

**PRINCIPALS' CHARACTERISTICS INFLUENCING IMPLEMENTATION OF
PROCUREMENT PRACTICES IN PUBLIC SECONDARY SCHOOLS IN
EMBAKASI SUB-COUNTY, NAIROBI COUNTY, KENYA**

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DECLARATION

This research report is my original work and has not been presented to any other university or for any other examination or award.

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DEDICATION

To my parents Mr. and Mrs. Lazarus Kirianki, my dear wife Hellen Karimi and my lovely daughter Elsie Neema.

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ABBREVIATIONS AND ACRONYMS

BoM	Board of Management
CFSK	Computer for Schools Kenya
DEFRA	Department for Environment Food and Rural Affairs
GDP	Gross Domestic Product
ICT	Information Communication Technology
KEMI	Kenya Education Management Institute
KISE	Kenya Education Staff institute
MoE	Ministry of Education
NGOs	Non-Governmental Organizations
OECD	Organization for Economic Cooperation and Development
PPDA	Public Procurement and Disposal Act
POEA	Public Officer Ethics Act
PPOA	Public Procurement Oversight Authority
SASA	South African School Act
SGBs	School Governing Bodies

ABSTRACT

The purpose of this study was to investigate principals' characteristics influencing the implementation of procurement practices in public secondary schools in Embakasi Sub-County in Nairobi. The study was guided by four objectives namely: to determine the influence of the principals' training in implementation of procurement practices in public secondary schools in Embakasi Sub County; to assess the influence of principals' experience in implementation of procurement practices in public secondary schools in Embakasi Sub-County; to examine the influence of principals' level of awareness in implementation of procurement practices in public secondary schools in Embakasi Sub County; and to assess the influence of principals' use of Information Communication Technology in implementation of procurement practices in public secondary schools in Embakasi Sub-County. The study adopted a descriptive survey design to collect and analyze both qualitative and quantitative data. The target population of the study was all the (7) registered public secondary schools Embakasi Sub County. The sample for the study was made of 7 principals, 7 BOM members in public secondary schools and 1 district school auditor in Embakasi Sub County, totaling to 15 respondents. The study adopted purposive sampling to get the sample size of all the schools in Embakasi sub-county. A census was applied to get the principals, the district school auditor and the BoM chairpersons who were the key respondents in this study. Questionnaires and an interview guide were used to obtain data from the respondents. Content validity was ensured through expert judgment while reliability of the instruments was done through test-retest method. A one hundred response rate was recorded for this study. The findings were that majority of the principals indicated that their highest academic qualification was a master's degree. The principals' level of education influenced their competence in management of procurement process in schools to a moderate extent. The findings also revealed that majority respondents indicated that a principal's experience affects his or her competence on procurement. The study findings showed that the principals used their knowledge, experience and expertise to enrich their capability to conduct proper procurement in schools. The study also concluded that principals' experience, level of awareness, ICT literacy and level of education affected procurement processes at Kenyan public secondary schools to a great extent. The experiences of principals from financial management and other areas that deal with human resources plays a very important role in effective procurement management in secondary schools. The study recommended that the government through the Ministry of Education should organize regular training for principals to help them improve on their procurement management practices in schools.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Procurement is a process that forms part of the key operations within the organization. It denotes the acquiring of merchandises and services in the correct value, from the accurate source and the correct amount all to fulfill a particular requirement. It is through procurement that the organization acquires various resources that ensure its continued existence (Njeru, 2015). Public procurement on the other hand is generally defined as the acquiring, appointment or obtaining by any additional vote means of goods, building workings and services by the public segment. Public procurement therefore implies acquisition by a procuring body by means of communal coffers (World Bank, 1995).

Each government is mandated to deliver indispensable services to its people. Government establishments throughout the globe seem to devote between 8 per cent and 25 per cent of their GDPs on goods and services (OECD 2007). Developed countries like the United Kingdom, public procurement expenditure is approximately £150 billion per annum (DEFRA 2007). In emerging economies, public procurement is progressively acknowledged as indispensable in service provision (Basheka & Bisangabasaija, 2010), whose allocation ranges from 40 percent to 70 percent of total expenditure. A good number of countries both in

industrialized and least industrialized nations have instituted procurement modifications concerning rules and guidelines.

In South Africa, South African School Act of 1996 started School Governing Bodies (SGBs) that comprise of the principal, chosen representatives of parents, tutors, sub-ordinate staff and students. Section 21 of South African School Act (SASA) mandates the School Governing Bodies (SGBs) to be in charge of maintaining schools property, purchase of schoolbooks, learning resources or apparatus and recompense for services offered to those institutions. Nombasa, (2004) quoted by Kaluga, (2015) revealed that most SGBs in South Africa lacked skills in drafting of budgets, writing financial and policy statements, control of finance and petty cash, initiative and innovation as well as accountability. The main reason was illiteracy and lack of training. Kakwezi and Nyeko (2010) too indicates that the procurement sections of communal bodies in Uganda face the problem of lacking sufficient information about the procurement process. This indicates that such like issues need training on procurement processes and expected performance levels.

Application of public procurement guidelines in public secondary schools might depend on the experience of the school's head teacher on management training. Onyinkwa, (2013) asserts that school heads who are the managers don't have any previous training before work appointment. This agrees with Kamunge Report of 1988 in that school heads are selected from amongst the employed educators many

of who lack any prior experience on school or organizational management. Kalai (1998) perceived that countless managerial fiascoes in secondary schools are a consequence of insufficient knowledge of the nature of management and deficiency of methodical awareness combined with important talents. Kiawa (2011) records that leaders require self-renewal and also great administrative abilities to assist them to be more energetic in their responsibilities. On condition that they are provided with the appropriate skills, such preparation in procurement will nonetheless safeguard faithfulness to procurement processes therefore apprehension of appropriate operation of public procurement guidelines (Kainuma & Tawara, 2006). Absence of exercise may possibly lead to mismanagements in the carrying out of public procurement guidelines in institutes.

According to Ngatara and Ayuma, (2016), among the reasons for non – acquiescence with procurement guidelines is the level of consciousness with the procurement guidelines. All through the early years of the commencement of public procurement guidelines in the Netherlands, several metropolises may perhaps not observe to the guidelines since they remained not accustomed with them. Gelderman, (2006) confirms this situation in an investigation on obedience of procurement dictates; Public purchasers will be in compliance with the rules they know and understand. On the other hand, the situation is conceivable that those who are familiar with the regulations know it so well that they understand how to seal the loopholes to their advantage. It can be noticed that uncertainty in the public procurement processes can offer chances for

unscrupulous tendering and distinguish contractor hodgepodge and this can lead to pitiable compliance extents.

Principal's experience is vital to attain supply conscription and management skills that comprise of management of monies proceeds, expenditures and preservation of money steadiness (Mutual, 2013). Unless a head teacher learnt accounting techniques, the information of monetary reports is assimilated over teaching and involvement. A very knowledgeable head teacher is consequently well positioned in procurement and monetary management in general. The treatment of those precisely essential official papers in financial management do not necessitate exercise only but corresponding knowledge. The further knowledgeable a leader is, the superior they are in financial management (Baraka, 2010)

Information Communication Technology (ICT) is a notable factor in the implementation of the public procurement practices. Government officials and elected leaders have increasingly come to realize that public agencies must utilize ICT in order to enhance the procurement processes in the public sector (Wekesa et al, 2016). A study carried by Njeru, (2015) showed that information communication technology influences the implementation of procurement practices in tertiary public training institutions in Kenya. The study findings showed that ICT factors notably; computer literacy level amongst the employees in the institutions, level of automation, use procurement systems, ICT infrastructure and level of embracement of E-procurement systems to a large

extent affects effective implementation of procurement practices in tertiary public training institutions.

Procurement in Kenya is done in total adherence to the Public Procurement and Disposal Act, 2005 (PPDA, 2005). Adherence to the requirements of the act would constitute the best procurement practices. However, there are cases of deviation from the regulations of the Act, which could have many different causes. In studying public procurement practice and the factors that influence it, can establish why some institutions fail to practice it. This would help the affected sections related to the schools' operations to make the necessary adjustments. In all the stages of the process of procurement, disappointment can nearly be built in, if there is insufficient attention paid to the process. It benefits to contemplate each phase of the practice and to examine the probable reasons of disappointment as an initial stage to taking anticipatory achievement (Stephen, 2006).

Public secondary schools in Kenya are government owned and are funded by the government under the free (subsidized) secondary education jointly with other donors, as well as the parents and sponsors of these institutions. There may be also funding from other sources such as grants and fundraisers (Republic of Kenya, 2013). Attainment of goods and services in these organizations is therefore through public procurement. Procurement in public secondary schools is overseen by the necessities of the PPDA of 2005, Public Procurement Guidelines of 2006 as well as the Public Procurement Manual for Schools and Colleges of

2009 (Republic of Kenya, 2006). These govern all aspects of procurement and disposal of unserviceable goods in the public sector which includes public secondary schools. This was to enhance accountability and transparency in expenditure management.

An efficient public procurement system is vital to the advancement of African countries and is a concrete expression of their national commitments to making the best possible use of public resources (Odhiambo & Kamau, 2003). A study done by the Kenya Publishers Association on book vendors for instance, points to the way volumes suppliers conspire with institution leaders to misappropriate cash put along for subsidized education in public secondary schools in Kenya (Wanyama, 2010).

A study conducted by Nyakundi et al, (2012) on Challenges Facing Procurement Committees in Implementing the Procurement Act in secondary schools in Kisii County, showed that in various public institutes, the procedure is still blanketed by confidentiality, disorganization and dishonesty of which there is need to establish the cause. Mulwa, et al. (2014) carried out a study to establish if secondary schools in Kenya comply with public procurement regulations. Their study found out that, important factors like forming public procurement structure, induction of the procurement personnel, trainings to principals and other possible interventions within the public procurement need to be considered to achieve compliance in the public sector. Their study further revealed that, in relation to

PPDA compliance, the level of compliance was low hence the need to create awareness.

In Embakasi Sub County, it is notable that some schools misrepresent the guidelines to limit the involvement of concerned contractors in attaining, or still guide the conclusion of other people; while others fail or delay in submitting annual financial report (District Audit report 2011 - 2012). In 2015 for instance, only 2 public secondary schools out of the 7 were prompt in the submission of their books of account for the annual audit, 4 schools delayed and 1 failed completely. In 2014, 5 secondary schools submitted on time while 1 delayed and 1 failed. In 2013, 4 secondary schools submitted on time while 3 delayed to submit while in 2012, only 5 schools had submitted their books for annual audit by June.

1.2 Statement of the problem

Procurement practices are vital aspects in financial management. Studies show that in spite of the fulfillment of the procurement Guidelines, Obedience levels tend to be less in public bodies in Kenya (PPOA 2007). Although measures put by the government, various factors like: Training, experience, level of awareness and technological issues continue to hamper the procurement process. All the above cases denote massive wastage of funds and resources.

Studies by Wanyama (2010), Nyakundi *et al* (2012) and Mulwa *et al* (2014), were conducted on the influence of individual characteristics of principals on efficiency

in the procurement process in schools and colleges. In spite of these studies, there is limited literature on principal's competency in financial management in the recent past in Embakasi Sub County. In view of the above gaps and bearing in mind that procurement is vital in financial management, it was imperative that a study to be done in Embakasi Sub County to establish principals' characteristics influencing the implementation of procurement practices in public secondary schools.

1.3 Purpose of the study

The purpose of this study was to investigate principals' characteristics influencing the implementation of procurement practices in public secondary schools in Embakasi Sub County in Nairobi.

1.4 Objectives of the study

The study sought to investigate the following objectives:

- i. To determine the influence of the principals' training in implementation of procurement practices in public secondary schools in Embakasi Sub County.
- ii. To assess the influence of principals' experience in implementation of procurement practices in public secondary schools in Embakasi Sub County.

- iii. To examine the influence of principals' level of awareness in implementation of procurement practices in public secondary schools in Embakasi Sub-County.
- iv. To assess the influence of principals' use of Information Communication Technology in implementation of procurement practices in public secondary schools in Embakasi Sub-County.

1.5 Research questions

The study sought to answer the following questions:

- i. To what extent does principals' level of training influence implementation of procurement practices in public secondary schools in Embakasi Sub County?
- ii. In what ways does a principals' experience influence the implementation of procurement practices in public secondary schools in Embakasi Sub-County?
- iii. What is the influence of principals' level of awareness in implementation of procurement practices in public secondary schools in Embakasi Sub-County?
- iv. In what way does a principals' use of Information Communication Technology influence the implementation of procurement practices in public secondary schools in Embakasi Sub-County?

1.6 Significance of the study

The study findings may be important to the Ministry of Education (MoE) in formulating policies related to the management of the public secondary schools taking into account the competencies required for a secondary school principal. The TSC under the department of education may also use the study conclusions to determine persons' skills in financial management to be promoted to be secondary school principals. The school Board of Management (BoM) may use the results and recommendations to make strategic decisions concerning procurement plans in the school. It may also help the BoM to efficiently manage financial resources in line with MoE regulations on financial management. The principal on the other hand, may use the findings to help in identify the characteristics influencing implementation of procurement practices in a school to enable him/her to be a better financial manager. The findings may also provide data for future researchers in a similar area to acquire information on principals' characteristics influencing carrying out of procurement practices in public secondary schools.

1.7 Limitations of the study

The limitation in this study was that the respondents might have considered some material as private and therefore not be enthusiastic to disclose most of it. The researcher overcame the restriction by having an introductory letter from the school that was meant to guarantee the respondents that the material gathered would only be used solely for education purposes.

