelor Degree	200	75.4
Masters and above	5	2.1
Work Experience		
Under 3 years	60	23
4 – 6 years	152	58
7 – 11 years	18	6.9

Age and duration of service of BOM Chairmen n = 223

	Minimum	Maximum	Mean Age
Age	45	66	55.5
Duration served in the BOM	2	10	6

Table 5 shows that out of the 223 majority of the school managers, 110 (49.32%) are aged 47 and above, 38 – 47 years age are 103 (46.8%) and 28 – 37 age are 10 (0.04%). Managers with Diploma are 42 (18.82%), first degree were 153 (68.6%) and post graduate lies at 28 (12.55%) respectively. Majority of school managers had 7 – 11 years 92 (42.25%), 4 – 6 years are 53 (23.76%), under 3 years are 38 (17.04%). For the 260 Deputy School Managers, majority are aged 38 – 47 years 183 (78.27%), 47 and above age are 26 (11.14%) and lastly 28 – 37 age are 15 (0.67%).

Majority of Deputy Managers work experience ranged between 4 – 6 years are 152 (58%), under three years are 60 (23%) and 7 – 11 years are 18 (6.9%) and those with Diploma level of education were 29 (12.3%). First degree are 200 (85.4%) and masters and above are 5 (2.1%). This was in agreement with Ayoo (2002) who reported that as years of service increase most teachers get administrative positions and also become more productive in terms of content delivery to learners. Lastly the findings showed that the average for BOM Chairmen is 55.5 years with minimum age being 66 years. The duration of service range between 2 years to 10 years. This showed that BOM Chairmen had served for considerable duration to be able to understand performance measurements and managerial competencies of the school managers within their respective institutions.

Reliability Analysis

The result in the table 6 below showed a Chronbach's alpha (α) above 0.6 for all the scales indicators an acceptable level of reliability (Tavakol, & Dennick, 2011). Most of the alpha values were acceptable since they were > 0.6 for all the dimensions. The 37 performance indicators and 22 management competencies were reliable and consistent measures of eight managerial roles.

Table 6. Reliability Analysis

N=124	Alpha Values	Number of indicators for each measure
<u>Performance Dimension</u>		
Competencies	0.649	16
Financial Performance	0.7091	10
Quality service	0.819	5
Flexibility	0.805	3
Personnel utilization	0.615	3
<u>Managerial Roles</u>		
Director role	0.755	3
Producer role	0.671	3
Coordinator role	0.825	3
Facilitator role	0.716	3
Mentor role	0.695	3
Innovator role	0.638	4

Determine performance measurement applied in secondary schools managers

The study determined the performance indicators applied by secondary school managers in Siaya County. A five item 5 point likert scale questionnaire was developed which captured the view of the 223 school managers. The items were on a scale of 1 – 5 where 1 - strongly disagree SD, 2- Disagree D 3 – neutral 4 – agree A and 5 strongly agree SA.

The data obtained was analyzed to show frequency and percentage for each item on a scale of each respondent category. The mean score for all the items in the scale for each item respondent category was determined for the five items on the scale, the total value was expected to range from 5 for respondent scoring 1 on each item 25 for respondents scoring 5 on each item. Thus the mean (average score for each item on the scale) were between 2 and 25.

The detail of the findings on the determination of performance indicators applied by secondary school managers in Siaya county are presented in table 4 showing frequency percentages and means. The school managers were asked to indicate the level of use and importance of each performance indicator by responding to 37 performing indicators contained in the survey instruments. The level of use and importance scores were averaged and measured for performance ranged between 0.978 - 0.448. These results indicated that the managers in this study demonstrated reasonable use and value of wide range of performance dedications.

