

CHRISTIAN SERVICE UNIVERSITY COLLEGE

THE EFFECTIVENESS OF INTERNAL CONTROL SYSTEMS IN PUBLIC SECOND
CYCLE INSTITUTIONS IN KUMASI METROPOLIS

(A SURVEY OF SOME SELECTED PUBLIC SECOND CYCLE INSTITUTIONS IN
KUMASI METROPOLIS)

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STATEMENT OF AUTHENTICITY

We have read the University regulations relating to plagiarism and certify that this report is all our own work and do not contain any acknowledged work from any other source. We also declare that we have been under supervision for this report therein submitted.

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ABSTRACT

For every company to be strong without threat of fraud, errors and misappropriation of assets which eventually lead to the collapse of many institutions, there must be an effective and efficient internal control systems.

The objective of the study was to find out whether or not internal control systems are stipulated by legislation and regulators of the Financial Administration Regulation, Public Procurement Act and Internal Audit Act is what is practiced in the public second cycle institutions in Ghana.

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DEDICATION

We dedicate this piece of work to our lovely parents for their unfailing love, persistent, protection of prayers and financial provisions.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The second cycle institution in Ghana serves as the middle phase for the human resource development of people living in Ghana. This makes it very imperative for any problem associated with it to be a concern to any patriotic citizen.

Over the years the schools in Ghana have suffered from several embezzlements of funds. Not long ago, the Bursar of Presbyterian boys' secondary school (PRESEC) Legon-Ga East District admitted his complicity of embezzlement of over 200,000 Ghana cedis belonging to the school.

According to the daily graphic, in a written letter to the Audit report implementation committee (ARIC) of the Ghana Education Service(GES), the former Bursar accepted the findings of the audit team which he had hitherto rejected, promising to refund the money. (Daily Graphic 19-11-07, Anonymous)

A more recent report was posted by Magdalene Sey on February, 21, 2011, who was transferred by Ghana Education Service (GES) to Mankassim Secondary Technical, following the allegation of mismanagement, was posted to replace his female counterpart, Madam Agnes Hudson, the immediate past Headmistress of MSTs.

The enraged teachers held that they do not want him to run down the school as he did during his days at Ghana National College. (Mankessim reject's National Headmaster, the Ghanaian journal, Anonymous).

The issue of misstatement and embezzlement of funds poses serious threats to the development of these institutions and eventually, to the nation as a whole. The reason being that, any country that had had the high potential of gaining the interest of international investors is mostly due to their good human resource development.

This concern help us to identify the weaknesses in the internal control of second cycle institutions and make recommendations on how to strengthen its effectiveness, is what encouraged the group to undertake the study.

1.2 Statement of the problem

The problem of the study has to do with the embezzlement and mismanagement of funds which has become rampant in the Public Second Cycle Institutions in Ghana. These problems are alleged from poor internal control systems and lack of research in the Public Second Cycle institutions that have been known to be victims, hence the study.

1.3 Objectives of the study

The research is meant to find out whether or not the internal control systems as stipulated by legislation and regulators of the Financial Administration Regulation, Public Procurement Act and Internal Audit Act is what is practiced in the Public Second Cycle Institutions in Kumasi Metropolis in Ghana.

1.4 Research questions

1. What are the internal control systems outlined by Ghana Education Service (GES)?
2. Do second cycle institutions comply with the internal control of Ghana Education Service?

1.5 Methodology

The research activity is to be carried out within Kumasi Metropolis with a population of sixteen (16) government owned schools. Some of the data that are expected to be collected and Strategies to conduct the research include;

1. Organizational charts and manual
2. Related literatures
3. Questionnaires (close ended and open ended) and interviews
4. Qualitative and quantitative data analysis

1.6 Scope of the research

The scope of the research is concentrated on Public Second Cycle Institutions in Kumasi Metropolis. The overall activity is expected to take five (5) months.

The period for the research is limited for the collection and acquisition of enough information to be carefully analyzed.

1.7 limitation of the study

The main problems faced were time, apathy, location and cost. The selected schools were scattered within the Kumasi metropolis which denied the researchers easy and immediate access to respondents. Out of the thirty-two (32) questionnaires that were sent out, only twenty (20) were retrieved from many of the personnel who were qualified to answer the questionnaires. Though some did but it was a few of them who showed concern.

It was quite difficult to lay hands on the headmasters and accountants of second cycle institutions because of their busy schedules which led to a delay in gathering the information needed for the research.

Financial limitation was another problem encountered. Diverse visits had to be made on distribution and collection of questionnaires which increased the transport allocation of the research work.

Some of the relevant information and materials like the external auditor's report, financial statements and internal auditor's report of various schools that were needed were available but we did not get access to them.

1.8 Significance of the study

The significance of the study is to:

1. Encourage the government of Ghana in assisting and instituting internal controls and to other stakeholders in taking result achieving decisions to eliminate the frequent arising news on mismanagement and embezzlement of funds that are eluding the public second cycle institutions in the country.
2. The research marks the beginning of contribution to the academic world to the worker.
3. To the study organization, it will help strengthen and encourage the second cycle institutions adopt and practice proper internal control.
4. Finally, the study is expected to serve as a data for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This study was conducted in the Kumasi Metropolis in public Second Cycle institutions in Ghana. In this study ten [10] public second cycle institutions were selected based on convenience sampling. The various schools were Kumasi Senior High Technical School, Adventist Senior High School, Opoku ware Senior High School, Prempeh College, Kwame Nkumah University of Science and Technology Senior High School, Kumasi Anglican Senior High School, T. I. Ahmadiyya Senior High School and Kumasi Girls Senior High School

Recently, education has become very important. The government is subsidizing much of the cost and many parents are striving to send their wards to schools. Education has become important to the extent that there is free education offered by the government in the primary and junior secondary Schools. Some Non- Governmental Organizations are also providing scholarships, textbooks, and other educational materials to various schools to promote the educational sector in Ghana.

There is therefore the need for authorities in charge to safeguard assets, keep proper book of account and make efficient and effective use of resources available.

2.1 Related literature

There has been extensive research in developed and some developing countries that discusses internal control systems and in particular voluntary disclosures in public institutions. A number of researches done in this area are summarised below:

Takyi Emmanuel (2010) of Kwame Nkrumah University of Science and Technology (KNUST) did a research on the effectiveness of internal control system (case study of the Coca-Cola Bottling Company of Ghana Limited). Based on the analysis, a conclusion was drawn that, the internal control structures at the Coca-Cola Bottling Company of Ghana Limited is effective. In areas where weaknesses were found it was recommended that management should lead by example as well as ensuring that there is policy to allow workers to be rotated.

Dushyantkumar Vyas (2010) Carlson School of Management, University of Minnesota researched on the internal control assessment over financial reporting ; internal control over operations (privacy breaches; SOX 404 assessment). The findings suggest that operational control deficiencies can be used as cues for potential present and future financial reporting control deficiencies and that the internal control environment has pervasive effects on the level of internal control throughout the organisation.