1.8 Delimitation of the study

The study was restricted to public secondary schools in Embakasi Sub-County that include mixed day and girls' boarding secondary schools. It is delimited to four principals' characteristics relating to procurement practice which are: Principals' level of training, experience, level of awareness and use of ICT. The respondents were principals and BoM members because they are directly involved in procurement services in public secondary schools.

1.9 Assumptions of the study

- i. That Principals' characteristics influence implementation of procurement practices in secondary schools.
- ii. The respondents will give accurate information to the best of their knowledge.
- iii. The research activities will rarely be affected by the weather constraints.

1.10 Definition of significant terms

Accountability refers to an economic or monetary trustworthiness and evasion of deception that ensures that cash is recorded and consumed as decided and in line with suitable guidelines, and that information is presented to shareholders in schools.

Compliance refers to conforming to public procurement rules, such as specifications, policies, standards or law

Experience refers to the knowledge and skill that is gained through time spent doing a job or activity.

Influence refers to the influence that an individual or object has on somebody's choice, thoughts or conduct or the way something occurs.

Information Communication Technology (ICT) refers to an expertise that includes usage of computers, software and internet networks arrangement for auxiliary statistics dispensation and communication meanings.

Level of awareness refers to the principals' understanding of the guidelines to be observed in the practice of procurement practices

Public procurement refers to obtaining goods and services using communal funds.

Public secondary schools refers to the schools in which government coffers are dispensed and which have statements of revenue and disbursement that are sanctioned by the Ministry of Education.

Procurement practices in public secondary schools refers to a development in which public secondary schools meet their requirements for properties, services, construction works and utilities in a manner that realizes significance for public cash.

Training refers to individual's capability to complete a given task, behavioral or to execute specific cognitive procedures related to a particular work. It is offered by KEMI to provide principals and other employees with specific knowledge and skills necessary for school financial management.

1.11 Organization of the study

The study was organized in five chapters. Chapter one deals with the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, assumptions of the study, limitations of the study, delimitations of the study, definitions of the significant terms and organizations of the study. Chapter two has the relevant literature reviewed on civic procurement guidelines, procurement practices in communal secondary institutions, principals' training and implementation of procurement practices, principals' experience and implementation of procurement practices, principals' level of awareness and implementation of procurement practices, principals' use of ICT and implementation of procurement practices, summary of literature review, theoretical and conceptual frameworks. Chapter three deals with research methodology focusing on research design, target population, sample size and sampling procedures, research instruments, validity of the instruments, reliability of the instruments, data collection procedures, data analysis techniques and ethical considerations. Chapter four focuses on data analysis, interpretation and discussion of the findings while chapter five contains the conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers reviewed relevant literature on principals' characteristics influencing procurement practices. The chapter was hence broken down into public procurement regulations; principals' training, principals' experience, principals' level of awareness and principals' use of Information Communication Technology and procurement; summary of literature review; theoretical framework and the presentation of conceptual framework.

2.2 Public procurement regulations

The guidelines became effective from the 1st January of 2007 following the officialization of the Public Procurement and Disposal Regulations Act 2005. The significance of the Act is geared towards instituting measures aimed at procurement and the clearance of out dated, archaic or excess provisions and paraphernalia through civic bodies to accomplish well-organized administration of public coffers. The act encompasses eleven sections. Part 2 of the Act contains information on the formation of bodies entangled in the direction of public procurement.

Part 3 of the Act contains the interior association of public bodies in as much as procurement is apprehensive. Part 4 of the Act has the overall necessities for procurement by civic bodies. It pinpoints the obligations that every procurement body intends to practice the uncluttered tendering under Part 5 or unconventional attaining techniques under Part 6. Part 5 provides guidelines for ground work of tender official papers, announcements and solicitation to tender, tender sanctuaries, and also introduction of tenders. Part 6 comprises of substitute procurement processes. Part 7 offers administrative review of procurement procedures and part 9 offers the ineligibility from partaking in public procurement.

2.3 Procurement practices in public secondary schools

The advancement of the procurement meaning and its possessions on organization's performance relies hugely on two factors; the economic worth and

the cost exchangeable occasions. Particularly as soon as the value and volume of the purchases is high, the occasions to save cash ought to be exploited. In the humblest terms, important the value of the acquisitions is done by shrewd the prices of the obtained goods and service area together which will upshot in the total financial price (Agaba & Shipman 2007). Procurement activities have a connection with an organization's financial management. All the procurement activities associate out rightly with the manner in which finances are organized and used to the advantage of the institute.

Procurement has undeviating and unintended expenses that obviously influence the efficiency. The administrative arrangement, division of work as well as process productivity; remain constituents that alter the efficacy of the procurement activities in schools. The procurement procedures as well as measures have a proximate association with other purposes on the institutions and on their productivity as well. For instance, developments in quality matters as well as on the provision time frames show the overall expenses on the logistics and production side. Lowering the whole expenses can be seen to reduce the quality of goods. Price effective procurement should not suggest that the quality of goods would decline (Roodhooft & Abbeele, 2006). The effective utilization of procurement approaches is the solution to discharging the establishment's funds.

2.4 Principals' training and implementation of procurement practices

Training is the practice of recognizing and advancing the required understanding and abilities necessary for performing a task. Sessional Paper No. 1 of 2005 specifies that in-service training and funding services in Kenya are presented by Kenya Education Staff institute (KESI) currently Kenya Education Management Institute (KEMI). This approves with Mullins (2008) who articulates that preparation is a chief inspiration on the accomplishment of any establishment. Charles (2007) struggles that absence of specialized preparation is a significant impairment to upkeep of in height close of know-how in the performance of procurement processes in various public schools.

Kuria (2008) noted that, school principals are observed as monetary supervisors and bookkeeping generals at institute level while Board of Management members are the policy makers. Both however mainly lack professional qualifications to enable them execute their duties effectively (Asiago, 2010). While school bursars are required to maintain records of both revenue and expenditure and advice the principal, most of them either lack technical capacity to offer guidance or intentionally neglect procurement practices hence giving room unethical practices for their own gain. The generally nonexistence of procurement understanding therefore, remnants a chief feebleness to the competence of attaining operations. The procurement officers require exercise and awareness of procurement procedures and regulations as spelt out in procurement Act (Hui et al., 2011).

Saunders (1997) supposed that efficaciousoperative of administrativeassemblies and effective process of preparationswhichorganizations is in need on the quality and capability of operateworking. Kalai, (1998) experimental that numerous administrative disappointments in secondary schools consequence from insufficientempathetic of the countryside of management and nonexistence of technical knowledge coupled with essential skills. The study done by PPOA (2007) designated that the procurement guidelinesremainedpreordained to make sure that effectivetutoring was being given to specialists in order to qualify them function in procurement. It is similarly shown fromresearch by the PPOA that existingknow-howof obtainingdivisions didn'tencounter the requirementintended forparticularobtaininginformation notwithstanding the fact that there are strides in the direction ofraising a specialized procurement personnel. The requirements to educate professionals and arm them with improved skills are urgent (Sauber et al., 2008).

2.5 Principals' experience and implementation of procurement practices

Appointment of public secondary school principals in Kenya is not on the basis of predetermined leadership qualities including financial management but rather job group 'M' among other factors. This means that one is only trained on management when they become principals or deputy principals (Republic of

Kenya, 2005). The capability of a school principals aids them to obtain supply enlistment and management talents which take in consideration things like: management of cash proceeds, expenditures and maintenance of money equilibriums (Mutual, 2013). For proper implementation of procurement practices, the school need to retain records.

According to a study by Baraka (2010), unless a head teacher learned accounting, the awareness of monetary testimonials is developed over and done with exercise and knowledge. A more knowledgeable head teacher is consequently well positioned in financial management. The treatments of these precisely essential official papers in economic management do not require training merely but correspondingly knowledge. The more knowledgeable a manager is, the enhanced he is in economic management (Baraka, 2010).

2.6 Principals' level of awareness and implementation of procurement practices

In line with a study by Rossi (2010) an organization compliant through prescribed brass tacks indicates knowledge of the rules. Gelderman et al., (2006), asserts that among the factors causing inefficiency in procurement lie the extent of awareness with the procurement guidelines. Public purchasers will be in compliant with the rules they know and understand. The possibility of non-compliance may be increased by poor clarity. Providing education and training to the public buyers will be a tremendous move in increasing compliance to the

directives. Eyaa and Oluka (2011) hold that failure to understand procurement guidelines result into poor compliant levels or untimely procurement. They found that in the Kenyan schools, becoming familiar with procurement guidelines that makes it a significant prediction for compliance with attaining principles.

According to De Boer and Telgen (2008) among the aspects causing non – amenableness using procurement protocols within public sector is the level of understanding the procurement legislations. Awareness in public procurement regulations is very crucial for easy implementation. Increasing knowledge of the law can possibly improve compliance. Thus, proper induction of the school principals on public procurement regulations is likely to enhance implementation of public procurement regulations in schools. Lack of induction, may adversely influence implementation of public procurement regulations.

2.7 Principals use of ICT and implementation of procurement practices

ICT and Management Information Systems role in enhancing efficacy and transparency in public procurement cannot be underrated (De Boer and Telgen, 2008). In line with Sessional Paper No. 1 of 2005, one of the ICT strategy intentions is in the direction of assimilating ICTs in the distribution of the schooling programmes and to promote effective and effectual management at the entire stages of schooling.

ICT in public procurement is intended to serve a number of goals which include: Broadening participation in public tendering, acceleration of procurement process

and ensuring efficiency through expansion of demand and supply; provision of transparent move in public procurement through review of established procedures and public information, and by development of audit systems.

2.8 Summary of the literature

The literature reviewed the relationship between principals' level of training, experience, level of awareness and use of ICT in public procurement practice. The study by Mullins (2008) found that a school heads' level of training has a strong correlation with their efficiency in procurement contradicting Kuria (2008) who found that level of training was not a predictor of efficiency in procurement. Wambui (2013) established that a principals' experience is a significant predictor of efficiency in procurement. The finding however contradicted that by Wanyama (2010) that experience wasn't a significant factor influencing efficiency in procurement. This therefore presents a conceptual gap which the researcher sought to fill by addressing the inconsistencies in the findings. Charles (2008) established that a managers' efficiency in the use of ICT in procurement influences their efficiency in the procurement process. However the study was concentrated on private firms a gap that this study seeks to address by focusing on public institutions.

2.9 Theoretical framework

This study is based on two theories namely the knowledge-based theory and the institution based theory.

The knowledge-based theory

The proponents of this theory argue that since knowledge-based possessions are typically challenging to reproduce and informally multifaceted, assorted awareness bases and aptitudes among organizations are the key elements of continued inexpensive benefit and greater commercial performance (Grant 2007). The knowledge-based model concludes the environment of organizational human resource competences that are frequently predisposed by the landscape of exercise prearranged to the workers. The study consequently used this model to determine by what means employee's particularly secondary school principals are trained, in order to equip them with financial knowledge and ICT skills that helps them support effective implementation of procurement practice.

Institutional based theory

The institutional theory is an old-fashioned methodology which can be employed to inspect fundamentals of civic procurement (Obanda 2010). There isn't anyone, generally approved classification of "established model". In line with Scott (2004), organizations stand comprised of cultural-cognitive as well as regulational essentials which coupled using connected happenings as well as possessions provides significance for life cycle. Scott (2004) states 3 institution pillars as regulatory, normative and cultural cognitive. Each pillar addressed different issue such as use of rules, laws and sanctions that is regulatory pillar as enforcement mechanism to be complied with.

In Kenya, public procurement is under guidance of the PPDA Act 2005, which spells out the regulations and guidelines issued by the PPOA (Barrett, 2010). Institutional theory asserts that if organizations complied with the Public procurement regulations then they would be assured of competition in bids, transparent processes, and professional approach in procurement process (Munywoki, 2016). This theory is applicable in the study because principals' experience and his level of awareness in procurement guidelines influence performance of public institutions. This study enables public secondary school principals to ensure full implementation and compliance with procurement regulations in service delivery.