Table 7. Ranking of performance measurement by mean score and percentages

Performance indicators rank by mean score and percentages. The two key indicators identified financial indicators and non- financial indicators

Table 7: Performance measurement Rank by Mean Score and Percentage

PERFORMANCE INDICATORS		SD		D		N		A		SA	
RESULT INDICATORS	N = 223	Mea n	Fre	Me an	Fre	Me an	Fre	Me an	Fre	Me an	Fre
Competitiveness											
Enrollment		0	0	0	0	0	0	0	0	18. 0.1	81. 0.8
Admission growth rate		0	0	0	0	0	0	0	0	23. 0.2	76. 0.7
		0. 0.00								31. 0.3	68. 0.6
Bench marking		4	44	1	0	0	0	0	0	8	18
Stakeholders confidence					0. 0.0					26. 0.2	73. 0.7
Current Assets & Liabilities		0	0	0	9	08	2	0	0	9	691
		0	0	0	0	0	0	0	0	17. 0.1	82. 0.8
Revenue Achieved		0	0	0	0	0	0	0	0	9	794
		0. 0.00			0. 0.0					37. 0.3	62. 0.6
Rate of Supplies		4	44	1	9	08	2	0	0	2	72
Total cost of development					0. 0.0					32. 0.3	67. 0.6
quality of performance		0	0	0	0	0	0	0	0	31. 0.3	68. 0.6
		0	0	0	4	04	1	0	0	31. 0.3	68. 0.6
		0. 0.00						1.7	0.0	4	13
Enrolment by gender		4	44	1	0	0	0	9	17	4	3
										28. 0.2	71. 0.7
Return rate		0	0	0	0	0	0	0	0	23. 0.2	76. 0.7
Student competition rate		0	0	0	0	0	0	0	0	3	33
		0	0	0	0	0	0	2	2	25. 0.2	74. 0.7
										1	51

Evaluating behaviour of leaders	0	0	0	0	0	0	0	0	0	30.9	0.309	69.0	0.691	15.4
inn maintenance facility	0	0	0	0	0	0	0	0	0	35.49	0.378	65.0	0.655	14.5
Quality of performance	0.4	0.0044	1.1	0.03	0.013	3.3	3.3	3.3	0	34.5	0.345	65.77	0.654	14.6
Benefits gained in academic program	0	0	0	0	0	0	0	0	0	10.3	0.103	44.23	0.448	10.0
Financial Performance														
Total revenue achieved	0	0	0	0	0	0	0	0	0	2.24	0.022	97.5	0.978	21.8
Cost reduction	0	0	0	0	0	0	4	0	0	3.59	0.035	96.8	0.964	21.5
Utilization of – fund	0	0	0	0	0	0	0	0	0	5.83	0.0358	94.13	0.942	21.0
Development index	0	0	0	0	0	0	0	0	0	23.3	0.233	76.52	0.766	17.1
Completion of set budget	0	0	0	0	0	0	2	2	0	37.2	0.372	62.7	0.628	14.0
Paying workers income	0	0	0	0	0	0	0	0	0	40.4	0.403	59.90	0.596	13.3
Income generating	0	0	0	0	0	0	1	1	0	46.2	0.461	10.3	53.8	0.538
Pay Creditors and Suppliers	0.4	0.0044	0.1	0.04	0.01	0.0	0.0	0.0	0	41.7	0.417	58.93	0.583	13.0
Capitation	0	0	0	0	0	0	0	0	0	44.8	0.448	10.1	55.52	0.553
Enhance resource mobilization	0	0	0	0	0	0	0	0	0	45.7	0.457	10.2	54.43	0.541
DETERMINANT INDICATORS														
Service quality										44.8	0.448	10.1	55.52	0.553
School category rate	0	0	0	0	0	0	0	0	0	8.48	0.0848	0.1	52.52	3.0
Incenton quality	0	0	0	0.0	0.02	0.0	0.0	0.0	0	49.4	0.494	11.1	50.5	11.0

