

Influence of management of resources by principals on quality assurance in public secondary schools in Thika West sub-county

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ABSTRACT

Principals play important roles towards quality assurance in secondary schools. The purpose of this study was analysing the Influence of management of resources by principals on quality assurance in public secondary schools in Thika West sub-county. The study was guided by The Systems Theory. The study applied mixed methods approach, that is, quantitative and qualitative methods and thus applies concurrent triangulation research design. The target population comprises of 50 principals, 93 HoDs and 9 QASOs all totaling to 152 which a sample of 49 respondents were selected using The Central Limit Theorem. Stratified sampling was applied to create five different strata based on the number of zones in Thika West Sub-county. From each stratum, three principals and six teachers were selected using purposive sampling. The researcher then applied simple random sampling to select three QASOs. Questionnaires were used to collect data from principals and HoDs whereas interview schedules were used to collect data from QASOs. Piloting of the instruments was conducted to help establish validity, reliability, credibility and dependability. Reliability was established using test retest method and reliability coefficient, $r = 0.65$ was obtained using Pearson's Product Moment Correlation Formula thus indicating higher internal consistency. Credibility was established through data triangulation by multiple analysts and experts whereas dependability was established through repeated trial. Data analysis began by identifying common themes. Frequency counts of the responses were also taken. Qualitative data was analyzed thematically based on research objectives whereas the quantitative data was analyzed using One-Sample t-Test Analysis in Statistical Packages for Social Sciences (SPSS) Version 21. The study has established that principals' management of resources enhance quality assurance in secondary schools. However, in Thika West Sub-county this has not been the case. The study thus recommends that principals should understand that prudent management of resources is critical to the quality assurance in most secondary schools. Thus, the school principals should ensure that resources are properly managed to realize the school's stated objectives.

Key words: Influence, management of resources, principals, quality assurance, secondary schools

INTRODUCTION

Introduction

1.1 Background to the Study

The adoption of quality assurance in schools as an emerging policy perspective in the contemporary world emanated at the world conference on Education for ALL (E.F.A) led by UNESCO at Thailand in 1990. Representatives of the international community agreed that all countries should pay greater attention towards improving all aspects of the quality of education and outcomes in schools (UNESCO 2002). In many African countries, inspection system lacks the capacity to provide effective quality assurance. Frequency of inspection is low when schools are visited, the inspection is often focused in administrative, rather than pedagogical issues.

Uganda is one of the East African countries that has embraced the idea of quality assurance in education. The ministry of Education and sports Uganda (2005) rules that government and stakeholders are obliged to ensure the provision of quality education for Uganda's children regardless of gender, status, ethics, social and cultural origin. This is not only necessary for the learner, but also for the achievement of other natural aspiration and objectives like economic development, social process, peace and democracy.

According to the Ministry of Education Science and Technology (MOEST) hand out for inspectors (2002), the inspectorate in Kenya was established 36 years ago. This was to ensure maintenance of quality and standards in education. According to the Ministry of Education (MOE) strategic plan (2006 – 2011) the directorate of quality assurance and standards was established in the year 2004. The functions of the directorate: to ensure quality teaching is taking place in the institution; monitor performance of the teacher and education in institutions, carry out regular and folk panel inspections of all educational institutions on regular basis among others. The directorate however suffers from inadequate human resource to enable it to efficiency and effectively deliver services.

Quality assurance is a philosophy and a process in which all functions and activities of an institution are treated equally, planned, controlled and implemented in a systematic and scientific manner (Venkaiah, 1995; Harrey, 1999). Raouf (2008) opines that quality assurance in education is the process of ensuring continuous improvement in all aspects of education business in an institution of learning to satisfy the needs and expectations of the institution customers. Principalship is a well-established position of the chief executive who performs staggering range of roles that are enormously complex and multi-tasking, providing instructional leadership by coordinating curricular, co-curricular programmes and is responsible for general administration for secondary schools.

The principals being the instructional leaders are at the vantage positions to supervise, monitor, assess, evaluate and disseminate current information or education issues and modern teaching techniques to teachers in order to stimulate them for scholarship and best practices in curriculum delivery. Quality assurance is achieved in schools that have strong principals who devote considerable time to coordinating and managing instruction. Such principals are highly visible in the school and stay close to the instructional process (Peters and Watermann, 1988). Sergio, Vannir and Starrat (1983) define supervision as a set of activities and role specifications designed to influence instruction. Wiles and Lovell (1975) state that teachers may view supervision as a positive force for programme improvement while another one may view it as a threat to the teacher's individuality.

The principals as the chief executive must make it possible for the staff to have access to suitable facilities of all kinds in order to discharge full their responsibilities in achieving educational objectives. The teachers must be well supervised and motivated in order to sustain their interest and make them dedicated, committed, willing, enthusiastic and inspiring teachers.

The Kenya Education sector support programme (KESSEP) report (2005 – 2010) supports effective monitoring of curriculum delivery in schools to ensure teacher effectiveness which is a mandate under the Director of quality Assurance and standards. (QQAS) and is performed by QASOS. More of then quality performance in schools is majorly determined by student examination outcome, teachers' effectiveness, staffing issues, physical and material resources and principal's supervisory practices among others. Apparently the dismal KCSE results in Thika West sub-county has prompted he study on supervisory roles of school principals in enhancing effective quality of education. The quality assurance and standards officers have been experiencing challenges in supervision and this necessitates the principal's supervisory role on quality assurance. It is envisaged that, principals are also QASO's 'number one' assisted by Heads of department in secondary schools. They are 'number one' because according to the norms, quality assurance officers would visit school at most once after many years unless it is a special measure or follow up being made and thus the study.