2.10 Conceptual framework

Procurement practice is a purpose of numerous aspects as illustrated in figure 2.1:

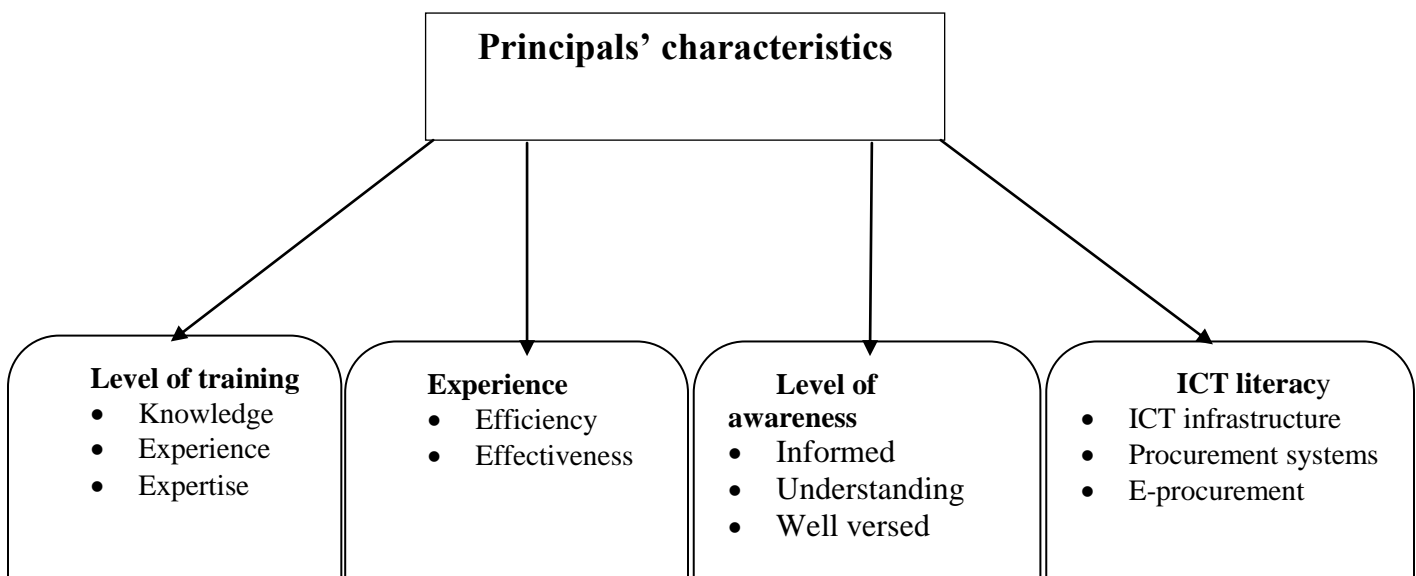


Fig 2.1 conceptual framework on principals' characteristics and procurement practices

The conceptual framework is drawn from the assumption that there is a strong relationship between the principals' personal characteristics which include: level of training, experience, level of awareness, ICT literacy and procurement process which enables him to implement procurement practices. Professional training on financial management and experience coupled with level of awareness and

knowledge in ICT would provide the principal with necessary skills in implementing procurement practices.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter has the overall method conceived in aiding the research in answering questions raised in the study. It pacts the research design, population targeted, size

of the sample and sampling procedures, instruments for collecting data, instruments' validity and reliability, data collection procedure, data analysis methods and ethical concerns.

3.2 Research design

It is the configuration for directs the effectiveness of a research technique and the consequent investigation of attained information (Kothari, 2004). It offers a structure for giving proof that fit a given measure and to the study query that the investigators are concerned with. This study assumed a descriptive survey design method of which according to Orodho (2003) is a technique of collecting data by interrogating or giving questionnaires to a sample of people. This study tangled a one-time interface with sets of individuals of public secondary schools. Interpretations concerning relations among variables were made, without straight interpolation from related variation of independent and dependent variables (Paton, 2002). The variables were probed without any influence or change. A descriptive research design consents an individual to present information collected from numerous techniques that assess and document review to give the whole information (Yin, 2009). The design investigated the principals' characteristics influencing the implementation of procurement practices in public secondary schools in Embakasi sub-county.

3.3 Target population

This concerns all the items under study (Kothari, 2004). According to Mugenda and Mugenda, (2003) target population has the entire number of persons to whom the researcher expects to generalize the outcomes of his/her outcomes. Embakasi Sub County has seven 7 registered public secondary schools as at 27th Nov, 2017. The schools in the sub county fall into two categories namely: 1 extra county girls' boarding and sub-county mixed day schools which are 6 in number. The study population was made of 7 public secondary schools in Embakasi sub - County with a target population comprising of 7 principals and 7 Board of Management members.

3.4 Sample size and sampling procedures

The entire population of 7 schools was selected through census sampling because the population parameter was small and according to Neuman (2000), if the target population is small, the researcher is recommended to consider the entire population for the study. The Sample of respondents was drawn from the 7 principals and 7 BoM members who were board chair persons in public secondary schools in Embakasi Sub-County. (Nairobi County Education Office, 2015). The study sampled 7 Principals and BOM members from the 7 public secondary schools because they are directly involved in procurement practices in secondary schools and hence form important respondents for this study.

3.5 Research instruments

A questionnaire and an interview guide were used to obtain information. The questionnaire formed the key instrument for data collection because of its confidentiality especially in some sensitive areas, requires less time and allows collection of data from a wide population. The respondents of the questionnaires were the members of the BoM who are involved in the procurement process and the school principal who is the financial manager of the institution. A questionnaire was quite appropriate for the study because according to Mugenda and Mugenda, (2007) a questionnaire gather written data from learned respondents, and those that are rather capable of answering items appropriately. Principals' questionnaires had two main sections: Section A contained demographic information and section B that collected data on the independent variables. The BoM members' questionnaire had 5 sections: section A had demographic data, section B, C, D and E had items on influence of the independent variables which include: training, experience, level of awareness and use of Information Communication Technology (ICT) on implementation of procurement practices. The questionnaires were administered using a drop-and-pick-later technique.

Interview schedule has a set of established queries the investigator enquires when interrogating (Mugenda & Mugenda, 2007). Unrestricted one on one interviews were conducted to complement the questionnaires. Interview schedules involved one on one meetings with the District schools auditor. The interview was used to

overcome the challenges that might have arisen from the solitary use of questionnaires.

3.6 Validity of the instruments

The extent in which experiential measures the concept correctly is validity (Orodho, 2005). Validity was enhanced through appraisal of the questionnaires and verification by the supervisors who are experts. According to Oso and Onen (2011), instrument validity can be enhanced through expert judgment. The content validity was used to measure the extent to which information gathered using the questionnaires represented the particular sphere of indicators in the study. The supervisor was consulted to assess the questionnaire to ensure that it measured the concept it was intended to. The pre-test was done using two public secondary schools in the sub county. Corrections and adjustments on unclear items were done appropriately.

3.7 Reliability of the instruments

This is the measure of the degree to which a research instrument produces steady results after repetitive trials, (Mugenda & Mugenda 2003). The questionnaires were assessed for reliability through test-retest method. The researcher used split half reliability to calculate the reliability of the questionnaires. The technique involved recording the odd against the even items of the trial independently for unlike classes of the instruments thereafter computing the Pearson product moment correlation coefficient for the two sets. From the results, split-half

reliability coefficient was calculated for the principals' and BoM members' questionnaires using the Spearman's-Brown Prophecy formula as follows:

$$r = \frac{2 \times \text{Corr. between the halves}}{1 + \text{Corr. between the halves}}$$

Where r = resultant reliability coefficient.

Split-half reliability coefficients for the principals' and principals' questionnaires were calculated using the SPSS computer programme and established coefficients of 0.80 and 0.84 respectively. The reliability of the interview guide was calculated using the Karl Pearson correlation coefficient which determines whether a relationship is positive or negative. This was selected for the reason of its ability to summarize the course of correlation. If the correlation coefficient is closer to +1 or -1, then the variables are closely related. The instrument yielded a coefficient of 0.07. According to Orodho (2004), a reliability co-efficient of around 0.8 is adequate to judge an instrument as reliable for use in conducting a study. Consequently the instruments were considered acceptable and reliable for use in the study.

3.8 Data collection procedures

After obtaining letter of identification from the University of Nairobi, the researcher pursued for study permits from the National Commission for Science Technology and Innovation, Nairobi county education director and the Embakasi sub-county education officer. The researcher reported to the relevant authority before proceeding to the field. Such authorities included the Nairobi County Director of Education for self-introduction and subsequent authorization to conduct research. A letter of transmittal was written which would introduce the researcher to the respondents and assure them total confidentiality of their identities. In this study the researcher visited the sampled schools to reserve an appointment with the respective school principals and also to acquaint with them. The researcher administered the questionnaires to the respondents in person, on the agreed dates and time. Upon completion, the researcher collected and packed them securely awaiting for analysis.

3.9 Data analysis techniques

Techniques employed include quantitative and qualitative data analysis. Quantitative data was coded and keyed into the computer for analysis using statistical Package for Social Sciences (SPSS). Descriptive statistical analysis such as the frequency and percentages, were computed and presented as tables, pie charts and bar graphs. Qualitative information on the other hand was analyzed according to themes sourced through open ended items in the questionnaires and

interview. Content analysis was used to extract the key theme, concepts, and arguments with the aim of having a clear understanding of principal's characteristics in implementing procurement practices in public secondary schools in Embakasi Sub County. The data was presented in tabular form, pie charts and bar graphs.

3.10 Ethical considerations.

The study consent was secured from the Ministry of Education through the Sub-county Quality Assurance and Standards and the school principals before starting the study. The researcher employed the principle of voluntary involvement in that the respondents were not forced to take part in the study. Clear information about the academic purpose of the research and the likely hood of the study becoming reference document to the school and to the Ministry of Education in enhancing procurement best practices in public secondary schools. The researcher guaranteed the participants confidentiality in the entire research process. The researcher cited all the authors whose research work was instrumental in this piece of work.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents the data analysis, interpretation and discussion of the findings. The chapter starts with the response rate, demographic data, principals' training level and implementation of procurement practices, principals' experience and implementation of procurement practices, principals' level of awareness and implementation of procurement practices and Information, Communication and Technology (ICT) and implementation of procurement practices.

4.2 Instruments return rate

The study was conducted in all the 7 public schools in Embakasi Sub County among 7 principals and 7 BoM chairpersons and 1 district auditor; totaling to 15 respondents and obtaining 100 percent response rate. The study response rate is presented in Table 4.1.

Table 4.1: Instruments return rate

Respondents	Instruments issued	Instruments returned	Percent
Principals	7	7	100.0
BoM members	7	7	100.0
District auditor	1	1	100.0

This response rate was considered excellent for statistical inference because it conforms to Mugenda and Mugenda (2007) assertion that a response of 50 percent is adequate, a response rate of 60 percent is good and a response rate of 70 percent and over is excellent for analysis and reporting. This response rate was attributed to the efforts of the researcher as well as ease of access of the respondents.

4.3. Demographic data

The demographics of the respondents were the first item to be analysed in this study. The analyses were done in frequencies and presented in tables and figures under the following sub-headings:

4.3.1 Gender of respondents

The respondents were required to indicate their gender. The findings are presented in Table 4.2.

Table 4.2: Distribution of respondents by gender

Gender	Principals		BoM members		Total	
	F	%	F	%	F	%
Male	4	57.1	5	71.4	9	64.0
Female	3	42.9	2	28.6	5	36.0
Total	7	100.0	7	100.0	14	100.0

The findings show that majority (64.0%) of the respondents were of the male gender. For the principals, majority (57.1%) were male whereas for the BoM members, majority (71.4%) were male. The domination of the male gender on the respondents of this study could be explained by the fact that most BoM members are male.

4.3.2. Age of respondents

The respondents were also asked to provide their ages. According to Mwenda (2015), on average teachers with many years of experience are more effective and committed towards their work. The results are presented in Table 4.3.

Table 4.3 Distribution of respondents by age

Age group	Principals		BoM members	
	F	%	F	%
36-40	2	29.0	0	0.0
Over 40 years	5	71.0	7	100.0
Total	7	100.0	7	100.0

The findings in Table 4.3 shows that majority (71%) of the principals were over 40 years. This could be explained by the fact that the study required senior respondents in the management structure of secondary school who naturally would be of higher age brackets.

4.3.3. Experience of school principals

The school principals were required to indicate the number of years they had been serving as head teacher in their school. This information would be useful to the researcher in giving insights on the experience possessed by the school heads. The data is presented in Table 4.4.

Table 4.4: Distribution of principals by experience

Number of years	Frequency	Percent
Below 5	3	42.9
5-9	4	57.1
Total	7	100.0

The findings in Table 4.4 indicate that majority (57.1%) of the principals had an experience of between 5 and 9 years as principals in their schools. The implication of this is that the principals had stayed in their workplaces long enough to understand the issues being raised about the study.

4.3.4: Total number of students in the school

The principals were required to indicate the total number of students in their schools. The findings are presented in Figure 4.1.

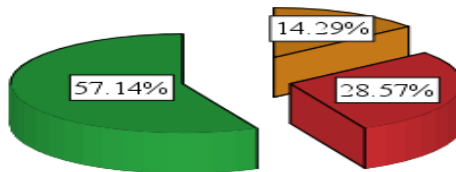
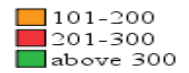


Figure 4.1: Number of students in the schools

The findings in Figure 4.1 show that majority (57.14%) of the principals indicated that their schools had over 300 students. The implication of this finding is that schools in the sub County are well populated and therefore require special attention when it comes to teacher staffing.

4.3.5. Total number of teachers in the schools

The principals were also required to indicate the total number of teachers in their schools. They were required to specify the total number of male and female teachers in their respective schools. The findings are presented in Table 4.5.

Table 4.5: Total number of teachers in schools

Groups	Male	Female
1-5	1	0
6-10	3	5
11-15	3	2
Total	7	7

The findings in Table 4.5 indicate that majority of the schools had between 6 and 15 teachers in their schools. The implication is that the TSC has ensured that the

schools are staffed properly in order to cater for the needs of all the students. The finding could also be interpreted to mean that most school BoM members have human resources to take care of in their respective schools.

4.3.6. Highest academic qualification of BoM members

The BoM members were required to indicate their highest level of academic qualification. The findings were presented in Figure 4.2.

