Influence of internal quality assurance practices on students' academic performance in public secondary schools in Kieni East and Kieni West Sub counties, Nyeri County, Kenya

By

Ednah Njeri Kagochi

Supervisors

Dr. Maurice Kimosop

&

Dr. Josphat Kagema

1.1 Background of the study

➤ World wide it is believed that the overall education system should be supported by educational quality assurance in order to improve the teaching-learning process in general and learners' achievement in particular (UNESCO, 2012).

➤ In particular school principals are supposed to take a salient role in in the internal quality assurance exercise due to their supervisory role bestowed upon them to improve school performance

➤ In Singapore and China, school principals are considered very crucial in the assessment of quality and standards at institutional level (Zhang, 2004).

➤ In Nigeria, Adikinyi (2007) and Afolabi and Loto (2008) underscore the inspectional role of the school principal as guarantee to performance of students

Background cont..

- In Kenya the role school principals in instructional supervision is well documented in the school heads manual and the recent developed TPAD Tool aimed at improvement of quality of instruction and performance of students (TSC, 2016).

- Nonetheless, internal quality assurance as envisaged in TPAD has aroused a debate about its effectiveness with vehement resistance posed by trade unions alongside reported poor performance among students in national examinations

- In Kieni East and West Sub counties performance in KCSE and has been lower compared with other subcounties in Nyeri County as indicated in Table 1.1.

- Consequently, there is need to examine internal quality assurance practices at school level in the wake of reported poor performance of students in national examinations.

Table 1.1: Performance in KCSE

Subcounty	KCSE mean scores		
	2020	2019	2018
Nyeri Central	5.168	6.024	5.924
Nyeri South	5.123	5.823	6.012
Tetu	4.956	5.210	4.623
Mukurweini	4.135	4.262	4.234
Kieni East	3.962	3.825	3.625
Kieni West	3.625	3.925	3.823

1.2 Statement of the problem

School principals are mandated to carry out quality assurance practices as envisaged in TPAD for the purposes of improving quality of instruction. However, consistent poor performance in KCSE notably in the study area casts doubt on effectiveness of the internal quality assurance practices. Literature available concerning performance indicate that research undertaken mainly concerned entry behavior, student absenteeism, leadership styles and parental involvement but little had been done on quality assurance. Consequently, it was a necessity to examine the influence of internal quality assurance practices on students academic performance.

1.3 Purpose of the study

► The purpose of the study was to evaluate the influence of internal quality assurance by principals on students' school performance in Kieni West and kieni East Sub counties, Kenya

1.3   Specific objectives

i)To establish the influence of frequency of examining teachers' professional documents by the principals on academic performance of students in public secondary schools in Kieni West and Kieni East sub counties, Kenya.

ii)To evaluate the influence of effective monitoring of use of teaching/ learning resources by the principals on academic performance of students in public secondary schools in Kieni West and Kieni East sub counties, Kenya.

specific objectives cont'd

iii) To assess the influence of effective feedback on internal quality assurance reports by the principals on academic performance of students in public secondary schools in Kieni West and Kieni East sub counties, Kenya.

iv) To establish the influence of monitoring syllabus coverage by principals on the academic performance of students in secondary schools in Kieni West and Kieni East sub counties, Kenya.

1.4 Research questions

i) What is the influence of frequency of examining teachers' professional documents by the principals on academic performance of students in public secondary schools in Kieni West and Kieni East sub counties, Kenya.

ii) What is the influence of effective monitoring of use of teaching/ learning resources by the principals on academic performance of students in public secondary schools in Kieni West and Kieni East sub counties, Kenya.

iii)What is the influence of effective feedback on internal quality assurance reports by the principals on academic performance of students in public secondary schools in Kieni West and Kieni East sub counties, Kenya.

iv) What is the influence of monitoring syllabus coverage by principals on the academic performance of students in secondary schools in Kieni West and Kieni East sub counties, Kenya.

1.6 Significance of the study

▶ Education officers and school principals will be informed on the status of internal quality assurance

▶ The same officers will be encouraged to give more attention to implement quality assurance activities in schools.