1.2 Statement of the Problem

Currently most principals neglected their duty as educational supervisors but concentrated on managing and administrating schools instead. Principals spend less than a third of their time in supervision. Principals are

reported to have used only 20% of their time for visiting classes, curriculum related task and staff development activities. Although supervision can help to improve the effectiveness of teaching and learning activities in class rooms, supervision is one of the management function and one of the most important component in curriculum process. The directorate of quality assurance and standards in Kenya ensure that there is maintenance of quality and standards in education. The directorate however suffers from inadequate human resources to enable it to efficiently and effectively deliver services. The quality assurance officers only visit schools whenever there are crisis and when their advice is least likely to be sympathetic to the plight of teachers. This therefore necessitates the need for principal's supervision for effective quality assurance. If the supervisory role of principals is not treated with seriousness it deserves, the quality of education may be compromised. This in the long run would result to very poor academic and co-curricular performances by students in Thika West Sub-county.

1.3 Purpose of the Study

The purpose of the study is to assess how the principal's management of resources contributes to quality assurance in secondary schools which aims at improving quality of education to learners.

1.4 Objectives of the Study

- i. To establish influence of management of resources by principals on quality assurance in public secondary schools in Thika West sub-county.

1.5 Research Question

- i. What is the influence of management of resources by principals on quality assurance in public secondary schools in Thika West sub-county?

1.6 Rationale and Significance of the Study

Quality assurance in secondary schools in Thika West Sub-county has been on the decline. That is, KCSE performance has been dismal, time taken to meet deadlines long and poor time management. However, little has been done to interrogate the supervisory roles of secondary school principals in enhancing quality assurance. Thus, the findings of the study may significantly benefit teachers, educators, policy makers, school administrators, curriculum developers and ministry of Education in finding a solution to effective teaching and learning in Kenyan Secondary schools. The study may serve to improve on service delivery by principals to schools and foster teachers understanding on their role in keeping with current changes in the inspection programmes. It may provide crucial information, paving way for further research on the area. The study findings may be significant to already practicing QASO as well as the principals and those aspiring to take up this noble task. The study may offer the principals an opportunity to evaluate their work performance through effective quality assurance indicators. By understanding these general perceptions, the principals may be forced to change or to improve the way they go about their duties during their administration, management and leadership of secondary schools. The study might also strengthen the existing knowledge of secondary schools principals on quality assurance.

1.7 Delimitations and Scope of the Study

The study was delimited to public secondary schools principals, teachers and QASOS in Thika West Sub-county. This study was confined to selected secondary schools, 2 boys boarding, 2 girls boarding and 2 mixed boarding and 9 mixed day secondary schools. In addition 3 QASOs were randomly selected for the study. The study only covered one sub-county and the results obtained may not depict accuracy as to what is happening with the principals' supervisory roles on quality assurance in public secondary schools in the entire county at large. The sub-county has various types of secondary schools, National, extra-county, county, sub-county, boys boarding, girls boarding, mixed boarding and mixed day. The ministry of education performance have shown that the sub-county and generally the entire county has not been performing well in academics and co-curricular activities for the last five years.

1.8 Limitations of the Study

- i. The results of the study may not be generalized to other secondary schools since such schools may have unique aspects that contribute to quality assurance other than the variables under investigation.
- ii. Some of the respondents, especially principals, were difficult, hostile and unwilling to volunteer the correct information about management of resources in the schools under their supervision. In this case, the researcher explained to them that the study aimed at complementing their efforts in improving quality of education and academic performance of students.
- iii. The principals, teachers and Quality Assurance Officers sampled may not reflect the entire population of principals, teachers and QASOs in Thika West Sub-county. In this case, the researcher selected samples which were as representative as possible.

2.0 LITERATURE REVIEW

2.1 Empirical Literature Review on Quality Assurance in Education

Quality assurance and standards has been a thorny issue both regionally and internationally. In South Africa quality education has been compromised with high number of learners compared to teachers. However, the country has expressed its seriousness in managing quality in education. There are several concerns on the problems the quality assurance and standards officers are facing. These problems include short time frames and notices, unavailability of transport and shortage of assessment tools (Horsolman, 2002). In Scottish schools the initiative of quality was formally launched in June (1997) as a partnership between schools, education authorities and the Scottish office.

The intention was to raise educational standards and deliver excellence by improving the quality of educational provisions in Scottish schools. The quality initiative in Scottish schools was improved to include a culture of co-operation, collaboration and consultation (Clark, 2000). Nigeria has experienced massive growth in aspect of quantitative growth. In the process however, quality seems to have suffered with all the attendance consequences. Without quality, education becomes wastage and even poses danger to individual beneficiary and the society. The quality of education in Nigeria being provided for children has been a source of grave concern for a long time as reported by Nwagwu et al, (2000). Quality control practices in Nigerian education are based essentially in school inspection, monitoring and control. School inspection has been criticized for its inadequacy to assist classroom teachers to improve their performance (Tuoyo, 1999). West-Burnham (1994) also sees inspection as an external imposition which is prone to rejection by teachers. This is more so when inspectors behave like tin-gods (Ijaiya, 1991).

School inspection is particularly criticized for its limitations as a post-mortem examination of certain school activities, searches for lapses and wastages rather than preventing them and then seeking ratification which is often more costly (West-Burnham, 1994) in terms of time, money and energy to the student, government, teachers and parents. In United Kingdom (UK), there is a long history of Inspection thoroughly documented (Taylor, 1996). However, the inspections were few and far between, and in 1993 HMI were either disbanded or re-employed in the Offices of Standards in Education (OFSTED). These offices were headed by a part-time chief who was to inspect one school in four each with teams headed by trained registered inspectors including lay members (Taylor, 1996).