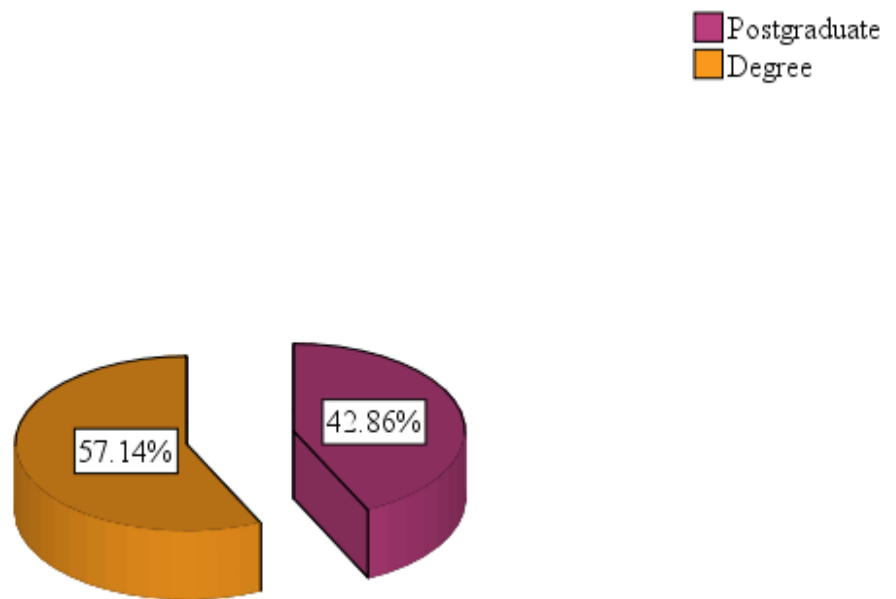


Figure 4.2: Highest academic qualification of BoM members

The findings in Figure 4.2 show that majority (57.14%) of the BoM members indicated that their highest academic qualification was a university degree. This means that they were adequately schooled and having the necessary knowledge to understand human resource management in schools.

4.4. Principals' training level and implementation of procurement practices

The first objective of this study was to determine the influence of the principals' training in implementation of procurement practices in public secondary schools in Embakasi Sub County. This was covered by means of taking in the level of education of the respondents and procurement practices in schools. Data on this objective was analyzed through the use of frequencies and summarized under the following sub topics:

4.4.1. Highest academic qualification

The principals were required to indicate their highest academic qualification. This was based on the premise according to Nadeem (2011) who argues that ones' academic qualification is important in determining their efficiency in implementation of procurement practices. The findings are presented in Figure 4.3.

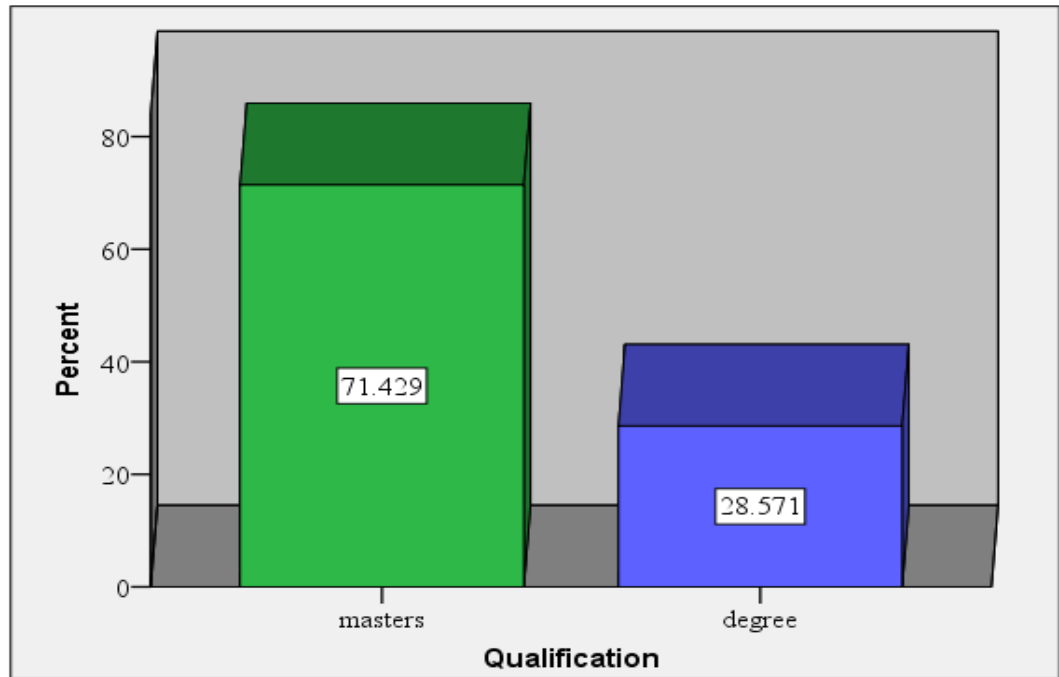


Figure 4.3: Responses on principals’ academic qualifications

The findings in Figure 4.3 show that majority (71.43%) of the principals indicated that their highest academic qualification was a master’s degree. About 29% of the principals indicated that their highest academic qualification is a university degree. This implies that there is a lot of learning among the education managers to enhance their skills in management.

4.4.2. Attendance of financial training

The principals were also required to state whether they had previously attended any training courses on financial management. This information would help the researcher assess their level of efficiency in financial management practices as

well as give insights of their familiarity with procurement procedures. The findings are presented in Table 4.6.

Table 4.6: Attendance of financial training

Response	Frequency	Percent
Yes	5	71.4
No	2	28.6
Total	7	100.0

The findings of Table 4.6 show that the majority (71.43%) of the principals indicated that they have attended courses on financial training. The necessity of attending seminars on financial training is that the training exposes one to opportunities to equip their knowhow in effective school management (Ngware, Wamukuru & Odebero, 2006). The finding agrees with that of Thomson and Jackson, (2007), who found that most government officials were attending seminars on management and procurement training.

4.4.3. Frequency of attendance of financial training courses

The principals were required to indicate how frequent they have been attending courses on financial management. This information was crucial to help the researcher in gaining knowledge about the frequency at which school principals were attending training courses on financial training. The findings are presented in Table 4.7.

Table 4.7: Responses on frequency of attendance of financial training courses

Response	Frequency	Percent
Often	3	42.9
Rarely	2	28.6
Never	2	28.6
Total	7	100.0

The findings in Table 4.7 shows that many (42.9%) of the principals indicated that they often attend training courses on financial management. The implication of this finding is that emphasis has been laid on the financial management aspect of management by the school principals. The frequency of attendance of financial management ensures that the principals are equipped properly with knowledge on procurement procedures and processes.

4.4.4. Influence of principals' level of training on their competence

The BoM members were required to indicate their ratings on the extent of influence of principals' competence. This information was very necessary to help the researcher assess the principals' competence in procurement practices. The respondents were required to indicate their responses on a scale ranging from large extent to no extent at all. The findings are presented in Figure 4.4

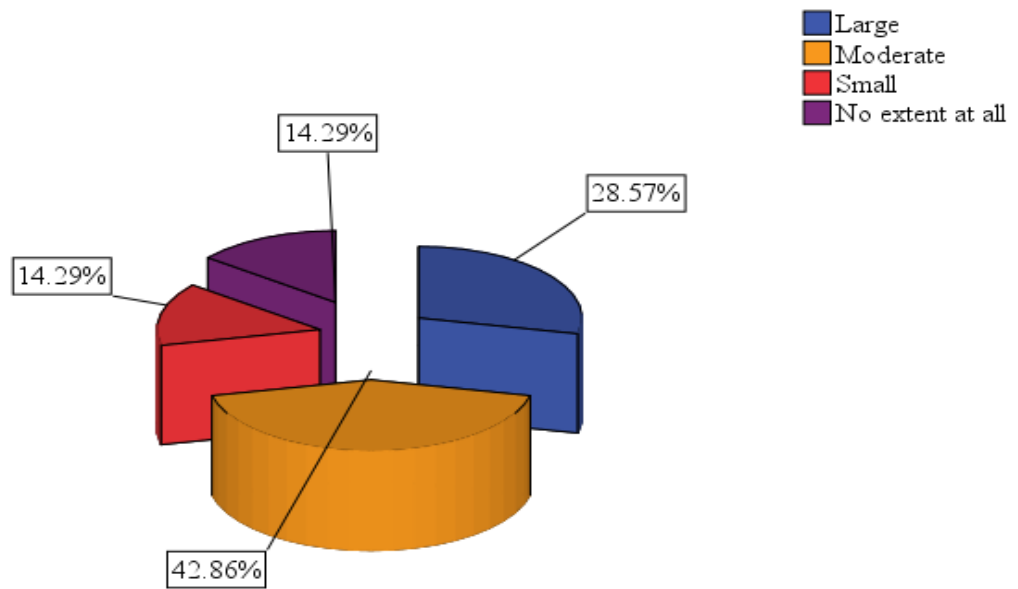


Figure 4.4: BoM responses on influence of principals' level of training on their competence

The findings in Figure 4.4 show that many (3) (42.86%) of the principals indicated that their principals' level of training influences their competence to a moderate extent. The implication of this finding is that the competence of principals is a key factor in proper procurement in schools. This finding agrees to that of Thomson and Jackson (2007), who found that school principals' level of training had some influence on their competence.

4.4.5. Principals' training and experience in procurement

The principals were required to indicate their extent of agreement with the statement that highly trained school principals possess the requisite experience to be experts when it comes to procurement practices in the schools. They were

required to indicate on a scale ranging from large extent to no extent at all. The findings are presented in Figure 4.5.

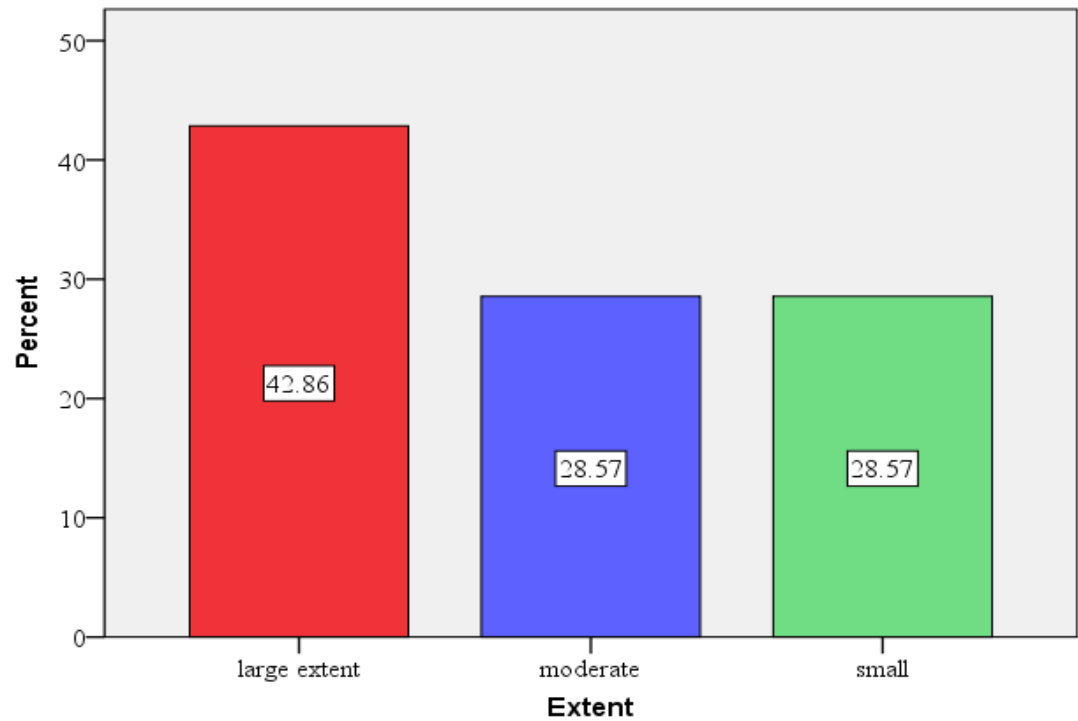


Figure 4.5: Responses on principals' training and experience in procurement

The findings in Figure 4.5 show that many(3) (42.86%) indicated that the principals had the requisite training and experience in procurement to a large extent. The implication is that training and experience of one as a principal in procurement procedures is very key in determining one's ability and success in the whole management process as a school manager.

4.4.6. Influence of principals' training in implementation of procurement practices

The researcher investigated the influence of training in implementation of procurement practices in public secondary schools in Embakasi Sub County. According to Bush and Heystek (2003) training makes a difference in school management, hence minus training school management participants cannot implement their governance tasks effectively. To establish this influence, the researcher required the principals to score on a scale ranging from strongly agree to strongly disagree, statements regarding school principals' training and their implementation of procurement practices. The findings are presented in Table 4.8.

Table 4.8: Responses on influence of principals’ training in implementation of procurement practices

Statement	SA		A		NO		D		SD	
	F	%	F	%	F	%	F	%	F	%
1. Am competent in financial management	3	43.0	4	57.0	0	0.0	0	0.0	0	0.0
2. The level of training of a principal influences his/her competence of the school principal	2	29.0	3	43.0	0	0.0	2	29.0	0	0.0
3. A principals’ level of training influences the implementation of public procurement practices in the school	1	14.0	2	29.0	0	0.0	3	43.0	1	14.0
4. Highly trained principals have high level expertise when it comes to procurement processes in the schools	1	14.0	3	43.0	1	14.0	1	14.0	1	14.0

The findings in Table 4.8 indicate that majority (57.0%) of the principals agree that they are competent in financial management. In a study on school governance in South Africa, Bush and Heystek found that many school heads were competent in financial management thus agreeing with the findings of this study. Many (43.0%) principals indicated that they agree with the statement that the level of training of a principal influences his/her competence of the school principal. This

finding disagrees with that by Demba (2013) who found that level of training of a college administrator does not influence his/her competence in financial management. Further findings show that many (43.0%) principals indicated that they disagreed with the statement that a principal's level of training influences the implementation of public procurement practices in the school. The implication of this finding is that a school principal's training has an influence on the implementation of procurement practices in secondary schools. This finding agrees to that by Njeru (2015), who found that the level of training of a school head teacher influences their ability and competence in procurement practices.

