INFLUENCE OF MONITRORING AND EVALUATION APPROACHES ON IMPLEMENTATION OF PHYSICAL INFRASTRUCTURAL PROJECTS IN PUBLIC SECONDARY SCHOOLS OF UASIN GISHU COUNTY, KENYA

BY

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DECLARATION

This research project report is my original work and has not been presented to any other university.

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DEDICATION

I dedicate this research project to my husband Mr. Shem Vilembwa for moral support and encouragement in the course of study, my mother Jones Ondisa for the good advice and my dear children Aristone, Laurecia and Trendavillea who endured my absence gracefully during my course of study.

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ABSTRACT

Monitoring and evaluation has a key role in achieving organization growth and development. Most project managers appreciate the fact that monitoring and evaluation of projects is important if the project objectives and success is to be achieved. Project monitoring and evaluation exercise adds value to the overall efficiency of project planning, management and implementation by offering corrective action to the variances from the expected standard. Project managers in the county are required to undertake more rigorous monitoring and evaluation of the projects and develop frameworks and guidelines for measuring its influence as per the settings in public secondary schools. The study was guided by the following objectives: to assess how fund utilization in monitoring and evaluation influences implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya, to assess how project scheduling in monitoring and evaluation influences implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya, to establish how quality compliance in monitoring and evaluation influences implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya and to determine how the level of stakeholder involvement in monitoring and evaluation influences implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya . The target population was drawn from public secondary schools in Uasin Gishu County with a target population of 173 public secondary schools. The participants of the study consisted of Constituency development fund (CDF) committee members, Quality Assurance (QUASO) auditors, the Ministry of Works officials, Project Management Committee from the BOM and the school Principals. The target population consisted of 537 respondents.The total sample size was therefore be 162 respondents. The data collection instruments that were used to collect data from the selected respondents were interview schedule and questionnaires. The study applied both quantitative and quantitative analysis techniques. A descriptive research design was adopted for the study. Frequency, percentages and correlation were used to analyze the data under quantitative analysis. The findings from the study indicate monitoring and evaluation approaches are in use in our public secondary schools of Uasin Gishu with a popularity of over 70% for each of them. Influence of budgeting, tendering, decision making by stakeholders and internal controls on implementation of physical infrastructural projects in monitoring and evaluation scored over 90%.This is a clear indication that they work best for the county when in use. The study has been of benefit to other counties as it is able to make them perceive an in depth overview of the monitoring and evaluation process on the ground at county level as it is and its influence. The study has been of great resource to scholars as it has immensely contributed to the body of knowledge.

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LIST OF ABBREVIATIONS AND ACRONYMS

BOM: Board of Management

CDF: Constituency Development Fund

GOK: Government of Kenya

MP: Member of Parliament

NACOSTI: National Commission of Science Technology and Innovation

SMC: School Management Committee

PPOA:Public Procurement Oversight Authority

LATF:Local Authority Trustee Fund

SPSS: Software Package for Social Sciences

PA: Parent's Association

CHAPTER ONE

INTRODUCTION

1.1 Background of study

Globally, monitoring and evaluation has relevance in management of project scope, time, cost, quality, human resources, communication and risks. A study by Prabhakar (2008) pointed that monitoring and feedback is a factor leading to project success. The probability of achieving project success seemed to be enhanced among other factors, by steadily monitoring the progress of a project. In agreement, Hwang and Lim (2013) also proved that monitoring and evaluating budget performance, schedule performance and quality performance could result in project success. Ika, Davis, Lascon, & Uhl (2010) carried out a regression analysis which shows that there was a significant and positive relationship between each of the critical success factors and project success. The critical success factors include monitoring, coordination, training and Institutional environment.

In Kenya, studies carried out show that quite a number of projects have been successful. This is according to (Kimando, 2013). The self-reliant agriculture (SRA) projects which were meant to help the villagers become self-reliant by growing their own food. This program was viewed as successful since it realized its goals through training local population of Mnyenzeni on how to raise their own food. Most of the villagers had access to land where they could plant gardens and rear animals but the land was not used efficiently (Ward, 2010). On the other hand, several projects in Kenya have been cited as failed projects; meaning that they did not achieve success. Some studies show that one of the drawbacks of monitoring and evaluation in Kenya is failure by the management to

implement the recommendations offered by the monitoring and evaluation team (Ochieng, Odeh, and Battaineh, 2012).

Monitoring and evaluating of projects can be of great value to various players including project sponsors as it ensures similar projects are replicated elsewhere as witnessed in various projects undertaken by the financial sector (Marangu, 2012). Through the review of literature, the researcher has singled out three major aspects in relation to monitoring and evaluation in project management. The three aspects include strength of the monitoring team, monitoring and evaluation approaches and stages in project lifecycle. Naidoo (2011) noted that one of the components of the project management methodology whose main aim is to achieve project success was monitoring project progress (Chin, 2012). Project managers are required to undertake more of monitoring and evaluation of the projects and develop frameworks and guidelines for measuring impact (Kahilu, 2010).

Magondu (2013) also noted that financial availability is the most important resource in any functional organization as far as other resources such as human are concerned. To set up a monitoring department, finances are required. He further elucidates that staff capacity both in numbers and skills are also very instrumental in any effective implementation and sustainability of monitoring and evaluation. The staff needs to be equipped with the relevant skills for performance and success. Other factors also play a role in strengthening monitoring teams which includes: frequency of monitoring to identify changes, number of persons monitoring project schedule, extent of monitoring to detect cost over runs (Ling, Bruce, Samson, & Joseph, 2009).

One of the components of the project management methodology whose main aim is to achieve project success was monitoring project progress (Chin, 2012). There seems to be consensuses across the project management field of study in the statement that monitoring and evaluation is a major contributor to project success. Most project managers appreciate that monitoring and evaluation of projects is important if the project objectives and success is to be achieved. Project monitoring and evaluation exercise adds value to the overall efficiency of project planning, management and implementation by offering corrective action to the variances from the expected standard. Project managers are required to undertake more rigorous monitoring and evaluation of the projects and develop frameworks and guidelines for measuring impact (Kahilu, 2010).

School infrastructure, its design, quality and day to day management is significant in enabling the government school system to deliver improved education outcomes. Investment in school infrastructure has the potential to improve education outcomes through improving the student outcomes achieved by individual schools (Mulwa, 2008). School and classroom factors, as distinct from stakeholder and family influences, are considered to explain between eight and fifteen per cent of the variation in student outcomes (Shashi, 2010). Two of the key characteristics of effective schools are the establishment of a stimulating and attractive learning environment and a concentration on teaching and learning (Sammons, Sambasivan & Soon, 2013).Physical infrastructure will refer to classrooms, teacher's houses, school toilets and teachers' offices.

1.2 Statement of the Problem

There are many physical infrastructural projects underway in our schools with increasing demand for education. Development is also automatically taking root in our public secondary schools on yearly basis. Development projects in our schools are initiated by the stakeholders and accountability is expected of the resources pumped into the project. Embezzlement of project funds by the schools administration is a common occurrence. The school projects need to be monitored and evaluated closely to ensure proper funds utilization, proper scheduling of activities and quality compliance. Literature from past studies shows that if a project follows a monitoring and evaluation approach from the beginning, it is easy to conduct an evaluation at the end. An evaluation is a critical tool for determining lessons learned for future purpose .Without monitoring and evaluation dialogue at the grassroots level is minimal and the entity is in a position of passive beneficiaries. Research recently conducted on more than 5,400 monitoring and evaluation projects on average, large monitoring and evaluation projects run 45 % over budget and 7 % over time, while delivering 56 % value than predicted under precise monitoring and evaluation programmes.

1.3 Purpose of the Study

The purpose of the study was to investigate the influence of Monitoring and evaluation approaches on implementation of physical infrastructure projects in public secondary schools in Uasin Gishu County, Kenya.

1.4 Research Objectives

1. To assess how fund utilization in monitoring and evaluation influence implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya.
2. To assess the extent to which project scheduling in monitoring and evaluation influences implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya
3. To determine the influence of level of stakeholder involvement in monitoring and evaluation on implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya.
4. To determine the of influence quality compliance in monitoring and evaluation on implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya.

1.5 Research Questions

1. How does fund utilization in monitoring and evaluation influence implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya?
2. How does project scheduling in monitoring and evaluation influence implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya?
3. How does the level of stakeholder involvement in monitoring and evaluation influence implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya?

4. How does quality compliance in monitoring and evaluation influence implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya?

1.6 Significance of the Study

It was hoped that the study would provide feedback that was important to county leaders and specifically county development officers because they would be able to acknowledge the influence of monitoring and evaluation approaches on physical infrastructure projects in public secondary schools. The study highlighted some of the most popular monitoring and evaluation approaches in implementation of physical infrastructural projects by the stakeholder in the county. The study is to be of benefit to other counties as it will enabled them to perceive an in depth overview of the monitoring and evaluation process on the ground at county level as it is and its influence. The study was of great resource to scholars as it immensely contributed to the body of knowledge. The scholars should be able to read/understand and contribute to this study and its applications in other relevant fields and sectors.

1.7 Delimitations of the Study

The study was only confined to Uasin Gishu County. As a result the findings of the study were not used to make inferences with respect to practices in other counties.

1.8 Limitation of the Study

The study was faced with challenges since some respondents were not willing to share out information that would be useful for the study for fear of reporting colleagues and administrative systems negatively. Some respondents were also be uninterested, with reserved personalities or were too busy; however the aim of the study was explained to

them that the study is only carried out for educational purpose and thus the information collected would be confidential.

1.9 Organization of the study

This study comprised of five chapters. Chapter one dealt with the background of the study, statement of the problem, purpose of the study, research objectives, significance of the study, delimitation of the study, limitations of the study, definition of significant terms used in the study and assumptions of study. Chapter two basically dealt with reviewing of theories and the past studies. The past studies offered insights and were beneficial in guiding and providing information to the study. Chapter three discussed research methodology, sampling procedure, researcher instruments, reliability of research instruments, data collection procedures, data analysis and ethical issues. Chapter four presented data analysis, presentation and interpretation. The analysis was based on the objective of the study. Chapter five discussed the summary of the findings drew conclusions and made recommendations for further research.

1.10 Assumptions of the Study

The study assumed that the public schools in the county employ monitoring and evaluation and stakeholder participation. The study also assumed that respondents of the study would respond to the interview questions and questionnaires genuinely and without biasness.

1.11 Definition of Terms used in the Study

Project monitoring and Evaluation- An important project tool that is used to help identify good practices and single out less effective ones contributing to decision making which is evidence based.

Fund utilization- it is the usage of finances to facilitate the execution of the project activities

Sponsoring-To supports an event or organization financially or through provision of products or services.

Accountability- Answerability, blameworthiness, liability and the expectation of account giving.

Valuation-In finance is the process of estimating what something is worth. Items usually valued are a financial asset or liability to determine proper tax liability and in litigation.

Project scheduling-is the arranging of the projects activities in terms of commencement time, implementation and expected completion time.

Identification of projects- The act of determination and selection of projects to be undertaken.

Sustainability of projects-Endurance and maintainability of projects

Project duration-The length of time that project implementation lasts.

Level of stakeholder involvement- Degree of participation of persons with a vested stake or interest in projects.

Tendering-The process by which bids from interested contractors are invited in order to carry out specific packages of construction work.

Budgeting-A plan for future expenditures and income that can be used as a guideline for saving and spending.

Decision making- Selection of the plan of action to abide by.

Quality compliance- it refers to the adherence to stakeholder requirements and expectations in projects.

Level of inclusiveness- Extent of integration of a particular aspect.

Responsibility- The state of being accountable or answerable.

Internal controls- Involves everything that controls risk to an organization. As defined in accounting and auditing is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting and compliance with laws, regulations and policies.

Physical infrastructure- refers to fundamental tangible structures inclusive of offices, classrooms, staff houses, toilets etc.

Project- refers to planned set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the literature available on key issues dealing with influence of monitoring and evaluation approaches on implementation of physical infrastructure projects in public secondary schools. This is followed by a systematic review of relevant literature organized in accordance to the research objectives.

2.2 Concept of Monitoring and evaluation

Monitoring and evaluation is a process whose goal is to improve current and future management of outputs, outcomes and impact (Ward, 2010). It is mainly used to assess the performance of projects, set up by governments, international organisations and NGOs. It establishes links between the past, present and future actions (Naido, 2011). Monitoring and evaluation processes can be managed by the donors financing the assessed activities, by an independent branch of the implementing organization, or by the implementing team themselves and/or by a private company. The credibility and objectivity of monitoring and evaluation reports depend very much on the independence of the evaluator or evaluating team in charge and their expertise (Naido, 2011).

Many international organizations such as the United Nations, the World Bank group and the Organization of American States have been utilizing this process for many years. The process is also growing in popularity in the developing countries where the governments have created their own national monitoring and evaluation systems to assess the development projects (Shashi, 2010). The developed countries are using this process to

assess their own development. An evaluation is a systematic and objective examination concerning the relevance, effectiveness, efficiency and impact of activities in the light of specified objectives. The idea in evaluating projects is to isolate errors not to repeat them and to underline and promote the successful mechanisms for current and future projects (Ika, Davis, Lascon, & Uhl, 2010).