Mishra Sushma of Virginia Commonwealth University, Defining internal control objectives for information systems security: a value focused assessment. The findings form the basis for further theoretical exposition in security governance area.

The related researches above indicate extensive research work in relation to internal control in particular done in various parts of the world. These literatures point out a research gap of no

research being done on the Assessing the effectiveness and efficiency of second cycle institutions in Kumasi Metropolis hence this research.

2.2 Meaning of internal control

Internal control is a process affected by a college or university's governing board, administration, faculty and staff designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations;
- Reliability of financial reporting;
- Compliance with applicable laws and regulations.

The definition reflects certain fundamental concepts:

- Internal control is a process. It is a means to an end, not an end in itself.
- Internal control is affected by people. It's not merely policy manuals and forms, but people functioning at every level of the institution. All personnel should be responsible to communicate problems in operations, deviations from established standards, and violations of policy or law.

Internal control is geared to the achievement of objectives in several overlapping categories.

- Internal control can be expected to provide only reasonable assurance to an organization's leaders regarding achievement of operational, financial reporting and compliance objectives. It is not absolute assurance.
(internalaudit.wsu.edu/internalcontrols.html).

A study conducted by Committee Of Sponsoring Organization(COSO) titled internal control - integrated framework defines it as a process effected by an entity's board of directors, management and other personnel designed to provide reasonable assurance regarding the achievement objectives in the following categories;

- Reliability of financial reporting
- Effectiveness and efficiency of operations;
- Compliance with applicable law and regulations.

Statement of Auditing Standards (SAS) 300 also defines internal control as a system comprising the control environment and control procedures and policies adopted by the directors and management of an entity to assist in achieving their objectives of ensuring as far as practicable, the orderly and efficient conduct of it business including adherence to internal policies, the safeguarding of asset, the prevention and detection of fraud and error, the accuracy and completeness of accounting records and the timely preparation of reliable financial information.

According to Banking Glossary, internal control is a system of objective and controls designed for safeguarding of assets and reliability of financial records.

Internal control comprises the plan of organization and all of the coordinate methods adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, to promote operational efficiency and encourage adherence to prescribed managerial policies.

(Brockport/edu.com)

2.3 Components of internal control systems

Internal control systems operate at different levels of effectiveness. Determining whether a particular internal control system is effective, is a judgment resulting from an assessment of whether the five components – Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring – are present and functioning. Effective controls provide reasonable assurance regarding the accomplishment of established objectives.

1. Control Environment

The control environment, as established by the organization's administration, sets the tone of an institution and influences the control consciousness of its people. Leaders of each department, area or activity establish a local control environment. This is the foundation for all other components of internal control, providing discipline and structure. Control environment factors include:

- Integrity and ethical values;
- The commitment to competence;
- Leadership philosophy and operating style;
- The way management assigns authority and responsibility, and organizes and develops its people;
- Policies and procedures.

2. Risk Assessment

Every entity faces a variety of risks from external and internal sources that must be assessed. A precondition to risk assessment is establishment of objectives, linked at different levels and

internally consistent. Risk assessment is the identification and analysis of relevant risks to achieve the objectives, forming a basis for determining how the risks should be managed. Because economics, regulatory and operating conditions will continue to change, mechanisms are needed to identify and deal with the special risks associated with change.

Objectives must be established before administrators can identify and take necessary steps to manage risks. Operations objectives relate to effectiveness and efficiency of the operations, including performance and financial goals and safeguarding resources against loss. Financial reporting objectives pertain to the preparation of reliable published financial statements, including prevention of fraudulent financial reporting. Compliance objectives pertain to laws and regulations which establish minimum standards of behavior.

The process of identifying and analyzing risk is an ongoing process and is a critical component of an effective internal control system. Attention must be focused on risks at all levels and necessary actions must be taken to manage. Risks can pertain to internal and external factors. After risks have been identified they must be evaluated.

Managing change requires a constant assessment of risk and the impact on internal controls. Economic, industry and regulatory environments change as entities' activities evolve. Mechanisms are needed to identify and react to changing conditions.

3. Control Procedures

Control procedures are the policies that help ensure that management directives are carried out. They help ensure that necessary actions are taken to address risks to achieve the entity's objectives. Control activities occur throughout the organization, at all levels, and in all functions.

They include a range of activities as diverse as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties.

Control procedures usually involve two elements: a policy establishing what should be done and procedures to affect the policy. All policies must be implemented thoughtfully, conscientiously and consistently.

4. Information and Communication

Pertinent information must be identified, captured and communicated in a form and time frame that enables people to carry out their responsibilities. Effective communication must occur in a broad sense, flowing down, across and up the organization. All personnel must receive a clear message from top management that control responsibilities must be taken seriously. They must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream.

5. Monitoring

Internal control systems need to be monitored – a process that assesses the quality of the system's performance over time. Ongoing monitoring occurs in the ordinary course of operations, which includes regular management and supervisory activities, and other actions personnel take in performing their duties that assess the quality of internal control system performance.

The scope and frequency of separate evaluations depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures. Internal control deficiencies should be

reported upstream, with serious matters reported immediately to top administration and governing boards.

Internal control systems change over time. The way controls are applied may evolve. Once, effective procedures can become less effective due to the arrival of new personnel, varying effectiveness of training and supervision, time and resources constraints, or additional pressures. Furthermore, circumstances for which the internal control system was originally designed also may change. Because of changing conditions, management needs to determine whether the internal control system continues to be relevant and able to address new risks.

(www.kstate.edu/internalaudit/intcontr.html)

2.4 Types of internal control

The types of internal control can be categorized as

1. Physical controls

These are concerned mainly with the custody of assets and involve procedures and security measures designed to ensure that access to assets are limited to authorized personnel only.

2. Authorization and approval

To ensure proper segregation of duties all should require proper initiation, authorization and approval by appropriate needs. The limits to these authorizations should be clearly specified.

5. Personnel controls

This deals with procedures to ensure that personnel have capabilities which are consistent with their responsibilities. Selection and training as well as the characteristics of personnel involved are important features to be considered in setting up any control systems.

6. Arithmetic and accounting controls

These are the controls within the recording functions which check that, transactions to be recorded and processed have been authorized, are all included and are correctly recorded.

7. Management controls

These are controls exercised by management outside the day –to –day routine of the system. They include the overall supervisory control exercised by management, the review of management accounts and budgetary comparisons of internal audit function and so on.

6. Organizational controls

Organizations should have a plan defining and allocating responsibilities for all aspects of their operations. There should be a clearly specified or defined line of delegation.

7. Segregation of duties

This deal with the separation of those responsibilities or duties which when combined enables an individual to record and process a complete transaction. It reduces the risk of international manipulation or accidental error and increases the element of check and balances in the system. Key functions that must be separated include those of authorization and execution, custody and recording.

8. Supervision

Any system of internal control should include the supervision by responsible official of day-to-day transaction and recording thereof. The responsibility for supervision should be clearly laid down and communicated to the person being supervised. \

2.5 Definition and nature of internal audit

The professionalism and states of internal auditing has been enhanced by the institute of internal Auditing, a voluntary organization dedicated to issuing standards and interpretations of those standards to more than 50,000 members located in 102 countries. In 1976, it issued the statement of responsibilities of Internal Auditors, in 1980 the standards for the professional practice of institute administers the certified internal auditor program, which provides a benchmark measure of competence for the internal auditing profession.