4.5. Principals' experience in implementation of procurement practices in public secondary schools

The second objective of this study was to assess the influence of principals' experience in implementation of procurement practices in public secondary schools in Embakasi Sub-County. The researcher set out to understand how the experiences of school principals influence their effectiveness and efficiency in procurement practices in the schools. The researcher used 8 items in the principals' questionnaire to answer the question under this objective. The data under this objective was analysed using frequencies and presented in tables and pie and bar charts under the following sub-topics:

4.5.1. Monitoring principals' financial management

The principals were required to indicate how often the BoM in their school monitored principals' financial management in the school. This information was very significant in that it would help the researcher get an insight on the role of school board members in financial management in the schools. The findings on this are presented in Figure 4.6.

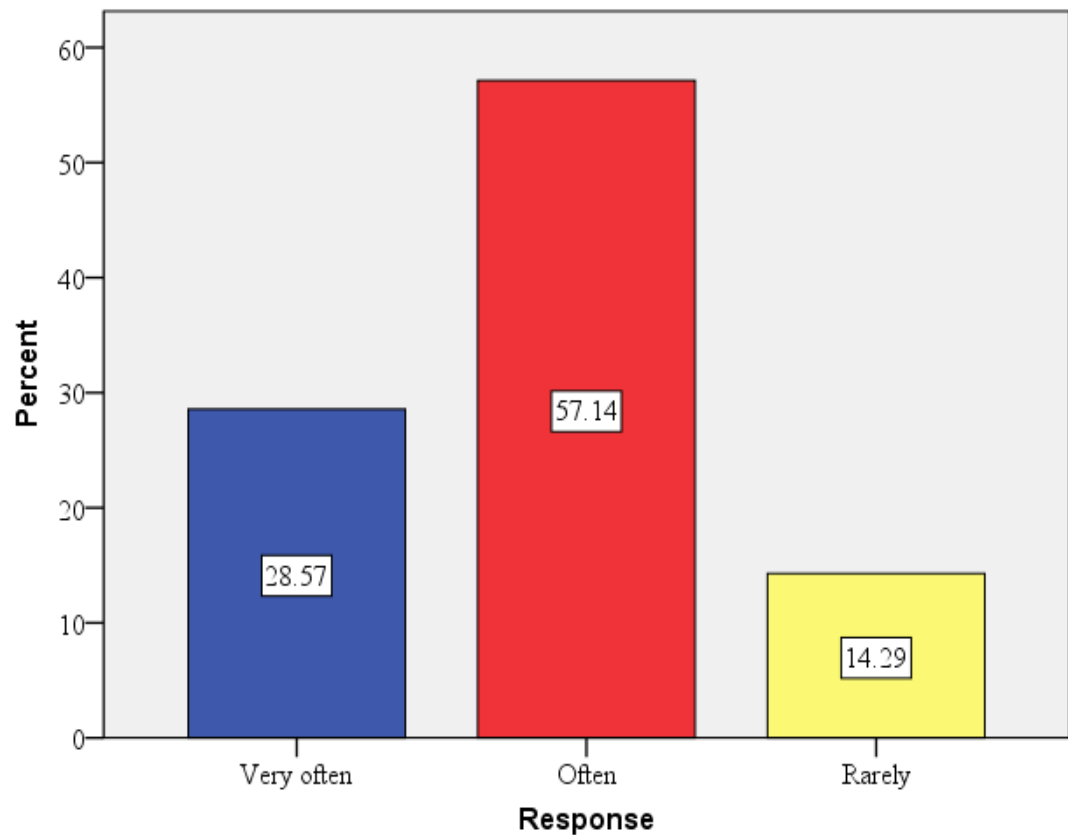


Figure 4.6: Responses on monitoring principals' financial management

The findings in Figure 4.6 show that majority (4) (57.14%) of the principals indicated that monitoring of principals' financial management by BoM was being

done often. School boards of governance keep the principals on toes in implementation of policies formulated by the boards (Munyiri, 2008). This finding implies that principals as chief implementers of policies have an oversight body in the school boards. The finding disagrees with that by Mutemi (2015), who found that school boards were rarely involved monitoring principals' financial management,

4.5.2. Principal rating on procurement management

The school principals were also required to indicate their own assessment of procurement management. The necessity of this information was that it would help the researcher in understanding their personal views on procurement in their schools. The findings on this item are presented in Figure 4.7.

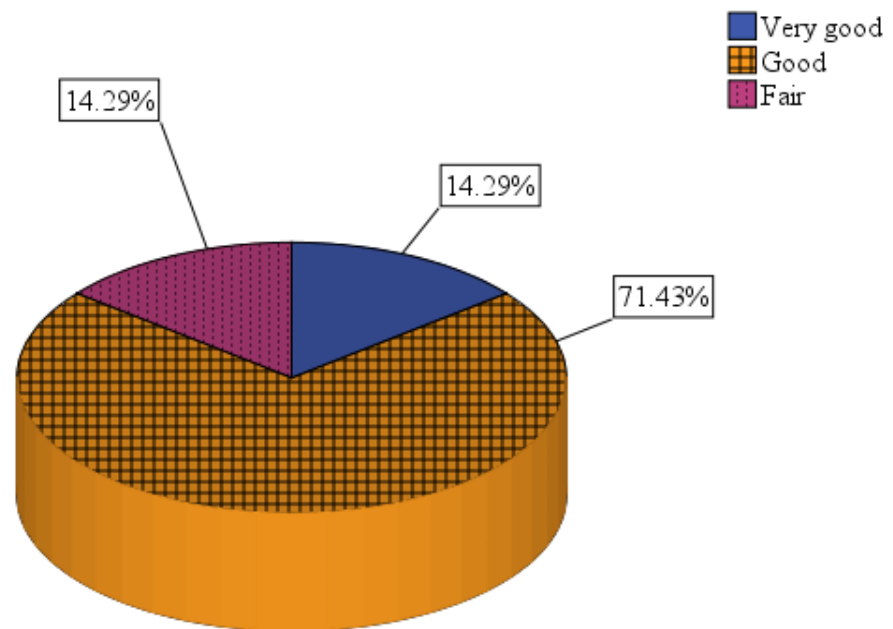


Figure 4.7: Responses on principal rating on procurement management

The findings in Figure 4.7 indicate that majority (5) (71.43%) of the principals indicated that they were good in procurement management practices. The implication of this finding is that procurement in secondary schools is supposed to be carried out by professionals. The finding coincides with that by Magak (2013) who found that most school administrators considered themselves very good in procurement management.

4.5.3. Principals' experience and procurement management

The BoM members were required to indicate their school principals' competence in procurement. The question asked was, how would you rate the school principal on procurement management? The respondents were required to indicate on a scale ranging from very good to very poor. The findings are presented in Figure 4.8.

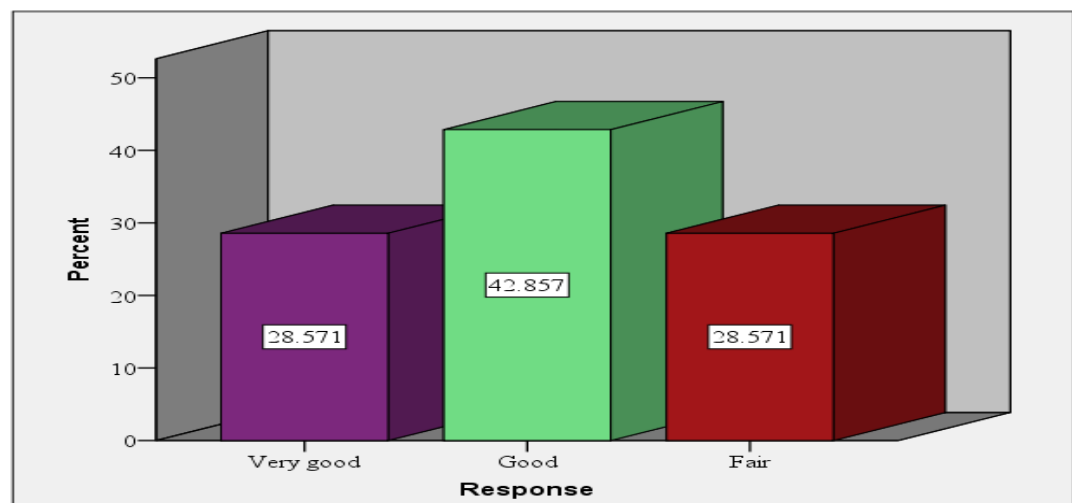


Figure 4.8: BoM responses on principals' experience and procurement management

The findings in Figure 4.8 show that many (3) (42.86%) of the BoM members indicated that their school principals were good in terms of ranking on experience in procurement management. The implication is that procurement practices is one of the major tasks carried out by school principals. This finding is in agreement with that by Magak (2013) who found that school principals were experienced in procurement practices within their schools.

4.5.4. Principals' competence in financial management

The BoM members were required to indicate the competence of their school principal's competence in financial management. This information was very crucial in helping the researcher understand the competencies of school heads in the whole financial management processes. The findings are presented in Figure 4.9.

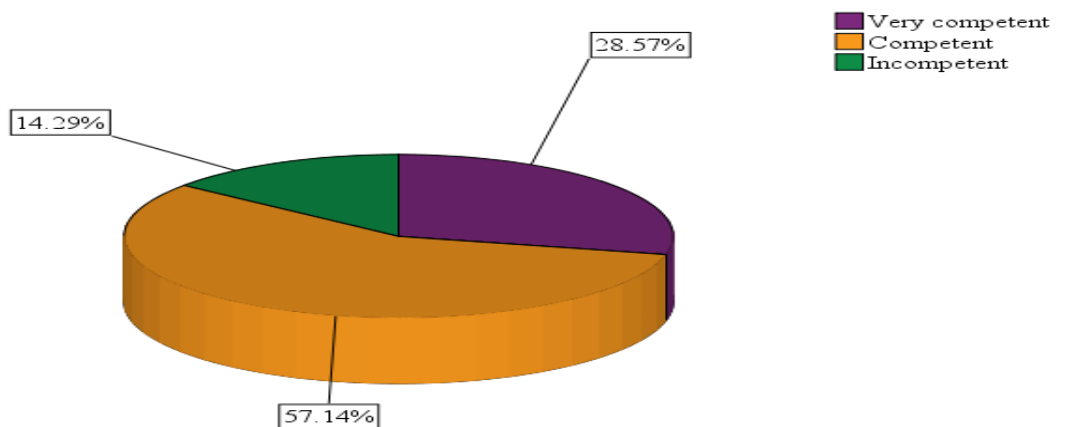


Figure 4.9: BoM members' responses on principals' competence in financial management

The findings in Figure 4.9 show that majority (4) (57.14%) of the BoM members indicated that their school principals were competent in financial management. One of the major requirements of school principals according to the Ministry of Education (2007) guide, is competence in financial management. The finding agrees with that by Mutemi (2015) who found that school heads were very competent in financial management.

4.5.5. Principal experience in financial management

The school principals were also required to indicate the extent of their experience in financial management. This information would provide knowledge on their experience in procurement procedures. The question posed to the principals was “to what extent is the principal experienced in handling financial matters in the school?” the principals were expected to give their ratings on a scale ranging from a very large extent to no extent at all. The findings are presented in Figure 4.10.

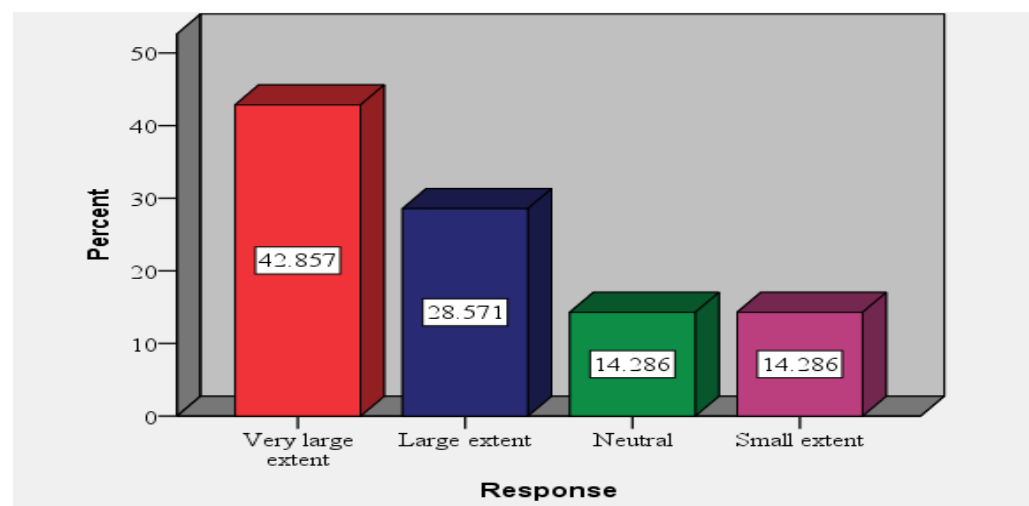


Figure 4.10: Principals’ responses on experience in financial management

The findings in Figure 4.10 indicate that majority (3) (42.86%) of the principals indicated that they had experience on financial management to a very large extent. Only 14 percent of the principals indicated that they were experienced in financial management to a small extent. The implication of this finding is that there are still some school managers who are not experienced in financial management which is at the centre of all management responsibilities of a school principal. The finding agrees with that by Mutemi (2015), who established that school administrators were experienced in financial management.

4.5.6. Effect of principal experience on procurement

The school principals were also required to indicate the effect of principals' experience on procurement. This information was necessary in that it would help the researcher in assessing the effect of a principals' experience on procurement on his or her effectiveness in procurement management. The findings are presented in Figure 4.11.

