

**FACTORS INFLUENCING IMPLEMENTATION OF INFRASTRUCTURAL
DEVELOPMENT PROJECT IN PUBLIC SECONDARY SCHOOLS IN MERU
CENTRAL SUBCOUNTY IN KENYA**

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**A Research Report Submitted in Partial Fulfilment of the Requirements for the Award of
A Master of Arts Degree in Project Planning and Management of The University of
Nairobi**

2018

DECLARATION

This research project is my original work and has not been presented for an academic award in any other university.

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DEDICATION

I dedicate this research paper to my loving wife Kendi Josphine, my daughter Stacy Nkatha and my parents Mr. and Mrs. Gideon Munyua.

ACKNOWLEDGEMENT

I acknowledge the support of my supervisor Dr. Stephen Luketero for his outstanding guidance and encouragement that has helped me gain more insight towards this research project. Special thanks to the senate of the University of Nairobi for recognizing my hard work and awarding me scholarship to pursue this course. To Dr. Chris Mutunga I will always remain indebted to you for taking me through the process of getting my scholarship in the most free, fair and efficient way. Sincere thanks to my lectures; Prof Guantai Mboroki, Dr. John wanjohi, Dr. Kirema Nkanata, Dr. Calvin Kithinji, Dr. Mercy Mugambi, Mr .Ben Mutai, to mention but a few for their wonderful lectures and guidance in pursuing this course .To the UON Meru-Extra Mural staff led by Mr. Amos Gitonga, Mercy Kagwiria and Paul Maina, thank you very much for support, updates and advice. May God, bless you all.

To my brothers, Job Munyua and Raymond Munyua, my sister Beth Gatwiri and aunt Doris Kanini ,my sisters in law Daisy Chebet and charity Kanana ,I am grateful for your material, spiritual and moral support, care and advice which you have given me throughout my academic journey and believing in me all the time. To my friends Victor Nyongesa, Joseph Kaigai ,Nicholas Mwenda,Mr and Mrs Patrick Muriuki, Patrick Mutua and Dennis Kimathi , my classmates Moris Mwenda ,Koome Dennis, Maureen Mwende and Caroline Gacheri ,this work would not have been possible without your support. May God, bless you abundantly.

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LIST OF ACRONYMS

ASAL	: Arid and Semi-Arid Land
BOG	: Board of Governors
BOM	: Board of Management
BQ	: Bill of Quantities
CDF	: Constituency Development Fund
CEF	: Centres of Excellence Fund
ESP	: Economic Stimulus Package
FDSE	: Free Day Secondary Education
GOK	: Government of Kenya
ICT	: Information Communication Technology
IFAD	: International Fund for Agricultural Development
IFC	: International Finance Corporation
KESSP	: Kenya Education Sector Support Programme
LATIF	: Local Authority Transfer Fund
M&E	: Monitoring and Evaluation
MOE	: Ministry of Education
NCSL	: National College for School Leadership
NGO	: Non-Governmental Organisation
NPQH	: National Professional Qualification for Headship
OECD	: Organisation for Economic Co-operation and Development
PASSIA	: Palestinian Academic Society for the Study of International Affairs
PMC	: Project Management committee
PTA	: Parents Teachers Association
SGB	: School Governing Boards

SMC : School Management Committee/Councils
SMT : School Management Team.
SPSS : Statistical Packaged for Social Sciences
TSC : Teachers Service Commission
UNDP : United Nations Development Program