2.1.1 The Concept of Principals' Supervision

Wiles and Bandi (1986) defines supervision as the general leadership function that coordinates and manages those activities concerned with learning. A supervisor is a member of the first line management responsible for a particular group. This position gives the holder some influence over others. At first level, one must realize that the responsibility involved is immense than that of controlling others (Sagimo 2002). Olembo et al (1992) says that supervision concerns the tactic of efficient and proper management of personnel in line with goals of administration. Okumbe (1999) concurs with Olembo et al (1992) when he says that supervision is considered as that dimension or phase of administration that is concerned with providing instructional effectiveness through guiding and influencing teachers and students to strive towards desirable teaching and learning behaviour in order to achieve educational goals. Through history the concept of supervision and its practices in education can be traced back to the earlier American education systems. Eye and Nelzer (1971) outlines supervisory trends from 1640's to the present.

Supervision to them evolved from a more judicious nature of inspection, whereby inspectors made judgement about a teacher rather than the teaching or learning, to the present nature that focuses on assisting teachers to improve their instructional effectiveness. In Kenya supervision can be traced way back to the time of colonial government. In 1925 Phelps Stokes commission commented on the poor quality of education provided to the African schools. The colonial government responded by recognizing the importance of supervision in schools as a means of enhancing quality of education (Lewis 1962). The Beecher report of 1949 recommended the introduction of efficient supervision of schools. Soon after independence, the Ominde commission (1964) identified lack of supervision as one of the major causes of low standards of education. To rectify the situation the committee recommended the use of school based supervision to be done by Headteachers. It further recommended provision of sufficient supervision and careful selection of supervisors.

The commission also suggested careful selection and preparation of headteachers for their task. It can therefore be argued that it is the time when the role of principal's as supervisor was realized. Traditionally supervision usually referred to the managerial or leadership function of overseeing the productivity progress of the employees. However, supervision should be viewed more from the coaching and mentoring perspective than managerial perspective hence supervision may be defined as a development process designed to support and enhance an individual's motivation, autonomy, self-awareness and skills necessary to accomplish effectively the job at hand. Crucial to the organization, it is from the supervisor that instructions go through and from whom information, guidance and advice are channelled through. The supervisor represents the other workforce and his calibre affects the performance of the department. In school context the supervision is identified as designed and developing teaching aids and materials in form of resources units which help the staff force to carry out their function effectively.

Supervision in school is viewed as what personnel does to maintain or change the school operations in the way that affect/influence teaching process employed to promote learning (Olembo 1975). It is geared towards maintaining and improving the learning in Kenya. Olembe et al (1998) explains that supervision in education administration can be understood in two functional ways "overseeing" and "helping". The overseeing function of supervision involves the task at hand and assesses the extent to which particular objectives have been accomplished within the bounds set by those in authority for their subordinates. These activities are generally referred to as quality assurance and standards. In Kenya, the overseeing function has been delegated to the directorate of quality assurance and standards, which is the professional arm of the ministry of education. The helping aspect of supervision involves facilitating, supporting, guiding and assisting teachers and students to enhance effectiveness in classroom. This function is delegated to principals.

Schon (1988) observes that the concept of instructional supervision emphasizes collegial classroom observations and specifically focuses on support, guidance and encouragement of reflective teaching. For Opiyo (2004) supervision is a basic component of administration. Every administration needs inbuilt supervision system to provide the cohesion and direction necessary to achieve the purpose of the organization. According to Olembe et al (1998), supervision concerns the tactic of efficient and proper management of personnel and those aspects of administration that are aimed at maintaining efforts of personnel in line with the goal of administration. Okumbe further argues that supervision evolved from the realization that we accomplish very little alone and that we cannot accomplish much by simply grouping people together. According to Okumbe (1988) supervision can be divided into General supervision and Instructional supervision. General supervision activities include writing and revision of curricular preparation of units and development of processes and instruments for reporting to parent. Instructional supervision on the other hand is concerned with the pupils or the students learning in the classroom.

The most recent concept in instructional supervision is called clinical supervision. Clinical supervision is the rationale and practice designed to improve the teacher's classroom performance. Its principle data are obtained from the events which take place in the classroom. Goldhammer (1980) have defined clinical supervision as that phase of instructional supervision which draws its data from first hand observation of actual teaching events and involves face to face and other associated interactions. Interactions between the supervisors and the teacher in the analysis of teaching behaviours at activities for instructional improvement. Okumbe (1998) further argues that supervision as an administrative activity whose strategy is to stimulate teachers towards greater pedagogic effectiveness and productivity.

For Okumbe supervision must not be confused with inspection or “snooper vision” which have autocratic connotations for compliance. Academic achievement which is an indicator of quality assurance is influenced by the extent to which the principal performs instructional supervision duties as revealed by Kamindo (1998). In her study in Ngong division she sought to find out how the headteachers performed their supervision duties. The findings of the study were that headteachers in private schools carried out supervision more than in their counterparts in public schools and this as manifested by better performance in national examinations. There are basic requirements for supervision to be efficient and effective. Therefore, the supervisor must understand the physical organization of the department, understand ones duties and responsibilities and must preferably prepare a duty sheet and understand the powers and limitations.

Together with understanding the organization and one’s job description, it is fundamental to understand their roles by understanding their duties and those of teaching and non-teaching staff. According to Sagimo (2002), unless the headteachers is conversant with the capability of his teachers, then supervision becomes defective. Teacher management therefore relates to effective quality assurance. Supervisor must be responsible for staff training and development. Teachers and other employees must be equipped with right skills and expertise to effectively perform their duties. This will enable achievement of goals and objectives. There is truism in the statement that motivated and qualifies staff achieve organizational productive objective.