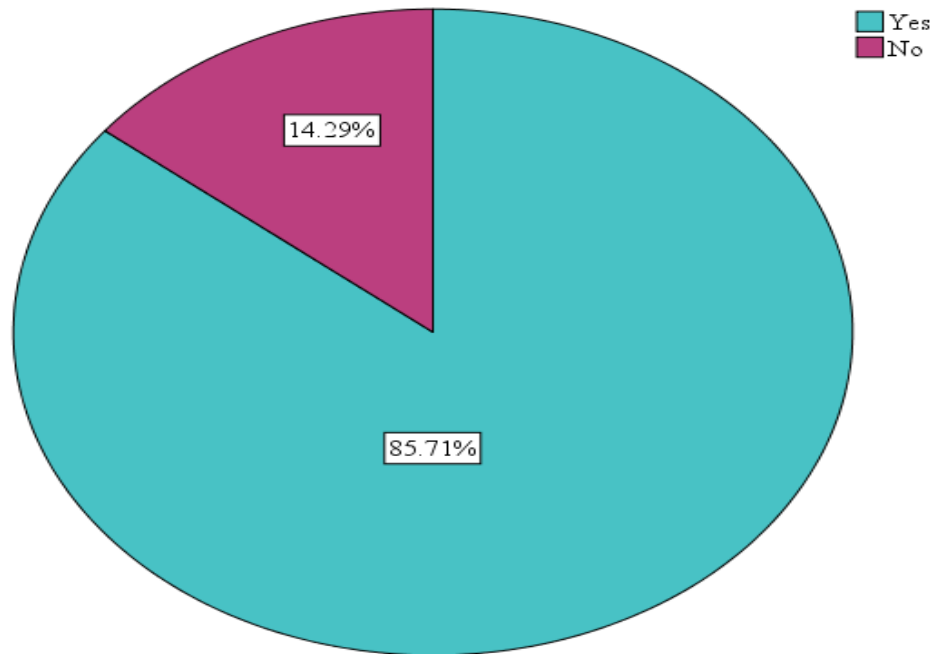


Figure 4.11: Responses on effect of principal experience on procurement

The findings in Figure 4.11 show that majority (6) (85.71%) of the principals indicated that a principal's experience affects his or her competence on procurement. Only (1) 14.29% of the principals felt that a principal's experience does not influence their competence in procurement. The implication of this findings is that experience matters when it comes to one's competence as a school principal.

4.6. Principals' level of awareness in implementation of procurement practices

The third objective of this study was to examine the influence of principals' level of awareness in implementation of procurement practices in public secondary

schools in Embakasi Sub County. To answer the question under this objective, the researcher used 8 items on the principals' questionnaire. Data on the items under this objective was analyzed using frequencies and presented under the following sub-topics:

4.6.1. Conversance with public procurement and disposal Act of 2005

The principals were required to indicate their level of conversance with the public procurement and disposal Act of 2005. This was necessary to gauge their level of awareness of the requisite procurement procedures. They were required to respond on a scale ranging from very large extent to no extent at all. The findings are presented in Table 4.9.

Table 4.9: Responses on conversance with public procurement and disposal Act of 2005

	Frequency	Percent
Very large extent	1	14.3
Large extent	4	57.1
Neutral	1	14.3
Small extent	1	14.3
Total	7	100.0

The findings in Table 4.9 show that majority (57.1%) of the principals indicated that they were conversant with the public procurement and disposal regulations Act of 2005, while only (14.3%) of the principals indicated conversance to a small extent. The implication of this finding is that a key qualification of one as a school head is conversance with the public procurement and disposal Act of 2005. This is in accordance with the procurement guideline manual of 2007.

4.6.2. Influence of principals’ level of awareness on implementation of procurement practices

The principals were required to indicate their level of agreement or disagreement with some statements regarding the principals’ level of awareness on implementation of procurement practices. They were required to do so on a scale ranging from strongly agree to strongly disagree. The analyses were done using frequencies and presented in Table 4.10.

Table 4.10: Influence of principals’ level of awareness on implementation of procurement practices

Statement	SA		A		NO		D		SD	
	F	%	F	%	F	%	F	%	F	%
1. A principals’ conversance with public procurement act	3	43.0	3	43.0	0	0.0	1	14.0	0	0.0

2.	A principals' level of awareness about procurement procedures in the school	2	29.0	5	71.0	0	0.0	0	0.0	0	0.0
3.	A principals' commitment to the strict adherence of the procurement procedures	2	29.0	2	29.0	1	14.0	1	14.0	1	14.0
4.	Procurement is solely dependent upon the school principals level of awareness	1	14.0	3	43.0	0	0.0	3	43.0	0	0.0
5.	School principals should attend procurement training courses	2	29.0	4	57.0	0	0.0	1	14.0	0	0.0
6.	School managements should employ experts	1	14.0	2	29.0	0	0.0	4	57.0	0	0.0
7.	The ministry of should put it as one of their requirements that all school heads have knowledge of procurement	2	29.0	4	57.0	0	0.0	1	14.0	0	0.0
8.	They should organize annual seminars on the sensitization of	3	43.0	4	57.0	0	0.0	0	0.0	0	0.0

The findings in Table 4.10 show that many (43.0%) of the principals agree and strongly agree with the statement that, a principals' conversance with public procurement act enhances his or her efficiency in procurement. Majority (71%) of the principals indicated that they agree with the statement that, a principals' level of awareness about procurement procedures influences the implementation of public procurement practices in the school. Further findings show that many (43.0%) of the principals agree that school principals should attend procurement training courses. The Ministry of Education (2007) procurement manual gives the specific guidelines that school heads should adhere to which include a conversance with the whole procurement process. This finding agrees with that by

Miriti and Wangui (2014) who found that secondary school principals' level of awareness influences their procurement competencies in management.

4.7. Information Communication Technology (ICT) and the implementation of procurement practices

The fourth objective of the study was to assess the influence of principals' use of Information Communication Technology in implementation of procurement practices in public secondary schools in Embakasi Sub-County. To answer the question under this objective, the researcher used 12 items on the principals' questionnaire. The data under this objective was summarized using frequencies and presented in tables, pie charts and bar charts under the following sub- topics:

4.7.1. Influence of ICT on procurement

The principals were required to indicate the influence of ICT on the implementation of public procurement practices in the school. This information was very crucial in understanding how principals utilize ICT in public procurement practices. The principals were required to respond by a simple yes or no response. The findings are presented in Figure 4.12.

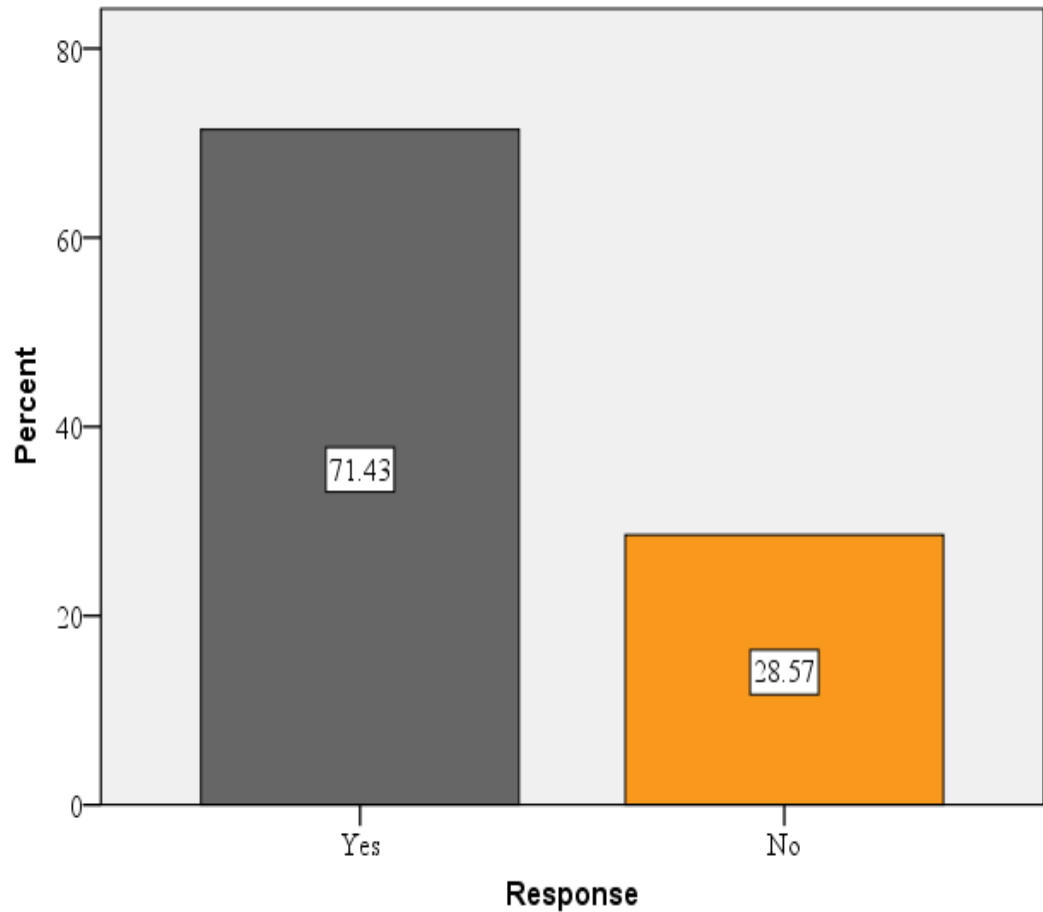


Figure 4.12: Responses on influence of ICT on procurement

The findings in Figure 4.12 show that majority (5) (71.43%) of the principals indicated that ICT influences procurement while (2)(28.57%) indicated that it did not affect procurement. The implication is that there are school principals who still rely upon the old ways of doing things instead of adapting to the changing ICT trends. The finding agrees with that by Hansraj (2007), who found that ICT influences the competence of school managers in procurement processes.

4.7.2. Use of ICT in procurement

The principals were required to indicate the extent at which they use ICT in procurement of goods and services in their schools. This information was very crucial in assisting the researcher understand the levels of utilization of ICT in public procurement in schools. The findings on this are presented in Figure 4.13.

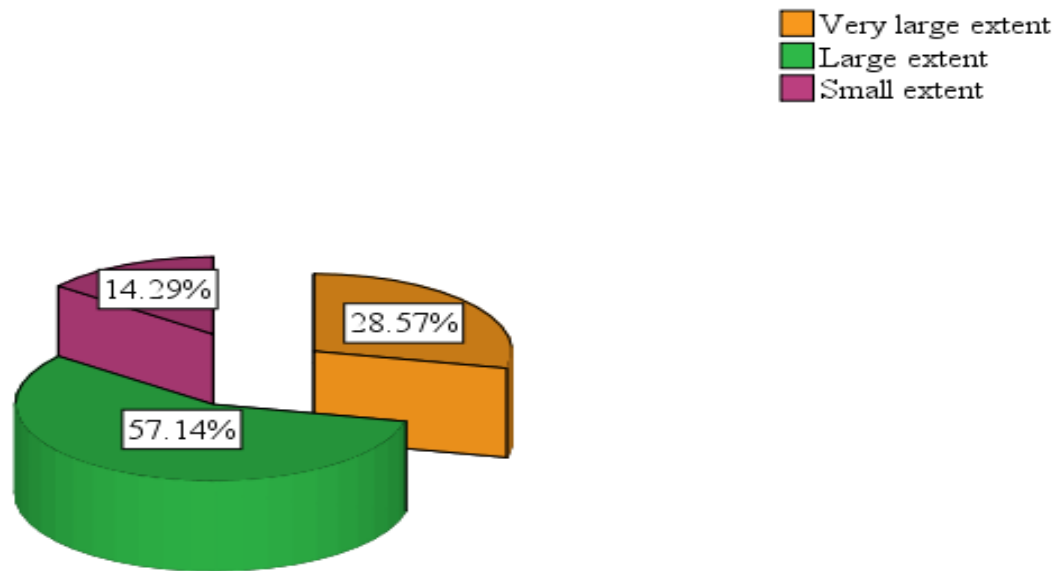


Figure 4.13: Responses on usage of ICT in procurement

The findings in Figure 4.13 show that many(4) (57.14%) of the principals indicated that they were using ICT in procurement to a large extent. The implication of this finding is that the usage of ICT in procurement should be emphasized upon by school policy makers.

4.7.3. Usage of ICT in various aspects in procurement

The principals were required to indicate their ratings in use of ICT in the aspects of computer literacy, ICT infrastructure, procurement systems and e-procurement.

They were required to rate on a scale ranging from very good to very poor. The findings are presented in Table 4.11.

Table 4.11: Responses on usage of ICT in various aspects in procurement

Response	Computer literacy		ICT infrastructure		Procurement systems		E-procurement	
	F	%	F	%	F	%	F	%
	Very good	3	42.9	1	14.3	1	14.3	4
Good	3	42.9	4	57.1	5	71.4	3	42.9
Fair	1	14.3	2	28.6	1	14.3	0	0.0
Total	7	100.0	7	100.0	7	100.0	7	100.0

The findings in Table 4.11 show that many (42.9%) of the principals indicated that they were very good and good in computer literacy. Majority (57.1%) of the principals indicated that they were good in the utilization of ICT infrastructure in their schools. Further findings show that most (71.4% of the principals indicated they were good in procurement systems. The implication of this finding is that there are the preferred ICT platforms used by the school administrators which the policy makers should give top consideration in their policies. This finding agrees with that by Hansraj (2007), who found a strong correlation between ICT utilization and procurement competence of principals.