ABSTRACT

The purpose of this study was to establish influence of the selected factors in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya. The specific objectives were:- to determine the influence of availability of funds in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya, to establish the influence of monitoring and evaluation practices in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya, to establish the influence of stakeholders involvement in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya and finally to determine the influence of the board of management managerial skills in the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county in Kenya . Meru central sub-county has 44 registered public secondary schools and census was used in this research. Principals, B.O.M chairs, teachers representative in the school board of management and the school bursars in the 44 schools comprised the study respondents. The study employed primary and secondary data. The instrument used to collect primary data was questionnaires. The instruments of the study were validated before actual data collection by consulting the supervisor and expert in research field to ensure that the item measured what it intended to measure. The scores obtained from the pilot respondents were correlated to determine the instruments reliability through test re-test method. On the other hand, secondary data was sourced from literature review and from the ministry of education publications. The researcher used both qualitative and quantitative data analysis technique. Data analysis involved the interpretation of information obtained from the respondents and was analysed using SPSS. Findings were compiled into a report and a conclusion drawn. Data was presented in tables, and analysed using descriptive statistics. The study found that there was a good availability of funds for projects implementation in the schools, that monitoring and evaluation in implementation of infrastructural school development projects is carried out and mainly by BOM, that there was a good participation of stakeholders in implementation of school projects in schools and that BOM in schools possess some managerial skills. The study concluded that stakeholders involvement had the greatest effect on implementation of infrastructural development projects in Kenya followed by school BOM managerial skills, then availability of funds while monitoring and evaluation had the least effect on the implementation of school infrastructural development projects in Kenya. The study recommended that there is need for more stakeholder involvement in the process of implementation of infrastructure projects in public secondary schools, that the government through the Ministry of Education (MOE) should organize training programs on project management skills, project finance and project monitoring and evaluation for all the stakeholders involved in school infrastructure projects, that the government should encourage the school management to aim at diversifying their sources of funds by engaging in income generating activities, education stakeholders should ensure that they work as a team with the school community by embracing a participatory approach so that they are aware of the daily running of the school as well as understanding the objectives of the school projects and that the BOM should equip itself with managerial skills through personal violation and that the schools should advance in usage of external expertise in monitoring and evaluating implementation of school projects.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Project implementation is a very important part of the life cycle of a project since it is the actual execution of the project design which involves what is required to successfully complete the project along dimensions of time, budget, and quality (Field and Keller 1998). Projects globally either infrastructural or social are initiated with an aim to solve a given problem that might be affecting the people or to take advantage of an existing opportunity in a business world (Barney, 2010) as cited by (Sanganyi, 2016) in her research on implementation of monitoring and evaluation of infrastructural school projects. He further states that projects have excelled in developing countries as opposed to developing countries that are faced with a number of challenges, ranging from lack of funds, poor communication, poor strategic plans and lack of experts, failure to use monitoring and evaluation in project implementation among others.

In implementation of school projects in the United States on their research on factors influencing the implementation of school based parental support programme Helena (2015) argue that lack of resources was a barrier to effective implementation and opines that managerial support is very important in the implementation process. On performance indicators for a well implemented project within a construction project as an example in Greenwood UK states, performance indicators namely; construction cost, construction time, cost predictability, time predictability, defects, client satisfaction with what is implemented are cited. Given the relationships between the success factors, project performance; efficiency, effectiveness, stakeholders performance, needs and expectations stakeholder participation and the real factors in the implementation of projects, it is possible to propose a conceptual model for a successful implementation of projects Takin and Atikonye (2002). A successfully implemented projects exhibits a number of characteristics which include; a complemented homework, a clearly defined mission, a well-defined need for the program, implementation plan, activities to monitor short term and long term impacts, steady sources of income, as well as strong and committed board of directors which should know how to execute its role in the process of implementation (Longdon, 2010)

In the United States public school facilities are in dire need of improvement where there

are many old buildings that dates back to 1950s .This has not only led to aged buildings but also change in student demographics and mandate of education (National centre,[NC]2008) as cited by (Shadrack, 2014). In a research on influence of budgeting on implementation of development plans in public secondary schools, in Middle East majority of schools had problems such as shortage of furniture, lack of science laboratories, inadequate I.T facilities, inadequate building, and shortage of classrooms, inadequate light, drinking water and toilet facilities. Consequently, urgent need for school improvement in terms of missing physical facilities to meet actual needs. Physical facilities strive to give students a comfortable atmosphere in which they work and learn. In developing countries, low levels of learning among children can be partly attributed to poor or inadequate facilities of the schools. Research demonstrated that availability of physical facilities including drinking water facilities, electricity, boundary wall, toilets, furniture, playgrounds, libraries, and dispensaries had a positive influence on the performance of students and their achievements (Shami &Hussain, 2005).It is through involvement of the stakeholders that the implementation of school projects can be improved.

In Pakistan a study on quality of education showed that majority of schools had problems in the implementation of the school infrastructural facilities and therefore many schools lacked buildings such as classrooms, washrooms, information and communication facilities, furniture as well as science laboratories. Research showed that lack of these facilities affected the performance of the learners who were not able to do well in their exams(shami and Hussain 2005).Another research showed that it was evident that physical facilities were unsatisfactory where schools in Punjab lacked physical infrastructure such as washrooms and classrooms (Bruce ,2006).It is the involvement of the stakeholders that can help improve the implementation of projects in these schools (International finance corporation [IFC]2010)

A research done in Latin America in Mexico, on facilities maintenance management showed that the schools lacked physical facilities and they were not able to implement new ones, regardless of the study showing a need to have new facilities. The enrolment had gone high and the existing facilities were not able to accommodate the learners regardless of them being maintained (Magee and Gregory, 2005)

Research done in Africa shows that there is little implementation of the school projects and the growing number of students will require more facilities such as classrooms. It is said that some approaches have succeeded in bringing funds among many African countries for school projects implementation. NGOs as well as social funds have tried to work with the community in bringing up these projects but in vain. There are issues that need to be looked at, such as capacity for planning, maintenance and facilities. Research further found out that participation of the local community was key in implementing school projects in Africa. (Obasi and Asodike 2007). A research done in Nigeria on causes and effect of construction delays which included classrooms showed that seven out of ten projects suffered delay in their execution. (Odeyenka and Yusuf 1997). later research on education and development in the same country revealed that learning took place in un conducive environment where it lacked basic facilities such as classrooms (Ahmed ,2003).