▶ Finally the study will be a springboard for other researchers who want to conduct further research in the area of quality assurance

1.7.1 Scope of the study

- The study focused on public secondary schools in Kieni East and Kieni West Sub counties in Kenya with the study involving head teachers, teachers and the Sub county Quality Assurance and Standards Officer (SQASO) as respondents

1.7.2 Limitations of the study

▶ The study was limited to Kieni East and Kieni West Sub counties which may limit generalization of the findings to the entire country

▶ The nature of instruments characterized by self-reporting may have attracted biased information but use of multiple data collection methods was used to overcome the limitation

▶ The presence of a sampling bias may have lowered the representativeness of the sample of the entire target population and finally being a survey, it was difficult to determine cause effect

1.8 Assumptions of the study

- Internal quality assurance is carried out in the study area

- Respondents are aware of quality assurance practices in schools

1.9 Theoretical framework

▶ The study was informed by Principles of Management Theory advanced by Fredrick Taylor in 1911 as elaborated in Wertheim (2007)

▶ Theory postulates that work can only be done efficiently when clear guidelines are developed and carefully monitored how they are followed

▶ TPAD provides guidelines on internal quality assurance practices to ensure effective curriculum instruction in line with the Theory

► **1.10 Conceptual framework**

► Diagrammatic representation of the relationship among variables.

Independent variables Intervening variables Dependent variable

• **Examining professional documents**		**Academic performance**
• **Monitoring of use of teaching/learning resources**	• **Personal attributes**	
• **Feedback on quality assurance reports**	• **Government policies**	
• **Monitoring syllabus coverage**	• **Professional competence of quality assurance staff**	
	• **Social economic factors**	
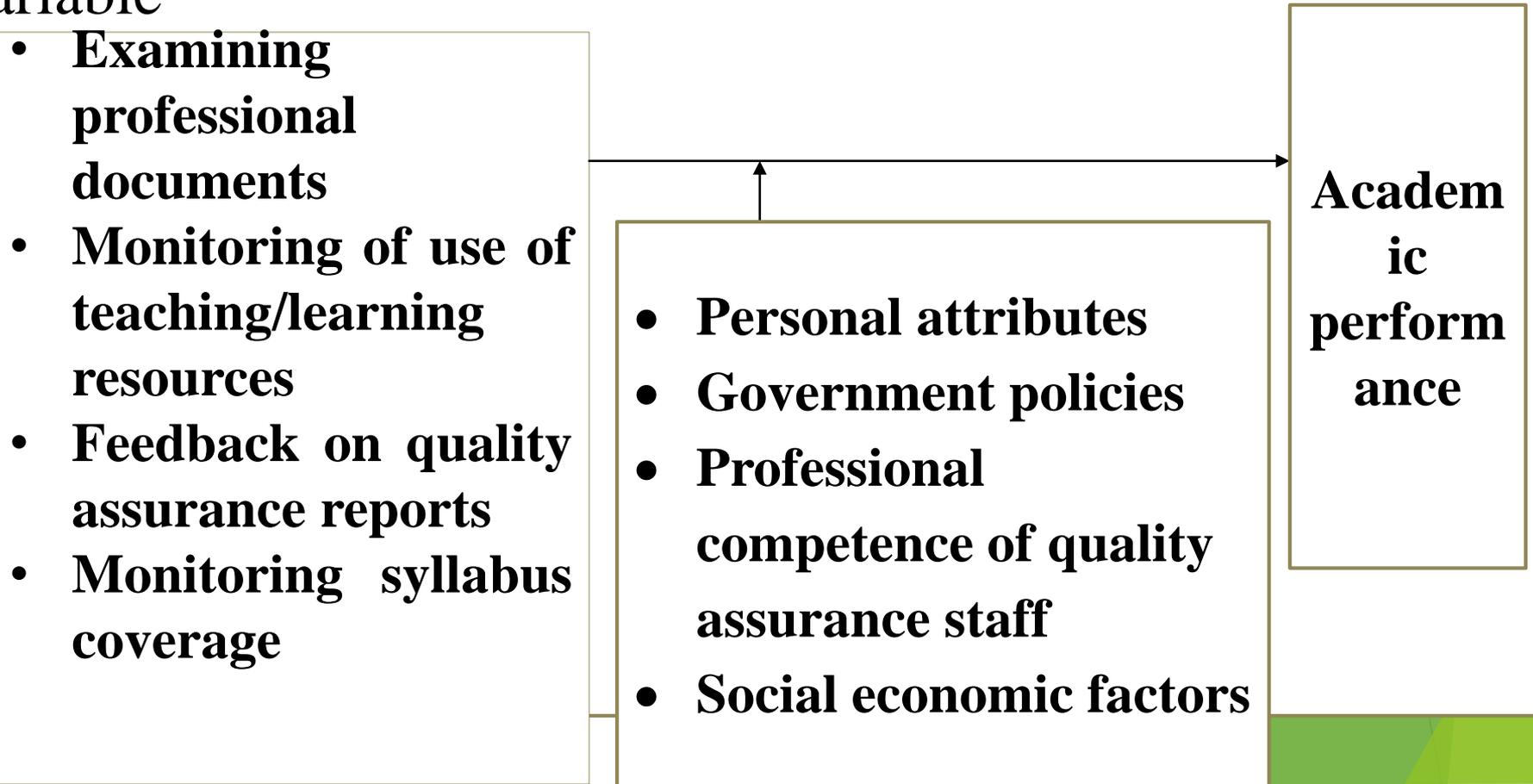
Chapter 3: Research design and methodology