An important goal of evaluation is to provide recommendations and lessons to the project managers and implementation teams that have worked on the projects and for the ones that will implement and work on similar projects. Evaluations are also indirectly a means to report to the donor about the activities implemented. It is a means to verify that the donated funds are being well managed and transparently spent. The evaluators are supposed to check and analyse the budget lines and to report the findings in their work (Mulwa, 2008). Monitoring is a continuous assessment that aims at providing all stakeholders with early detailed information on the progress or delay of the ongoing assessed activities. It is an oversight of the activity's implementation stage. Its purpose is to determine if the outputs, deliveries and schedules planned have been reached so that action can be taken to correct the deficiencies as quickly as possible (Mulwa, 2008).

The common ground for monitoring and evaluation is that they are both management tools. For monitoring, data and information collection for tracking progress according to the terms of reference is gathered periodically which is not the case in evaluations for which the data and information collection is happening during or in view of the evaluation. The monitoring is a short term assessment and does not take into consideration the outcomes and impact unlike the evaluation process which also assesses the outcomes and sometime longer term impact. (Ward, 2010).

This impact assessment occurs sometimes after the end of a project, even though it is rare because of its cost and of the difficulty to determine whether the project is responsible of the observed results. In general, monitoring is integral to evaluation. During an evaluation, information from previous monitoring processes is used to understand the ways in which the project or programme developed and stimulated change. The evaluation process is an analysis or interpretation of the collected data which delves deeper into the relationships between the results of the project, the effects produced by the project/programme and the overall impact of the project (Ward, 2010).

2.3 Fund Utilization and Implementation of Physical Infrastructure Projects

In Malawi, June 2011, the Government of Malawi announced that all primary school fees would be abolished as of the beginning of the new school year in October 2011. This created a flood of over one million additional pupils in the primary schools. Classrooms were overcrowded, and thousands of children had to take their lessons in temporary facilities such as churches and mosques. Thousands more assembled in the open air or under trees. It was common to see classes of two or three hundred children in a small shed called a classroom. In view of the new imperatives, a primary education project was developed, focusing on the following urgently needed activities. Concerned stakeholders were involved in the sponsoring the project and the construction of classrooms and associated infrastructure, pedagogical support and in-service training, particularly focusing on the newly recruited teachers and provision of teaching and learning materials (World Bank 2013).

Stakeholder participation in sponsoring in monitoring and evaluation was incorporated in attempts to realize the first objective of school construction. The notion of integrating stakeholder participation into the monitoring and evaluation of the project was considered from the preparation stage of the project. Through that, the importance of all stakeholders including the bank, the Government, and communities were satisfied with the achievements gained through stakeholder participation in monitoring and evaluation (World Bank, 2013). Further, stakeholder members were participating in the monitoring and evaluation activity by contributing funds and forming school committees to evaluate school performance. Stakeholder members were willing to make cash contributions because the stakeholder really cared about their children and wanted to provide good education for their children. This was the case because the government delegated more responsibilities to local stakeholder. Communities were encouraged to participate in the development of their schools through all phases, including planning, construction and operation in monitoring and evaluation (World Bank, 2013).

In Kenya there are three types of schools: public/government schools, private schools and stakeholder schools. Public/government schools constitute the largest proportion of schools in the country. The government is responsible for payment of teachers' salaries and providing subsidies in terms of textbooks and school feeding in public/government schools. They also receive support in terms of supervision, curriculum development and pedagogical development. Monitoring and evaluation is used in construction of school buildings, determination of salaries for non-teaching staff and operational costs. Private schools are owned by private entrepreneurs, companies, churches and other recognized bodies. Parents participate through paying school fees for their children. Stakeholder

schools are built, financed, managed and maintained by the communities. It is the communities that are responsible for paying teachers' salaries, teaching learning materials and other recurrent costs for monitoring and evaluation in school projects (World Bank, 2013).

People-centered development shifts the emphasis in development action to people, rather than to objects and production, and to the enhancement of their capacity to participate in the development process. Heavily relying on outside resources, such as funding, has resulted in most interventions being unsustainable. A people centered approach enhances self-reliance in communities (Adesina, 2007). Designed to support the government's strategy of education reform, the project attempts to involve parents and local communities in decision making and the evaluation in monitoring and evaluation of the performance of service providers, in order to make the education system truly accountable to the people. In addition, the project regards school as a stakeholder resource, the center for stakeholder training programs and other extracurricular activities, thus allowing the stakeholder to assume its new responsibilities, and parents to better understand and carry out their role of supporting, and reinforcing the education of their children (Adesina, 2007).

To set this process in motion from the outset of the education reform, school and local councils are created. These councils actively participate with local National Secretariat Education representatives in activities, including selecting teachers, allocating the budget, determining the language of instruction, and setting the school calendar. Furthermore, the councils provide continuing oversight of the education system at a stakeholder level

in monitoring and evaluation. As they are more directly accountable in monitoring and evaluation to the communities in which they work, teachers and administrators are more responsive to beneficiary's needs, which are an important step to achieve decentralization of the education system (Adesina, 2007).

Stakeholder accountability in monitoring and evaluation in the decision making process is essential to making any governmental or private system, accountable to its beneficiaries. The success of the education reform program in Bolivia will be assessed by the degree to which school councils can be empowered and enabled to assume these responsibilities (Adesina, 2007).

2.4Project scheduling and Implementation of Physical Infrastructure Projects

According to Gray and Larson (2008) a project is a complex non-routine, one life time effort limited by time, budget and resources to meet customers' needs. The constituency development fund amended Act 2007 defines a project as an eligible development in which the projects are identified by the school management committee (SMC) or Board of managements (BOM) after stakeholder formulation (GOK, 2014).

The BOM is the legitimate manager of a public secondary school and exercises this authority through the principal who is the BOM secretary. The CDF Act of 2010, sections, 23 (3) provides for stakeholder to come up with a list of projects to be funded by CDF. Section 38 of act provides for the stakeholder representation in any project undertaken to be under a manager in the school. Project identification and costing lays squarely with the Board and after identifying the project then the BOM cost the project by preparing Bill of Quantities (BQ) and forward the same to CDFC in accordance with

CDF Act, (2007) The BOM then forwards minutes of certified documents for approval and ratification to local CDF office (MOE, 2007)

According to Kamau (2007) BOM face many challenges while managing projects funds from CDF which is due to composition of BOMs, shortage of CDF funds and long bureaucratic process and disbursement. CDF Act, 2010, provides the needs for costing and evaluating projects in schools on continuous basis, in which the BOM is mandated to cost all projects and avail financial records related CDF projects, tender the project and provide all bank transactions and project implementation report. Political interference has become a serious hindrance which affects school projects and it's general management, the board of managements nomination process is a political activity since education Act, cap 211 section 4 (2) (c) (d) states that six BOM members should be proposed by the local politicians, the area member of parliament and councilor and area chief (Achoka, 2010).

Physical infrastructure projects in schools require adequate allocation of time and resources to monitoring and evaluation. Bamberger & Cheema (2007) asserts that stakeholder participation in monitoring and evaluation is one of the major contributing factors for sustained stakeholder project because without the stakeholder, the project cannot stand on its own. While other factors that can be seen to make the stakeholder development project sustainable include, monitoring and evaluation, planning, programme operations, fact finding and research, budget allocation and analysis, public relation, human commitment, team work etc, all these come from the implementing organization.

Monitoring and evaluation is an important factor for the sustainability of projects as it is the genuine involvement of local people as active participants and equal partners whose concerns and experience are intrinsic to the project's success. Stakeholder awareness and involvement in monitoring and evaluation in project planning and implementation are important elements in the sustainability of a project. Many scholars suggest encouraging active stakeholder participation at all levels of project design and implementation for sustaining those programs.

Amutabi, (2009) states that politics determine the scope of funding the school is allocated by constituency development fund and the level of influence by the local politicians plays a major role in sourcing of constituency development funds. Politics either limit or benefit school project implementation. The BOM is influenced by local politics in its project implementation school project management under BOM. CDF funds face major problems from politicians hence, with the BOM being influenced by political forces from project identification up to implementation it is evident that majority of problems facing school projects using CDF lays squarely with politicians which can make CDF projects either progress or derail school projects management of public schools. In central division Machakos district success mostly depends on political interest.

According to Okumbe (2008) local stakeholder are the school funds managers. The Board of Managements (BOM) should integrate and co-exist in a peaceful atmosphere so that schools can integrate their programmes with those of the stakeholder. According to Adesina (2007) most schools in post-independence Kenya were started by local stakeholder finances, they provided funds security and local communities has been impressively supporting school’s projects after independence. Cases of negative

stakeholder influence in monitoring and evaluation on CDF project management in schools slows down project implementation and affects school performance. Locally initiated programs may be more sustainable so it might be necessary to develop some level of local institutional building. Involving all relevant stakeholder leaders and agencies facilitates sustaining programs (Goodman & Steckler, 2009).

2.5 Level of Stakeholder Involvement and Implementation of Infrastructure Projects

Heneveld and Craig (2014) recognize parent and stakeholder support in monitoring and evaluation as one of the key factors to determine school effectiveness in Sub-Saharan Africa. They identify five categories of parent and stakeholder support in monitoring and evaluation that are relevant to the region: children come to school prepared to learn. The stakeholder provides financial and material support in monitoring and evaluation to the school. Communication between the school, parents, and stakeholder is frequent; stakeholder has a meaningful role in school governance; and stakeholder members and parents assist with instruction.

Williams (2011) argues that there are three models of Education and Stakeholder. The first one is traditional stakeholder-based education, in which communities provide new generations of young people with the education necessary for transmitting local norms and economic skills. In this model, education is deeply embedded in local social relations, and school and stakeholder are closely linked. The second model is government-provided education, in which governments have assumed responsibility for providing and regulating education. The content of education has been largely

standardized within and across countries, and governments have diminished the role of the stakeholder. However, a lack of resources and management incapability has proven that governments cannot provide the stakeholder with adequate resources for education delivery, fully-equipped school buildings, and a full range of grades, teachers and instructional materials. Williams further presents a model that shows the relations between the role of stakeholder in monitoring and evaluation and local demand.

Epstein (2013) summarizes various types of involvement in monitoring and evaluation to explain how schools, families, and communities can work productively together, Parenting to help all families to establish home environments that support children's learning at school; Communicating to design effective forms of school-to-home-to-school communication that enables parents to learn about school programmes and their children's progress in schools as well as teachers to learn about how children do at home. Volunteering – to recruit and organize parents' help and support; Learning at home – to provide information and ideas to families about how to help students at home with home-work and other curriculum-related activities, decision, and planning; Decision-making- to include families in school decisions, to have parent leaders and representatives in school meetings; and Collaborating with the stakeholder to identify and integrate resources as well as services from the stakeholder in order to strengthen school programmes, family practices, and student learning.

Bray (2014) provides the following degrees of participation in monitoring and evaluation in education; designing policy, curriculum development, teachers hiring/firing,

supervision, payment of teachers, teacher training, textbook distribution, certification, building and maintenance of classrooms and mobilizing resources. Rose (2010) argues that there is potentially a range of areas in which communities can be involved in monitoring and evaluation in education from mobilizations of resources and constructing classrooms, to supporting the development of curriculum and design of policy.

Lancaster (2009) points out the importance of stakeholder participation in monitoring and evaluation as follows: the approach helps the project to be sustainable as communities themselves learn how to adopt and correct changes resulting from the project; partnership or participation helps to protect interest of the people concerned; it enhances dignity and self-reliance among people, that is, they are enabled to obtain and do things by themselves; communities become aware of the project implementation as they have a great store of wisdom and skills. They understand their local needs and the nature of their environment better than outsiders; participation makes local people to act as multiplier of new project which they achieve. They can easily transmit the new knowledge they acquired to other communities, thus cause a rapid increase in growth of the new idea; participation promotes a sense of ownership among the stakeholder of equipment used in the project, and even projects itself. For example, they will protect and maintain the project through their own means e.g. school buildings; it also enhances empowerment to stakeholder members by building their capacity to identify, define, solve and implement various social an economic issues that affect their lives; and participation creates sense and attitude of self-reliance; this especially happens when the project developer leaves the project to the indigenous stakeholder.

It is believed that participation ensures success as people get involved when they have a sense of ownership of project and feels that the project meets their needs. This makes them willingly oversee construction and then take care of the facilities to ensure their sustainability (Tacconi, 2009). In addition it is suggested that participation can lead to greater stakeholder empowerment in the form of strengthened local organizations, a greater sense of pride and the undertaking of new activities (Oakley, 2008). Stakeholder participation creates an enabling environment for sustainability by allowing users not only to select the level of services for which they are willing to pay, but also to make choices and commit resources in support of the choices made by the stakeholder (Tacconi, 2009).

Stakeholder participation in monitoring and evaluation, project initiation, implementation and management, apart from creating a sense of ownership and responsibility within communities, is an important factor in developing an effective and long-lasting project (Kaliba, 2009). As a means to an end, Stakeholder participation in education is seen as way to increase resources, improve accountability of schools to the stakeholder they serve, contribute funds, ensure the most cost-effective use of resources and importantly be responsive to local needs (Rose, 2010).