In Rwanda on their research on factors influencing successful implementation of one laptop per child project in public secondary schools Kabaranya and Iravo found that finances influenced the implementation of the laptop projects where poverty in the area where the project was being implemented slacken the laptop project implementation .Other factors included procurement procedures ,power supply and teacher capacity . (Kabaranya, R and Iravo M, 2017).

In Kenya on his research on factors that influence the implementation of the laptop project in public primary schools in Kenya (Banju M. K 2014) cited financial constraints as one of the impeding factor in the implementation of the said project. In his research on challenges encountered by principals during the implementation of ICT in public secondary schools in Kenya (Mingaine,2013),opines that Kenyansecondary school principals who are the school heads have numerous leadership roles which includes management of the school finances.

In Meru on their research on factors affecting implementation of development plans in public secondary schools in Meru central sub-county Muthaa and Igweta asserts that based on their findings the state of physical facilities in many secondary schools is obsolete where the physical facilities and instructional materials are inadequate. They opine that involvement of stakeholders who are cited as B.O.M, teachers, parents, student leaders and non óteaching staff in the development of strategic plans to a greater

extent influences their implementation as well as school leadership where the school head consultations and collaborations, control and evaluation influenced the implementation. (Muthaa, G.M.& Igweta F.K., 2015)

1.2 Statement of the problem

Implementation of school projects has not been successful in Kenya,(wamunye ,2010). There has been great investment in infrastructural facilities under KESSP,CDF,ESP,CEF and LATIF but regardless of this there are many uncompleted school buildings, schools without necessary instructional materials and infrastructure, schools with no laboratories or laboratories with no equipments among others(KESSP 2005-2010) and some initiated projects end up being white elephants project (Jepkosgei 2011).unsuccessful implementation of projects in these public secondary schools has affected learners in their learning process due to inadequate learning facilities and hence poor performance in schools and unrest of students due to stalling projects. In Meru central sub-county a number of schools have got uncompleted school infrastructure.

Based on the findings from the problem studied an informed decision can be made on the influencing factors in the implementation of the infrastructural development projects in public secondary schools in Kenya.

1.3 Purpose of the study

The research focused on factors influencing the implementation of infrastructural development project in public secondary schools in Kenya. A case of Meru central sub - county

1.4 Objectives of the study

The study was guided by the following objectives: -

- i. To determine the influence of availability of funds in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya.
- ii. To establish the influence of monitoring and evaluation practices in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya.

- iii. To establish the influence of stakeholders' involvement in the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county in Kenya.
- iv. To determine the influence of the school board of management managerial skills in the implementation of the infrastructural development projects in public secondary schools in Kenya

1.5 Research questions

The study was guided by the following research questions:

- i. How does the availability of funds influence the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya?
- ii. How does monitoring and evaluation influence the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county in Kenya?
- iii. To what extent does stakeholders' involvement influence the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county in Kenya?
- iv. How does the school board of management managerial skills influence the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county in Kenya?

1.6 Significance of the study

A need to carry out this research is significant because the study would be of great importance to project managers in schools, educational planners and other interrelated parties in the planning and making appropriate decisions concerning project implementation in secondary schools. It would help them generate ideas that can be applied to enhance successful implementation of projects in secondary schools. It would also serve as additional material in the scope of management of projects in secondary schools and other project in general.

The study would highlight to educational stakeholders and the general public the state of affairs and especially the state of infrastructural development projects in secondary

schools concerning their implementation whereby, findings and recommendations would be made concerning factors that influence the implementation of infrastructural development projects. Based on this the stakeholders would be able to know the relationship of such factors and the implementation of such projects for effective implementation.

The study is also significant to the other researcher's work related to it as it would help in building the vast knowledge in the area and hence becoming a reference in future.

1.7 Delimitations of the study

This research study was limited to four variables namely availability of funds, stakeholder's involvement, monitoring and evaluation practices and school board of management managerial skills out of many others that may influence the dependent variable which is the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county in Kenya.

1.8 Limitation of the study

Data collection is a limiting factor in this research due to the nature of the area under study. The researcher used questionnaires which he administered himself and assured respondents' confidentiality of the data collected where their names were not mentioned in the final analysis.

1.9 Assumptions of the study

The study assumed that the 44 schools have undertaken an infrastructural development project, and the findings from those schools were similar to other public secondary schools in Kenya.