				9	08						8	97	1	2	02	2
											20.	0.2		79.	0.7	17
Interaction quality	0	0	0	0	0	0	0	0	0	2	01	45	8	98	8	
										19.	0.1		80.	0.8	18	
Quality pass 1 grade	0	0	0	0	0	0	0	0	0	3	92	43	7	07	0	
Service environment	0.	0.00								10.	0.1		89.	0.8	20	
Quality	4	44	1	0	0	0	0	0	0	3	03	23	6	97	0	
Flexibility																
											18.	0.1		81.	0.8	18
Modern technology	0	0	0	0	0	0	0	2	0	4	83	41	6	16	2	
Curriculum delivery										17.	0.1		82.	0.8	18	
quality	0	0	0	0	0	0	0	0	0	5	74	39	5	25	4	
Established market										22.	0.2		77.	0.7	17	
scheme	0	0	0	0	0	0	0	0	0	4	24	50	5	76	3	
Resource Utilization																
Employee healthy											35.	0.3		64.	0.6	14
Programme	0	0	0	0	0	0	0	0	0	4	54	79	5	46	4	
	0.	0.00								40.	0.4		59.	0.5	13	
ICT Usage	9	89	2	0	0	0	0	0	0	4	03	90	6	96	3	
Repair and										39.	0.3		60.	0.6	13	
Maintenance	0	0	0	0	0	0	0	0	0	5	94	88	5	05	5	

The two key indicators identified were financial and non-financial indicators

Respondent's views on wide range performance measurement applied in institutions

According to finding of the study in table 8 over 70% of the school managers strongly agree that they apply varied performance measurements in assessment on school performance. 16% agree to that and 6.6% remained neutral. Generally (92.4%; mean = 9.3) of the school managers confirmed that they apply varied measures of performance which further probably they categorized as financial and non-financial determinants. While only 6.6% indicated otherwise.

Table 8 shows the response of school managers to interview statements

Statements	SA	A	N	D	SD	Mean
School managers apply wide range of performance management in their school	23 23(76%)	5 5(16.6%)	2 2(6.6%)	0 0	0 0	9.3
School managers apply wide range of managerial competencies	25 25(70%)	6 6(20%)	3 3(10%)	0 0	0 0	9
Managerial competencies applied influence the performance management in the school	24 24(80%)	3 3(10%)	3 3(10%)	0 0	0 0	9.0

The Deputy School Managers were interviewed and their views were sought on the application of performance measurement by the school managers

Table 9 Deputy School managers view on school manager's application on performance measurement

Deputy school manager view n = 260	SD	D	N	A	SA
The principals has identified the performance measurement applicable for the institution and has prioritized the performance measurement relevant for the school	0 8%	0 15%	20 77%	40	200
The principals has involved the stakeholders in decision making in reference to identification of institutional performance measurement	0 4%	0 19%	10	49	20
The principal has created enabling environment towards achieving good performance and has mobilized stakeholders to support the school to attain good performance e.g. providing food	0 19	0 21%	50	210	

The deputy school managers were requested to provide response on the performance measurement applied by school managers. Of the 260 respondents that were interviewed, the table 9 shows the results 77% (200) strongly agreed that principals has identified performance measurement relevant/appropriate to the institutions, 15% (40) agree while 8% (20) remained neutral. Therefore, cumulatively 92% supported the statement that the principals have identified and prioritized the performance measurement which is of result and determinant in nature. This is similar to the finding of (Koval et al 2011), that demonstrated that each

measurement has a level of use of or importance and further classified as financial and non-financial measurement (Haris and Mongiello, 2001).

Deputy school managers also stated that principals have involved the stakeholders in decision making in relation to identification of institutional performance measurements. This was supported by 77% (201) of the deputy school managers who strongly agree and 19% (49) Agree while 4% (19) remained neutral. Cumulatively 96% agreed with the statement. This similar to the findings of (Dewaal, 2007) that stated that stakeholder’s confidence is highly emphasized in performance measurement undertaking by an institution. That is why 81% of stakeholders have been mobilized to provide funds and have strongly agree while 19% (50) of the stakeholders generally agree with the principals on the provision of fund.

The Board of Management Chairmen view on School Managers application of performance measurement.

Table 10 Chairmen view on School Managers application of performance measurement.