According to Armstrong (2006), “Handbook of human resources”, planning is an important principle of supervision. Alongside with planning, a supervisor must do it strategically. He/she must account for the effects of holidays, policy change and other resources that are likely to have some effects on the sections work (Campbell 1966). Planning is surrounded by other internal and external environments. Thus, before the principal plans he/she must consider the strengths/weakness/opportunities/threats before making choice of the objectives and goals. The supervisor should be royal and have a sense of duty. Thus he will supervise as an example by serving as a role model. In addition the supervisor should be royal to senior and subordinates. For effective performance of a supervisor, Armstrong asserts that the supervisor must be decisive, cost-conscious, communicate effectively, motivate and create good employee relationship to ensure industrial peace. In addition, the supervisor must strive to create good relationship between himself and the staff. The supervisor cannot operate alone but rather a member of the team where a member has a common goal and a valuable part to play in realizing that goal. The team is created by effectively communicating to the group its requirement and developing a culture that is conducive for team building (Burnmet, 1995). The principal must build a team, as the whole is more than the subtotal or its parts.

2.1.2 Principals’ Supervisory Roles and Quality Assurance

Academic achievement is influenced by the extent to which the head teacher performs supervisory duties as revealed through study by Kamindo (1998). In her study in Ngong division, she found out how principals performed their instructional supervisory duties. The findings of the study were that principals in private schools carried instructional more regularly than their counterparts in public schools. As a result, teachers in private schools were more efficient in their duties than public schools and this was manifested by better performance in national examinations. Kimosop (2002) concurred with Kamindo (1998) in a study aimed at finding out the role of the headteachers as instructional supervisors in Karbaranet as Instructional supervisors in Karbaranet and Salawa divisions of Baringo County. The research findings showed that most principals do not perform their instructional supervisory duties for example classroom observations, checking students’ notes and teaching notes frequently. As a result schools where the principals did minimal instructional supervision duties experienced inadequate learning resources. Lack of supervision likewise leads to inadequate teaching in schools. This implies that principals who are committed to the supervision perform well in academics. Malav (1988) conducted a study on causes of poor performance of students in KCPE examinations in Kaloleni Sub-county of Kilifi County. The findings of the study revealed that schools principals were too busy with other administrative duties to the extent that little time was left for evaluation purpose. As a result, head teacher did not evaluate teachers’ scheme of work, preparation of lesson plans, lesson notes, and teachers’ record of work and observations of teaching in progress for various classes was neglected. Malav concluded that lack of supervision in Kaloleni sub-county contributed to the zones being the poorest in terms of academic performance in Kilifi County.

Supervision therefore involves guiding and influencing teachers and students to strive towards desirable teaching and learning behaviour in order to achieve good academics performance. According to Libben and Huglies (1992), the high gaining teacher uses time allocated for the class in a highly efficient manner. Classes begin promptly at the beginning of each lesson. Management time and transition time are kept to a minimum and the teacher reinforces students who are spending time on task. Levine and Lezzotte's (1990), studies on the correct use of time are expanded between classes and other extraneous factors affecting teaching and learning time. Blum (1984) concurs with Levine and Lozzottes (1990) when he says that in schools with good time management through supervision, classes start quickly and peacefully. Teachers have assignments or activities ready for students when they arrive. Materials are supplied or ready too.

Administrative matters are handled with quick efficient roundness that keeps class disruptions to a minimum. Craig (1999) carried out a research to assess students' performance. He found out that teachers do not spend much time conducting statistical analysis of their assessment data. This probably led to the poor performance hence developing the need to know principals supervise teachers to ensure this is carried out. Proper students' evaluation enables principals to know the areas that need development and acts as factor for enhancing quality assurance.

2.2 Theoretical Framework: The Systems Theory

This study was based on system theory which was proposed by Biologist Ludwing Von Bertalanffy (1968). A system is a set of elements or parts which possess some degree of independence or identity but which at the same time form an integral part of a larger whole. Whole systems are composed of parts or subsystems which can be decomposed further into component elements. It involves thinking in terms of the whole problem, task, operation or group and its interacting subparts, as well as monitoring the optimum alternative sequences, interactions or components parts. This theory holds that components of a system are linked together in such complex ways that action taken by one produces for reaching effects on others. For instance if the school principal does not supervise teachers, non-teaching staff, implement government policies and properly manage resources, this would compromise performance in national examinations, co-curricular activities such as games and sports.

A principal is both an administrator and as well as a supervisor. He/she acts as a supervisor when checking records of work visiting classrooms to observe teaching, checking on teacher class attendance, giving and marking of exams, analysing of exams, participation in co-curricular activities, checking check out by teachers and non-teaching staff. The study is also based on role theory. The proponent of this theory is Mullin (2004). Mullin (2004) posits that a role is the expected pattern of behaviour associated with members occupying a particular position within the structure of the organization. Quality assurance and standards officers are required to explicitly portray certain skills above their counterpart. The theory relates to the supervisory roles of principals for effective quality assurance in education which is improved through performance in examinations and co-curricular activities

RESEARCH DESIGN AND METHODOLOGY

2.1 Research Methodology

The study applied mixed methods approach since there was collection of both quantitative and qualitative data. Kothari (2005) indicates that, in quantitative approach, the researcher decides what to study; asks specific questions, collects quantifiable data from a large number of participants; analyzes these numbers using statistics; and conducts the inquiry in an unbiased and objective manner. Quantitative data was collected using questionnaires. In qualitative approach, the researcher relied on the views of participants, asked broad, general questions and collected data consisting largely of words from the participants. The researcher described and analyzed these words based on the objectives of the study. In this case, data was collected using interview schedules and observations.

2.1.1 Research Design

The study applied a concurrent triangulation design since it is single-phase design in which researcher implemented the quantitative and qualitative methods during the same timeframe and with equal weight

(Creswell, 2009). This design generally involves the concurrent, but separate, collection and analysis of quantitative and qualitative data so that the researcher may best understand the research problem. The researcher attempted to merge the two data sets, typically by bringing the separate results together in the interpretation.