1.10 Definitions of Significant Terms

Development: A new stage in a changing situation of a school brought about by the projects implemented in a given school.

Fund: Money that is geared towards implementation of school infrastructural development projects in schools.

Implementation: It is the actual execution of the project design which involves what is required to successfully complete the project along the dimensions of time, budget / cost and quality.

Infrastructure: Physical structures and facilities such as the classrooms, laboratories, washrooms, dining halls that bring about development in schools.

Monitoring: This refers to checking of the progress of different stages throughout the implementation process of infrastructural development projects in schools.

Stakeholders: These are people who are interested and concerned with the wellbeing of a given school and those that can influence the implementation of infrastructural development projects in schools. Examples include; parents, board of managements, teachers among others.

Evaluation: This refers to checking the level and value of infrastructural development projects in a given school throughout the implementation process.

1.11 Organization of the study

The research project is organized in five chapters. Chapter one focuses on the background of study, statement of problem, objectives and research questions, justification of study, significance of study, basic assumptions, limitations and delimitations of the study. Finally, discuss definition of significant terms and organization of study.

Chapter two focuses on literature review of study, with a detailed study on the four variables. The theories of the research are well discussed and all the concepts are explained diagrammatically through a conceptual framework which is further discussed.

Chapter three presents the research methodology of the study. It highlights research design, study population, sampling techniques, sample size, research instruments, instrument validity, reliability of the instruments, ethical consideration, data collection procedures and data analysis techniques.

Chapter four has covered the presentation, interpretation and analysis of the data collected on the factors influencing implementation of infrastructural development project in public secondary schools in Kenya based on Meru central Subcounty. Chapter five presents the discussion of key data findings, conclusion drawn from the findings

highlighted and recommendation made there-to. The conclusions and recommendations drawn are focused on addressing the objective of the study

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on literature review of study and gives a detailed account on the implementation of the school projects with a detailed study on the four variables. The theory of the research is well discussed and all the concepts are explained diagrammatically through a conceptual framework which is further discussed.

2.2 Project implementation

Project implementation is a very important part of the life cycle of a project since it is the actual execution of the project design which involves what is required to successfully complete the project along dimensions of time, budget and quality (Field and Keller 1998). According to Longdon project manager and consultant (2010) a successfully implemented projects exhibits a number of characteristics ,which include a completed homework ,clearly defined mission which is limited in scope, a well-defined programme strong and committed board of directors which understands its role, as well as evaluation activities and monitoring the quality and quantity of services delivered.

2.3 Availability of funds and implementation of school infrastructural development projects

In U.S.A (Dortch, 2013) on school construction and renovation: a review of federal programs asserts that school construction and renovation have traditionally been considered to be state and local responsibilities. Nonetheless, the federal government has established a role in financing school construction and renovation. The federal government provides both indirect support for school construction (mainly by exempting from federal income taxation the interest on state and local government bonds used to finance school construction and renovation) and direct support via grants and loans.

In Kenya over the years, financing of secondary education has been a collective responsibility of parents and communities through user charges. The existing physical infrastructure in secondary schools was put up through communities, except the national schools which were constructed during the colonial period (Ngware M.N et al, 2006): as cited by [Obwari 2013]education financing is based on the cost-sharing policy of 1988, which requires most costs in education to be met through partnerships between the public sector and Nongovernmental Organizations (NGOs), religious organizations,

development partners, communities/individuals, and the private sector (Government of Kenya, 1988) Within this funding policy framework, the overall government role includes the professional development of teachers, teachers' remuneration in public institutions, provision of infrastructure, administration and management, and provision of bursaries and scholarships for needy students. The responsibilities for other players include physical infrastructure development and maintenance; payment for tuition, public examinations and in post-school institutions; payment of school/college amenities (transport, water, energy and communication), students' personal expenses, and remuneration of school/college non-teaching staff. Coupled with rapid education expansion, the policy has led to escalation of costs of schooling, especially at post-primary level of the school system, and increased pressure on the government budget over time (GoK, 2003a) as cited by . (Muthaka D.I et al, 2007).

2.3.1 Constituency development fund [CDF]

The Constituency Development Fund act (Government of Kenya, 2003) became law on 31st December 2003 upon receiving presidential assent (Ongoya&Lumallas, 2005). The act was expected to come into force by notice. The CDF amendment Act, 2007 (GOK, 2007) is divided into 10 parts and 53 sections. To the CDF (Amendment) act, 2007 are also annexed six schedules. Part one of the Act, is the preliminary part setting out the short title, the interpretation section and the application section. The application section provides that the provisions of the Act shall ensure that a specific portion of the national annual budget is devoted to the constituencies for purposes of development and in particular the fight against poverty at the constituency level. 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 community formulation. The CDF act compels the government to set aside not less than 2.5 percent of its annual ordinary revenue every financial year to CDF projects where education sector and schools in particular are allocated, 46.1 percent. The constituency development funds are released to school projects at the location, divisional and district level in the constituency based on work plans and bill of quantities (BQ) as prepared by board of managements and school management committees according to poverty level (GOK, 2003). Each school project has its own Project Management Committee (PMC) within the Board of Managements

under constituency development funding. (Ngware M.N et al, 2006): as cited by (Obwari 2013).