BOM Chairmen view n=223)	SD	D	N	A	SA
The Principal and BOM have identified the performance Measurement for the institution	0	0	13	210	
			6%	94%	
The school principal and the Board have prioritized the various performance measurement for the school, and that Board have shared with staff on performance measurement models	0	0	33	190	
			15%	85%	
The principal and the Board agree that performance measurement are broadly acceptable and working	0	0	23	200	
			10%	90%	

The chairman of the Board of Management as constituted in the Education Act 2013 were interviewed on the school manager’s application of performance measurement in their respective schools. Out of 223 respondents that were polled, table 12 shows the result. The study findings in table 10 showed that 94% (210) of the Board of Management chairmen strongly agree that school managers and Board have identified school performance measurement for their institutions and moved ahead to prioritize the various performance measurement which were both financial and non-financial in nature, that 6% (13) Agreed with the statement. In total 100% of the school Board Chairmen supported the principal on identification and prioritizing of the performance measurement. This finding is similar to that of Hansen (2010) that emphasized the ranking of performance measurement.

The study also established that 85% (190) of the Board Chairmen Strongly Agreed that the principals and the Board have shared with both teaching and non-teaching staff on the performance measurement models being applied by schools. 15% (33) of the Board Chairmen agreed with the statement. Cumulatively 100% (233) agreed that both teaching and non-teaching staff have been brought on board. This is because both staff played significant role as far as performance of school is concerned because they support teaching and learning process in the school besides creating enabling environment.

Financial performance measurement

On the analysis of school manager’s response indicators that monitor total revenue and operating costs 97.16% strongly agreed, that revenue is key while only 2.2% agree to that. On cost reduction, 96.41% strongly agree while partly 3.58% agree. The result were consistent with literature and previous study by (Harris, 2002) particularly given the previously suggested revenue oriented nature of school operations being intensive (Fitz Geerald et al., 1995). While the research findings supported this expectations, also demonstrated quite varied response in relation to level of use and importance to each indicator (Fitz Geerald

et

al.,1995)

Non-financial measurement

The non-financial indicators that were rated high in terms of mean score and percentage was enrolment of which 81.17% strongly agree and only 18.83% Agree. Admission growth rate 76.68% strongly agree and 23.32% Agree. Stakeholders confidence 73.09% strongly agree and 26.91% Agree. Students' competition rate: 74.89% strongly agree and 25.11% Agree and lastly; enrolment by gender 71.75% strongly agree and 28.25% Agree. These were essentially result measure of competitiveness. It is important to note that generally school managers appear to pay significantly less attention to non-financial indicators than to financial indicators. Non-financial measures are important as they provide feedback about the school activities that may directly or indirectly affect the school's result. By measuring and monitoring stakeholder satisfactions, student enrolment, admission growth rate which in a way constitute or determine the financial well-being of an institution. (Shank and Govindarajan, 1993), strategic cost management concept represented significant step in the literature reading make conclusion that non-financial measures have many merits and that non-financial measures are more directly traceable to the strategy of the firm (ibid)

The inherent weakness in using only financial measure of performance are that they are result of management action and organization performance and not the cause of it, (Brignal & Balantine, 1996). Non-financial measures are strategic efforts an institution may take to improve on its financial measures. In need they are the financial measures of stability of an institution (Harns and Mongiello, 2001). The organization success is a multi-dimensional concept, (Emmanuel et. al., 1990). Therefore sole focus on financial indicators in public school may lead to failure to adopt to the new market and competitive environment