“Internal Auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach and improve the effectiveness of risk management, control, and governance processes” Institute of Internal Auditing, IIA (2007).

Internal audit can be defined as an independent appraisal function established by management of an organization for the review of the internal control system as a service to the organization. (Millichamp, 2002, p. 349).

The internal audit staff often reports to the audit committee or the Board of Directors or to another high executive. It is expected that, the internal auditing staff have access to all units of

the organization, and that their recommendations will be given prompt attention by department heads.

Though the internal auditors are employees of the organization in which they work, subject to the restraints inherent in the employer, it is imperative that the internal auditors be independent of the department heads and line executives whose work they review. The objective of internal audit is to assist members of the organization in the effective discharge of their responsibilities and information concerning the activities reviewed. (Rittenberg, Schwierger, 1997).

2.6 Internal audit agency act

As part of the reforms under the Public Financial management reform program, a scoping study for the establishment of internal control audit functions in Ministries, Departments and Agencies (MDA) and Metropolitan, Municipal and District Assemblies (MMDA) were carried out. It resulted in proposal for the establishment of a central internal audit agency to enhance efficient accountability and transparency in the management of resources in the public sector.

Hitherto, under the Financial Administration Decree, 1979 (SMCD 221), the auditor general had legal mandate to carry out internal audits to the MDA'S and the MMDA'S but a review of the internal audit function revealed limitations on the reporting relationship.

The Bill establishes the central Internal Audit Agency is divided into three parts. The Agency is to set standards and procedures and included among the functions in clause three is the duty to ensure that the financial managerial and operating information reported internally is accurate,

reliable and timely. The object of the Agency is to coordinate, facilitate and provide quality assurance for Internal Audit Act within the public sector. It is to operate as apex oversight body.

The governing body of Agency is the Board setup in clause four. It is the function of the Board to formulate the policy of the Agency and to establish appropriate structures for the effective and efficient execution of its mandate (clause 6).

2.7 Some of the internal control procedures outlined by Ghana Education Service

1. Keep custody of checkbooks, receipt books, etc.
3. Keep receipt register
4. Form a procurement committee
5. Budget committee to prioritize needs and budget appropriately
6. purchase approved equipment or material based on budget and written memorandum
7. All transactions must be submitted with receipts. Honor certificates must be attached when there is no receipt
8. Periodically invite the internal audit team to minimize wastage of financial resources
9. Raise vouchers for every payment
10. Proper provision is made for the safe custody, banking and investment of cash, and the safe custody of value books, property and stores
11. Proper quarterly and annual accounts are prepared.
12. The Accountant and the accounting officers work in accordance with Ghana Education Service financial guidelines.

2.8 Scope of internal control activities

Each agency is responsible for developing a system of internal control processes that is specific to its operations. This system of internal controls includes procedures or mechanisms that:

- Review risk profiles on a regular basis.
- Ensure compliance with internal policies and procedures.
- Ensure compliance with applicable laws, regulations and accounting standards.
- Reduce the possibility of error, fraud or other irregularities through processes such as delegations of authorities and segregation and rotation of duties, and
- Ensure that activities underpinning agency objectives are complete, correctly recorded in the agency's financial system and ultimately reflected in the agency's financial and performance reports.

Agencies are encouraged to draw on the experience and expertise of other agencies as appropriate, including the Queensland Audit Office, when establishing new processes or reviewing existing systems.

2.9 Mechanisms to review internal controls in organizations

Although internal control systems are very important aspects of the organizations management, they have their own limitations. No internal control system however, elaborate and comprehensive it may be, itself guarantee efficient administration and reliability of records nor can be a proof against fraudulent collusion especially on the part of those holding positions of authority or trust.

Controls of segregation of duties can be defeated by collusion of those performing those duties. Also pressure exerted from both within and outside the organization may alter the competence and integrity of personnel operating the controls, other factors such as fatigue distraction, carelessness, and misunderstanding of instructions and errors of judgment or misinterpretation of instructions are more likely to undermine effective operation of controls, Whittington and Penny, (1995).

In view of the aforementioned and for the fact that internal control system is not a guarantee against losses, theft and fraud and dishonest employees, internal control has to be reviewed from time to time.

With store related duties, continuous stock check of inventories is carried out continuously according to laid down procedures.

1. Review on regular basis for store requisition, indents for authorization and proper coding.
2. Regular review of stores ledger cards against store tally cards etc.

All these are closely monitored by management to ensure the adherence to management policies on internal control systems. This is done by assessing the quality of performance on timely basis, and regular management and supervisory activities.

In summary, internal control is crucial to any business organization without it, the ability to ensure the accuracy and reliability of accounting information, a business organization cannot survive in a competitive environment. Since the inception of company's code 1963 Act 179 (123) companies are charged to institute internal control system and errors since Auditors are charged with the responsibility of a testing to the reliability of public accounting information, the

design and evaluation of systems of internal controls have become important tasks of the accounting profession.

2.10 Auditors' assessment of internal control implies:

- Determining the significance and the sensitivity of the risk for which controls are being assessed;
- Assessing the susceptibility to misuse of resources, failure to attain objectives regarding ethics, economy, efficiency and effectively, or failure to fulfill accountability non-compliance with laws and regulations;
- Identifying and understanding the relevant controls;
- Determining what is already known about control effectiveness
- Assessing the adequacy of the control design;
- Determining, through testing, if controls are effective;
- Reporting on the internal control assessments and discussing the necessary corrective actions.

2.11 Management responsibility

Management has an obligation to ensure that internal control processes are cost-effective, consistent with agency operational needs, and recognize changing operational requirements. To achieve this goal, management should:

- Recruit staff with skills sufficient to deliver agency objectives.
- Provide appropriate training to staff.

2.12 Benefits of internal controls

- Internal controls help prevent errors and irregularities from occurring. If errors or irregularities do occur, internal controls will help ensure they are detected in a timely manner.
- Internal controls encourage adherence to prescribed policies and procedures.
- Internal controls protect employees:
 1. By clearly outlining tasks and responsibilities,
 2. By providing checks and balances, and
 3. From being accused of misappropriations, errors or irregularities.

2.13 Control limitations

Internal controls, no matter how well designed and operated, can provide only reasonable assurance regarding the achievement of objectives. The concept of reasonable assurance recognizes that, the cost of internal controls should not exceed the benefits derived, recognizes evaluation of these factors requires estimates and judgment by management. For objectives related to the effectiveness and efficiency of operations, internal control can only help to ensure that management is aware of the entity's progress or lack of it.

Limitations which may hinder the effectiveness of an otherwise adequate system of internal controls include:

- Resources constraints.
- Inadequate skill, knowledge or ability.
- Degree of motivation by management and employees.

- Faulty judgments.
- Unintentional errors.