According to Okumbe (2008) local stakeholder are the school funds managers. The Board of managements (BOM) should integrate and co-exist in a peaceful atmosphere so that schools can integrate their programmes with those of the stakeholder. Giovanna (2009) argues that the critical motivation behind the department of management of fund is that the stakeholder who is the beneficiaries can participate in both prioritization of the projects to be funded and in evaluating the expenditure of the money thus cutting losses

due to bureaucracy, graft and mismanagement. This actually is well catered for in the Act as section 45.3 of the CDF Act 2010 disqualifies all politicians such as MPs and councilors from being Constituency Account Signatories. The section also specifies that the authorized signatories will be at least 3 persons with County Accountant signature being mandatory, the county development officer also regulates the payment by signing vouchers and all cheques are passed through him/her and the Fund Account Manager seconded to CDFC by the board. Hence as much as Mwangi (2013) explains that CDFC appointment and its management create room for political patronage and other irregularities, otherwise checks and balances are well in place.

Involving men and women in CDF projects and programmes at the local level creates ownership of the CDF funded projects and the people look at it as their own project and utilize it optimally while at the same time taking care of it and safeguarding it against vandalism and destruction since it is their property. Samburu West, Dagorreti, South Imenti, Bahari, Nyando, and Kajiado South constituencies are good examples of how to ensure participation of local men and women in CDF activities right from the sub-location level (Tacconi, 2009). According to Adesina (2007) most schools in post-independence Kenya were started by local stakeholder finances, they provided funds security and local communities has been impressively supporting school's projects after independence, cases of negative stakeholder influence on CDF project management in schools slows down project implementation and affects school performance.

Project estimates and tender prices can then be compared to this database and when they are significantly below it, should direct attention to potential quality and durability concerns, or the ability of the contractor to complete the work effectively. Where they are

significantly higher this may indicate deliberate price inflation or collusion in the tender process. Direct comparison of costs between and within countries, projects and programmes can be difficult because they vary considerably due to factors including exchange rate, procurement method, taxes, location, and availability of materials, logistics, climate, geology and the infrastructure design (Gasper, 2009).

Common methods of procurement in secondary schools include tendering where open tendering is advocated for as the preferred method of tendering. In some specific situations though, restricted open tendering and selective tendering also get to be employed. According to Kinyanjui (2012), framework contracting is a method schools may employ as it is allowed by PPOA. It would suit secondary schools as a method to procure products that are required in large quantities (the same thing) year in year out. In a case where selective tendering is to be employed, the school would need to appraise a list of suppliers.

Lawler's (2014) work suggests that school-based budgeting would entail allocating most of the budget to schools in a lump-sum and then empowering key stakeholders at the site -- the school site council, the principal, and teachers -- to make budget decisions. Research in schools further indicates that sites need flexibility with the budget, so that school-level participants can make changes to the instructional program, such as the ability to decide the mix of personnel. In a research of two school-based managed districts, principals cited budget flexibility as a critical ingredient for effectively addressing school-specific problems. Research conducted by Brown (2007) also supports the importance of budget flexibility. In his study of centralized counties, one of the

primary complaints of principals was that they did not have the flexibility to acquire the resources they felt they needed to competently do their job.

A second area of budgeting power is the extent to which schools control expenses related to substitute teachers and utilities (Hentschke, 2008). This includes the ability to accrue savings from these accounts as discretionary funds at the school site. In centrally managed districts, the district office pays for utilities and provides substitute teachers on an as-needed basis. Thus, if schools work to conserve energy by turning off lights after school hours or reduce teacher absenteeism, they do not gain any financial rewards for their efforts. Proponents of school-based budgeting argue that if such expenses were under school control, staff would become more aware of the costs and more efficient in their use of these resources.

The third area of authority is control over the source of supply (Hentschke, 2008; Murphy, 2008). In traditionally managed districts, the district office provides services and supplies to schools and often it is the district, not the school that decides when they are needed. Under school-based budgeting, schools have the authority to purchase services and supplies from either the district or an outside vendor when the school decides they are needed. Brown (2007) predicts that if schools were given this authority, there would be less of an urge to hoard supplies. Past research of districts with school-based budgeting suggests that central offices have been reluctant to fully devolve this authority to schools, however.

Finally, the literature on decentralized management suggests that school-based budgeting should allow individual schools to carry over unspent money from one year to the next

(Hentschke, 2008; Murphy, 2008). In centralized districts, any unspent money reverts to the district office. Such a policy often pushes schools to make poor expenditure decisions and order nonessential items just so that all of the money is spent on time (Brown, 2007).

Knight (2010) found that information technology also can be utilized to model the financial costs of alternatives. Other types of information that would be useful to schools with school-based budgeting include comparative data about other schools' budgeting activities/processes, survey data from parents and other stakeholder members about school priorities and performance, and student achievement and personnel data. Such information could be used to inform the budget development process by clarifying student needs and by providing useful school-based budgeting models.

According to Okumbe, (2008), by continuously fulfilling their needs, people learn to realize their objectives more easily. It is a mechanism that enables local people to determine their own values and priorities and act on their own decisions. Full potential of individuals is realized after they have been made aware; then, depending on their capabilities, they act in order to achieve their goals and objectives (Ika et al, 2010). Lawler (2009) found that information needs to accompany power in order for departments and work teams to be able to make good decisions. Indeed, according to Lawler (2009), effective communication of financial and strategic information is a primary responsibility of senior management. This information might include revenues and costs disaggregated to the department and unit levels, timelines, production reports, and customer satisfaction results. Lawler (2009) suggests the use of technology, particularly electronic mail, as one way to speed up the collection and dispersal of this information. Similarly, schools need to receive the information necessary for making

decisions about how to create and plan a budget, how to allocate dollars, and how to evaluate the budget.

Brown (2008) recommends that schools be provided with a district handbook to guide staff members through the budget planning process. This handbook might include district goals to guide the budget process; a planning timetable for the upcoming year; district allocation processes used; costs, such as personnel and services, to be incurred at the site; and the budget format to be followed. In addition, on-going evaluation of the budget needs to occur throughout the year.

The experiences with decentralization in giving room to stakeholder participation in monitoring and evaluation have been very mixed in a numbers of countries that have committed themselves to participation. People in Chad value education highly and, therefore local contributions to the cost of education have been a long standing tradition in the country. This explains the efforts of local communities to play a greater role in financing and operating schools even when the education system deteriorated due to the civil war of 2009 (Uemura, 2009).

Primary education services were not delivered in rural areas. In these critical circumstances, communities organized themselves and developed a self-managed, private form of education administered by an association of rural workers who hired and paid teachers directly from their own financial resources. In 2008, the government started to transfer its funds to these innovative stakeholder managed schools (Education Con Participation de La Comunided; EDUCO) (World Bank, 2007).

2.6 Quality Compliance and Implementation of Physical Infrastructure Projects

High involvement, or decentralized management, has become a prevalent strategy in the private sector to enhance organizational effectiveness and productivity (Lawler, 2009).Based on Lawler's (2014) work, it has been found that organizational effectiveness and productivity improves when four key resources are decentralized within the organization: power, information, knowledge, and rewards.

In the context of school-based budgeting, the high involvement framework implies that schools need real power over the budget to make allocation and expenditure decisions; fiscal and performance data for making informed budget decisions; professional development and training for the budget process so that people at the school site will have technical knowledge to do the job; and control over the compensation system to reward performance. In the private sector, several levels of the organization, including departments or divisions and work teams, may be empowered to make budgeting decisions. Operating in a high involvement framework, these groups function almost as small businesses or mini-enterprises (Lawler, 2009).

To effectively accomplish these tasks, Lawler (2009) suggests that these groups need budgetary responsibility, including the ability for processing claims, managing credit card accounts, managing investments, and providing staff services such as fringe benefits. While many private sector organizations have devolved these tasks to the department or division level, there are now examples of these duties being delegated to work teams as well.

The incorporation of good school planning and design is essential if the programme is to provide modest yet safe, attractive, accessible and durable learning environments that meet local needs. To achieve this, the programme needs to: review national design norms and standards which are often inappropriate if they exist; produce a series of generic designs specifications, bills of quantities and schedules of materials for different topographical and climatic regions for all types of education infrastructure and put in place systems to ensure that good planning and gender sensitive design practice is incorporated into the design of the schools and facilities.

The strategy should therefore: set out what national norms and standards are in place and assess their suitability; set out how new standards will be developed or existing ones modified, where this is required; identify and list what standard designs and documentation should be developed; show how principles of good planning and design will be incorporated into the programme (this is a particular issue when stakeholder contracting is being used) and identify any particular land issues that are likely to arise (a particular issue in urban environments). Particular issues that relate to the incorporation of water and sanitation into the programme could include: the involvement of other departments and ministries, such as water, health and sanitation (including separate arrangements for girls and boys); technical issues and how school and stakeholder water supplies may be combined. The strategy therefore needs to have a specific section setting out how the provision of school will be addressed in the programme (Bruce, 2014).

Construction quality will be better if there is competent supervision of the works. Without regular professional site supervision contracts cannot be managed properly, the durability of completed facilities is likely to be compromised, maintenance costs will be

higher, health and safety procedures will be difficult to enforce and there will be less transparency. Supervision is often undervalued and inadequately budgeted for even when very significant sums of money are being disbursed for capital works. The strategy therefore must: set out how quality control will be addressed; include budgeted proposals for the provision of competent supervision by suitably qualified personnel (preferably from the stakeholder) and set out how stakeholder members can be equipped with basic maintenance and evaluation skills for reliable and sufficiency in reporting at each stage of development (Kumaraswamy,2009).

Realistic estimates of what will be delivered, in what order, over what time period and at what cost will be crucial to the success of the programme and while these estimates need to be flexible, it is important that efforts are made to ensure that they are as realistic and accurate as possible. The strategy therefore needs to include: a range of targets that are based on what can realistically be achieved taking into account the time frame and implementation capacity; a timeline that: clearly shows the logical progression of the programme phases, the proposed activities and the dependencies between them; is realistic considering the prevailing constraints including the construction season and that allows time for preparatory work to be undertaken prior to any disbursements of funds for capital works; a budget that: covers all activities required to deliver the programme effectively and is based on an independent cost baseline. The programme design should include for the development of a cost database based on market rates (rather than any fixed or standard rates) for all the types of infrastructure to be constructed. Infrastructure unit costs should be based on the actual designs and procurement method to be used and include an analysis of regional price differences (Baloi, 2008)

Parents and communities in Bolivia have traditionally made cash and in-kind contributions to their children's school. However, they have historically had no voice in decisions directly affecting their children's education. Parents and communities have not been involved in selecting teachers, determining the school calendar, the language of instruction and content of materials, and evaluating teachers' attendance or behavior. Even when communities protest regarding teacher absenteeism, abuse of children, or other misbehavior, they only encounter administrative authorities that are habitually unresponsive. This poor educational system largely has resulted from strongly centralized decision making, cronyism, and corruption (Lancaster, 2009).

The project is designed to support the government's educational reform strategy that introduces mechanisms to achieve the effective participation of parents and communities. The School Board, comprised parents and stakeholder members, works with District Education boards and Local Education Boards to review and approve key decisions a the corresponding level, such as selection of key personnel, budgets, yearly operating plans, school calendars, and selection of materials. The School Board will also approve all appointments of principals and teachers as well as the yearly budget, and will report on resource use. The School Board will be asked to evaluate aspects of teacher performance, in particular, their class attendance and treatment of children, and to participate in the identification of students' learning needs and in the overall definition of the new curriculum (Rose, 2010).

2.7 Theoretical Review

2.7.1 Arnstein's ladder of participation

Perhaps the seminal theoretical work on the subject of stakeholder participation was by Arnstein (2009). The particular importance of Arnstein's work stems from the explicit recognition that there are different levels of participation, from manipulation or therapy of citizens, through to consultation, and to what we might now view as genuine participation, i.e. the levels of partnership and citizen control. The limitations of Arnstein's framework are obvious. Each of the steps represents a very broad category, within which there are likely to be a wide range of experiences.

Use of a ladder also implies that more control is always better than less control. However, increased control may not always be desired by the stakeholder and increased control without the necessary support may result in failure. Arnstein's, increasingly complex theories of participation have been advanced and new terminology added. In particular, there has been a shift towards understanding participation in terms of the empowerment of individuals and communities. This has stemmed from the growing prominence of the idea of the citizen as consumer, where choice among alternatives is seen as a means of access to power.