Business orientation and public secondary school characteristics

The government of Kenya through ministry of education in 2003, since the onset of education for all in primary and free secondary education in 2003, has continued to invest in education to ensure its accessibility and quality by reducing education cost burden on parents. The result of this study support the business orientation concept proposed by previous study. It is critical recognize the fundamental business orientation of schools (Marginson & Vanderwende, 2007). The results indicates total revenue achieved (97.16% strongly agree and cost reduction 96.41% strongly agree) were evidently highly ranked by managers. This may be due to business orientation of the public secondary schools. Kashyap et. al, (2010) argue that business that tend to exhibit high proportion of fixed cost to total cost such as service organization are said to be market oriented, (revenue driven). Schools were also highly sensitive to the external environment seen in indicators such as stakeholder's confidence (73% strongly agree) and to an extent environmental growth indicator (81.17%) strongly agree. The key performance indicators in public secondary schools were drawn from both quality of service and competitive cause of evidence among public secondary schools. The stakeholders confidence (73% strongly agree) indicator favored by management is an explicit symbol of the customer focused approach on the public secondary schools in Kenya. Kashyap et. al, (2010) contend that poor management practices bureaucracy inefficiency and low productivity levels in many secondary schools of developing countries, Kenya included, create a considerable pressure for school managers to adopt, ready to implement strategies including performance measurement practices. Most secondary schools in Kenya are yet to enroll comprehensive management information systems that can capture the necessary information in all performance dimensions (Mutia, 2023).

The objective was to find what secondary school managers regarded as the most important performance indicators they use to manage their school performance; that is to determine their school performance; that is to determine (Muchiri, 2017). The indicators that school managers regularly drawn upon to determine their performance. The empirical research results indicate that majority of the respondent school managers almost exclusively monitor result measures such as competitiveness which has (16 indicators) of which four indicators mostly highly preferred were as follows enrolment (81.17%, Admission growth rate (76%) students competitive rate (16%) and stakeholders conflict (73%) and financial indicators which had 10 indicators out of which three indicators were highly ranked as follows; revenue (97.16%) cost reduction (96.41%) and utilization of resources (94.17%). Modest attention was paid to non-financial or determinant dimension such as service quality sub dimension measures which consists of five indicators of which three

indicators were ranked as follows: service environmental quality (89.72% strongly agree) quality passes grade 80.72% strongly agree and interaction quality (79.82% strongly agree). Flexibility sub dimension had three indicators of which two were highly ranked as follows: modern technology (81.6 % strongly agree and resource utilization sublimation had three indicators of which one indicator which was highly ranked was employing health programme 64.57% strongly agree. Key performance indicators provided vital information to the institution for tracking and predicting school performance against strategic school objectives in a way that complements financial measures. An indicator is used for measurements that are not direct or exclusively used for measurement of performance (Abdelhadi et. al., 2022). The indicators that eventually a company units, department or section evaluate as the most representative to successfully describe its need of measuring its performance constitutes the key performance (Ishaq Bhatti et al., 2014).

CONCLUSION

From the study, school managers in Siaya County demonstrated wide range of performance indicators of the result dimension. In the financial, revenue which was rank 97.6% strongly agreed and 2.4% agreed and operation cost which was ranked 96.4%strongly and 3.6% agree were highly ruled. The competitive measure of result dimension student enrolment indicator was ranked (81.17) strongly agree and 18.83% agree was highly rated. other indicators which followed closely were stalk holders confidence 73.63% strongly agree and 22.17% agree student competition 74.89% strongly agree and 25.11% agree, Enrolment by gender 71.75 strongly agree 28.25% agree. This was corroborated by the qualitative findings from the interview which identified financial and non-financial dimension of performance and 90% with a mean of 0.9 agreed that they applied varied performance measurement. Documentary guide analysis revealed the same by stating availability and use of schemes of work , lesson plan and lesson notes which manifest indicators of performance dimension and non-financial sub dimension namely syllabus coverage which determine student competition, stakeholder confidence, quality performance, cohort completion rate among others.

This is similar to the findings of interview by deputy school managers that stated that school managers have identified as (result and determinant) and prioritized performance measurement in their institutions in consultation with stakeholders. This was further confirmed by the interview findings of Board of Management Chairmen, of which cumulatively 100% of them stated that performance measurement model are broad acceptable and validated.

RECOMMENDATIONS

Performance measurement are very key in defining status of a learning institution in terms of equity, quality, retention and completion rate. There is need for the performance models applied to be broad validated universally acceptable and prioritized in consultation with all education stakeholders.

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