Additionally, controls can be circumvented by collusion of two or more people. Even more important to recognize, management has the ability to override the internal control system.

These factors, combined with changing needs and personnel, make it risky to project any evaluation of internal control to future periods. On an on-going basis, management must evaluate business risks and the controls needed to manage those risks and keep existing controls effective. Management evaluation generally leads to periodic adjustments and corrective action, which also helps assure the continuing effectiveness of the internal control system.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter is to elaborate on the choice of methods used in the execution of the research work, the benefits, importance, and challenges. The contention here is that the degree of success of internal controls established by Ghana Education Service (GES) depends largely on the ability to minimize the level of collusion between staff members who operate the system.

Based on the forgoing contention the investigative survey method was used as the basis research techniques for the collection of data. The method helped us to better investigate the internal control that is practiced in samples of schools selected in Kumasi Metropolis as compared with what is required by Ghana Education Service (GES). Again, a reasonable conclusion was drawn based on the method used.

3.1 Research design

Research design is the actual techniques or steps taken to collect data relevant to the research problem. That is the actual activities the researcher or investigator designs and employs to ensure that the relevant data is collected. The design ensures that the researcher gathers the appropriate information to solve the research problem [Saunders et al, 2007].

The study involved investigating and assessing the benefits of maintaining the internal controls as stipulated by the Ghana Education Service (GES). This design was chosen in order to assist in the drawing of conclusion on the effectiveness of internal controls. The survey was conducted in

the Kumasi Metropolis based public second cycle institution. The design chosen assisted in generating much more information for the judgment, since respondent were most at times given the option to express their views freely in open ended question and close ended questions. The population size for our research is sixteen (16) schools and the sample size is ten (10) schools. The convenient sampling method was used. In this method, sample units are drawn directly from the population and the procedure that is designed to meet the essential criterion of convenience. Three questionnaires each were distributed to each school, each one to the headmaster, Accountant and Storekeeper.

3.2 Population

A population according to Saunders et al, (2007) is the full set of cases from which a sample is taken, Zikmund (2000), on his part explained as all possible subjects who have the attributes in which the researcher is interested.

There are sixteen (16) public second cycle institutions in the Kumasi Metropolis.

(www.ghana.schoolssnet.com/page/senior).

Out of the sixteen schools taken as our population size, ten (10) schools were selected as our sample size. A non-probability convenience sampling technique was adopted, in which the selection of the sample was based on convenience of data acquisition from the public second cycle institutions.

3.3. Sources of data

There are two sources of data. Namely; primary and secondary data.

Primary data constitutes all the information obtained from the targeted population directly.

Secondary data is a type of data that involves all the various texts information, facts and websites that were not directly obtained including newspapers and previous written projects.

But for this research we are employing both primary and secondary data. The primary data that was used for this research were interview and questionnaires.

Secondary data that was employed for this research was information from textbooks, internet and previous written projects.

3.4 Data collection method

Questionnaires were designed taking into consideration the various sections of the schools, their individual functions as well as various accounting and internal control system used by them. The intention for these set were to obtain their views and opinions as to the objective of such controls. The focus of questionnaires was gathering relevant information so that upon analyzing them the researcher would be able to answer the research question in how effective accounting and internal controls are.

Also, interviews were conducted using the phone and face-to-face basis involving direct interaction. This was done to facilitate direct and immediate access to respondents and to avoid any information distortion.

3.5 Data analysis

The data was obtained for this research was tabulated before proceeding with analysis. The responses were analyzed using;

1. Percentages
2. Tables
3. Microsoft Excel
4. Pie Charts
5. Bar Charts and other illustrative instrument necessary for extensive data analysis.

CHAPTER FOUR

DATA ANALYSIS

4.0 Introduction

This chapter contains the research findings and the analysis of the findings. Recommendations will be drawn on the findings and finally conclusions drawn based on the data received. Both primary and secondary data was used in the acquisition of information. Primary data include questionnaires and personal interviews whilst secondary data includes information from text books, teases, media and the library.

4.1 Data analysis and result

Three questionnaires were sent to each public second cycle institution with the exception of Asanteman Senior High due to the misplacement of the number of questionnaires originally sent. The response rate of the questionnaires is 63% as summarized below. This can be considered as an acceptable level of reliability.

There are three (3) parts to the questionnaire: Administration, Accounts department and Asset control. There are a total number of twenty four (24) questions; fourteen (14) close-ended questions and ten (10) open-ended questions. A majority of the closed ended-questions also have spaces for participants to express their (unstructured) comments.

4.2 Background of schools

Table 1.1

Name of School	Number of Students	Number of Staff	Number of Courses
Kumasi Senior High Technical	2100	116	7
Adventist Senior High	2217	112	4
Opoku ware Senior High	2360	107	3
Prempeh College	2600	105	4
Kwame Nkumah University of Science and Technology Senior High	1965	92	5
Kumasi Anglican Senior High	2847	116	5
T. I. Ahmadiyya Senior High	2600	115	5
Kumasi Girls Senior High	2420	113	5
Osei Kyeretwie Senior High	2015	102	5
Asanteman Senior High	2310	120	5

4.3 Background of respondents

Table 2.1

Position of Respondent	Number of Responses	Response Rate
Headmaster/Headmistress	5	25%
Accountant	10	50%
Storekeeper	5	25%
Total	20	100%

From the table, it can be concluded that, a greater percentage of Accountants in the second cycle institution were willing to provide us with the information we needed. We can also deduce that, all ten (10) questionnaires representing fifty percent (50%) given to Accountants of various schools were acquired as compared to the Heads and Storekeepers of various institutions of only five (5) questionnaires representing twenty-five percent (25%) each.

A pie chart indicating the backgrounds from which questionnaires were answered

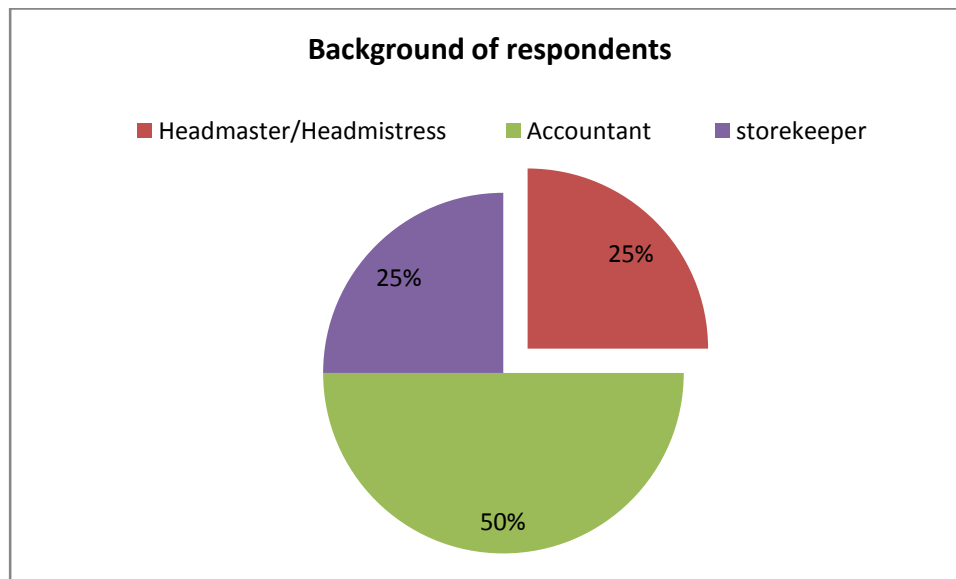


Figure 1 **Source: field survey (2011)**

4.4 Responses to questionnaires

A total of thirty two (32) questionnaires were sent out for answers to be provided by respondents out of which twenty (20) of them were received and twelve (12) not received. A tabular illustration of the questionnaires answered and received is provided in the table and pie chart below.