Under this model, people are expected to be responsible for themselves and should, therefore, be active in public service decision-making. This theory relates immensely to the study in that monitoring and evaluation adopts a participatory approach. Stakeholder is involved in decision making and more control from the stakeholder is better than less control. Funds support is vital in project implementation

2.7.2 Utility Theory

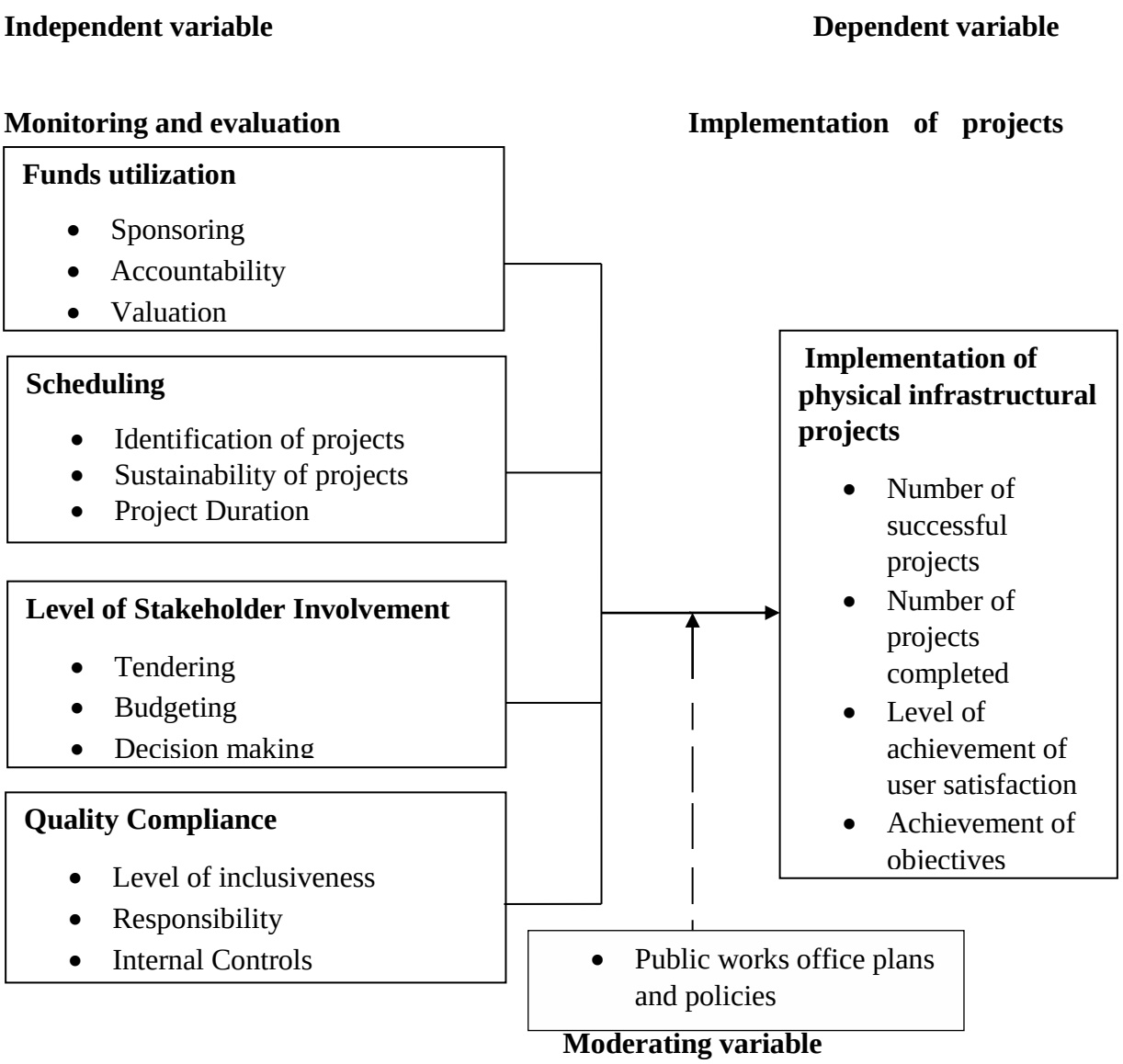
This study was guided by the Utility Theory advanced by Weldon (2013). The theory postulates that although it is impossible to measure the utility derived from a good or service, it is usually possible to rank the alternatives in their order of preference to the consumer. Utility is that property in any object, whereby it tends to produce benefit, advantage, pleasure, well or happiness. Utility theory is concerned with people's choices and decisions and with judgment of preferability worth, value and goodness.

Utility theory provides a methodological framework for the evaluation of alternative choices made by individual firms and organizations, which is the main reason behind the researcher's decision to use it for the study. Budgeting gets its root from evaluation of viability of an investment, which is not limited to one venture but rather series of ventures from which an organization can choose from. Evaluation leads to ranking in order of desirability or profitability or utility (Weldon, 2009). Utility theory therefore provides methodology framework for the evaluation in the study.

Utility would be useful during budget line determination, budget control (implementation phase) and project identification and activities prioritization during implementation. This means that there should be benefit gained from having competent budgeting committee members, allocation resources for project implementation, evaluating project implementation and applying virement procedures.

2.8 Conceptual Framework

The study conceptualized the monitoring and evaluation process as the independent variable, and implementation of physical infrastructural projects as the dependent variable. The conceptual framework shows the relationship between the dependent and independent variables.



Source: Author, (2015)

Figure 2.8 Conceptual Framework

2.9 Knowledge Gap

The rapid expansion of student enrolments in recent years, coupled with inadequate resources to cope with the ever-increasing demand for educational provision, has made school project management a much more complex and difficult enterprise now than a few decades ago. To ensure effective and successful management, the school head must not only be innovative, resourceful and dynamic, but also be able to interact well with people both within and outside the school. These include staff and students, parents, members of the Parents Association and many other members of the stakeholder. All of these need to be brought, in some way or other, into the decision-making and project management process if they are to remain supportive of what the school head is doing. In other words, for the purpose of achieving success as a project manager, the head must create an environment of participation in the running of the school.

There have been a number of valuable studies of Project success, majority of which seems to agree that monitoring and evaluation is a major contributor to project success (Prabhakar, 2008; Hwang and Lim, 2013; Ika et' al, 2010; Chin, 2012; Ika et' al, 2010). The review of literature suggests that there are researches that have been carried out mostly from USA, Malaysia, Iran, India, Nigeria, United Kingdom, and the like. Therefore the knowledge gap that was addressed by this study in an attempt to add to the body of knowledge is to give the research an Uasin Gishu County perspective.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction.

The chapter describes the research design as well as the methods that were used to sample the population and the target population bringing out the sample size. The chapter further looks at methods of data collection, research instruments, their validity and reliability, operational definition of variables and methods of data analysis.

3.2 Research Design

Research design is a plan for collecting and utilizing data so that desired information can be obtained with sufficient precision (Huberman, 2009). The study adopted a descriptive survey. A descriptive survey research design is a design used to assess thoughts, opinions, and feelings. It describes or defines, often by creating a profile of a group of problems, people or events, through the collection of data and tabulation of the frequencies on research variables or their interaction (Cooper and Schindler, 2010).This design was deemed appropriate as it enabled the researcher to collect primary data on the influence of monitoring and evaluation approaches on implementation of physical infrastructural projects in public secondary schools.

3.3 Target Population

According to Mugenda (2009), target population is a population to which a researcher would like to generalize the result of the study. The target population was drawn from public secondary schools in Uasin Gishu County, Kenya. According to the County Ministry of Education, there are 173 schools. The participants of the study consisted of Constituency development fund (CDF) committee members, Quality Assurance Officer's audit members, Ministry of Works officials, schools principals and Project management

committee from the BOM**.** The target population was 537 respondents as illustrated in table 3.3

Table 3.3 Target Population.

Strata	**Numbers**
Constituency Development Fund Committee	9
QUASO Audit members	6
Works Ministry officers	3
School principals	173
PMC BOM members	346
Total	**537**

Source: Education Office –Uasin Gishu County, 2016

3.4 Sampling Procedures and Sample Size

According to Gray (2009) sampling is the process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they will be selected. The sample size of the study will be calculated using the formula below as recommended by Mugenda (2010).This formular is used to obtain the sample size by obtaining 30% of the target population.

Table 3.4 Sample Size

Strata	**Numbers**	**procedure**	**Sample Size**
CDF Committee	9	9*.3	3
QUASO Audit	6	6*.3	2
Works Ministry officers	3	3*.3	1
School principals	173	173*.3	52
PMCBOM members	346	346*.3	104
Total	**537**		**162**

The study employed simple random sampling. This is a sampling method that allows the researcher to select respondents at random without subjecting any selected individual more than once.

3.5 Research Instruments

This refers to the tools which were used for collecting data and how these tools were developed. The data collection instruments that were used to collect data from the selected respondents are interview and questionnaires. Selection of the tool was guided by the nature of data to be collected, time available, objectives of the study and the simplicity of the instrument.

3.5.1 Questionnaire

Structured questionnaires were used to collect the required information from the study population. The questionnaires consisted of the respondents' background information and were based on the objectives. This method was chosen because it enabled the researcher to obtain a lot of information over a short period of time. The instrument also ensured anonymity of respondents as they were not asked to identify themselves. A questionnaire was used to determine a variety of aspects from respondents including beliefs, thoughts, knowledge, and motives. Well-designed questionnaires were easy for literate people to complete and the researcher to administer and analyse. Notable strengths included: simplicity in testing for reliability and validity and ability to offer respondents a great sense of anonymity that enables them to provide factual responses which the researcher considered beneficial due to the sensitive nature of the survey. A structured questionnaire was developed based on the literature review and reference also was made to the problem identified and objectives set. Assistance in development of the instrument was sought

from the research supervisor and a statistician. Questions developed were mainly close ended.

3.5.2 Interview Guide

The study also employed an interview guide as a primary tool of getting information. The interview guide was administered to the CDF Committee, QUASO Audit members and Ministry of Works officials since they had more information to give.

3.5.3 Validity of Instruments

According to Mugenda and Mugenda (2010), validity is the degree to which results obtained from the analysis of data actually represent the phenomena under study. A valid instrument should accurately measure what it is supposed to measure. Validity refers to the extent to which an empirical measure adequately reflects the real meaning of the subject under investigation (Orodho, 2010). To ensure the data acquired will be valid in this study, the following steps were taken: to enhance validity of instruments, pre-testing will be done to determine whether or not the questions are acceptable, answerable and well understood. The feedback was used to validate the instruments in readiness for the study. For validation purposes the researcher formulated the questionnaire and interview guide in person as per each research objective.

In order to specify and determine the content validity of the research instruments the researcher consulted the supervisors whose critique was used to improve the questionnaire to ensure that the instruments were viable to collect data from the intended area. Content validity was ensured by doing a thorough literature review study on which the content of the questionnaire was based. The researcher's supervisors checked the questionnaires for its general content, content validity and thoroughness. Based on their

comments, the questionnaires were modified and the necessary review and adjustments were made before the questionnaires were piloted. Content validity is a non-statistical type of validity that involves the systematic examination of the test content to determine whether it covers a representative sample of the behaviour domain to be measured. Content validity requires the use of recognized subject matter experts to evaluate whether test items assessed defined the content.

3.5.4 Reliability of Instruments

Reliability is the consistency of the research instrument. Mugenda and Mugenda (2009) observe that reliability is a measure of degree to which a research will yield consistent results after repeated trials. To ensure reliability of the research instruments, the questionnaires that were used for the purposes of this study were subjected to a pilot study. 16 respondents from Elgeiyo Marakwet County [10% of the sample size with 162 respondents] were subjected to the questionnaires to ensure reliability. The results from piloting were used to assist in restructuring the questions in the questionnaire that are not clear to the respondents. The restructured questionnaires were again retested through administering to a different set of respondents.

3.6 Data Collection Procedures

The researcher obtained a permit from the university to conduct the study. Then she sought permission from The National Commission for Science, Technology and Innovation (NACOSTI). Permission was also sought from the Education Ministry County Director, Uasin-Gishu County and from the respondents who were to participate in the study. The researcher visited the selected schools before hand for familiarization and acquaintance with targeted respondents, especially the principals. While filling the

questionnaires, they were not required to write their names. This was expected to enable them give sincere and reliable responses. The researcher agreed with the respondents to collect all the administered questionnaires in person after two days upon completion. This ensured high return rate of the questionnaires and ruled out the problems likely to be encountered through posting then back to the researcher.

3.7 Data Analysis Techniques.

Data analysis is the process of creating order, structure and meaning to the mass of information collected (Mugenda, 2010). The study applied both qualitative and quantitative analysis techniques. Qualitative data was analyzed and presented thematically. Quantitatively, data was analyzed using descriptive statistics. Descriptively data was analyzed using frequencies, percentages and correlation.

3.8 Operationalisation of variables.

The table below shows the objectives of study, variables and indicators of study. The measurements that were made and the measurement scales that were employed are also indicated. The research approaches and tools of analysis of the study are also included in the table.

Table 3.8 Operationalization of Variables

Objective	**Variables**	**Indicators**	**Measurement**	**Measurement scale**	**Research approaches**	**Tools of analysis**
To assess how funds utilization in monitoring and evaluation influence implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya.	Fund utilization	Sponsoring Accountability Valuation	Frequency -Quality reports -Quantity reports	Nominal, ordinal	Qualitative and quantitative	Frequency, percentage and correlation
To assess the extent to which project scheduling in monitoring and evaluation influences implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya.	Project scheduling	Identification of projects Sustainability of projects. Project duration	-Quantity reports -Quality reports -Timelines	Nominal	Qualitative and quantitative	Frequency and percentage

To determine the influence of level of stakeholder involvement in monitoring and evaluation on implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya.	Level of stakeholder involvement	Tendering Budgeting Decision making	-Quantity reports -Quality reports -Frequency	Ordinal, Nominal	Qualitative and quantitative	Frequency and percentage
To determine the influence of quality compliance in monitoring and evaluation on implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County, Kenya.	Quality compliance	Level of inclusiveness Responsibility Internal controls	-Quantity reports -Quality of work	Ordinal	Qualitative and quantitative	Frequency and percentage

To determine the influence of approaches of monitoring and evaluation on implementation of physical infrastructure projects in secondary schools	Implementation of physical infrastructural projects	Number of complete projects. Number of successful projects Achievement of objectives Level of achievement of user satisfaction	-Frequency -Quality reports -Quantiy reports	Ordinal	Qualitative and quantitative	Frequency, percentage and correlation

3.9 Ethical Considerations of the study.

The study ensured privacy and confidentiality by allowing respondents to have pre-eminence over time and extent to which they can withhold or share information. All the respondents were treated with respect and equality. Moreover, the principle of free and informed consent was adhered to by emphasizing voluntarism, clear explanation and sufficient detail of the nature of the research and procedures. Research permit and letter from the University was also used so as to obtain permission to carry out the research study in secondary schools according to the required rules and regulations of the institution.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION.