2.2 Locale of Study

The research study was carried out in Thika West Sub-county in Kiambu County. The sub-county has an approximate of population of 125, 326 persons and covers an area of 304 km², that is, a population density of 413 persons per km² (KNBS, 2009). Subsistence agriculture is economic activity in Thika West Sub-county. Cash crops grown in the division include coffee, pineapples and cashew-nuts. Residents also practice commercial trade. The sub-county also faces challenges with some of its residents living in relative poverty which has created challenges in the education sector in the sub-county with instances of low accessibility, high drop-out rates, low teacher-student ratio and high reported instances of poor nutrition amongst pre-school learners which has negatively influenced their academic performance. Quality assurance are yet to be adhered to by most principals and teachers with KCSE performance in this sub-county is dismal. However, little has been done to assess the effectiveness of principals' supervisory roles on quality assurance in most secondary schools. It was against this background that the researcher focused on Thika West Sub-county as the locale of study.

3.3 Target Population

Borg & Gall (2008) define target population as all members of a real or hypothetical set of people, events or objects to which an investigator wishes to generalize the results of a research study. The target population were all 40 public secondary schools in Thika West sub-county in Kiambu County. These schools were either day or boarding; one to four streamed and either National, Extra-county, county or sub-county. Thus, the study targeted 50 principals, 93 Heads of Departments and 9 QASOs all totalling to 152 as shown in Table 1;

Table 1: Target Population

Categories	Target Population
Principals	50
Heads of Departments (HoDs)	93
Quality Assurance Officers (QASOs)	9
Total	152

Source: Thika West Sub-county Education Office (2015)

3.4 Sampling and Sampling Techniques

A sample is defined as a subset of the population (Kothari, 2005). The researcher applied The Central Limit Theorem to obtain a sample of 15 secondary schools, that is, 30% of the targeted 50 secondary schools. The Central Limit Theorem states that, for any sample size, $N \geq 30$, sampling distribution of means is approximately a normal distribution irrespective of the parent population (Kothari, 2005). It thus allowed the researcher to select, $N \geq 30$ from the target population. Thus, the researcher sampled 49 respondents, that is, 32.2% of 152. The researcher applied stratified random sampling to create five different strata based on the number of zones in Thika West Sub-county.

From each stratum, three principals and six teachers were selected using purposive sampling since they hold responsibilities that bring them closer to the learners in order to relate their ideas and experiences to performance. The researcher then applied simple random sampling to select three QASOs. Simple random sampling was appropriate since it helped avoid the feeling of bias amongst the respondents. This sampling

procedure enabled the researcher to realize a sample of 15 principals, 31 teachers and 3 QASOs as shown in Table 2;

Table 2: Sample Size Grid

Categories	Sample Size
Principals	15
Heads of Departments (HoDs)	31
Quality Assurance Officers (QASOs)	3
Total	49

Source: Researcher (2015)

3.5 Data Collection Instruments

These are tools which were used to gather information about the specific research objectives. They included; questionnaire and interview schedules.

3.5.1 Questionnaire for Principals and Teachers

According to Creswell (2009) and Bland (2000), a questionnaire is a data collection instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents and is often designed for statistical analysis of the response. In this study, the researcher applied a self-designed questionnaire with closed-ended test items to collect quantitative data about the views of principals and teachers. The questionnaire was divided into two parts. The first part consisted of information on respondents' demography, while the second part contained information on study objectives with 5-point Likert type of questions to help capture the specific objectives of the study.

3.5.2 Interview Schedules for Quality Assurance Officers

According to Kothari (2005), an interview provides access to what is inside a person's mind and makes it possible to measure what a person knows, what a person likes or dislikes, that is, values and preferences, and what a person thinks, that is, attitudes and beliefs. It is always helpful in gathering classified information and of personal nature about the respondents. The researcher used structured interview schedule with open-ended test items to collect qualitative data from sampled Quality Assurance Officers. Interviews were important for this study since they allowed the researcher to collect information with ease, ask probing questions, develop a good rapport with the respondents and have a goal-directed attempt to obtain reliable and valid measures in the form of verbal responses from one or more interviewees.

3.6 Piloting of Research Instruments

Piloting of research instruments was conducted amongst two principals and three teachers from two secondary schools in Thika West Sub-county. The purpose of piloting was to check on suitability and the clarity of the questions on the instruments designed, relevance of the information being sought and the language used and to test the reliability of the instrument. The respondents from whom data was collected during the piloting were not considered during the actual data collection for the study.

3.6.1 Validity of the Instruments

Validity refers to the accuracy and meaningful of inferences which are based on the research report. It is the degree to which results obtained from the analysis of the data obtained in the study represents the variables of the study. If such data is a true reflection of the variables, then inferences based on such data were accurate and

meaningful. It tells whether an item measures or describes what it is supposed to measure or describe. It is the degree to which the empirical measure or several measures of the concept, accurately measure the concept (Orodho, 2005). For the purpose of the study, the researcher sought assistance of the experts who assessed the relevance of the content used in the questionnaires. They examined the questionnaires individually and then provide feedback. Their findings and recommendations were incorporated in the final questionnaires.

3.6.2 Reliability of the Instruments

Creswell (2009) defines reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial. In order to improve the reliability of the instrument, the researcher, with the help of her supervisors, critically assessed the consistency of the responses on the piloted instruments to make a judgment on their reliability. Test-retest technique of reliability testing was applied; whereby the pilot questionnaires were administered twice to the respondents, with a one week interval, to allow for reliability testing. Then the researcher examined the research instruments for appropriateness of items so as to identify any ambiguous and/or unclear items. Such items were restated to ensure that the respondents clearly understood them. Computation of the correlation between the scores of the two sets was carried out and correlation coefficient obtained using Pearson's Product Moment Correlation Coefficient Method. A reliability coefficient of $r = 0.65$ was obtained which indicated high internal reliability.