4.7.4. Usage of various channels of communication

The principals were required to indicate the extent to which they used various channels of communication in their schools. The necessity of this information was

to enable the researcher gauge the extent of usage of various ICT communication channels in schools. The findings are presented in table 4.12.

Table 4.12: Responses on usage of various channels of communication

	Internet		Mobile phones		Landlines		Oral		Delivered	
	F	%	F	%	F	%	F	%	F	%
Large	2	28.6	5	71.4	1	14.3	3	42.9	3	42.9
Moderate	2	28.6	2	28.6	3	42.9	2	28.6	3	42.9
Small	2	28.6	0	0.0	3	42.9	1	14.3	1	14.3
No extent at all	1	14.3	0	0.0	0	0.0	1	14.3	0	0.0
Total	7	100.0	7	100.0	7	100.0	7	100.0	7	100.0

The findings in Table 4.12 show that the majority(71.4%) of the principals indicated that they used mobile phones at a large extent. Many (42.9%) of the principals indicated that they used oral channels of communication to a large extent. The implication of this finding is that new ICT innovations should be integrated in the procurement processes in schools to ensure efficiency, effectiveness, accountability and transparency on the procurement activities in schools. This finding is in agreement with that by Demba (2013), who found that ICT influences procurement competence of school principals.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, conclusions, recommendations and suggestions for further research.

5.2. Summary of the study

The purpose of this study was to investigate principals' characteristics influencing the implementation of procurement practices in public secondary schools in Embakasi Sub-County in Nairobi. The study was guided by four objectives namely: to determine the influence of the principals' training in implementation of procurement practices; to assess the influence of principals' experience in implementation of procurement practices; to examine the influence of principals' level of awareness in implementation of procurement practices and to assess the influence of principals' use of Information Communication Technology in implementation of procurement practices in public secondary schools in Embakasi Sub-County.

The study adopted a descriptive survey design to collect and analyze both qualitative and quantitative data. The target population of the study was all the seven (7) registered public secondary schools Embakasi Sub County. The sample for the study was made of 7 principals, 7 BOM members in public secondary schools and 1 district schools auditor in Embakasi Sub County, totaling to 15 respondents. Data collection was done using questionnaires for the principals, BoM members and an interview guide for the district schools' auditor.

The researcher sought to determine the influence of the principals' training in implementation of procurement practices in public secondary schools in Embakasi Sub County. The findings were that majority (71.43%) of the principals indicated that their highest academic qualification was a master's degree. Majority (57.0%) of the principals agreed that they were competent in financial management. The majority (43.0%) respondents agreed with the statement that the level of training of a principal influences his/her competence of the school principal. Further findings showed that most (43.0%) principals disagreed with the statement that, a principals' level of training influences the implementation of public procurement practices in the school.

The research set out to assess the influence of principals' experience in implementation of procurement practices in public secondary schools in Embakasi Sub-County. The findings revealed that majority (57.14%) of the respondents indicated that monitoring of principals' financial management by BoM was being done often. Majority (85.71%) of the respondents indicated that a principal's experience affects his or her competence on procurement. Most majority (57.14%) of the respondents indicated that their school principals were competent in financial management which was in line with ministry guidelines.

The research sought to examine the influence of principals' level of awareness in implementation of procurement practices in public secondary schools in Embakasi Sub County. The findings showed that majority (57.1%) of the

respondents indicated that they were conversant with the public procurement and disposal regulations Act of 2005. Further findings revealed that majority (43.0%) of the respondents agreed and strongly agreed with the statement that, a principals' conversance with public procurement act enhances his or her efficiency in procurement.

The findings also set out to assess the influence of principals' use of Information Communication Technology in implementation of procurement practices in public secondary schools in Embakasi Sub-County. The findings revealed that majority (71.43%) of the principals that ICT influences procurement. Further findings showed that most (57.14%) of the respondents indicated that they were using ICT in procurement to a large extent. Further findings show that majority (71.4%) of the respondents indicated that they used mobile phones at a large extent. Majority (42.9%) of the respondents indicated that they used oral channels of communication to a large extent.

5.3. Conclusions from the study

The following conclusions were drawn from the study:

The study found that procurement process in Kenyan public secondary schools was affected by individual factors of principals such as; level of training, experience, level of awareness and ICT literacy to a moderate extent. The principals used their knowledge, experience and expertise to enrich their capability to conduct proper procurement in schools.

The study also concludes that principals' experience affected procurement process at Kenyan public secondary schools to a great extent. The experiences of principals from financial management and other areas that deal with human resources plays a very important role in effective procurement management in secondary schools.

Additionally, the study concludes that principals' level of awareness affected procurement process at secondary schools to a great extent. Principals who were well informed of the regulations of the public procurement Act and the governing regulations were very effective in procurement practices in their schools.

The study furthermore concludes that ICT literacy of principals influenced procurement procedures at public secondary schools to a pronounced level. ICT literacy improved the procedure of operative tendering by means of marketing, obtaining evaluations, possibility intended for cost cutting and improved cognizance of fresh progress. Embracing ICT empowered Kenyan secondary schools' principals to provide exceptional procurement management.

5.4. Recommendations of the study

In line with the study findings, the subsequent endorsements were made:

- i. The government through the Ministry of Education should avail funds for regular training for principals in management with the ultimate goal of improving their procurement management practices in schools.

- ii. The Teachers Service Commission needs to be enlightened to use their previous experiences from other departments to enrich the efficiency of the process of procurement in public secondary schools. Adequate controls must be ensured in order to reduce opportunities for corruption and fraud.
- iii. The Kenya Educational Management Institute (KEMI) should strengthen the curriculum on financial management to improve on procurement process.
- iv. The Computer for Schools Kenya and other stakeholders should provide adequate ICT resources to schools for easy access and effective ICT integration in school administration as well as ensure that the principals are sensitized and trained on the use of ICT to improve procurement processes in schools.

5.5. Suggestions for further research

The study makes the following suggestions for further research:

- i. A research ought to be conducted to determine the institutional factors influencing procurement process of deliveries in public secondary schools.
- ii. A study should be carried out on the challenges faced by principals of schools while carrying out procurement processes for school supplies.
- iii. A study should be conducted on the influence of institutional factors on principal management of the procurement processes in educational institutions in Kenya.

REFERENCES

Agaba, E., & Shipman, N. (2007). *Public Procurement Reform in Developing Countries: The Ugandan Experience*. Odey Publishers. Kampala.

- Asiago, M. (2010). *A Handbook of Human Resource Management Practice*. 9th Edition. Oaks', Pub. London.
- Baraka, Y.K., (2010). *Challenges Facing Public Secondary School Principals in Financial management: A case study of Kitui District*, Nairobi: Kenyatta University Library, Unpublished M.Ed Thesis: University of Nairobi.
- Barrett, B.C & Lentz, E.C (2010). *Measuring Food Security: International Studies Compendium Project*. Oxford: Wiley-Blackwell.
- Basheka, B. C., Bisangabasaija, E. (2010). Determinants of unethical public procurement in local government systems of Uganda: a case study. *Int. J. Procurement Management*, 3(1), 91–104.
- Bush, T. & Heystek J. (2003). School governance in the New South, Africa. *Compare*, 33 (2): 127- 139.
- Charles, N. (2008). Centralized and decentralized procurement functions. *Journal of supply chain Management*. 29 (4), 66-73.
- Compton, D. (2007). *Purchasing and supplies chain Management. (3rd Edition)*. New York: Pearson Publishers.
- Demba, G. A. (2013). Effects of financial management practices on Performance of Kenya Medical Training College. Unpublished MBA project. University of Nairobi, Kenya.
- Eyaa, S. & Oluca, P. (2011). Explaining non- Compliance in Public Procurement in Uganda. *International Journal of Business and Social Science*, 2(11).
- Gelderman, J. C., Ghijsen, W. P. & Brugman, J. M. (2006). Public procurement and EU tendering directives-explaining non- compliance. *International Journal of Public Sector Management*, 19(7), 702-714.
- Golder, A. (2007), Outsource recruitment to slash unnecessary costs. *Journal of supply chain Management*. 36(4), 144-148.
- Government of Kenya. (2013). the Basic Education Act, No. 13 of 2013. Nairobi: The Government Printer.
- Grant, R.M. (2007). Prospering In Dynamically-Competitive Environments *Journal of Supply Chain Management*. Vol.36, No.4. pp. 144-148.
- Hansraj, I. (2007). *The financial management role of principals in section 21 Schools in south Durban, KwaZulu-Natal*. Unpublished Master of Education project, University of South Africa, South Africa.

- Hui, W. S., Othman, R. O., Normah, O., Rahman, R. A. & Haron, N. H. (2011). Procurement Issues in Malaysia. *International Journal of Public Sector Management*, 24(6), 567-593.
- Hunja, R. (2009). Obstacles to Public Procurement Reform in Developing Countries. *Journal of supply chain Management*. Vol.35, No.9. pp. 149152
- Kainuma, Y., & Tawara, N. (2006). A multiple attribute utility theory approach to lean and green supply chain management. *International Journal of Production Economics*, 101, 99–108.
- Kakwezi and Nyeko, (2010). *Performance Measurement: From Quality to Excellence*.
- Kalai J.M (1998). *Kenya Education Staff Institute (KESI) In-service Programmes as perceived by Secondary school head teachers*. Unpublished masters' thesis: University of Nairobi.
- Kiawa, M.F. (2011). *Accountability in public sector procurement*. Unpublished Thesis for the award of LLM, University of Nairobi.
- Kothari, C. (2004). *Research methodology, methods & techniques* (2nd Ed.). New Delhi: Wishwa Prakashan.
- Kuria, L.K. (2008). *Budgeting process and financial management in Public Secondary in Thika district*. Unpublished Med Project: University of Nairobi.
- Magak, E. O. (2013). *Challenges facing head teachers in financial management in public secondary schools: A case of Kisumu East District Kenya*. Unpublished MEAP project: University of Nairobi, Kenya.
- Ministry of Education (2007). *Procurement manual for primary schools*. Nairobi: Ministry of Education.
- Mugenda, O.M. & Mugenda, A.G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi, Acts Press.
- Mugenda, O. M. & Mugenda, A. G. (2007). *Research Methods: Quantitative & qualitative Approaches*. Nairobi: African Centre for Technology Studies (ACTS).
- Mullins, L. J. (2008). *Management and Organizational Behavior*. New York: Pearson Education, Ninth Edition.

- Mulwa J. K., Kalai J. M. & Migosi J. (2014). Determinants of implementation of public procurement regulations in Kenya's secondary schools. *International Journal of Educational Research and Reviews* 2(1), 009 – 016.
- Munyiri, C.W. (2008) *Failing Management in Kenya schools*, Nairobi. Available at <http://www.kenyaimagine.com>.
- Munywoki J. (2016). *Public Procurement Regulations and Procurement Performance in Nairobi County*. University of Nairobi: A Thesis Submitted In Partial Fulfilment Of The Requirements For The Award Of Master Of Business Administration.
- Mutemi, J. M. (2015). *Individual factors influencing effectiveness of board of management members in management of human resources in secondary schools in Kyusa sub county, Kitui County, Kenya*. Unpublished masters' project: University of Nairobi.
- Mutua, R (2013) *Factors Influencing Effectiveness of Financial Management in Secondary Schools In Kitui Central District of Kitui County, Kenya*
- Mwenda, E. M. (2015). *Institutional factors influencing job satisfaction among teachers in mixed day secondary schools in Imenti South District, Kenya*. Unpublished masters' project: University of Nairobi.
- Nadeem, N. (2011). Teachers' competencies and factors affecting the performance of female teachers in Bahawalpur (Southern Punjab) Pakistan. *International Journal of Business and Social Science*. 7(1), 54-69.
- Neuman, S., Susan B. and David, K. (2002) *Hand Book of Early Literacy Research*, New York: The Guildford Press.
- Ngatara, I. and Ayuma, C. (2016) *Factors Affecting the Implementation of Procurement Best Practices in Kenya: A Survey of Public Secondary Schools in KILIFI County*. *The International Journal of Business & Management* (ISSN 2321–8916).
- Ngware, M. W., Wamukuru, D. K. & Odebero, S. O. (2006). Total quality management in secondary schools in Kenya: Extent of practice, *Quality Assurance in Education*, 14(4), 339-362.
- Njeru, S.E (2015) *Factors affecting effective implementation of Procurement Practices in tertiary public training institutions in Kenya*. Unpublished Thesis: Jomo Kenyatta University of Agriculture and Technology.

- Nombasa, N.S. (2004). *Self-Managing Schools in Gauteng: Challenges and opportunities for School-Based Managers*, Unpublished Thesis; University of South Africa.
- Nyakundi, E., Kombo, C., Omari, R., & Mong'are, O. (2012). Challenges Facing Procurement Committees in Implementing the Procurement Act; A Case Study of Secondary Schools Procurement Committees in Kisii County, Kenya. *Elixir International Journal* 9186-9191
- Obanda, W. P. (2010) *Fighting Corruption in Tactical Procurement*. Enschede pp 288
- Odhiambo, W. & Kamau, P. (2003). *The Integration of Developing Countries into the World Trading System*. Public Procurement Lessons from Kenya, Tanzania and Uganda, available on <http://www.oecd.org>, on 15th Dec. 2009.
- OECD. (2007). *Integrity in Public Procurement Good Practice from A to Z*, OECD.ParisPublishing.
- Onyinkwa, J. (2013). Factors influencing compliance to procurement regulations in public secondary schools in Kenya: a case study of Nyamache District, Kisii County. *Interdisciplinary journal of contemporary research in business*.Vol.5 No.1, Pp 561-592.
- Orodho, J. A. (2004). *Essentials of educational and social science, research methods*. Nairobi: Masola Publishers.
- Orodho, C.R. (2005). *Elements of Education and Social Science Research Methods*. (2nd Edition). New Delhi: Kanezja Publishers.
- Oso, W.Y. & Onen, D. (2011). *General guide to writing research proposal and report: A handbook of beginning researchers*. Nairobi: J.K.F.
- Otieno, R. (2004). *Procurement activities in public institutions*. Unpublished thesis. Jomo Kenyatta University of Science and Technology, Kenya.
- Paton, M.Q., (2002), *Qualitative Research and Evaluation Methods* (3rd Edition). London: Sage Publications.
- Public Procurement Oversight Authority (2007).*Assessment of the Procurement System in Kenya*. Nairobi: PPOA
- Republic of Kenya, (2005). *Public Procurement Disposal Act no. 3*; Government Printers: ThikaDistrict inspection report 2003/2004.