4.1 Introduction.

The study was geared towards establishing the influence of of monitoring and evaluation approaches on the implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County. The dimensions of the study from the independent variable included fund utilization, scheduling, level of stakeholder involvement and quality compliance, which were investigated against implementation of physical infrastructural projects. The data was analyzed by use of descriptive statistics and presented using percentage, frequency and correlation tables. The outcome from the tables was interpreted in categories that were relative to the objectives.

4.2 Questionnaire response rate

The researcher dispatched and collected the questionnaires. The number of respondents that were targeted was 162.They consisted of school principals and the PMC committee's of the board of management. Some respondents accepted to fill and return the questionnaires immediately while some preferred to have the questionnaires collected at a later date as per agreement.148 questionnaires were returned out of the 156.The response rate was therefore 94.9% which is within the accepted margin according to Mugenda (2010).

4.3 Demographic information of the respondents.

Demographic information from the respondents which included age, gender, level of education and length of service in the particular institution was obtained analyzed and interpreted.

4.3.1 Age of respondents.

Information concerning the age of the respondents was important because it would portray the level of maturity of the respondents which will be assumed to have a direct relationship on the kind of responses they would give.

Table 4.3.1 Age of respondents.

	Frequency	Percent
31-40 years	4	2.7
41-50 years	52	35.1
Over 51 years	92	62.2
Total	148	100.0

According to the findings 2.7% (4) of the respondents had an age bracket of 31-40 years, 35.1% (52) had a 41-50 age bracket while 62.2%(92) with an age bracket of over 51 years. More than half of the respondents were aged over 50 years. This is attributed to the fact that in their capacity as leaders they were experts, exposed and experienced. The respondents were therefore capable of providing tangible information towards this study.

4.3.2 Gender of respondents.

The gender information of the respondents was important to the study as it would reveal the gender parity in existence from different angles. Gender related issues constitute the global emerging issues and form part of the millennium development goals and the sustainable development goals.

Table 4.3.2 Gender of the respondents

	Frequency	Percent
Male	82	55.4
Female	66	44.6
Total	148	100.0

55.4% (82) of the persons providing feedback to the questionnaires were male while 44.6% (66) were of female gender. This signifies that the respondents were almost equally paired but still the male were higher in numbers compared to females by a difference of 10.8%.Gender parity is reported to orchestrate greater development in the nation and that would be a point of interest to be noted in the study because the study has some alignment to development issues (development of school's physical infrastructure).

4.3.3 Level of education of the respondents.

Information concerning the level of education of the respondents was seen to be worth noting as it would portray the level of skill, power, scope of knowledge and expertise possessed by the respondents.

Table 4.3.3 Level of education of respondents

	Frequency	Percent
diploma	2	1.4
degree	56	37.8
master	74	50.0
PHD	16	10.8
Total	148	100.0

1.4% (2) of the respondents had education to the diploma level. Degree level respondents constituted 37.8% (56) whereas masters level respondents formed 50% (74).The rest consisting of PHD holders formed 10.8%(16) of the respondents. The study therefore revealed that our leaders in the public secondary schools sector are generally well educated and therefore capable of making the right decisions for governance as the stakeholders in project implementation.

4.3.4 Length of service of the respondents in school.

Information concerning length of service of the respondents in the schools was key as it would act as an indicator into the level of understanding of the respondents on the school procedures and policies.

Table 4.3.4 Level of service of the respondents in the school

	Frequency	Percent
Less than three years	60	40.5
Between 3-7 years	38	25.7
Between 7-11 years	50	33.8
Total	148	100.0

From the findings 40.5% (60) of the respondents had an experience of less than three years while 25.7% (38) had between 3-7 years' experience in the school.33.8%(50) had an experience of between 7-11 years. The analysis shows that most of the respondents had an experience of less than three years in the schools. This would be attested to the fact that school managers and project managers of schools faced frequent transfers due to organizational policies.

4.4 Influence of fund utilization on implementation of projects.

This forms the first objective of the study and will narrow down to sponsoring, valuation and accountability as the sub –dimensions that are tied to the objective.

4.4.1nfluence of sponsoring on project implementation.

As a form of financing of projects sponsoring and its influence on implementation of projects was investigated upon and the following findings were obtained from the analysis

Table 4.4.1 1nfluence of sponsoring on project implementation.

	Frequency	Percent
Yes	116	78.4
No	32	21.6
Total	148	100.0

78.4%(116) respondents agreed to the notion that sponsoring in monitoring and evaluation has an influence on implementation of physical infrastructural projects in public secondary schools in Uasin Gishu county while 21.6%(32) did not. It is clear that most of the respondents felt that sponsoring indeed had a positive influence on implementation of physical infrastructure. The sponsors may include local politicians, parents and organizations. This translates to the fact that sponsoring may be absent from some institutions.

4.4.2 Influence of accountability of funds on the implementation

The study also investigated on the influence of accountability of funds on the implementation of physical projects in secondary schools and the following results were obtained.

Table 4.4.2 Influence of accountability of funds on the implementation.

	Frequency	Percent
Yes	118	79.7
No	30	20.3
Total	148	100.0

As concerns accountability in monitoring and evaluation 79.7% (118) persons were positive that it affects the implementation of physical infrastructural projects in public secondary schools in Uasin Gishu county while 20.3%(30) did not believe that it had any

effect**.** Accountability was therefore perceived to have a positive influence by a greater percentage in the various project stages during project management. It can be concluded that as an approach not all of the respondents implemented it for one reason or another.

4.4.3 Influence of valuation on the implementation of projects.

The perspectives of the respondents about valuation of projects before and during implementation process were analyzed as follows:

Table 4.4.3 Influence of valuation on implementation of projects.

	Frequency	Percent
strongly agree	66	44.6
Agree	66	44.6
undecided	2	1.4
Disagree	14	9.5
Total	148	100.0

44.6%(66) strongly agreed, 44.6%(66) agreed 1.4%(2) were undecided, while 9.5%(14) disagreed to the fact that valuation influences implementation of physical infrastructural projects in schools. It seems that opinion was spread upon the scale but a majority of the respondents feelings about the same was concentrated on strongly agreeing and agreeing to the fact that accountability has an influence. However to something that appears to have a positive influence to many of the respondents some were undecided while others disagreed about it having an influence to the implementation process. This confirms that valuation as an approach is popular to many but not popular to some few individuals. Therefore many school projects valuate their projects and find it helpful but few don't feel its impact.

From the interview schedule which was administered to the CDF officials, principals and the education ministry audit department it was established that fund utilization in

monitoring and evaluation has led to development of projects in public secondary schools in a positive way in moments when funds are utilized in the required standard. Misuse of funds negatively affects the implementation process resulting in non-adherence of project plan. Proper utilization of funds ensures proper funding of projects, growth of schools and suitable use of resources. The number of classrooms, libraries and laboratories has increased. Mismanagement of project infrastructure funds has led to a lag in development of public secondary schools.

4.5 Level of stakeholder involvement on implementation of projects.

As per the second objective stakeholders of the implementation process and their involvement's influences results were tabulated in the tables below.

4.5.1 Influence of tendering on implementation of projects.

Sourcing for resources is a core function of the stakeholders of a project. The table below shows the findings.

Table 4.5.1 Influence of tendering on implementation of projects.

	Frequency	Percent
Strongly agree	72	48.6
Agree	62	41.9
Undecided	14	9.5
Total	148	100.0

48.6% (72) strongly agreed, 41.9%(62) agreed while 9.5%(14) were undecided about tendering having an influence on development of physical infrastructural projects in public secondary schools in Uasin Gishu county. There was section of the participants of the implementation process who did not partake the tendering process in their institutions leading to this disparity. Some respondents also noted that their schools did not have a

tender committee. For others it was about the tendering process not being procedural or dominated by a few individuals leading to this disparity.

4.5.2. Influencing of budgeting on implementation of projects.

Budgeting which involves forecasting of expenditure was studied as concerns its influence on the implementation process.

Table 4.5.2 Influence of budgeting on implementation of projects.

	Frequency	Percent
Strongly agree	102	68.9
agree	46	31.1
Total	148	100.0

68.9% (102) strongly agreed that budgeting influences selection and development of physical infrastructural projects in public secondary schools in Uasin Gishu County while 31.1% (46) only agreed to it. This indicates that indeed that budgeting as a planning tool was one which worked for many construction projects in schools.

4.5.3. Influence of decision making on implementation of projects.

Deciding on an assortment of choices is a mandatory responsibility of the stakeholder of an institution. Findings are as analyzed below.

Table 4.5.3.1Influence of decision making on implementation of projects.

	Frequency	Percent
yes	136	91.9
no	12	8.1
Total	148	100.0

91.9%136) proposed decision making by the stakeholder as influential while 8.1% (12) felt that it was not. The reason as to this is explained by the essence that some institution's leaders effected the stakeholder's decisions making it influential while others overruled the decisions of the stakeholders. From the findings it is evident that a majority of the respondents felt that decision making by the stakeholder was influential. This also suggests that the majority of the stakeholders made helpful decisions.

Table 4.5.3.2 Stakeholders involved in the budgeting process.

	Frequency	Percent
All BOM members	12	8.1
Procurement Staff	100	67.6
Stakeholders	30	20.3
Other	6	4.1
Total	148	100.0

8.1%(12) members purported that all BOM members in their institution were involved in the budgeting process while 67.6%(100) stated involvement of the procurement staff as 20.3%(30) of institutions used stakeholders. 4.1% (6) involved other group categorized as principals only, acceptance and inspection, and tender committees. The findings show that each institution had its own kind of organization in the budgeting process which would directly influence the implementation process, leading to such variations in the points of view. In some schools especially the sub-county ones, only the principal was involved in the budgeting process. National and extra-county schools integrated several committees which worked together. Transparency, accountability and

efficiency are more pronounced when more individuals are brought on board. Better decisions are made.

The interview schedule revealed the following: Active stakeholders ensure that projects are not dominated by a few individuals and rapidly get into the required standard. Through stakeholder involvement labor is availed to the projects and also assets that enable the projects to proceed faster. Two of the respondents reported that stakeholder involvement also makes the environment for infrastructure projects good as far as security is concerned. Sponsoring is effected by stakeholders when the funds are insufficient. Sponsoring from several sources helps the projects to run to completion. Stakeholders are the key people to control the use of resources and are the persons that will ensure that the infrastructure is brought to completion in any society.

Involvement is good if each party understands expectation. Technical team looks at the document and confirms that the contractor does what is expected of them. Compromise from the technical team causes the BOM and the CDF to raise alarm in order to bring about correction. Each party is checking on each other. More levels of stakeholder involvement provide checks and balances. The ministry of works official's do inspection, CDF provides funds, and BOM can provide for additional funds. Cooperation from stakeholders can amount to other benefits i.e. faster completion of the physical infrastructure in schools, better management and quality finish.

4.6 Project scheduling on implementation of projects.

Project scheduling influence is featured in the third objective. Dimensions of scheduling for the study included project identification, duration and sustainability.

4.6.1 Identification of projects inclusion during implementation.

Identification of projects is key for project implementation. Below are the findings.

Table 4.6.1 Identification of projects inclusion during implementation

	Frequency	Percent
Yes	134	90.5
no	14	9.5
Total	148	100.0

90.5% (134) reacted to yes as 9.5% (14) reacted to no in project identification. A few institutions did not involve the school board of management PMC members in project identification.

4.6.2 Project duration inclusion in implementation.

Project duration in project scheduling yielded the following results.

Table 4.6.2 Project duration inclusion in implementation

	Frequency	Percent
Always	50	33.8
Sometimes	92	62.2
Rarely	6	4.1
Total	148	100.0

33.8% (50) felt that project duration is always determined during the stages of project implementation of infrastructure projects. Those who felt that it was sometimes and rarely determined in implementation of projects were 62.2% (92) and 4.1% (6) respectively. The funds availability, weather conditions, availability of labor, adherence to regulations among other factors would interfere with the set project duration.

4.6.3 Sustainability of projects dependence on project scheduling.

It was investigated whether sustainability of projects would depend on project scheduling and the following findings were obtained.

Table 4.6.3 Sustainability dependence on scheduling

	Frequency	Percent
Yes	124	83.8
No	24	16.2
Total	148	100.0

83.8% (124) supported the statement while 16.2% (24) did not. Sustainability of the projects would therefore at fewer times not depend on the scheduling process.