3.6.3 Credibility of Qualitative Data

One of the key criteria addressed by positivist researchers is that internal validity in which they seek to ensure that their study measures or tests what is actually intended. According to Merriam, the qualitative investigators equivalent concepts, that is credibility deals with the question "How congruent are the findings with reality" Lincoln and Guba argues that ensuring credibility is one of most important factor in establishing trustworthiness. The following provisions may be made by researcher to promote confidence that they have accurately accorded the phenomenon under scrutiny. The adoption of research methods well established both in qualitative investigation in general and in information science in particular. The development of an early familiarity with the culture of participating organizations before the first data collection dialogue takes place.

This may be achieved via consultations of appropriate documents and preliminary visits to the organizations themselves. Random sampling of individuals to serve as informants. Triangulation which may involve the use of different methods especially observation, focus groups and individual interviews which form the major data collection strategies for much qualitative research. Tactics help ensure honesty in informants when contributing the data. In particular each person who is approached should be given opportunities to refuse to participate in the project so as to ensure that the data collection sessions involve only those who are genuinely willing to take part and prepare to offer data freely. Peer scrutiny of the research project. Opportunities for scrutiny of the project by colleague, peers, and academics should be welcomed as should the feedback offered to the researcher at any presentation that are made over the duration of the project.

3.6.4 Dependability of Qualitative Data

In order to address the dependability issue more directly, the processes within the study should be reported in detail, thereby enabling a future researcher to repeat the work 'if not necessary to gain if not necessary to gain the same results. Such in-depth coverage also allows the reader to assess the extent to which proper research practices have been followed. To enable the reader of the research report to develop a thorough understanding of the methods and their effectiveness the text should include the research design and its implementation describing what was planned and executed on a strategic level. The operational detail of data gathering addressing the minutiae of what was done in the field.

3.7 Data Collection Procedure

The researcher sought for an introductory letter from The School of postgraduate Studies of Mount Kenya University and authorization letter and research permit from National Commission for Science, Technology and Innovation. These documents enabled the researcher to secure an authorization letter from The County Commissioner and County director of Education, Kiambu. These letters introduce the researcher to pre-school managers of the sampled pre-schools seeking permission to carry out research in Thika West Sub-county. The researcher then booked appointments with the pre-schools to administer questionnaires and to conduct interviews to collect data from the respondents. The researcher conducted face to face interviews for the purpose of getting first-hand information directly from the respondents. The interviews were administered to QASOs. On the questionnaire, the research visited the schools personally and administer the questionnaire to the respondents. This enabled the researcher to collect the questionnaires from the respondents thus enhancing high

response rate hence influencing the reliability of the findings. It saved time and embarrassment that could occur if the questionnaires are not returned in time.

3.8 Data Analysis and Presentation

Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains. Since the study involved concurrent triangulation design, the separately, but concurrently, collected data will be analyzed quantitatively and qualitatively and then merged into one overall interpretation in which the researcher related the quantitative results to the qualitative findings. Frequency counts of the responses were then obtained so as to generate descriptive information about the respondents and to illustrate the general trend of findings on the various variables that were under investigation. Qualitative data was analyzed thematically along the study objectives whereas quantitative data was analyzed using One-sample t-Test in Statistical Packages for Social Science (SPSS Version 21). The findings of the study were presented using tables.

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Questionnaire Return Rate

The questionnaires were administered in person to the principals and HoDs. Out of the 46 questionnaires administered, 44 were successfully filled and returned. This gave return rates as indicated in Table 3;

Table 3: Questionnaire Return Rate

Respondent Categories	Sampled Respondents	Returned Questionnaires	Achieved Return Rate
Principals	15	15	100.00%
HoDs	31	29	93.55%
Total	46	44	95.65%

The above information shows that the total questionnaire return rate was 95.65% affirming the fact that the questionnaire return rate was sufficient and above 75% of the acceptable levels to enable generalization of the results to the target population (Creswell, 2009). At the same time, QASOs registered a response rate of 100.0% (3 out of 3).

4.2 Respondents' Demographic Information

The research instruments solicited demographic information of the respondents. These included' gender and level of education.

4.2.1 Gender of the Respondents

Information about the distribution of the respondents by gender was collected and the results were as indicated in Table 4:

Table 4: Distribution of the Respondents by Gender

Gender	PR		HoDs		QASO	
	F	%	F	%	F	%
Male	10	66.7	17	58.6	2	66.7%

Female	5	33.3	12	41.4	1	33.3%
Total	15	100	29	100	3	100

Key: PR-Principals; HoDs-Heads of Departments; QASO-Quality Assurance Officers; F-Frequency

The data on the Table 4 indicate that two-thirds (66.7%) of the sampled principals were male with female principals constituting a third (33.3%) of the sample. However, majority (58.6%) of the sampled HoDs were female with 41.4% being male. At the same time, two-thirds (66.7%) of the Quality Assurance Officers were male whereas female constituted a third (33.3%) of the sample. These data reveal that there was adequate gender disparity at all levels of the study.