(Obwari, 2013) on Influence of constituency development fund on education development in the counties: a study of public secondary schools in Likuyani constituency, Kakamega county, Kenya found that CDF funds have helped to facilitate the provision of physical facilities in public secondary schools in Likuyani Constituency to a small extent, but facilities were still not enough in spite of the funding. It was established that most of the facilities in schools were funded by the parents. The other facilities were funded by GOK, LATF and other bodies. This implies that schools did not rely on CDF funds for facilities. It also shows that the CDF funds were inadequate, thereby making it necessary to seek funds elsewhere. Measures included channelling part of the CDF funds to education development projects. Strong partnerships are required with government providing clear guidelines on future plans on secondary education expansion and strengthening partnerships for efficient resource utilization particularly in rehabilitation of existing physical facilities and targeted construction of secondary schools (Ngware et al., 2006; Ohba, 2009).

2.3.2 Government subsidy on education through free secondary education and the state of school infrastructure development in schools

In 2008 free Day Secondary Schooling was rolled out as stipulated in Kenya Education Sector Support Programme (KESSP) launched in July, 2005, where government committed herself to ensure that free education went beyond primary school. Under the secondary education plan, each student was allocated ksh 10, 625 per year (Kamau N.J & Kennedy O.K, 2012) the school situation in terms of buildings and infrastructure before the introduction of the FDSE subsidy in 2008 was assessed. From the research it implied that the subsidy has had a positive effect on the school infrastructure. The effect of FDSE on sanitation facilities was also investigated. It is observed that whereas in Turkana County which has been described as purely ASAL County, majority of the respondents strongly agreed that there was adequate number of sanitation facilities in the county before the introduction of FDSE, implying that FDSE has worsened the status of sanitation facilities. This contrasts with the findings in all the other counties implying that the FDSE has positively impacted on sanitation facilities while in the ASAL county of Turkana, the effect is negative. (Zachariah S Kosgei et al, 2014).

2.3.3 Parents as the main funding partner of Government

The government of Kenya funds most of the expenditure in secondary schools where in the 2017/2018 budget 0.3 billion was allocated for the upgrading of the National Secondary schools in Kenya, 2.5 billion was allocated for the feeding programs in arid and semi-arid areas and 13.4 billion was allocated for the free day secondary education (GOK 2017). This money is not enough and therefore parents pay money in terms of school fees which is used in developing the school through various projects. The share of parents is increasing with the increasing levels of enrolment in higher levels of the education system and with the development of private schools. (Government of Kenya, 2014)

The research therefore aims at determining how the availability of funds influences the implementation of infrastructural development projects in Kenyan public secondary schools.

2.4 Monitoring and Evaluation practices and implementation of school infrastructural development projects.

Monitoring and evaluation has become an increasingly important tool within the global efforts towards achieving environmental, economic and social sustainability through acting as a check and balance machinery in the process of projects and programs implementation, monitoring and evaluation contributes to the quality of project management by providing information on how results (output, outcome and impact) are achieved and by assessing effectiveness, efficiency and relevance of a specific development intervention. (OECD, 2012). Monitoring and evaluation is a process that assists projects managers in improving performance and achieving results, (Williams, 2000). Monitoring and evaluation is an important instrument for the management of school projects and employs quantitative and qualitative measurement tools. As such it contributes to improving the implementation of projects by enabling continuous feedback of their performance as well as allowing for the identification of the problems as they arise. In her research on implementation of monitoring and evaluation in infrastructural projects in public secondary schools, Mombasa County asserts that due to value attached to monitoring and evaluation in projects implementation, studies have been done across the world to focus on some factors influencing their success (Sanganyi, 2016).

In China monitoring and evaluation is known to be one of the best practices in both the private and public sector (UNDP,2015).According to (PASSIA 2013) in their report on the performance of sanitation projects in central elementary schools in China ,a number of factors determined their success .Monitoring and evaluation was cited as one of the major factor which was implemented by the government management bodies, the contractors and the school leaders for the success in implementation of the given projects. In New Delhi India monitoring and evaluation is said to be an influencing factor in the implementation of the projects. (Work, 2015).