The following paragraph summarizes the interview findings on scheduling:

With available funds physical infrastructural projects are completed in good time when schedules are adhered to. Activities are organized in a chronological order thus enhancing order in the implementation of the projects .It helps because it provides guidelines on priority as per activity hence leading to time saving. It helps in determining exactly when a programme is on track .At a critical time objectives and conclusion can be developed for execution of an extension of construction period.

4.7 Quality compliance on implementation of projects

The fourth objective of the study involved quality issues in relation to monitoring and evaluation. Inclusion of stakeholders, responsibility and internal controls were the sub-dimensions.

4.7.1 Influence of inclusion of stakeholders on implementation of projects.

Stakeholder as the affected panel would have a high inclination towards determination of the quality standards of project. Below is a table of the findings.

Table 4.7.1 Influence of inclusion of stakeholders on implementation of projects.

	Frequency	Percent
strongly agree	114	77.0
agree	34	23.0
Total	148	100.0

77% (114) strongly agreed to the fact that inclusion of stakeholders has an influence on implementation of physical infrastructural projects in public secondary schools. 23% (34) expressed agreement to it. The influence however can be said to be negative or positive. Too many people making decisions would be dentrimental to a project.

4.7.2. Influence of responsibility helpful

Responsibility of stakeholders unto quality compliance was investigated. The findings in the table below show the results of the analysis.

Table 4.7.2 Influence of responsibility helpful

	Frequency	Percent
strongly agree	42	28.4
agree	90	60.8
undecided	16	10.8
Total	148	100.0

28.4% (42) strongly agreed, 60.8 % (90) agreed to whereas 10.8%(16) were undecided about the fact that influence of responsibility of stakeholders in development of physical

infrastructural projects was helpful. It shows that other factors other than responsibility would override the implementation process at times. Funds availability was seen to be most crucial.

4.7.3 Influence of internal controls on implementation of projects.

Control of factors within the implementation process were investigated in this study and analyzed as shown below.

Table 4.7.3 Influence of internal controls on implementation of projects.

	Frequency	Percent
strongly agree	68	45.9
agree	78	52.7
undecided	2	1.4
Total	148	100.0

45.9% (68) strongly agreed, 52.7% (78) agreed while 1.4%(2) of the respondents were undecided on the statement that internal controls generates a scope for an even oversight by the stakeholders. As from the findings 98.6% of the respondents were positive to that statement. The controls would include policies and regulations from within the institutions and the national government, laws from the national government and restrictions.

As per the interview report, quality compliance was cited to have an influence on the implementation process in that it provided a leeway for checks and balances, confirmed material standards and hence quality standards are able to be achieved (durable and strong).The visits especially from the ministry of public works test the materials, crush stones to know their strength. Cement of quality 32.5R/L is recommended for

construction of buildings. Public works officials are required to be present on a daily basis at the project site. The role of the public works official is to certify good construction of buildings after every floor of construction.

It was also reported that physical infrastructure needed to be safe for use and classrooms needed to provide a good environment for learners hence quality of buildings and raw materials was seen to influence implementation of physical infrastructural projects in public secondary schools. Quality compliance in monitoring and evaluation would ensure success and completion of projects .A lot of wastage is controlled and so quality and proper management of public resources is observed and maintained. The other aspect of quality compliance is the competence, skill and knowledge power of the PMC and stakeholders which mitigates non adherence to quality compliance.

4.8 Indicators of good implementation of projects.

The study included number of completed projects, successful projects, level of achievement of user satisfaction and achievement of objectives as the indicators of project implementation. The results are analyzed in the tables below.

4.8.1 Number of completed projects as indicator of good implementation of projects

The study obtained the following findings as concerns the number of completed projects in relation to the project implementation.

Table 4.8.1 Number of completed projects as indicator of good implementation.

	Frequency	Percent
strongly agree	46	31.1
agree	74	50.0
undecided	12	8.1
strongly disagree	16	10.8
Total	148	100.0

The respondents rated as follows on the extent to which the number of completed projects are used as indicators of good implementation of projects; strongly agreed 31.1%(46), agreed 50%(74) undecided 8.1%(12) strongly disagreed 10.8%(16). Relatively higher percentages were achieved which indicated that the opinions of the respondents mostly lay on agreement to the statement. Some completed projects had bad implementation practices.

4.8.2 Number of successful projects as indicator of good implementation of projects

The study also aimed at determining whether the number of successful projects was used as good indicators of project implementation.

Table 4.8.2 Number of successful projects: indicator of good implementation of project

	Frequency	Percent
strongly agree	46	31.1
agree	94	63.5
undecided	2	1.4
strongly disagree	6	4.1
Total	148	100.0

31.1%(46) of the respondents were strongly of the opinion that the number of successful projects were used as indicators of good implementation of projects.63.5%(94) agreed,1.4%(2) were undecided whereas 4.1%(6) strongly disagreed to it. It can be seen that a high percentage of respondents were positive to the statement. However 6 respondents strongly disagreed showing that successful projects can also have issues.

4.8.3 Level of user satisfaction as indicator of good implementation of projects.

The study was used to determine whether satisfaction of users was seen to be a good indicator of good implementation of project.

Table 4.8.3 Level of user satisfaction as indicator of good implementation of projects

	Frequency	Percent
strongly agree	68	45.9
agree	58	39.2
undecided	16	10.8
strongly disagree	6	4.1
Total	148	100.0

A total of 45.9%(68) strongly agreed ,39.2%(58) agreed 10.8%(16) were undecided and 4.1%(6) respondents felt that the level of achievement of user satisfaction was used as indicators of good implementation of projects. The dissatisfaction to the statement would otherwise stem from the management of the implementation.

4.8.4 Achievement of objectives as indicator of good implementation of projects

The relationship between good implementation of projects and user satisfaction was investigated

Table 4.8.4 Achievement of objectives as indicator of good implementation of projects

	Frequency	Percent
strongly agree	54	36.5
agree	88	59.5
undecided	6	4.1
Total	148	100.0

36.5% (54) strongly agreed that achievement of objectives was used as an indicator of good implementation of objectives 59.5 %(88) agreed to it while 4.1 %(6) were undecided. It is clear that most of the time the achievement of objectives was seen to indicate good implementation but not all the times. It is possible to have achievement of objectives with bad practices.

From the interview schedule it was reported that there is immense influence of approaches in monitoring and evaluation on implementation of physical infrastructural projects of public secondary schools because it helps in identification and giving more attention to those fields that require review. Frequent monitoring leads to improvements and brings changes by evaluation of physical infrastructure. It ensures that the infrastructure projects implementation are in line with the plan of the project as far as time and finance is concerned. It ensures that funds are sufficient for certain projects, proper utilization of funds as per the work plan and contraction of projects to the recommended standards. Quality compliance is ensured and errors to be corrected at an early stage hence minimizing wastage of public funds and resources. It also shows the extent to which the physical infrastructure needs maintenance and if it is of short term or long term port-folio. It helps in identification of more critical projects. When all the approaches which are good lead to positive results the desired output is also good. Frequent use of the approaches lead to the best results. Maximization of benefits is achieved.

4.9 Cross tabulation of variables.

Cross tabulation will be used in this section to determine the nature of a relationship between two variables. Pearman's R and spearman's correlation will be used to analyze

the results. A value of less than 0.5 implies no significant relationship, 0.5 -0.6 means a relationship exists and 0.7 and above implies a strong relationship between the variables. This kind of analysis will provide a greater insight to the study.

4.9.1 Cross tabulation of gender and level of education of respondents.

It was important to investigate the relationship between gender and the level of education in order to determine the gender equity among project managers in the schools. Below is a report of the findings.

Table 4.9.1.1 Cross tabulation table of gender and level of education of respondents.

		Level of education				Total
		Diploma	degree	master	PHD	
Gender	Male	0	28	52	2	82
	Female	2	28	22	14	66
Total		2	56	74	16	148

The figure above shows 0:2 male to female ratio at diploma level of education, 1:1 male to female ratio at degree level 26:11 at master level and 2:7 at PHD level. The findings show that the county schools projects managers are almost achieving gender balance which is important in any type of development.

4.9.1.2Cross tabulation: relationship between gender and education of respondents.

The Pearson's and Spearman's coefficients on the relationship between gender and level of education were determined by computation of the data by use of SPSS.

Table 4.9.1.2 Cross tabulation : relationship between gender and education of respondents

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	.033	.086	.396	.692[c]
Ordinal by Ordinal	Spearman Correlation	.003	.088	.034	.973[c]
N of Cases		148			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Pearson's R (.033) shows no significant relationship between the level of education of the respondents and the gender of the respondents. Spearman Correlation also does not show a significant relationship (0.003).This implies that the level of education of the respondents is not significantly dependent on gender.

4.9.2 Cross tabulation of Length of service and age of respondents.

This analysis will unveil the relationship between the length of service in the institution and age of the respondents. This will provide information on the workers turnover which has some bearing to continuity in project systems.

Table 4.9.2 Cross tabulation of Length of service and age of respondents.

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	-.088	.086	-1.063	.290[c]
Ordinal by Ordinal	Spearman Correlation	-.088	.085	-1.068	.287[c]
N of Cases		148			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

The above figure gives a relationship between length of service in the school (dependent variable) and age (Independent variable).The symmetrical measures show no significant relationship between the two of above(-0.088 ,-.088).This indicates that the length of service of the respondents in the school was not dependent on the age of a particular respondent. Therefore there is indication of a high turnover of employees.

4.9.3 Cross tabulation of Sponsoring effect and number of completed projects

This part of the study aimed to establish whether there is a relationship between sponsoring and number of completed project.

Table 4.9.3 Cross tabulation of Sponsoring effect and number of completed projects

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	-.155	.068	-1.901	.059[c]
Ordinal by Ordinal	Spearman Correlation	-.166	.105	-2.030	.044[c]
N of Valid Cases		148			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

From the findings the Pearson's R (-.155) and the Spearman correlation (-.166) suggests that there exists no significant relationship between the two aspects. Most of the completed projects did not rely on sponsoring but on CDF, LATF and PA funds.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS.

5.1 Introduction

This chapter gives summary of the research findings as analyzed in the previous chapter. It shows the conclusions as per the research's questions and also the researcher's recommendations. It will also suggest the areas for further research.

5.2 Summary of findings.

The following represents the summary of the findings of the research topic influence of monitoring and evaluation approaches on the implementation of physical infrastructural projects in public secondary schools of Uasin Gishu County. The summary has been made in accordance with the objectives of the study.

According to the findings more than half of the respondents were aged over 50 years. Therefore it can be deduced that the data is likely to be highly reliable due to the experience possessed by the respondents who are leaders in their capacities. The male were higher in numbers compared to females by a difference of 10.8%. A bit of work has to be done to achieve gender equity. Gender balance is reported to orchestrate greater development and that would be a point of interest to be noted in the study because the study has some alignment to development issues (development of school's physical infrastructure).

The study revealed that our leaders in the public secondary schools sector are generally well educated and therefore should be capable of making the well informed decisions for governance as the stakeholders in project implementation.

The analysis shows that most of the respondents had an experience of less than three years in the schools project management committees. This indicates the turnover levels which may be partly attributed to policies in the institutions.

5.2.1 Influence of fund utilization on implementation.

It is clear that most of the respondents (78.4%) felt that sponsoring indeed had a positive influence on implementation of physical infrastructure. The sponsors may include local politicians, parents and organizations. Sponsoring is not effected in some institutions. As concerns accountability in monitoring and evaluation 79.7% of the persons were positive that it affects the implementation of physical infrastructural projects in public secondary schools in Uasin Gishu county. Accountability was therefore perceived to have a positive influence by a greater percentage (79.7%) in the various project stages during project management. As an approach not all of the respondents implemented it for one reason or another. It seems that opinion that valuation of projects is done was spread upon the scale but a majority of the respondents(89.2%) feelings about the same was concentrated on strongly agreeing and agreeing to the fact that valuation having an influence. However to something that appears to have a positive influence to many of the respondents, some were undecided while others disagreed about it having an influence to the implementation process. This confirms that valuation as an approach is popular to many but not popular to some few institutions..

From the interview schedule which was administered to the CDF officials, the education ministry audit department and the ministry of works officials it was established that fund utilization in monitoring and evaluation has led to development of projects in public secondary schools in a positive way at moments when funds are utilized in the required

standard. Misuse of funds negatively affects the implementation process resulting in non-adherence of project plan. Proper utilization of funds ensures proper funding of projects, growth of schools and suitable use of resources. The numbers of classrooms, libraries and laboratories have increased. Mismanagement of project infrastructure funds has led to a lag in development of public secondary schools.

5.2.2 Influence of level of stakeholder involvement on implementation

A section of the participants of the implementation process seem not to have been in the tendering process in their institutions.90.5% of the respondents believed that tendering had an influence on development of physical infrastructural projects. In a few isolated cases it was discovered that the tendering process was not procedural or dominated by a few individuals. Some schools were devoid of the tender committee. This creates a gap that needs to be investigated. On the other hand as from the findings budgeting with 100% rating of influence as a planning tool was one which worked for all construction projects in schools. From the findings it is evident that a majority of the respondents (91.9%) felt that decision making by the stakeholder was influential. This also suggests that the majority of the stakeholders made helpful decisions. The findings also show that each institution had its own kind of organization in the budgeting process which would directly influence the implementation process, leading to such variations in the points of view. In some schools especially the small ones only the principal was involved in the budgeting process. Large schools integrated various committees which worked together and checked on each other.