4.2.2 Principals' and HoDs' Level of Education

The research instruments also elicited information on respondents' level of education since this variable could influence their ability to supply credible information about the research objectives. The results were as indicated as shown in Table 5;

Table 5: Principals', HoDs' and QASO Officers' Level of Education

Educational Qualifications	PR		HoDs		QASO	
	F	%	F	%	F	%
Diploma	0	0.0	5	17.2	1	33.3
Bachelors'	10	66.7	21	72.4	1	33.3
Postgraduate	5	33.3	3	10.4	1	33.3
Total	15	100	29	100	3	100

Key: PR-Principals; HoDs-Heads of Departments; QASO-Quality Assurance Officers; F-Frequency

The data shown on Table 5 indicates that two-thirds (66.7%) of the sampled principals had bachelors' degrees whereas a third (33.3%) had postgraduate qualifications. In the same vein, majority (72.4%) of the HoDs had bachelors' degrees. 17.2% of the HoDs had diplomas whereas a paltry 10.4% had postgraduate qualifications. A third (33.3%) of the QASOs had diplomas, a third (33.3%) had bachelors' degrees as did a third who had postgraduate qualifications. This information reveals that the principals, HoDs and Quality officers met the minimum qualification to competent to answer the research questions.

4.4 Management of Resources and Quality Assurance

The study intended to find out how principals' management of resources at school enhances quality assurance. Data was collected from principals and HoDs, organized and summarized and results were as indicated in Table 9;

Table 9: Principals' and HoDs' Views on the Influence of Principals' Management of Resources on Quality Assurance

Test Items	RESP	Ratings				
		SA	A	U	D	SD
		%	%	%	%	%
Principals' management of financial records enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management	PR	80.4	8.4	1.7	5.3	4.2
	HoDs	88.3	5.4	1.9	2.3	2.1
Principals' maintenance and repair of school resources enhance KCSE performance, performance in co-curricular activities, meeting deadlines and time management	PR	78.7	14.7	2.4	3.1	1.1
	HoDs	77.2	13.3	1.5	6.3	1.7
Principals' expansion of existing resources enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management	PR	69.7	12.1	2.1	10.3	5.8
	HoDs	75.3	20.1	1.4	1.3	1.9
Principals' purchasing of educational materials enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management	PR	74.9	17.3	2.6	3.4	1.8
	HoDs	59.9	27.4	3.3	5.7	3.7

Key: RESP-Respondents; PR-Principals; HoDs-Heads of Departments

The data on the Table 9 above reveals that majority (80.4%PR; 88.3%HoDs) of the sampled principals and HoDs strongly agreed with the view that principals' management of financial records enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management as did 8.4%HT and 5.4%TR who agreed. However, only a paltry 1.7% of the sampled principals as well as 1.9% of HoDs were undecided, 5.3% of principals as did 2.3% of the HoDs disagreed whereas 4.2% of principals and 2.1% of the HoDs strongly disagreed. These findings lend credence to the assertions of Olembo et al (1992) who says that supervision concerns the tactic of efficient and proper management of personnel in line with goals of administration. Okumbe (1999) concurs with Olembo et al (1992) when he says that supervision is considered as that dimension or phase of administration that is concerned with providing instructional effectiveness through guiding and influencing teachers and students to strive towards desirable teaching and learning behaviour in order to achieve educational goals.

At the same time, the study revealed that majority of the respondents (78.7%PR and 77.2%HoDs) strongly agreed with the view that principals' maintenance and repair of school resources enhance KCSE performance, performance in co-curricular activities, meeting deadlines and time management. 4.7% of the principals as did 13.3% of the sampled HoDs agreed. However, 2.4% of principals and 1.5% of the HoDs were undecided, 3.1% of principals and 6.3% of the HoDs disagreed whereas 1.1% of the sampled principals as did 1.7% of the HoDs strongly disagreed. The study also revealed that majority of the respondents (69.7%PR and 75.3%HoDs) strongly agreed with the view that principals' expansion of existing resources enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management. 12.1% of the principals as did 20.1% of the sampled HoDs agreed. However, 2.1% of principals and 1.4% of the HoDs were undecided, 10.3% of principals and 1.3% of the HoDs disagreed whereas 5.8% of the sampled principals as did 1.9% of the HoDs strongly disagreed.

In the same vein, majority of the sampled respondents (74.9%PR and 59.9%HoDs) strongly agreed with the view that principals' purchasing of educational materials enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management. A small proportion of 17.3% of the sampled principals and 27.4% of the sampled HoDs agreed. At the same time, 2.6% of the sampled principals and 3.3%

of HoDs were undecided, 3.4% of principals and 5.7% of the HoDs disagreed whereas 1.8% of the sampled principals as did 3.7% of the HoDs strongly disagreed. These findings corroborate the assertions of Olembe et al (1998) who indicated that, in school context the supervision is identified as designed and developing teaching aids and materials in form of resources units which help the staff force to carry out their function effectively. Supervision in school is viewed as what personnel does to maintain or change the school operations in the way that affect/influence teaching process employed to promote learning. That is, supervision in education administration can be understood in two functional ways “overseeing” and “helping”. The overseeing function of supervision involves the task at hand and assesses the extent to which particular objectives have been accomplished within the bounds set by those in authority for their subordinates. These activities are generally referred to as quality assurance and standards.