- Republic of Kenya (2006). *National Information and Communication Technology for Education and Training*. Government printing press.
- Republic of Kenya, (2013). *The Basic Education Act no.10 of 2013*. Government printing press.
- Roodhooft, F., & Abbeele, A. V. D. (2006). Public procurement of consulting services Evidence and comparison with private companies. *International Journal of Public Sector Management*, 19(5), 490-512.
- Saunders, M. (1997). *Strategic Purchasing & Supply Chain Management*, (7th Ed.). Essex: Pearson Education Ltd.
- Scott, W. Richard (2004b) "Institutional theory." Pp. 408-14 in *Encyclopedia of Social Theory*, George Ritzer, Ed. Thousand Oaks, CA: Sage.
- Telgen, J., & Boer L. (2008) Purchasing Practices in Dutch Municipalities. *International Journal of Purchasing and Materials Management* 12 (2).
- Thomson, J., & Jackson, T. (2007). "Sustainable procurement in practice: lessons from local government", *Journal of Environmental Planning & Management*, 50(3), 421-44.
- Wambui, E. N. (2013). Role of procurement on organization performance; a survey study of public secondary schools in Imenti North District, Kenya. *Int. J. Soc. Sci. Entrepreneurship*, 1(3): pp.289-302
- Wanyama, J. (2010). *The effectiveness of the Procurement Regulations in Kenya*. Available on <http://www.oecd.org>, on 18th March, 2016.
- Wekesa W.B., Namusonge G., & Nambuswa E. (2016) *Internal Factors affecting Procurement Practices in Public Secondary Schools in Bungoma County, Kenya*. Available at: www.researchpublish.com
- World Bank (1995a). *Guidelines: Procurement under IBRD Loans and IDA Credit*: Washington, D.C. World Bank.
- Yin, R.K. (2009) *Case Study Research Design Methods* (4th Ed.) Thousand Oaks: Sage Publications. PP. 240
- Zander, U. (2007). *Knowledge of the Firm, Combinative Capabilities*. (2nd Ed). London: Kogan Page Publishers.

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Kirianki Kimathi Benedict
Department of Educational

Administration and Planning
University of Nairobi
P.O Box 30197,
Nairobi.

The Head teacher,
_____ School

Dear Sir / Madam

RE: PERMISSION TO COLLECT DATA IN YOUR SCHOOL

I am a master student in the department of Educational Administration and Planning at the University of Nairobi. I am carrying out a research on “Factors influencing the Implementation of Procurement Practices in Public secondary schools in Embakasi Sub-county.” Your school has been selected to participate in this study. I will be grateful if you grant permission to carry out the research in your school. The information obtained will be purely for academic purposes. Your confidentiality will be treated with utmost confidentiality.

Thank you in advance.

Yours faithfully,

Kirianki Kimathi Benedict

APPENDIX II: QUESTIONNAIRE FOR THE PRINCIPALS

The purpose of this questionnaire is to get data on Factors influencing the principals’ Implementation of Procurement Practices in Public secondary schools in Embakasi Sub-county. You are therefore requested to participate in this study

by filling in the questionnaire. Do not write your name as your identity will remain confidential. Kindly be free to give your opinion to the best of your knowledge. Answer all the questions by indicating your response by ticking [] where appropriate or fill in the blank spaces.

Section A: Demographic information

1. What is your gender? Male [] Female []
2. Which is your age bracket? 20 – 30 years [] 31- 40 years [] 41- 50 years [] above 50 years []
3. How long have you been a head teacher in this school? _____years
4. What is the total number of the students in the school? Male _____ Female_____
5. What is the total number of teachers in the school? Male _____ Female _____

Section B: Influence of principals’ Training in implementation of procurement practices

6. What is your highest academic qualification? MED [] B.Ed.[] Diploma [] others (specify) _____
7. Have you attended training on financial management? Yes [] no []. If yes, how often do you attend courses on financial management? Very often [] often [] rarely [] never []
8. To what extent do you agree with the statement that “highly trained school principals possess the requisite experience to be experts when it comes to procurement practices in the schools? Large extent [], moderate [], small extent [], no extent at all []
9. Indicate by ticking appropriately your level of agreement of disagreement with the following statements on the scale provided as: **SA**=strongly agree, **A** =Agree, **NO**= No opinion, **D**= Disagree and **SD**= strongly disagree.

Statement	SA	A	NO	D	SD
Are you competent in financial management?					
The level of training of a principal influences his/her competence of the school principal					
A principals' level of training influences the implementation of public procurement practices in the school					
Highly trained principals have high level expertise when it comes to procurement processes in the schools					

Section C: Influence of experience in implementation of procurement practices.

10. How long have been in the headship position? _____ years
11. How experienced are you in handling procurement matters in the school?
Very experienced [] experienced [] neutral [] not at all []
12. How often do you prepare the procurement progress report annually as required? Very often [] often [] not often [] not at all []
13. Do you think experience of the school principal affect his/her competence on financial management? Briefly explain _____

Section D: Influence of principal's level of awareness in implementation of the procurement practices

14. To what extent are you conversant with public procurement and disposal regulations Act of 2005? Very large extent [] large extent [] Neutral extent [] small extent [] no extent at all []
15. Indicate your level of agreement or disagreement with the following statements on the scale provided as: **SD**=strongly agree, **A** =Agree, **NO**= No opinion, **D**= Disagree and **SD**= strongly disagree.

statement	SA	A	NO	D	SD
A principals' conversance with public					

procurement act enhances his or her efficiency in procurement					
A principals' level of awareness about procurement procedures influence the implementation of public procurement practices in the school					
A principals' commitment to the strict adherence of the procurement procedures determines their efficiency in procurement					
Procurement is solely dependent upon the school principals level of awareness					
School principals should attend procurement training courses					
School managements should employ experts in the fields of procurement to assist the principals.					
The ministry of should put it as one of their requirements that all school heads have knowledge of procurement					
The ministry of education should organize annual seminars on the sensitization of procurement processes in schools.					

Section E: Influence of Information Communication Technology (ICT) in the implementation of procurement practices

16. Does ICT influence the implementation of public procurement practices in the school? Yes No Briefly explain_____

17. To what extent do you use ICT in procuring goods and services in the school?
 Very large extent large extent Neutral extent small extent no extent at all

18. How would you rate yourself on usage of ICT in your school in the following aspects? Indicate your preferred choice using [] in the table below.

	Very good	Good	Fair	Poor	Very poor
Computer literacy					
ICT infrastructure					
Procurement systems					
E - procurement					

19. What do you use ICT for in the procurement processes

20. To what extent do you use the following channels to communicate with your clients?

Channel	Extent of usage			
	Large	Moderate	Small	No extent at all
Internet				
Mobile phones				
Landlines				
Oral				
Delivered				

21. What strategies would you recommend to the board of management to improve procurement practice in the school. _____?

22. Does your school follow the laid down practices in procurement procedures:

- a. Bidding
- b. Record keeping

23. State two challenges of using the following methods as a head in procurement

- A. Bidding _____
- B. Tender _____
- C. School procurement committee _____

Thank you for your time and cooperation.

APPENDIX III: QUESTIONNAIRE FOR THE BOM MEMBERS

The purpose of this questionnaire is to get data on Factors influencing the Principals' Implementation of Procurement Practice in Public secondary schools

in Embakasi Sub-county. You are therefore requested to participate in this study by filling in the questionnaire. Do not write your name as your identity will remain confidential. Kindly be free to give your opinion to the best of your knowledge. Answer all the questions by indicating your response by ticking [] where appropriate or fill in the blank spaces.

Section A: Demographic information

1. What is your gender? Male [] Female []
2. Which is your age bracket? 20 – 30 years [] 31- 40 years [] 41- 50 years [] above 50 years []
3. What is your highest academic qualification? Primary [] secondary [] Diploma [] Bachelor [] others (specify) _____

Section B: Influence of Training in implementation of procurement practices

4. How would you rate principals' competence in financial management? Very competent [] competent [] incompetent [] very incompetent []
5. How often does your school use training and development intervention strategies to improve on principals' competencies in financial management? Very often [] often [] not often [] not at all []
6. To what extent do you think principals' level of training influence the competence of the school principal? Very large extent [] large extent [] Neutral extent [] small extent [] no extent at all []. Briefly explain your answer _____

Section C: Influence of principals' experience in implementation of procurement practices.

7. How would you rate the school principal on procurement management? Very good [] good [] fair [] poor [] very poor []
8. To what extent is the principal experienced in handling financial matters in the school? Very large extent [] large extent [] Neutral extent [] small extent [] no extent at all []

9. Do you think experience of the school principal affect his/her competence in procuring goods and services in the school? Yes No Briefly explain

Section D: Influence of principals' level of awareness in implementation of the procurement practices

10. To what extent is the school principal conversant with public procurement policy? Very large extent large extent Neutral extent small extent no extent at all
11. To what extent does the principal comply with public procurement and disposal regulations Act of 2005? Very large extent large extent Neutral extent small extent no extent at all
12. How would you rate the principals' level of awareness in the implementation of procurement practices in the school? Very good good fair poor very poor

Section E: Influence of Information Communication Technology (ICT) in the implementation of procurement practices

13. Does ICT influence the implementation of public procurement practices in the school? Yes No Briefly explain_____
14. To what extent does the principal use ICT in procuring goods and services in the school? Very large extent large extent Neutral extent small extent no extent at all
15. How would you rate the principal on usage of ICT in the school on the following aspects? Indicate your preferred choice using [] in the table below.

Thank you for your time and cooperation.

**APPENDIX IV: DISTRICT SCHOOLS AUDITOR
INTERVIEWSCHEDULE**

1. For how long have you served as an auditor in schools in Embakasi Sub County? _____
2. How many schools were you able to audit last year 2016? _____
3. From your records how many schools submitted their books of account for annual audit 2014, 2015, 2016 respectively? _____
4. In your opinion, to what extent do the following aspects influence principal's procurement practice in public secondary schools in Embakasi sub county. Indicate your preferred choice using [√] in the table below.

	Very large extent	Large extent	Neutral	Small extent	No extent at all
Level of training					
Experience					
Level of awareness					
Use of ICT					

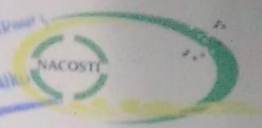
5. What are the challenges facing principals in procuring goods and services in public secondary schools? _____
6. What would you recommend to be done to improve procurement of goods and services in public secondary schools? _____
7. Do school principals adopt bidding in their procurement practices? _____
8. Is record keeping one of the ways adopted by school principals in procurement? Probe _____

Thank you for your time and cooperation

APPENDIX V: RESEARCH AUTHORIZATION LETTER

Received and
allowed to visit
the schools
28/11/2017

SUB-COUNTY QUALITY ASSURANCE
& STANDARD
OFFICER EMBAKASI - NAIROBI



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: 020 400 7000,
0713 788787, 0735404245
Fax: +254-20-318245, 318249
Email: na@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI Upper Kabete
Off Wayaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No **NACOSTI/P/17/83424/20294**

Date: 27th November, 2017

Kirianki Kimathi Benedict
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Principals characteristics influencing implementation of procurement practices in public secondary schools in Embakasi Sub County, Nairobi County, Kenya.*" I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending 24th November, 2018.

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

G.P. Kalerwa

**GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

**COUNTY COMMISSIONER
NAIROBI COUNTY
P. O. Box 30124-00100, NBI
TEL: 341865**

APPENDIX VI: RESEARCH PERMIT

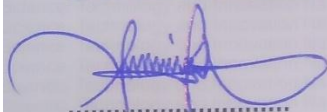
THIS IS TO CERTIFY THAT:
MR. KIRIANKI KIMATHI BENEDICT
of UNIVERSITY OF NAIROBI, 0-100
NAIROBI, has been permitted to conduct
research in *Nairobi County*

Permit No : NACOSTI/P/17/83424/20294
Date Of Issue : 24th November, 2017
Fee Received : Ksh 1000

on the topic: **PRINCIPALS
CHARACTERISTICS INFLUENCING
IMPLEMENTATION OF PROCUREMENT
PRACTICES IN PUBLIC SECONDARY
SCHOOLS IN EMBAKASI SUB
COUNTY, NAIROBI COUNTY, KENYA**



for the period ending:
24th November, 2018



Applicant's
Signature

J.P. Kalerwa

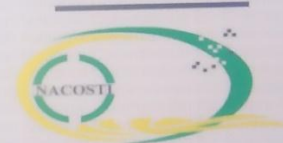
Director General
National Commission for Science,
Technology & Innovation

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.



REPUBLIC OF KENYA



National Commission for Science,
Technology and Innovation

RESEARCH CLEARANCE
PERMIT

Serial No.A **16658**

CONDITIONS: see back page