Table 3.1

Respondents	Number of Questionnaires Distributed	Number of Questionnaires Received	Response Rate
Kumasi Senior High Technical	3	3	15%
Adventist Senior High	3	2	10%
Opoku ware Senior High	3	1	5%
Prempeh College	3	3	15%
Kwame Nkumah University of Science and Technology	3	1	5%
Kumasi Anglican Senior High	3	1	5%
T. I. Ahmadiyya Senior High	3	3	15%
Kumasi Girls Senior High	3	2	10%
Osei Kyeretwie Senior High	3	3	15%
Asanteman Senior High	5	1	5%
Total	32	20	100%

A pie chart representing questionnaires received

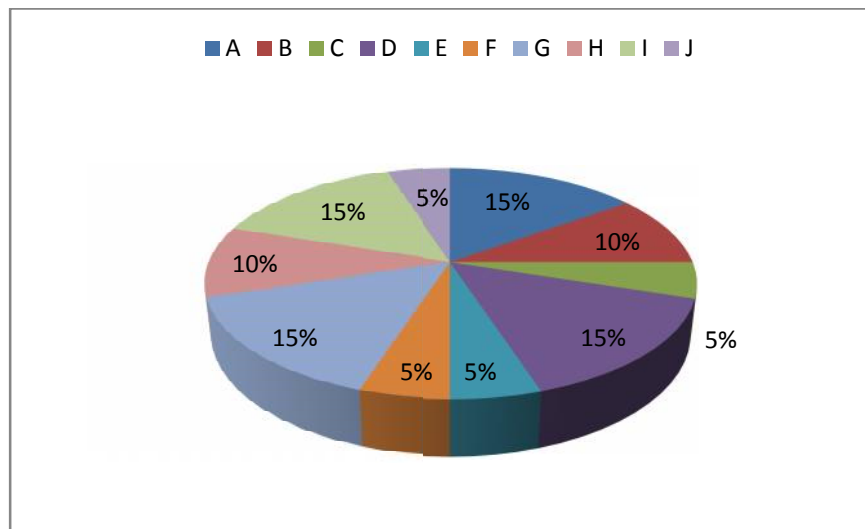


Figure 2 **Source: field survey (2011)**

A represents Kumasi Senior High Technical School, B represents Adventist Senior High School, C represents Opoku ware Senior High School, D represents Prempeh College School, E represents Kwame Nkumah University of Science and Technology, F represents Kumasi Anglican Senior High School, G represents T. I. Ahmadiyya Senior High School, H represents Kumasi Girls Senior High School, I represents Osei Kyeretwie Senior High School and J represents Asanteman Senior High.

4.5 Analysis of empirical data

Organizational structure

From the responses of our questionnaires, it can be noted that internal control plays an important role in every school sampled for our research. It can also be seen from the various organizational

charts that there are no internal auditors for each school to enforce what is stipulated by Ghana Education Service. Based on the ten (10) sampled, six (6) schools gave out their organizational chart whilst the rest, which were unavailable was due to the unwillingness to give out and the unavailability of the organizational chart.

Question 1: Does the school have a printed organizational structure?

Table 4.1

	Number of Respondents	Response Rate
Yes	18	90%
No	2	10%
Total	20	100%

When we talk about an organizational structure, we are looking at authorization, approval and procurement.

Out of a total number of twenty (20) respondents who answered the organizational chart, eighteen (18) respondents representing ninety percent (90%) have a printed organizational structure. Two (2) respondent representing ten percent (10%) do not have a printed organizational structure.

A pie chart showing the existence of an organizational structure

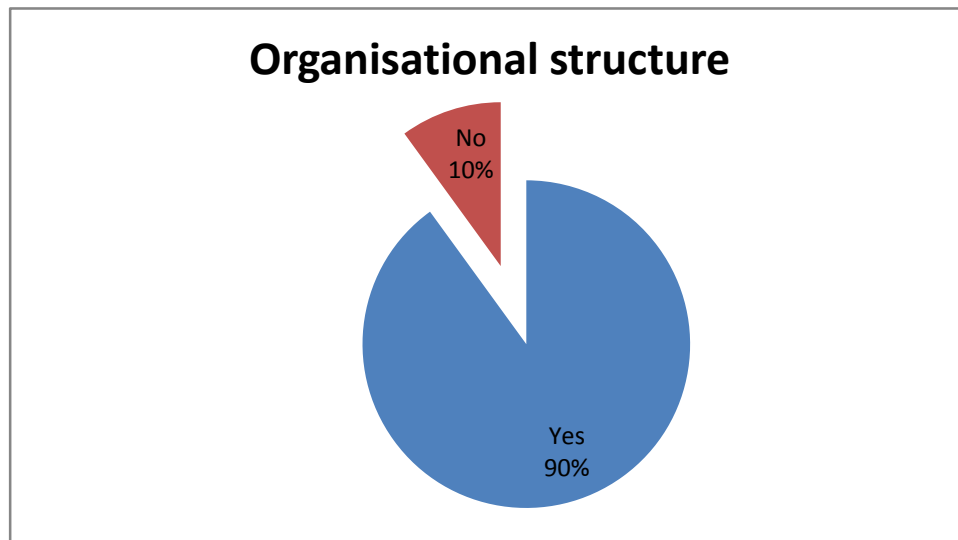


Figure 3 **Source: field survey (2011)**

4.6 Knowledge of the public procurement act

The Public Procurement Act, 2003 (Act 663) is an act enacted to control all Public Procurements. It stipulates in faces how much each authority can procure, the requirement for which level of procurement and sanctions prepared for those who disregard it. It is also another form of internal control measure to be followed.

Question 2: Does the school follow the Procurement Act for purchases and acquisition?

Out of the twenty (20) respondents seventeen (17) respondents representing eighty-five percent (85%) followed the procurement Act for purchases and acquisition whilst three (3) representing fifteen percent (15%) did not answer at all.