3.1 Research design

▶ Plans and procedures for carrying out research (Cresswell, 2009).

▶ Descriptive survey research design concerned with current status of events about a phenomenon

▶ Suitable in describing characteristics, opinions, attitudes for example as regards internal quality assurance practices

▶ Additionally, both qualitative and quantitative data can be easily collected in a large population and analyzed as fast as well

3.2 Study location

▶ The study was done in Kieni East and West Sub counties in Nyeri County. The area lies within the longitudes of 36°40" East to 37°20" East.

▶ The northernmost point of Kieni just touches the Equator (0°) and then proceeds to 0°30" South.

▶ The area was specifically chosen because of record poor performance in KCSE in the last three years

3.3 Target population

▶ Total population of interest to the researcher

▶ Target population will be 1004 respondents

56 principals, 944 teachers and four SCQASOs

3.4 Sampling techniques and sample size

▶ Stratified sampling in which members with similar characteristic are placed in a stratum to ensure equal representation will be used;

▶ Schools will be stratified into extra county, county and subcounty and further into four streams, three, two and one;

- ▶ Respondents were stratified into principals, teachers and SCQASOs

- ▶ Teachers were further stratified into deputies, senior masters and class teachers

- ▶ Purposive sampling was used to select principals in the in various strata of schools as well as SQASOs as they have required information on the virtue of their administrative positions

- ▶ Schools and teachers from various strata were selected via simple random based on sample size of 30% considered appropriate by Mugenda and Mugenda (2003) for a large population A sample of 18 schools,18 principals, four SCQASOs and 290 teachers were selected.

3.5 Data collection instruments

▶ A **Questionnaire** and **interview guides** were used to collect data.

▶ A questionnaire as a type of instrument with a series of items (Rowley, 2014) composed of likert scale items virtually soliciting opinion on extent of occurrence in relation to study objectives and administered to school principals and teachers. With questionnaires data is easily collected from a large population, is easily analyzed and objective responses are obtained due to its confidential nature (Fowler, 2009)

Data collection instruments contn'd

Interview guide:

▶ An instrument designed to collect research data through conversations (Mugenda & Mugenda, 2003)

▶ The instrument was administered to SCQASOs to confirm and corroborate data from questionnaires

▶ Suitable in soliciting in-depth data and clarification of questions using semi-structured items (Cameron, 2011)

3.7 Pilot study

- Refers to a miniature study in preparation of the entire study as well inform reliability and validity of data collection instruments (Bryman, 2016).

- The study was carried out in three schools as per school strata in which three principals and 15 teachers which within the minimum of range of between 1-10% of the sample (Mugenda & Mugenda, 2003).

3.8 Validity and reliability of the instruments

▶ **Validity** refers to whether the research instruments truly measures that which it was intended to or how truthful the research results are (Bryman, 2016).

▶ The instruments were validated by the research project supervisors

▶ **Reliability refers to** the degree to which an instrument yields consistent results or data after repeated trials (Kothari, 2004).

▶ During the pilot study instruments were administered twice (**Test-retest)** and scores of each test correlated using **pearson correlation coefficient** which yielded an coefficient of 0.82>0.7 indicating reliability of the instruments

3.9 Data collection techniques

▶ Research permit was obtained from NACOSTI

▶ Consent from the County Director of Education and the Sub County Directors of Education in charge in the study areas

▶ Schools were visited and questionnaires were administered and collected to sampled respondents

▶ Appropriate time was arranged to administer the interviews

3.10 Data analysis techniques and presentation

Quantitative data was analyzed using: descriptive statistics; percentages, frequencies, mean scores and SD

▶ **inferential statistics**; Pearson correlation coefficient with assistance of SPSS version 23 and presented in tables

▶ **Percentages** showed frequencies while **SD** showed unanimity of the opinions