In Africa ,though the concept of monitoring and evaluation has not been accepted fully as an integral part of the of operations in the implementation of the organisation projects, firms and companies have copied the idea recently (Crawford and Bryce 2010).On their research on external factors influencing on the success of M&E on projects in tertiary colleges and secondary schools in Libya Ayarkwa, J,Ayierebi,D,and Amoah,P,(2010) Opines that monitoring and evaluation had a great influence in the implementation of the said projects.

Regionally Rwanda has been cited as one of the best performing countries by the World Bank in its internalisation of the monitoring and evaluation in the project's success in every sector of the economy. While studying the role of M&E in the completion of the NGO funded projects in health and education sector in Kigali, level of expertise of the personnel handling the construction projects, the availability of personnel ,the attitudes and perceptions of the projects handlers on M&E, the financial resources and geographical locations had an influence.(Danson and Amoah ,2010)

In Kenya a preliminary review by a number of researchers on monitoring and evaluation on implementation of construction projects in secondary schools in Bomet,Kericho,Lamu and Kisii counties revealed that most of the projects are not completed on schedule while others are abandoned before complementing because of many problems and complex issues of performance such as cost,time,poor planning, poor monitoring and evaluation and safety(Mwangi and Kaimenyi,2011).There is a challenge in monitoring and evaluation of the government funded projects like the school infrastructural projects (Ombati ,2013) on factors influencing timely completion of infrastructural projects in public secondary schools in Kenya, a case of Kitutu Masaba constituency argued that M&E was a challenge because it was perceived as a witch-hunt activity.(Ochieng and

Tubey 2013) On determinants of effectiveness of monitoring and evaluation of CDF projects in Kenya opines that M&E on projects depends on issues like, availability of time, experts ,relevant technology ,proper information and proper perceptions and attitudes towards the same.

This research aims at establishing the influence of monitoring and evaluation practices on the implementation of the infrastructural development projects in public secondary schools in Kenya.

2.5 Stakeholders involvement and implementation of school infrastructural development projects.

Stakeholders are groups of people, organization and institutions that will affect or maybe affected by the project. These stakeholders include the community-men, women and youth; project field staff, program managers, donors, government and other decision makers÷ supporters, critics, government and NGO-S (Davies et al 2006) as cited by [Mary 2016]

Forss and Carlsson (1997) says that the growing need for efficiency, cost effective and results means that it is essential for stakeholders to have skills which enable them to perform to their best. Engaging stakeholders in discussions about, the what, how and why of program activities is often empowering for them and additionally, promotes inclusion and facilitates meaningful participation by diverse stakeholders groups (Donaldson and Lipesy, 2003). Stakeholder participation means empowering development beneficiaries in terms of resources and needs identification, planning on the use of resources and the actual implementation of development initiatives (Chitere and Ireri, 2004).

In their study on 10 school construction projects in Australia in 2005 to 2009 Proudlock, Ramalingam and Sandison (2009) found out that the whole process of impact evaluation, and particularly the analysis and interpretation of results, can be greatly improved by the participation of intended beneficiaries, who are after all the primary stakeholders in their own development and the best judges of their own situation.

In May 2000, an IFAD (2002) workshop on impact achievement stated that, participation means more than just beneficiary contribution to the project execution, rather, it should encompass all stakeholders and be formalized at all stages of the project cycle .IFAD

(2002) as cited by Jones et al. (2011) also continue to recognize the role of stakeholders by indicating the grassroots organizations, at community and higher levels as important partners. They provide invaluable insights on priorities and appropriate processes during the project's design phase, and undertake some of the implementation and M&E activities of the projects. One of their most valuable roles is in facilitating participatory process during implementation such as through participatory baseline survey, local impact assessment or annual project reviews. Working with them increases local ownership of the project and thus the likelihood of a sustained impact.

A similar study by International Finance Corporation [IFC] (2011) in 110 schools development projects in India, Pakistan, Kenya, Tanzania and Mauritius in 2008 to 2010 shows that, involvement of school staff, parents, students and community members like the local leaders, elected leaders and board of management will be required for a successful M&E in various school programs. In many instances in India and north eastern Kenya for example, parents volunteer to operate school feeding programs, check the process of various projects that they feel are owned by them, allocate some required resources like finances through paying school levies and contributions etc. Therefore, Programs that involve parents, staff and students in the operation and management often have greater success; however care must be taken to ensure that abuses do not occur.

2.6.School board of management managerial skills and implementation of school infrastructural development projects.

Management is working with and through people to achieve organization objectives. It entails planning, organising, actuating and controlling to accomplish set goals and objectives by use of human as a resource and other resources (Franklin,2002) Management skills are categorised into conceptual skills, human and technical. Conceptual involves thinking and information processing, human involves working with and through people, and technical skill is the understanding of and proficiency in the performance of specific tasks. It includes mastery of methods, techniques, and equipment involved in specific function (Daft,1997). In a project two types of managers are identified and differentiated where there is a functional manager who deals with people and a project manager who deals with the real work (Dunn 2001). Research has shown

that quality of education depends on how the schools are managed as opposed to the number of resources in the school.