The interview schedule revealed that active stakeholders ensured that projects are not dominated by a few individuals and rapidly get into the required standard. Through

stakeholder involvement labor is availed to the projects and also assets that enable the projects to proceed faster. Two of the respondents reported that stakeholder involvement also makes the environment for infrastructure projects secure. Sponsoring is effected by stakeholders when the funds are insufficient. Sponsoring from several sources helps the projects to run to completion. Stakeholders are the key people to control the use of resources and are the persons that will ensure that the infrastructure is brought to completion in any society. Involvement is good if each party understands expectation. More levels of stakeholder involvement provide checks and balances.

5.2.3 Influence of project scheduling on implementation

It can be concluded that a few institutions (9.5%) did not involve the school board of management PMC members in project identification. The funds availability, weather conditions, availability of labor, adherence to regulations among other factors would interfere with the preset project duration. Sustainability of the projects would therefore at times (16.2%) depend on other factors other than scheduling process. With available funds physical infrastructural projects are completed in good time when schedules are adhered to. Activities are organized in a chronological order thus enhancing order in the implementation of the projects .It helps because it provides guidelines on priority as per activity hence leading to time saving. It helps in determining exactly when a programme is on track .At a critical time objectives and conclusion can be developed for execution of an extension of construction period.

5.2.4 Influence of quality compliance on implementation

Too many people making decisions would be detrimental to a project. Good decisions are always made by consensus. Inclusion of stakeholders influence on implementation of construction projects had 100% opinion. The findings show that other factors (10.8%) other than being responsible would override the implementation process at times. As from the findings 98.6% of the respondents were positive to that statement that internal controls had an influence on the implementation process. The controls would include policies and regulations from within the institutions and the national government, laws from the national government and restrictions.

As per the interview report, quality compliance was cited to have an influence on the implementation process in that it provided a leeway for checks and balances, confirmed material standards and hence quality standards are able to be achieved. It was also reported that physical infrastructure needed to be safe for use and classrooms needed to provide a good environment for learners hence quality of buildings and raw materials was seen to influence implementation of physical infrastructural projects in public secondary schools. Quality compliance in monitoring and evaluation would ensure success and completion of projects. A lot of wastage is controlled and so quality and proper management of public resources is observed and maintained. The other aspect of quality compliance is the competence, skill and knowledge power of the PMC and stakeholders which mitigates non adherence to quality compliance.

5.2.5 Indicators of good implementation of a project.

From the respondents rating on the number of completed projects as good indicators of implementation, it can be suggested that relatively higher percentages were achieved

(81.1%) to indicate that the opinions of the respondents mostly lay on agreement to the statement.

Many of the respondents (94.6%) were strongly of the opinion that number of successful projects was used as indicators of good implementation of projects. However 6 respondents strongly disagreed showing that successful projects can also have issues. The dissatisfaction to the statement that user satisfaction is used as a good indicator of implementation of projects (4.1%) would otherwise stem from the management of the implementation. It is clear that most of the time the achievement of objectives was seen to indicate good implementation but not all the times (4.1%)

From the interview schedule it was reported that there is immense influence of approaches in monitoring and evaluation on implementation of physical infrastructural projects of public secondary schools. It ensures that the infrastructure projects implementation are in line with the plan of the project as far as time and finance is concerned. It ensures that funds are sufficient for certain projects. Proper utilization of funds as per the work plan and contraction of projects to the recommended standards is effective. Quality compliance is guaranteed. Errors are corrected at initial stages stage hence minimizing wastage of public funds and resources. It helps in identification of more critical projects. When all the approaches which are efficient lead to positive results the desired output is also achieved. Frequent use of the approaches lead to the best results. Maximization of benefits is achieved.

5.2.6 Cross tabulation studies.

The findings show that the county schools projects managers are almost achieving gender balance which is important in any type of development. The findings imply that

the level of education of the respondents is not significantly dependent on gender. Gender balance was therefore significant. On the other hand the length of service of the respondents in the school is not dependent on the age of a particular respondent. This implied a high turnover of employees

It was also established that there existed no significant relationship between sponsoring effect and number of successful projects Most of the completed projects did not rely on sponsoring but on CDF, LATF and PA funds.

5.3 Discussions of the findings

The findings of the study will be discussed in order to determine whether the study achieved the set objectives. The objectives involved fund utilization, scheduling, quality compliance and level of stakeholder involvement.

5.3.1Influence of fund utilization on implementation

In Kenya there are three types of schools: public/government schools, private schools and stakeholder schools. Public/government schools constitute the largest proportion of schools in the country. Monitoring and evaluation (monitoring and evaluation) is used in construction of school buildings (World bank,2013). The programme design should include for the development of a cost database based on market rates (rather than any fixed or standard rates) for all the types of infrastructure to be constructed. Infrastructure unit costs should be based on the actual designs and procurement method to be used and include an analysis of regional price differences (Baloi, 2008),. Giovanna (2009) argues that the critical motivation behind the department of management of fund is that the stakeholder who is the beneficiary can participate in both prioritization of the projects to be funded and in evaluating the expenditure of the money thus cutting losses due to

bureaucracy, graft and mismanagement. This actually is well catered for in the Act as section 45.3 of the CDF Act 2010 disqualifies all politicians such as MPs and councilors from being Constituency Account Signatories. The section also specifies that the authorized signatories will be at least 3 persons with County Accountant signature being mandatory. Hence as much as Mwangi (2013) explains that CDF appointment and its management creates room for political patronage and other irregularities, otherwise checks and balances are well in place. Results from the study indicate that sponsoring, valuation and accountability of funds are effected in the Uasin Gishu public schools. There is a greater influence of the three aspects. It was reported that misuse of funds negatively affects the implementation process resulting to non-adherence of plans and a lag in development of public secondary schools.

5.3.2 Influence of project scheduling on implementation

The BOM is the legitimate manager of a public secondary school and exercises this authority through the principal who is the BOM secretary. The CDF Act of 2010, sections, 23 (3) provides for stakeholder to come up with a list of projects to be funded by CDF. Section 38 of act provides for the stakeholder representation in any project undertaken to be under a manager in the school. Project identification and costing lays squarely with the Board and after identifying the project then the BOM cost the project by preparing Bill of Quantities (BQ) and forward the same to CDFC in accordance with CDF Act, (2007) The BOM then forwards minutes of certified documents for approval and ratification to local CDF office (MOE, 2007).

A few institutions did not involve the school's board of management PMC members in project identification. Funds availability from sponsors and the CDF have a direct bearing on the project scheduling. All of the planned activities cannot commence without funding. Weather conditions, availability of labor and regulations amongst other factors would interfere with the preset project duration. The school's PMC work closely with the CDF office in order to ensure construction of classrooms.

Realistic estimates of what will be delivered, in what order, over what time period and at what cost will be crucial to the success of the programme and while these estimates need to be flexible, it is important that efforts are made to ensure that they are as realistic and accurate as possible. The strategy therefore needs to include: a range of targets that are based on what can realistically be achieved taking into account the time frame and implementation capacity; a timeline that: clearly shows the logical progression of the programme phases, the proposed activities and the dependencies between them; is realistic considering the prevailing constraints including the construction season and that allows time for preparatory work to be undertaken prior to any disbursements of funds for capital works; a budget that: covers all activities required to deliver the programme effectively and is based on an independent cost baseline.(Baloi,2008).

5.3.3 Influence of level of stakeholder involvement on implementation

Involving men and women in CDF projects and programmes at the local level creates ownership of the CDF funded projects and the people look at it as their own project and utilize it optimally while at the same time taking care of it and safeguarding it against vandalism and destruction since it is their property. Samburu West, Dagorreti, South Imenti, Bahari, Nyando, and Kajiado South constituencies are good examples of how to

ensure participation of local men and women in CDF activities right from the sub-location level (Tacconi, 2009). According to Adesina (2007) most schools in post-independence Kenya were started by local stakeholder finances, they provided funds security and local communities has been impressively supporting school's projects after independence, cases of negative stakeholder influence on CDF project management in schools slows down project implementation and affects school performance.

Two respondents from the interview schedule revealed that stakeholder involvement makes the environment of the infrastructural projects good as far as security is concerned. This is in agreement with the literature review. When the project falls short of funds sponsoring can be effected by stakeholders. Cooperation from the stakeholders brings about faster completion of project implementation and better management of projects. Quality compliance is also ensured. Negative stakeholder influence has also been cited in the study. Compromise from the technical team causes the BOM and the CDF to cause alarm in order to bring in correction. More levels from the stakeholder bring in checks and balances. Large schools integrated various committees to project manage. Budgeting was the strongest tool that was used by the stakeholders. Tendering and decision making by stakeholders was also quite popular.

5.3.4 Influence of quality compliance on implementation

Construction quality will be better if there is competent supervision of the works.

From the study internal controls was perceived to have extensive influence on project implementation. Without regular professional site supervision contracts cannot be managed properly, the durability of completed facilities is likely to be compromised, maintenance costs will be higher, health and safety procedures will be difficult to enforce

and there will be less transparency. Supervision is often undervalued and inadequately budgeted for even when very significant sums of money are being disbursed for capital works. The strategy therefore must set out how quality control will be addressed; include budgeted proposals for the provision of competent supervision by suitably qualified personnel (preferably from the stakeholder) and set out how stakeholder members can be equipped with basic maintenance and evaluation skills for reliable and sufficiency in reporting at each stage of development (Kumaraswamy,2009).

The study reveals some insufficiency in certain public schools as concerns quality compliance. Some schools employed an external evaluator to provide a certificate of compliance to standards of regulation at each floor of construction. Ministry of works officials are mandated to check quality of materials at all times.CDF monitoring and evaluation personnel check on the projects from time to time.

5.4 Conclusion

Public schools constituting the largest proportion of the schools in the county of Uasin Gishu. A cost database on existing market rates should be developed for infrastructural project implementation. The stakeholder is the fund manager. Policies in the country have been put in place to deter political patronage when it comes to distribution of funds. Each school should develop its own mechanism for coordinating finances according to its setting. Accountability of funds is enforced in most situations. The county schools lack internal sponsorship from the stakeholders and rely mostly on CDF for construction of classrooms.

Project scheduling is very important in project implementation. The grantt chart and the work breakdown structure can be used as planning tools. Project scheduling can be

interrupted by weather conditions, unavailability of funds, government policies and policies within the school system. Activities need to be arranged in a realistic and systematic way. Project identification is effected by the BOM. Realistic estimates of what will be delivered, in what order, over what time period and at what cost will be crucial to the success of the project schedule.

Stakeholders of a project effect all the processes of project implementation. It has been proved that aspects of stakeholder inclusion have a robust contribution to project implementation. According to Arnstein's ladder of participation more control by stakeholders is better than less control. Checks and balances by management committees can mitigate compromise. County schools should at least have an active tender committee in place to work together with the BOM. Ministry of works officials and CDF officials should work together closely with school's PMC.

From the study internal controls was perceived to have immense influence on project implementation. Without regular professional site supervision contracts cannot be managed properly, the durability of completed facilities is likely to be compromised, maintenance costs will be higher, health and safety procedures will be difficult to enforce and there will be less transparency. The study reveals some insufficiency in certain public schools as concerns quality compliance. Some schools employed an external evaluator to provide a certificate of compliance to standards of regulation at each floor of construction. Ministry of works officials is mandated to check quality of materials at all times.CDF monitoring and evaluation personnel check on the projects from time to time.

It is evident that monitoring and evaluation along with its approaches are employed in the public secondary schools of Uasin Gishu County during implementation of the physical infrastructural projects. Monitoring and evaluation has led to project success. This is in according to Ward (2010), who states that monitoring and evaluation is a process whose goal is to improve the current and future management of outputs, outcomes and impact. Ika, Davis, Lascon and Uhl (2010) propose that the idea in evaluating projects is to isolate errors not to repeat them and to underline and promote successful mechanisms for current and future projects. Mulwa (2008) stated that monitoring is an oversight of the activity's implementation stage.

5.5 Recommendations

From the study the following recommendations have been made

1. Support from more sponsoring organizations to enable the sub-county schools to develop physical infrastructure faster i.e. the LATF is a sponsoring organization that has sponsored several school's infrastructure construction.

2. Tender committees to be established in all public county schools to enable inclusion of the stakeholders in procurement of resources that leads to better quality structures.

2. A greater involvement of the school's stakeholder's i.e. the Parent's Association, BOM, and the tender committee in the implementation of infrastructure process for greater supervision, by all public schools.

3. Prompt availability and dispatchment of CDF funds by the CDF officials to the school's PMC to enable the project scheduling by the contractor/school's PMC to be adhered to.

4. Acceptance and inspection committees which is consisted of teachers doing monitoring and evaluation on construction projects to be in co-opted in all national, extra-county and county schools.

5.6 Suggestions for further studies

1. Influence of turnover rate of PMC committees on implementation of physical infrastructural projects of public secondary schools in Uasin Gishu county.

2. Factors affecting PMC formulation in public secondary schools of Uasin Gishu county.

REFERENCES

Achoka, D. (2010). *The Logical Framework Approach and the Post-evaluation of health sector projects by the, African Development Bank.* Project Appraisal, 10 (4), Pages 210- 222.