▶ **Correlations** indicate the **degree** and **direction** of relationship among variables

Qualitative data was content analyzed to identify themes while some responses were quoted verbatim

3.11 Ethical considerations

➤ All sources of information were acknowledged to avert plagiarism

➤ Confidentiality and privacy of respondents were maintained

➤ Informed consent was sought from respondents

➤ Anonymity was maintained in data collection instruments as names of schools or respondents were not revealed

➤ The researcher shared findings through publication

➤ Authority to carry out research was sought from relevant authorities

Chapter 4 : Data analysis, presentation and interpretation

4.1 **Response rates**

A total of 269 out of 290 respondents representing 86.2% response rate (Table 4.1 in the text) far much above 60-80% as suggested by Edward et al (2000).

4.2 Gender of respondents

The male were the majority 50.6% (Table 4.2) representing gender an indication of possible gender balanced responses

4.3 Experience of school principals

Majority of school principals 50% and 22.4 % had experience of between 16-25 and 6-15 years respectively (**Table 4.3**).This indicates that they provided reliable information based on long experience

4.4 Job group distribution

All levels of grades among teachers were represented (**Table 4.4**) which indicates a possibility of balanced responses

4.5 Length of experience in their current positions

Majority of teachers 46.5% and 10% had an experience of between 2-5years and 6-10 years respectively (**Table, 4.5**) hence familiar expected responses

4.4 **Examining of professional documents**

▶ **First objective** sought frequency of examining professional documents and opinions .Respondents were to indicate their opinion rated as; often (5); sometimes (4); Rarely (3); Very rarely (2); Never (1). Descriptive analysis was done where frequencies were compounded to **means** and **SD** and results indicated in **Table 4.6.** Further analysis was done using **Pearson correlation** and results presented in **Table 4.7.**

Table 4.6 : Results on frequency of examining professional documents

Document	Respondent	Mean	SD
Schemes of work	Principals	2.94	1.305
	Teachers	2.95	1.265
Lesson plans	Principals	2.78	1.309
	Teachers	2.80	1.272
Students progress records	Principals	2.72	1.179
	Teachers	2.68	1.098
Records of work	Principals	2.72	1.179
	Teachers	2.71	1.148
Attendance register	Principals	2.50	1.249
	Teachers	2.49	1.201

The results indicate;

▶ Means for all items are M>2 and indicating that professional documents are rarely examined

▶ SD of closer to 1 in all items indicates that respondents are unanimous in their opinions as there are not outliers

▶ Data from interviews also confirm that there is hardly any evidence of internal quality assurance practices at school level

► Table 4.7:Pearson correlations on professional

Professional Documents		KCSE mean score
Schemes of Work	Pearson Correlation	.937**
	Sig. (2-tailed)	.000
Lesson Plans	Pearson Correlation	.917**
	Sig. (2-tailed)	.000
Records of Work	Pearson Correlation	.887**
	Sig. (2-tailed)	.000
Students' progress Records	Pearson Correlation	.888**
	Sig. (2-tailed)	.000
Students attendance registers	Pearson Correlation	.872**
	Sig. (2-tailed)	.000

Results from the analysis indicated:

▶ Firstly, for all the professional documents considered, the **Pearson correlation coefficients** were close to 1 indicating high positive correlation.

▶ Secondly, the significance (2-tailed) on the correlations were all $0.000 (p<0.05)$ implying high statistical significance.

▶ The findings imply that the frequency of examining the documents considered was significantly related to the academic performance of the students measured by the performance at KCSE

4.5 Monitoring of teaching/learning resources

▶ The second objective sought to assess the influence monitoring of teaching/learning resources on performance of students

▶ Descriptive analysis results in which frequencies of responses were compounded to means and SD were presented in Tables 4.8

▶ Further inferential analysis was done and results presented in Table 4.9

Table 4.8 Frequency of inspecting instructional resources

Document	Respondent	Mean ()	Std Deviation
C1 Library	Principals	2.94	1.434
	Teachers	2.83	1.162
C2 Textbooks	Principals	3.11	1.231
	Teachers	2.79	1.030
C3 ICT equipment	Principals	3.13	1.305
	Teachers	3.06	1.079
C4 Sports equipment	Principals	3.00	1.328
	Teachers	2.63	1.265
C5 Science laboratories	Principals	3.17	1.383
	Teachers	2.97	1.233

Results from the analysis show that:

▶ Means for all items are >2 and indicating that instructional resources are rarely monitored