To verify the possibility of difference between principals’ management of school resources and quality assurance, data was collected on principals’ management of school resources, KCSE performance and time taken to meet deadlines the results are shown in Table 10;

Table 10: Results of Principals’ Management of Resources and Time Taken to meet Deadlines and KCSE Performance

Management of Resources	Quality Assurance Indicators	
	Time Taken to meet Deadlines (hours)	KCSE Performance
Principals who supervise financial records	265	64
Principals who supervise maintenance and repair of school resources	200	71
Principals who supervise expansion of infrastructure	225	61
Principals who supervise purchase of educational materials	298	55

The results in Table 10 indicate that principals’ management of financial records, maintenance and repair of school resources, expansion of infrastructure and purchase of educational materials determines time taken to meet deadlines and hence performance in KCSE. These findings corroborate the assertions of Olembo et al (1992) that supervision is a dimension or phase of administration that is concerned with providing instructional effectiveness through guiding and influencing teachers and students to strive towards desirable teaching and learning behaviour in order to achieve educational goals. These results were subjected to One Sample t-Test Analysis and results were as indicated in Table 11:

Table 11: One-Sample t-Test Analysis of Difference between Principals’ Management of Resources and Time Taken to meet Deadlines and KCSE Performance

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Time taken to meet deadlines	11.416	3	.001	247.000	178.14	315.86
KCSE Performance	16.867	3	.000	63.250	51.32	75.18

From the One-Sample t-Test Analysis in Table 11, the processed data, which is the population parameters, has a significance level of 0.001 for time taken to meet deadlines and 0.000 for KCSE performance which shows that the data is ideal for making a conclusion on the population’s parameter as the value of significance values (0.001 and 0.000) are less than 5%, that is, $p\text{-value}=0.001 < 0.05$ and $0.000 < 0.05$. It also indicates that there is significant difference between principals’ management of resources and means of time taken to meet deadlines

and KCSE performance. These results were consistent with the findings of a study conducted by Opiyo (2004) which generated a p-value of $0.0044 < 0.05$. These findings attest to the fact that supervision is a basic component of administration. That is, every administration needs inbuilt supervision system to provide the cohesion and direction necessary to achieve the purpose of the organization.

4.4.1 Thematic Analysis of Qualitative Data

The Quality Assurance Officers who were interviewed also indicated that principals' management of resources enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management. Just like in quantitative data analysis, these views also lend credence to the assertions of Olembo et al (1992) who says that supervision concerns the tactic of efficient and proper management of personnel in line with goals of administration. In other words, supervision is considered as that dimension or phase of administration that is concerned with providing instructional effectiveness through guiding and influencing teachers and students to strive towards desirable teaching and learning behaviour in order to achieve educational goals.

The interviewees also expressed views in favour of the view that principals' maintenance and repair of school resources enhance KCSE performance, performance in co-curricular activities, meeting deadlines and time management. They also indicated that principals' expansion of existing resources enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management as did the principals' purchasing of educational materials. These views corroborate the assertions of Olembo et al (1998) who indicated that, in school context the supervision is identified as designed and developing teaching aids and materials in form of resources units which help the staff force to carry out their function effectively. In other words, supervision in school is viewed as what personnel does to maintain or change the school operations in the way that affect/influence teaching process employed to promote learning. That is, supervision in education administration can be understood in two functional ways "overseeing" and "helping". The overseeing function of supervision involves the task at hand and assesses the extent to which particular objectives have been accomplished within the bounds set by those in authority for their subordinates. These activities are generally referred to as quality assurance and standards.

SUMMARY

Management of Resources and Quality Assurance

The study has also established that principals' management of resources at school enhances quality assurance. That is, principals' management of financial records enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management as did as did maintenance and repair of resources, expansion of infrastructure and purchase of educational materials. These findings point to the fact that supervision concerns the tactic of efficient and proper management of personnel in line with goals of administration. Supervision is considered as that dimension or phase of administration that is concerned with providing instructional effectiveness through guiding and influencing teachers and students to strive towards desirable teaching and learning behaviour in order to achieve educational goals.

In school context, the supervision is identified as designed and developing teaching aids and materials in form of resources units which help the staff force to carry out their function effectively. That is, supervision in school is viewed as what personnel does to maintain or change the school operations in the way that affect/influence teaching process employed to promote learning. That is, supervision in education administration can be understood in two functional ways "overseeing" and "helping". The overseeing function of supervision involves the task at hand and assesses the extent to which particular objectives have been accomplished within the bounds set by those in authority for their subordinates. These activities are generally referred to as quality assurance and standards.

Conclusions

Drawing from the findings above, it is evident that principals' supervision of teachers' activities enhance quality assurance in secondary schools. That is, principals' supervision of class attendance, professional documents,

curriculum implementation, setting and marking of exams, teacher appraisal and teacher motivation enhance KCSE performance, performance in co-curricular activities, meeting deadlines and time management.

In the same vein, principals' management of resources at school enhances quality assurance. That is, principals' management of financial records enhances KCSE performance, performance in co-curricular activities, meeting deadlines and time management as did as did maintenance and repair of resources, expansion of infrastructure and purchase of educational materials. These findings point to the fact that supervision concerns the tactic of efficient and proper management of personnel in line with goals of administration. That is, supervision is considered as that dimension or phase of administration that is concerned with providing instructional effectiveness through guiding and influencing teachers and students to strive towards desirable teaching and learning behaviour in order to achieve educational goals. On the same breath, principals' implementation of secondary school policies influence quality assurance.

Implementation of curriculum policy, fees guidelines and teacher recruitment serve to enhance KCSE performance, performance in co-curricular activities, meeting deadlines and time management. In addition, principals' supervision of non-teaching staff enhances quality assurance in secondary schools. Principals' supervision of job attendance of non-teaching staff, appraisal of non-teaching staff, recruitment of new non-teaching staff and their motivation enhance KCSE performance, performance in co-curricular activities, meeting deadlines and time management.

Recommendations

The study makes the following recommendations;

- i. Principals should attend training courses on human resource management in order to enable them acquire pre-requisite skills to supervise teachers and non-teaching staff. This may go a long way in developing mutual understanding on how to meet deadlines and register impressive performance in KCSE.
- ii. Principals should understand that prudent management of resources is critical to the quality assurance in most secondary schools. Thus, the school principals should ensure that resources are properly managed to realize the school's stated objectives.

Suggestions for Further Research

- i. A study could be conducted to find out the effectiveness of principals' management training on quality assurance in secondary schools
- ii. A study could be conducted to find out the influence of school dynamics on quality assurance

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