Adesina A. (2007) Construction delay: a quantitative analysis, *International Journal of Project Management.*

Amutabi, A. (2009). The effects of construction delays on project delivery in Nigerian construction industry, *International Journal of Project Management Vol 20*

Arnstein F.T (2009) *Cost and overruns in highway construction projects* Paper presented at the 4th transportation specialty conference of the Canadian society for civil engineering – Montreal, Quebec, Canada.

Baloi, D, (2008) Evaluation of Global Risk Factors Affecting Cost Performance in Mozambique, COBRA 2008 Conference, Glasgow, Caledonia University

Bamberger, D. & Cheema, N., (2007). The Challenge of increasing access and improving quality: An analysis of universal primary education interventions in Kenya and Tanzania since the 2007s. *International Review of Education:* Vol 53*:*pp. 687-699.

Bray, J.R, (2014), Delays; a Major Management Problem for Construction Projects in East Africa Region; The Case Study of Tanzania, *Paper presented in 1st Regional Conference on Construction Project Management, East Africa context, Machakos Kenya*, Nov. 20-23

Brown, M.A (2007): *An investigation into factors causing delays in road construction projects in Kenya* M.A thesis, University of Nairobi, (unpublished)

Bruce, T. (2014). *Early Childhood Education: A guide for students.* London: SAGE Publications

Chin, K (2012). A comparative study of causes of time overruns in Hong Kong construction projects', International Journal of Project Management, 15 (1), 55-63 Chan,

Cooper & Schindler, C. (2010). *Project Evaluation:* A method of Enhancing the Efficiency and Effectiveness of aid Project Implementation. International Journal of Project Management.

Epstein, T. (2013). *Free Primary Education in Kenya: enrolment, achievement and local accountability,* Nairobi: Macmillan ltd.

Gasper, D. (2009). *Problems in the Logical Framework Approach and the challenges for project cycle Management.* The Courier, 173, 75-77. Brussels: European commission.

Giovanna R., (2009) An analysis of universal primary education intervention; http://jang.com.pk/thenews/sep2009-weekly/busrev-14-09-2009/p7.htm, retrieved on 17.03.2016.

Goodman & Steeker, M. (2009). Project management London, Thomson learning, Holbork house

Goodman, T & Steckler, R, (2009). People Work and Organization, ISBN 1st Edition 003910365

Government of Kenya, (2014): Kenya education sector support programme KESSP (2013 –2010). *Delivering quality education and training to all Kenyans* Nairobi: *In the email:*

Gray, D. & Larson (2008). *Logical Framework Approach and the challenges for project cycle Management.* The Courier, 173, 75-77. Brussels: European commission.

Gray, J. A. (2009). *Writing Research Proposal and Reports in Education and Social Sciences.* Kanezja.

Heneveld and Craig (2014) Construction Project Management, London, Butterworths Bennett J & Ormerod R (2011) cited in Bennett J, (2013)

Hentschke W. (2008). *Stakeholder participation Evaluation of Stakeholder Projects*, Paulins.

Huberman, L. (2009). Causes of delay and cost overruns in construction of groundwater projects in a developing countries; Ghana as a case study. *International Journal of Project Management 2010.*

Hwang, W. M and Lim, M. M. (2013). A comparative study of causes of time overruns in Hong Kong construction projects', International Journal of Project Management, 15 (1), 55-63 Chan,

Ika, R., Davis D, Lascon R, & Uhl G. (2010): Evaluation of Projects. . *Evaluation and Program Planning, .25(4): 397-407*

Kahilu, G.J. (2010). Causes and Effects of Delays and Disruptions in Construction Projects in Tanzania., *Australasian Journal of Construction Economics and Building, Conference Series,*(2) 52-59

Kaliba, D.R (2009). Time-cost Model for Building Projects in Nigeria, Journal of Construction Management and Economics, Vol. 24, pp253-258.

Kamau, D. (2007) Reasons for Overruns in Public Sector Construction Projects in Nigeria, *International Journal of Project Management*, 8: 237-241, Elsevier Science Ltd

Kamau, J. (2007). *Financial Management in Kenya Secondary Schools:* Problems and Issues. Unpublished. Med. Thesis . Kenyatta University. Nairobi.

Kimando, M. (2013) *Financial Management in Kenya Secondary Schools:* Problems and Issues. Unpublished. Med. Thesis . Kenyatta University. Nairobi.

Kinyanjui .K. (2012) *Financial Management in Kenya Secondary Schools:* Problems and Issues. Unpublished. Med. Thesis . Kenyatta University. Nairobi.

Knight, H (2010). Project management London, Thomson learning, Holbork house

Kumaransammy, M.M., (2009). Comparing Contributory Time and Cost Performance in building projects. Building and Environment, Vol. 31, Ed. 6, PP 569-578.

Lancaster. K., (2009). Critical factors influencing the project success amongst manufacturing companies in Malaysia, University Sains Malaysia, 11800 Penang, Malaysia.

Lawler, S. (2014) Causes of delay in large construction projects. *International Journal of Project*

Lawler, M (2009). The Causes of Time and Cost overruns in Construction Projects; *A paper presented in Joint Triennial Symposium*, Cape Town, S. Africa, September 5-10

Ling, W., Bruce, M., Samson, W & Joseph, C. (2009). Government Printers. Government of the Republic of Kenya. (2007). Kenya Vision 2030. Retrieved from http://www.vision2030.go.ke/

Magondu, K. (2010). Challenge of increasing access and improving quality Identifying Causes of Cost Overrun *Journal of Project Joint Triennial Symposium.*

Marangu, C.M, (2012). Building Contract Performance: A Case Study of Government Projects in Kenya, MA Thesis, unpublished, University of Nairobi.

Mugenda, J. (2009) *Research methods*, African centre for Technology studies, Nairobi Kenya

Mugenda, O. M. and mugenda, A. G. (2009). *Research Methods. Qualitative and Quantitive Approaches.* Nairobi: acts press

Mulwa, F. (2008). *Stakeholder participation Evaluation of Stakeholder Projects,* Nairobi, Paulins.

Murphy, K. (2008). *Improving Evaluation Practices:* Best Practices Guidelines for Evaluation and Background Paper

Naido, C. F. (2011). *The Malaysian PWD Form of Construction Contract, Sweet & Maxwell Asia.*

Oakley, K.T (2008). Clients Contribution to Delays on Completion Cost of Housing Projects in Nigeria, The Quantity Surveyor, Vol. 30, pp 31-44.

Ocheing, A., Odeh, A.M. and Battaineh, H.T (2012) *Causes of construction delay: traditional contracts* International journal of construction management Pergamon Vol. 20 (2009) pp 67 – 73

Okumbe, S.O. (2008). Construction delays in a fast growing economy: comparing economies, *International Journal of Project Management 2014.*

Orodho, J. A. (2010). *Techniques of writing Research Proposals and Reports in Education and Social Sciences*, second Edition, Maseno, Kanezja HP Enterprises

Prabhakbar, R. (2008). Preicioles of Construction Management, 3rd Edition, McGraw-Hill Books Company, Berkshire, England.

Rose, W. (2010). The significant factors causing delay of building construction projects in Malaysia. Engineering', Construction and Architectural Management Journal, 14 (2), 192-206.

Sammons, K., Sambasivan, M and Soon Y. W (2013). Causes and effects of delays in Malaysian construction industry, *International Journal of Project Management, Vol 25*

Shashi A. (2010). *The Quest for Financial Sustainability:* Foundations in Southeast Asia. Introduction to Financing Development in Southeast Asia: Opportunities for Collaboration and Sustainability.

Tacconi, E, (2009), The Contractual Procedures Utilized in Execution of Building Projects in Nigeria Tertiary Institutions, in *Journal of IQSK*, Vol 10, 2008

Uemura, A. (2009). *Free Primary Education in Kenya: enrolment, achievement and local accountability*, Nairobi: Macmillan ltd.

Vincent C, (2013), Building Costs in Kenya and Uganda, MA Thesis, University of Nairobi Waihenya J.W, (2011), Identifying Causes of Cost Overruns in Traditional Contracts in Kenya, MA Thesis, University of Nairobi

Ward C. P. (2010). *Successful project management.* Center for Project Management, San Ramon Calif

Wheldon, T. (2013). The Present Status of Structural-Functional Theory in Sociology. In Talcott Parsons, *Social Systems and The Evolution of Action Theory* New York: The Free Press,

Williams A, Barrinsgton T, Davis D, Lascon R, Uhl G & Phoenix U. 2011: Building evaluation capacity for HIV prevention programs. *Evaluation and Program Planning* 6(2) 133-142

World Bank (2013) *School feeding: a sound investment*. World Food Program.

APPENDICES

Appendix I: Data Collection Introductory Letter

CAROLINE AYOO OMOLO,
P.O.BOX 140,
ELDORET.

Dear respondent,

I am a master student of project planning and management and as a partial requirement of the coursework assessment, I am required to submit a research report on: **Influence of approaches of monitoring and evaluation on implementation of physical infrastructural projects in public secondary schools of Uasin Gishu county, Kenya** I would highly appreciate if you could kindly complete the questionnaire to assist me collect data. Your information alongside others will help me in my research, will be used strictly for academic purposes and will be treated as confidential. Therefore, do not write your name on the questionnaire.

Thank you in advance,

Yours faithfully,

CAROLINE AYOO OMOLO.

Appendix ii: Questionnaire

Introduction

The following is a questionnaire I the researcher intends to use to collect data. You are requested to kindly provide responses as asked as honest as possible. Please give answers in the spaces provided and tick (√) in the box that matches your responses to the questions where applicable. Your contribution to this research is highly appreciated.

Question	**Responses**	**Comment**
What is your age bracket?	20-30 years [ ] 31-40 years [ ] 41-50 years [ ] Over 51 years [ ]	Tick where appropriate
What is your gender?	Male Female [ ]	
What is your level of education?	Diploma [ ] Degree [ ] Master [ ] PHD [ ] Other ……	
How long have you served in the school?	Less than 3 years [ ] Between 3-7 years [ ] Between 7-11 years [ ] Over 11 years [ ]	
Funds utilization in monitoring and evaluation on implementation of physical infrastructural projects		
Do you believe that sponsoring affects implementation of physical infrastructural projects in the school?	Yes [ ] No [ ]	Tick where appropriate

Do you believe that accountability affects implementation of physical infrastructural projects in the school?	Yes [ ] No [ ]					
Kindly rate the extent to which you agree with the following statement.	**Strongly Agree**	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**	**Tick where appropriate**
Valuation influences implementation of physical infrastructural projects in the school.	[ ]	[ ]	[ ]	[ ]	[ ]	
Tendering influences development of physical infrastructural projects in the school.	[ ]	[ ]	[ ]	[ ]	[ ]	
Budgeting influences selection and development of physical infrastructural projects in public secondary schools.	[ ]	[ ]	[ ]	[ ]	[ ]	

Who are the stakeholders in the budgeting process.	All BOM members [ ] Procurement Staff [ ] stakeholders [ ] Other:_____					
Kindly rate the extent to which you agree with the following statement.	**Strongly Agree**	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**	**Tick where appropriate**
Inclusion of stakeholders has an influence on implementation of Physical Infrastructure Projects in schools.	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**	
Influence of responsibility of stakeholders in development physical infrastructural projects is helpful	[ ]	[ ]	[ ]	[ ]	[ ]	
Internal controls generates a scope for even oversight by the stakeholder	[ ]	[ ]	[ ]	[ ]	[ ]	
Does the stakeholder participate in decision making	Yes [ ] No [ ]					
Is decision making by the stakeholder influential	Yes [ ] No [ ]					

Indicators of Implementation of Project						
Rate the extent to which the following are used as indicators of good implementation of projects.	**Strongly Agree**	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**	**Tick where appropriate**
Number of completed projects	[ ]	[ ]	[ ]	[ ]	[ ]	
Number of successful projects	[ ]	[ ]	[ ]	[ ]	[ ]	
Level of achievement of user satisfaction.	[ ]	[ ]	[ ]	[ ]	[ ]	
Achievement of objectives	[ ]	[ ]	[ ]	[ ]	[ ]	

Project scheduling in monitoring and evaluation and implementation of physical infrastructural projects

Is project identification always included in the implementation of physical infrastructural projects?	Yes [ ] No [ ]	
Is project duration always determined during the stages of project implementation?	Always [ ] Sometimes [ ] Rarely [ ] Never [ ]	

Does sustainability of projects depend on scheduling during project implementation?	Yes [ ] No [ ]	

Appendix iii: Interview Schedule

1. How does funds utilization in monitoring and evaluation influence implementation of physical infrastructure projects in public secondary schools of Uasin Gishu County, Kenya?_____

2.To what extend does project schedules in monitoring and evaluation influence implementation of physical infrastructure projects in public secondary schools of Uasin Gishu County,
Kenya?_____

_____

3.Does the level of stakeholder involvement in monitoring and evaluation influence implementation of physical infrastructure projects in public secondary schools of Uasin Gishu County,
kenya?_____

_____

4. Does quality compliance in monitoring and evaluation influence implementation of physical infrastructure projects in public secondary schools of Uasin Gishu County, Kenya?_____

_____

5.To what extent do monitoring and evaluation approaches influence implementation of physical infrastructural projects in public secondary schools of Uasin Gishu county, Kenya?_____

_____