A chart representing the knowledge of the procurement Act

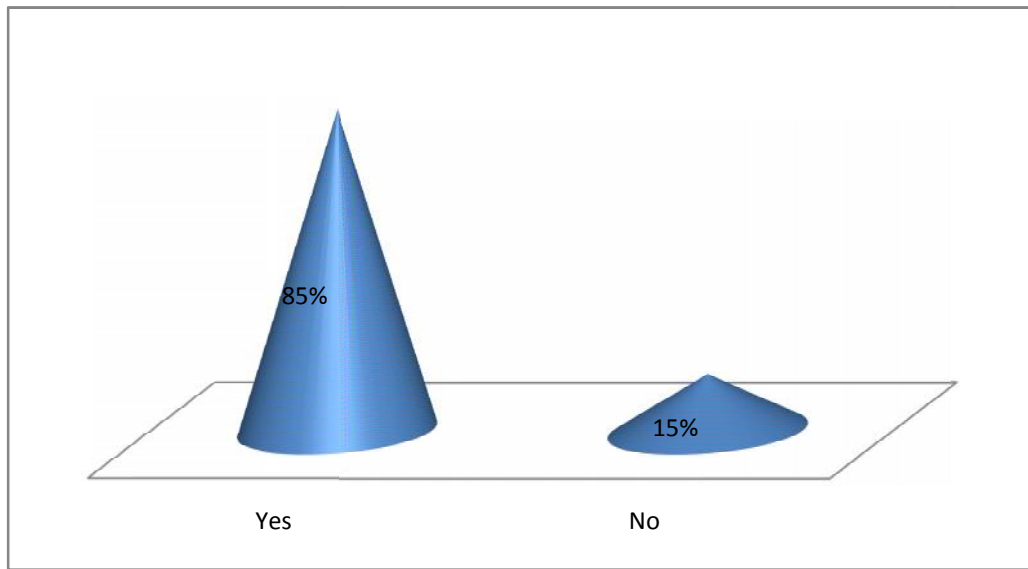


Figure 4 **Source: field survey (2011)**

Out of the total number of questionnaires received representing hundred percent (100%), three (3) respondents representing fifteen percent (15%) stated that, requisition of purchases is made by the accountant, three (3) respondents representing fifteen percent (15%) also stated that, requisition is made by the Headmaster or Headmistress. Fourteen (14) respondents representing seventy percent (70%) stated that, requisition of purchases is made by the beneficiary department.

Out of the total number of questionnaires received five (5) respondents representing twenty five percent (25%) stated that, the Accountant approves purchase requisition, ten (10) respondents representing fifty percent (50%) stated that, approval of purchase requisition is made by the

Headmaster or Headmistress. Three (3) respondents representing fifteen percent (15%) stated that, approval of purchase requisition is made by the procurement Officer.

Also seventeen (17) respondents representing eighty five percent (85%) stated that, the Accountant keeps custody of receipts, and three (3) respondents representing fifteen percent (15%) confirmed that the Storekeeper keeps custody of receipt.

All twenty (20) respondents, thus hundred percent (100%) confirms that the Storekeeper keeps custody of items.

Again, three (3) respondents indicating fifteen (15%) stated that the Accountant keeps records of the items in the stores ledger whilst seventeen (17) respondents representing eighty five percent (85%) stated that the Storekeeper keeps records of the items in the stores ledger.

In considering the information provided on the knowledge of procurement from the respondents, we can say that, there is a positive compliance to the Procurement Act in most of the public second cycle institutions.

A strong internal check must be done in the few schools who do not comply with the Procurement Law and Public Procurement Acts material be made available to them. From the study, it was realized that, a greater percentage (thus 75% representing 15 respondents) of the internal controls of public second cycle institutions detected weaknesses when the accounts are audited as compared to only 5% not detecting errors.

Question 3: who does the Auditor report to?

Table 5.1

Position	Number of respondent	Rate of Response
Management	18	90%
Board of Governors	2	10%
Total	20	100%

Ninety percent (90%) signifying eighteen (18) respondents stated that, the auditor's report to management, ten percent (10%) signifying two (2) respondents stated that, the auditor's report to Board of Governors.

Since Management is part of spending officers, it is a mistake on the part of Auditors and the school to report to them. Ninety percent (90%) therefore represents weak internal control in reporting whilst only ten percent (10%) represents strong internal control.

The external auditor is supposed to report to the Board of Governors, Metro Director or any higher authority. If not this act can lead to high rate of collusion and fraud.

A chart representing who the Auditor reports to

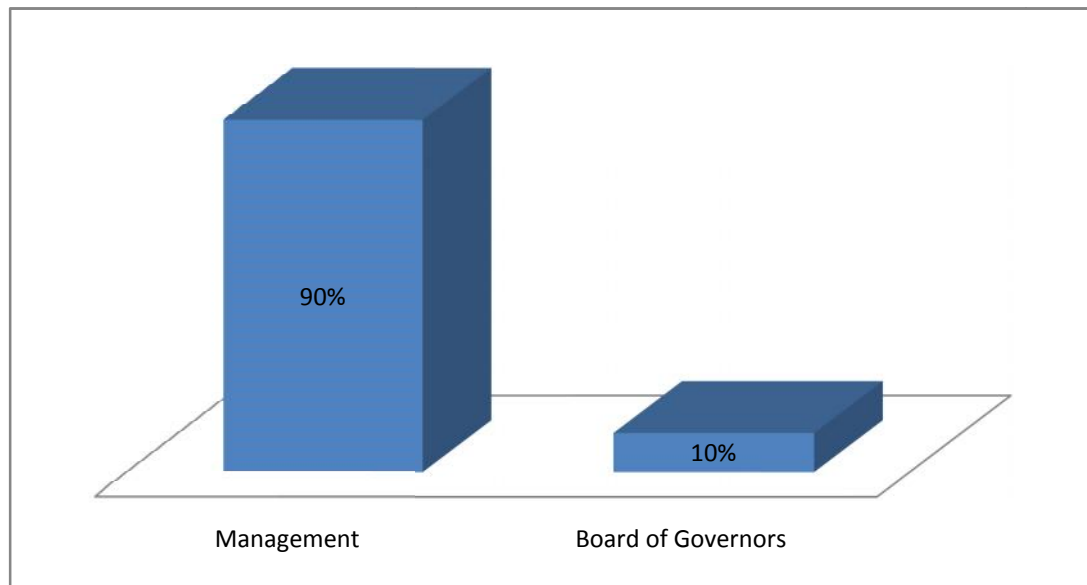


Figure 5 **Source: field survey (2011)**

Also concerning the review of internal control, twenty-five percent (25%) of the sample size indicating five (5) respondent reviews their internal controls quarterly, fifteen percent (15%) indicating three (3) respondents reviews it every term, ten percent (10%) indicating two (2) respondents reviews it yearly, fifteen percent (15%) does it by the order of the audit service and thirty-five percent (35) do not review their internal controls at all.

4.7 knowledge of the financial administration regulation

The financial administration regulation is a legislative instrument (L.I.1234) that guides the Act of public officers responsible for the receipt and disbursement of government funds. Its permeable states as follows: “in exercise of powers conferred on the commissioner responsible

for finance (Minister of Finance) by section 83 of financial administration degree (979 S.M.C.D 221) amended by financial administrating Act, 2003 Act 654. These accounting responsibilities shall apply to any public sector concern with the conduct of financial business on behalf of the government of Ghana or for the receipt, custody and disbursement of public and trust monies or for the custody, cure and use of public stores shall keep proper records of the transaction and shall produce such records for inspection where called upon to do so by the senior principal, secretary of the minister of finance, auditor general, controller and accountant-general by any officer deputed by them and failure to keep or render such record shall be deemed to be a breach of discipline.