▶ SD of closer to 1 in all items indicates that respondents are unanimous in their opinions as there are no outliers

▶ Data from interviews pointed out that during external quality assurance exercise dilapidated and unkept instructional materials are evident pointing at lack of internal monitoring

Table 4.9: Correlation analysis on management of instructional resources

Instructional Resource		KCSE Mean score
Library	Pearson Correlation	.965**
	Sig. (2-tailed)	.000
	N	18
Textbooks	Pearson Correlation	.901**
	Sig. (2-tailed)	.000
	N	18
ICT equipment	Pearson Correlation	.952**
	Sig. (2-tailed)	.000
	N	81
Sports equipment	Pearson Correlation	.916**
	Sig. (2-tailed)	.000
	N	18
Science laboratories	Pearson Correlation	.909**
	Sig. (2-tailed)	.000
	N	18

▶ **Results from the analysis indicated;**

▶ Pearson correlation coefficients were close to 1 indicating high positive correlation.

▶ Secondly, the significance (2-tailed) on the correlations were all 0.00(p<0.05) implying high statistical significance.

▶ The findings imply that the frequency of inspecting instructional resources considered was significantly related to the academic performance of the students measured by the performance at KCSE

4.6 Feedback on internal quality assurance and performance

- The 3rd objective sought to examine the influence of feedback on internal quality assurance on performance in KCSE

- Descriptive analysis results in which frequencies of responses were compounded to means and SD were presented in Table 4.10

- Further inferential analysis was done and results presented in Table 4.11

Table 4.10: Frequency of using each feedback strategy

Strategy	Respondent	Mean ()	Std Deviation
Summons	Principals	3.17	1.200
	Teachers	3.07	1.132
Memos	Principals	3.39	1.290
	Teachers	3.13	1.297
Reprimands	Principals	3.22	1.166
	Teachers	2.94	0.966
Review Meetings	Principals	3.58	1.353
	Teachers	3.55	1.124

Results from the analysis show that;

▶ Means for items ;**summons, memos and reprimands** had **m <3.5** indicating that the strategies are rarely used.

▶ Means for the item on review meeting as a strategy had **m>3.5** indicating the strategy is commonly used.

▶ **SD** of closer to 1 in all items indicates that respondents are unanimous in their opinions as there are no outliers

▶ Data from **interviews** confirmed that use of memos, summons and reprimands is not envisaged in modern quality assurance practices.

Table 4.11 Pearson correlation on communication strategies

Communication strategy		KCSE mean score
Summons	Pearson Correlation	.-893**
	Sig. (2-tailed)	.000
		18
Memos	Pearson Correlation	.-781**
	Sig. (2-tailed)	.000
		18
Reprimands	Pearson Correlation	.-736**
	Sig. (2-tailed)	.000
		18
Review meetings	Pearson Correlation	.946**
	Sig. (2-tailed)	.000
		18

Results from the analysis show that;

▶ All communication strategies have strong correlation with performance as 0.00(p<0.05) implies significant correlation

▶ However, summons (-. 893)memos (-.791) and reprimands (.-736) are strongly and negatively correlated with performance

▶ Review meetings (.946) are the most strongly and positively correlated with performance

4.7 Monitoring syllabus coverage and performance

► The 4th objective sought to examine the influence of feedback on internal quality assurance on performance in **KCSE**

► Descriptive analysis results in which frequencies of responses were compounded to means and **SD** and presented in Table 4.12

► Further inferential analysis was done and results presented in Table 4.13

Table 4.12:Frequency of checking syllabus coverage

Strategy	Respondent	Mean ()	Std
E1 Checking students' exercise books	Principals	3.00	1.237
	Teachers	2.84	1.065
E2 Checking Lesson notes	Principals	2.89	1.410
	Teachers	2.79	1.396
E3 Checking teachers lesson attendance register	Principals	3.00	1.372
	Teachers	2.71	1.041
E4 Checking records of work against syllabi	Principals	3.06	1.514
	Teachers	2.91	1.378

Results indicate ;

▶ Means for all items was m<3.06 indicating that checking of syllabus coverage was rare

▶ SD of closer to 1 in all items indicates that respondents are unanimous in their opinions as there are no outliers

▶ Data from interviews concurred that syllabus coverage was hardly done by school principals but mostly left to heads of departments and subject heads

Table 4.13: Pearson correlation on monitoring of syllabus coverage

Instructional Resource		KCSE Mean score
Checking students exercise books	Pearson Correlation	.915**
	Sig. (2-tailed)	.000
	N	18
Checking students lesson notes	Pearson Correlation	.882**
	Sig. (2-tailed)	.000
	N	18
Checking teachers lesson attendance register	Pearson Correlation	.924**
	Sig. (2-tailed)	.000
	N	81
Checking records of work against the syllabi	Pearson Correlation	.920**
	Sig. (2-tailed)	.000
	N	18

The results indicate;

► Pearson correlation coefficients were all close to 1 indicating high positive correlation.