For an institution of learning to be superior, the B.O.M must have a broad set of skills that may help them to potentially produce competitive advantages (Carnielli,2006).To create an effective school management team ,the schools needs to possess complementary managerial skills which will enable it to deploy specific skills to cope with the specific situations that occurs on daily basis including implementing different school projects.

Internationally, many reforms in secondary education are taking place. The growing demand for education and the pressure for greater access ,equity and quality are also provoking those reforms .These pressures for change are affecting the governance, management and accountability of secondary education. World Bank Report, (2007).In Britain school boards are as old as the countries democracy,Beckett,Elizabeth and Camarata(2000). In the USA a research about the effectiveness of BOGs in the management of the state schools, in the state of Delaware it was found that majority of BOGs were ineffective because of poor decision making processes as a managerial skill, Moolley (1999).In Ireland members of school boards serve in voluntary capacity.

In Africa for example Senegal, the recently created school management councils(SMCs) for upper and lower secondary schools oversee the material and activities that go on in secondary schools ranging from academic administrative to financial matters, World Bank working paper (2008).In South Africa, the 1996 school Act gave School Management Teams (SMTs) the power to make decisions. These teams form the internal management groups that include the principals, deputy principal and departmental heads. These groups are responsible for daily and annual management and decision making Mestry (2004),on his research on accountability of principals and SGB found that lack of necessary knowledge and skills for financial management and the inability to work out practical problems affected the working of such boards making schools not to have any projects. He later pointed out lack of collaboration between the SGB and the principal as a great challenge, where principals were unwilling to share responsibility for school governance for fear of losing power.Mestry (2006).

In Kenya the B.O.M were established by the cap 211 laws of Kenya of 1968 and revised in 1980 where its role was to manage the public secondary schools on behalf of the current day cabinet secretary for education (republic of Kenya, 1968). The board of management established under section 55 shall consist of the following members:- six persons elected to represent parents of the pupils in the school or local community in the case of county secondary schools, one person nominated by the county education board, one representative of the teaching staff in the school elected by the teachers, three representatives of the sponsors of the school, one person to represent special interest groups in the community, one person to represent persons with special needs and a representative of the students' council who shall be an ex officio member. The board of management may from time to time co-opt into its membership such persons as it is satisfied possess skills and experience to assist in the discharge of the board's functions which shall not exceed three at any given time and such members do not have a right to vote. The BOM elects their chairperson but such a person should not be a teacher. For public schools sponsored by faith-based organizations the chairperson shall be appointed by the county education board in consultation with the sponsor. Cabinet secretary shall by regulations prescribe the qualifications of those to be appointed in the board. The head of the institution shall be the secretary to the board. It is the board of management that shall ensure development of the school, ensure and assure the provision of proper and adequate physical facilities for the institution, administer and manage the resources of the institution as well as to receive collect and account for any funds accruing to the institution (The basic education act, 2013 No. 14 of 2013).

In Kenya Otieno (2010) on school related factors affecting management of secondary schools established that the inhibiting factor to fully participate by the Board of management was lack of training in management. Okelloh (2015) on her research on factors influencing individual board of management roles in implementing educational policy at public secondary schools in Rarieda, found that BOM professional qualifications, school management skills, experience and training of board of managers influenced the implementation of educational policy. In Meru central sub-county research on influence of boards of managers on sustainability of constituency development funded infrastructure projects in secondary schools, found that board of management skills had no significant influence on sustainability of school CDF funded

infrastructure projects but their level of involvement influenced the sustainability of the said projects,(Maina 2015).

Since the school principal is party and secretary to the B.O.M, Projects that are well managed and supported by the school head are most likely to fare well since their legitimate actions can easily bring change in the said institution of learning (Maranga 2007). one of the functions of the school head is to offer instructional leadership as well as connecting the school to the outside world and the school resources (Wango, 2009).The principal plays a big role in implementation of the change because he is the one to shape the organization conditions necessary for the success and monitor that which has been implemented. School heads need to be equipped with the right skills and techniques such as management by objectives. A poor manager without the right management skills will experience interpersonal problems such as poor communication (Kreither, 2000) .The study revealed that in terms of the management skills, roles and functions greatly affected the innovation, growth and development of the school.