This document which contains 139 regulations and other legislation are the rules and regulations that control every facts of public account in the country.

The Financial Administration Act governing the works schedule of staff of public second cycle institutions should be made in the form of hand outs and distributed to workers.

Question 4: How conversant is the staff with the Financial Administration Regulation?

Table 5.1

Knowledge of The Financial Administration Act	Number of Respondents	Response Rate
Conversant	12	60%
Not conversant	8	40%
Total	20	100%

The total numbers of questionnaires answered were twenty (20), twelve (12) respondent representing sixty percent (60%) were conversant with Financial Administration Act. Eight (8) respondents on the other hand representing forty percent (40%) were not conversant at all with the Financial Administration Act.

A pie chart indicating knowledge of respondents of the Financial Administration

Regulation

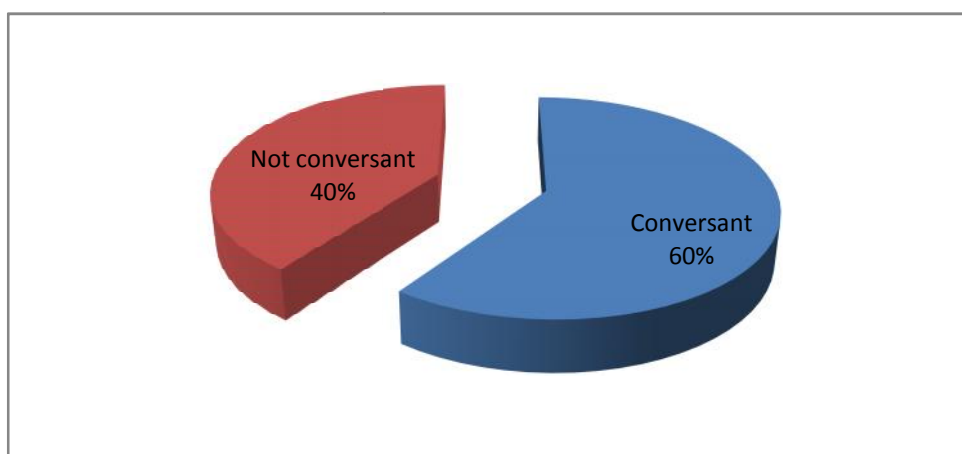


Figure 5 **Source: field survey (2011)**

As a public institution governed by the Financial Administration Act, all employees should have conversant knowledge about the Act. Adequate training should be made available to the remaining forty percent through workshops and other training activities.

4.8 Safeguarding of assets

Question 5: Are there measures put in place to safeguard asset?

Table 5.1

	Number of Respondents	Response Rate
Yes	44	73%
No	16	27%
Total	60	100%

With the payment of fees, sixteen (16) respondents indicating eighty percent (80%) does it with the bank draft whiles two (2) respondents signifying ten percent (10%) does it by cash and one (1) respondent representing five percent (5%) pays with the pay-in- slip. One respondent representing five percent (5%) also does it either by cash or by bank draft.

Fifteen (15) respondents indicating seventy-five percent (75%) of the respondents said the accountant cross checks cash before they are banked, three (3) respondents signifying fifteen percent (15%) answered that the Headmaster does this. Two respondents did not give an answer to this question.

Fifty-five percent (55%) indicating eleven (11) respondents sends cash to bank the same day they are received whilst seven (7) signifying thirty-five percent (35%) does not. The remaining percentage did not give respond to the question.

A pie chart indicating whether measures are put in place to safeguard assets

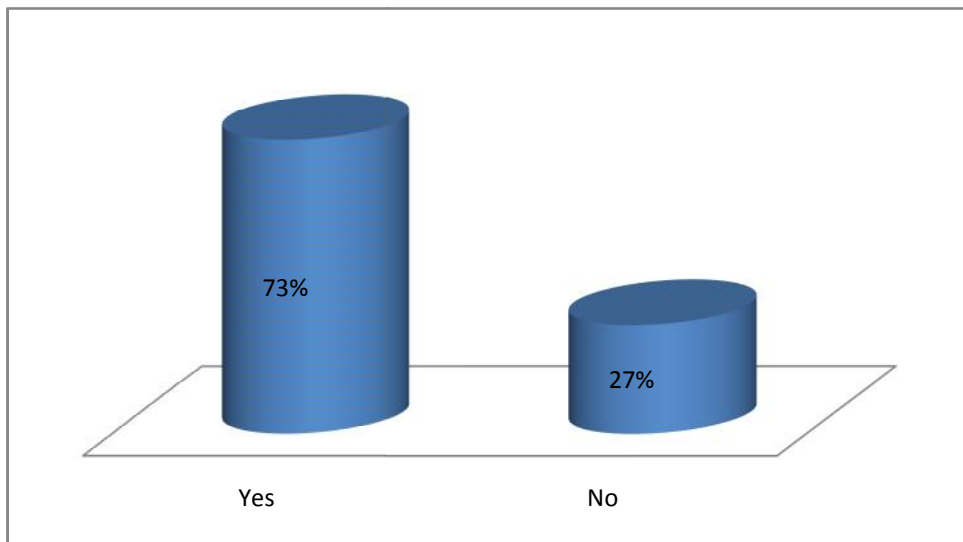


Figure 7 **Source: field survey (2011)**

Question 6: what system of accounts does the school operate?

Regarding the system of accounts that the school operates, nine respondents representing forty-five percent (45%) operates a manual system of accounts whiles one respondent representing five percent (5%) operates computerized and the remaining percentage use both of the system of accounts.

4.9 Analysis of findings

Table 6.1

Questions	Strong internal controls	Weak internal control	Total
Question 1	90%	10%	100%
Question 2	85%	15%	100%
Question 3	10%	90%	100%
Question 4	60%	40%	100%
Question 5	73%	27%	100%
Sub Total	318/5	182/5	
Total	64%	36%	100%

According to the findings analyzed, sixty four percent (64%) represents strong internal control systems whilst thirty six percent (36%) represents a weak internal control system in public second cycle institutions in Kumasi metropolis.