► Secondly, the significance (2-tailed) on the correlations were all $0.00 (p<0.05)$ implying high statistical significance.

► The findings imply that the frequency of checking syllabus coverage is significantly related to the academic performance of the students measured by the performance at KCSE

4.8 Academic performance

The study sought to establish the academic achievement of the schools surveyed over a period of three years from 2018-2020. High performing Indicating those above the mean of six and low performing indicating those below the mean of six. The results obtained are shown in table 4.14

Table 4.14: Mean scores according to low and high performing

School category	2018	2019	2020	Mean score
High performing	6.002	6.015	6.025	6.021
Low performing	1.518	1.745	2.801	2.021
Mean score	3.795	3.875	3.224	3.631

✓ The high achieving schools were found to have a higher mean score of 6.021, while low achieving schools had mean grade of 2.021

✓ The mean score for all the school categories was 3.631.

✓ During an interview one of the SCQASO, indicates that those principals in high achieving schools were keener to execute their internal quality assurance practices with regular assessment of professional documents and monitoring the use of instructional resources being common practices.

Chapter 5:Summary of major findings, conclusion and recommendations

5.2 Summary of findings

1. Professional documents were rarely examined and frequency of checking each item was significantly related to performance

2. Principals hardly monitored availability and utilization of instructional resources whose frequency in each item was significantly related to performance

3. Feedback on quality assurance was significantly related to performance with summons, memos and reprimanding strategies rarely used but negatively correlated with performance while review meetings were the most commonly used and positively correlated with performance

4. Monitoring of syllabus coverage was hardly done and all items were significantly positively correlated with performance

5.3 Conclusions

- Practice of examining professional documents is related to the academic performance of the students

- Prudent management of teaching/ learning resources such as libraries, ensure adequate supply and maximal utilization was found to be closely related to the academic performance of the students

- Use of summons, memos and reprimands to give feedback was negatively correlated with performance but use of review meeting common among majority of respondents is positively correlated with performance

- Monitoring of syllabus coverage by school principals can improve performance of students

- Quality Assurance Practices were found to influence students academic performance

5.4 Policy recommendations

i. School principals should be sensitized on rationale for internal quality assurance practices.
ii. Quality assurance and standards officers should make regular inspections to monitor and enforce internal quality assurance practices.
iii. The MOE of education should provide a quality management system to be adapted in schools.

5.5 Recommendations for further research

i. The study should be replicated at county and national level

i. The study should be replicated in other levels of education such as in primary schools

ii. A study should be done on principals' competencies on internal quality assurance practices

References

Adikinyi, J. W. (2007). Teachers Perception on the Role of Quality Assurance and Standards Officers on quality of education in Nairobi public Secondary Schools in Kenya. (M. Ed Thesis), University of Nairobi, Kenya.

Afolabi, F.O & Loto, A. B., (2008). The Head Master and Quality Control in Primary Education through Effective Intra School Supervision, Nigeria. Journal of teachers perception (Jotep), 2(24).

Bryman, A. (2016). Social Research Methods (5th ed.). London: Oxford University Press.

Cameron, R. (2011). Mixed methods research: the five Ps framework. The Electronic Journal of Business Research Methods, 9(2), 96-108.

Fowler, F. (2009). Survey Research Methods. (4th ed.). Thousand Oaks, CA: Sage.

Kothari, C. R. (2004). Research Methodology. New Delhi: Willy Eastern Limited.

Mugenda, O.M., & Mugenda, A.G. (2003). Research Methods: Quantitative & Qualitative Approaches. Nairobi: Acts Press.

Rowley, J. (2014)."Designing and using research questionnaires", Management Research Review, 37(3), 308-330.

TSC. (2016). TSC Circular on the implementation of the performance contract and TPAD. Nairobi: TSC.

UNESCO. (2012). Reforming school supervision for quality improvement. Paris: UNESCO.

Zhang, Y. (2004). Leadership attributes in a cultural setting in Singapore. International Journal of Educational Management, 8(6), 55-61.

END

THANK YOU