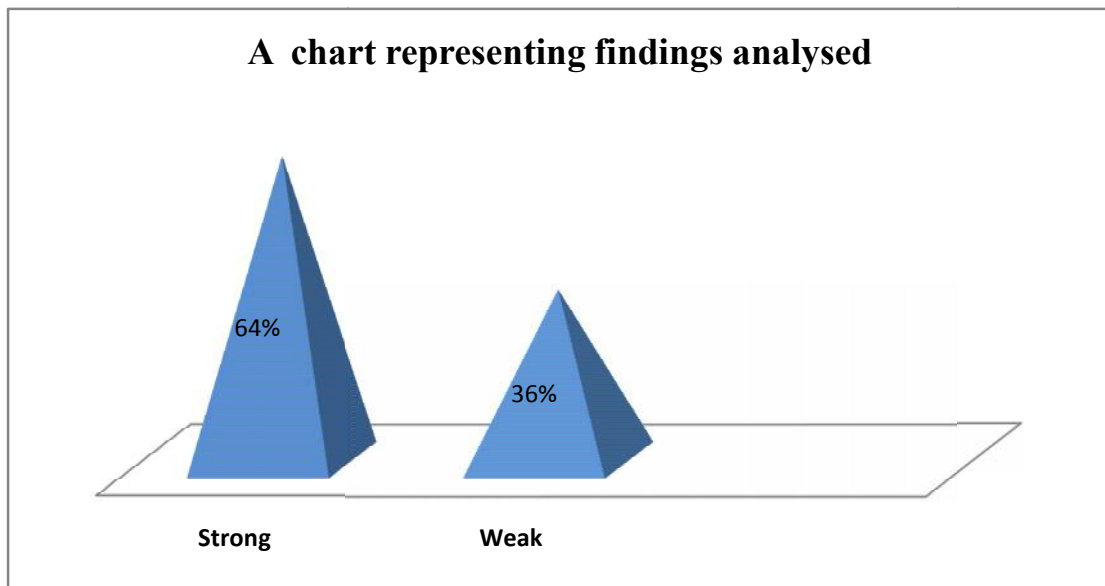


Figure 8 **Source: field survey (2011)**

CHAPTER FIVE

FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Findings

This chapter attempts to capture the main issues addressed in the study. It also gives conclusion, suggestion and recommendations which will help economically empower organizations to institute internal control systems in their school's workplace.

The main aim of the study was to investigate and assess the effectiveness of internal control systems in the Second Cycle Institutions in Kumasi Metropolis. The sampling method used for the study was convenient sampling and the research instrument used for the collection of data from respondents were questionnaires and interview. Descriptive statistics as well as frequency tables; percentages, Microsoft Excel, Pictorial graphs, pie charts, cones and bar charts were used in analyzing the data to explain certain point where necessary.

From the findings, it comes to light that the efficiency and effectiveness of internal control systems in Public Second Cycle Institutions are strong which represents 64%. Although some of the relevant information and materials like the external auditor's report, financial statements and internal auditor's report of various schools that were needed were available but we did not get access to them.

Notwithstanding these, there are some problems facing the schools which include;

- a. Inaccessibility to books, laws, rules and regulations on internal control system and internal audit
- b. Poor segregation of duties

- c. Lack of knowledge of the Internal Audit Agency Act
- d. Inadequate Supervision
- e. The unwillingness of officers in charge to train new employees on specific internal control systems existing in their individual division.

5.2 Conclusion

The study concludes that there are few challenges affecting the effectiveness of internal control system in the Second Cycle Institutions in Kumasi Metropolis.

It was realized through the study that knowledge of laws, rules and regulation of internal audit and internal control is lacking among staff. Facilities and logistics needed to assist in the implementation of internal control procedures are also insufficient in Second Cycle Institutions.

This is also due to the fact that administrators do not provide the necessary financial support to the officers and the individual officers are unwilling to sponsor themselves on such courses.

Other challenges hampering the effectiveness of internal controls in Second Cycle Institutions in general are inadequate review of accounts and documents sufficient.

5.3 Recommendation

In every organization, the process of establishing internal control unit is very important. This is because, it helps check waste, fraud, abuse and also helps to institute internal control measures in the organization.

Based on the data gathered, analysis made and views expressed by interested parties, the under mentioned suggestions and recommendations were made to ensure the success of the internal control systems in Second Cycle Institutions.

- a. Workshops and seminars should be incorporated in the budgetary allocations of various schools in order to provide all necessary training to staff members. Officers in charge must also make sure the finance set aside would be used for its purpose.
- b. A strong internal check must be done in the few schools who do not comply with the Financial Administration Regulation and Public Procurement Acts and then materials made available to them in the form of hand outs.
- c. The internal audit committee must also visit the various second cycle institutions frequently (that is at least three times in a term) to access their books and accounts.
- d. Also to limit corruption and insufficiency in the public institutions of Ghana by promoting accountability and greater transparency about government services, programs. The second cycle institutions must also adopt appropriate governance structure, mobilizing sufficient and appropriate resources and competent personnel.
- e. Auditors should report to the Board of Governors to reduce collusion fraud and mismanagement of funds.

- f. There should be effective internal control measures in place to check fraud, errors, and misappropriations of funds or any material misstatement and also the need to consider the structuring of transfers so that one staff does not remain at one station for more than four or five years to reduce collusion and fraud based on familiarity.

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APPENDIX A

RESEARCH QUESTIONNAIRES

**THIS RESEARCH IS BASED ON THE TOPIC “THE EFFECTIVENESS OF
INTERNAL CONTROL SYSTEMS IN PUBLIC SECOND CYCLE INSTITUTIONS IN
KUMASI METROPOLIS”.**

1) ADMINISTRATION

A. Does the school operate with internal control? Yes () No ()

B. If no, what is the alternative?

C. If No, how are they expected to function with the internal control procedures?

.....

.....

.....

D. Does the school have a printed organizational structure? Yes () No ()

E. Are the various staff members well informed about the organizational structure and how
it works?

Yes () No ()

F. Are external auditors engaged to audit accounts? Yes () No ()

G. Who does the auditor report to?

i. Management ()

ii. Metro Director ()

iii. Board of Governors ()

iv. Others ()

Specify

H. Have the reports of the external auditor ever detected weakness in the internal control?

Yes () No ()

If yes, what was it about?

.....

.....

I. Is there a policy for reviewing internal control system?

Yes () No ()

If yes, how often are they reviewed?

2) ACCOUNTS DEPARTMENT

A. What system of accounts does the school operate?

Manual ()

Computerized ()

Both ()

B. Are you conversant with the Financial Administration Act?

i. Conversant ()

ii. Quite conversant ()

iii. Not conversant ()

C. Does the school follow the procurement Act for purchases and acquisition?

Yes ()

No ()

D. Who can make requisition for purchase?

E. Who approves purchase requisition?

F. Who makes the purchases?

G. Who takes custody of receipt?

H. Who takes custody of items?

I. Who keeps record of the items in the stores ledger?

3) **ASSET CONTROL**

J. From whom does the school receive assets?

- i. Government ()
- ii. Parent Teachers association ()
- iii. Old students Association
- iv. Others

Specify.....

K. How is school fees paid?

- i. Bank draft ()
- ii. Cash ()
- iii. Pay-in-slip ()
- iv. Others ()

Specify.....

L. Are payment vouchers issued for monies given out? Yes () No ()

M. Are receipt vouchers issued for monies received? Yes () No ()

N. Who crosscheck cash before they are banked?

O. Are cash banked the same day they are received? Yes () No ()

RECORDS OF RESPONDANT

Name of the school.....

Position of respondent.....

Total number of students in the school.....

Total number of teachers.....

Number of courses.....

Gender of respondent: Male () Female ()