School principals as secretaries to their respective B.O.M should prioritize for important school facilities which include the administrative office, staff rooms and offices, classrooms laboratories, workshops, equipment, stores libraries, dormitories, staff houses, water projects and the school grounds. In order for a school to advance the learning opportunities offered to the students, it has to have all these facilities in place. It is therefore important to utilize the funds available well to ensure the projects are implemented and finished on time to allow students an easy time in learning. Incorporation of good planning is essential to provide modest yet safe, attractive, accessible and durable learning facilities or environments that meet local needs (Osei, 2006). School heads require good communication skills and public relations training because they are the most important facilitators of school improvement and a bridge between the school the B.O.M, community and education authorities. New skills are required to manage school projects in a context in which an increasing amount of responsibility is delegated (Gatheru, 2008). Training should aim at providing necessary skills for head teachers to use their new responsibilities as well as providing skills and knowledge in schools change and sustainable development.

The head teachers can also learn about effective leadership so as to know one's own strengths and weaknesses with an aim of improving one's management capacities. This will assist head teachers discover which aspects of their leadership role need improvement as well as how to relate with the community and stakeholders. In addition they can also explore how to guide change and overcome resistance and obstacles present in their own school therefore making wide-ranging and comprehensive changes throughout the school which are supported by teachers, children and parents (Otiende, 2002).

Within the complex operation of schools in the 21st century the school head plays a vital role in bringing about school improvement and effectiveness. increased interest leadership preparation and development is based on the fact that school leaders can make a difference in both the effectiveness and efficiency of schooling(Hallinger and sindvongs,2008).Research findings done on the field of education across the world indicates that school heads are the most single determinant of quality and effectiveness of a school Golding ,et al(2006) Garry,(2006) Leu and Bryner ,(2005).

In Hong Kong the conceptual foundations for leadership education for school head to improve their managerial skills was established by Hong Kong education department in 1999 after the study to various programs in England ,Australia, Scotland and Singapore(Wong and Chung-Chi,2004).Newly appointed school head s undergoes a nine day induction so as to improve on their managerial skills. In England the national college for school leadership (NCSL) prepares principals through the national professional qualification for headship (NPQH) (Fink, 2005).Those in service are trained by the head for the future (HftF) (Brundrett and De Cuevas, 2007).

In Kenya appointment to school headship is done by teachers service commission (TSC) based to seniority and performance as opposed to the earlier method where school heads were recommended by the stakeholders and had to be a person of high moral standards and having served for a minimum of three years (Nandwa ,2008).Once the school head has been appointed, the ministry of education(MOE)being the custodian of the curriculum uses the skills of the school heads as key implementers and supervisors of the school programs(Ministry of education , 2017).On challenges facing secondary school principals in Kenya (Mingaine ,2013) opines that Kenyan school heads has

numerous leadership roles which includes management and maintenance of the school facilities such as school .other researchers have found that school head leadership role plays a major rule in the implementation of the school projects .

2.7 Theoretical framework.

The research was based on two theories, namely; -implementation innovation climate theory and general systems theory.

2.7.1The theory of implementation innovation climate.

The theory was put forward by Klein and Sorra in 1996.They based the theory on extensive review of the determinants of effective information technology implementation. They observed that organizations use a wide variety of policies and practices to promote innovation use. The practices include training, technical support, incentives, persuasive communication, and user participation in decision making, workflow and workload changes, alterations in staffing levels and staffing mix, new reporting requirements, new authority relationships, implementation, monitoring and enforcement procedures. They argued that the implementation policies and practices vary from one organisation to the other. Katherine Klein and Joann Sorra's theory of innovation implementation has become increasingly prominent in the field of implementation science. The article in which the theory first appeared has been cited 258 times since its publication in 1996, reflecting the theory's popularity.

The theory relates to this research since the climate to which implementation can effectively take place has been discussed. In this research implementation of the infrastructural development projects happens to be the dependent variable, which depends on monitoring and evaluation practices, stakeholdersø involvement, B.O.M managerial skills which includes communication and reporting are identified in this theory. Since the climate varies availability of funds will also count for effective implementation.

2.7.2 General systems theory.

The study is also guided by general system theory which was proposed in the 1940ø by the biologist Ludwig Von Bertalanffy (General Systems Theory,1968) and furthered by Ross Ashby (Introduction to Cybernetics,1956).They both argue that a system is a collection of parts unified to accomplish an overall goal. If one part of the system is removed, the nature of the system is changed as well. Systems share feedback among

each of the aspects of the systems. On the other hand there is an infinitely complex environment and on the other hand there are self-replicating systems. It is widely applied in the field of management. The theory relates to this study since the school is a system made up of subsystems and for any project to be implemented such systems should work together. Stakeholders, school head, parents, and the government should all work together for successful implementation of school projects.

2.8 Conceptual frame work

Conceptual framework entails forming ideas on relationships between variables in the study and showing these relationships diagrammatically, (Mugenda and Mugenda, 2003).

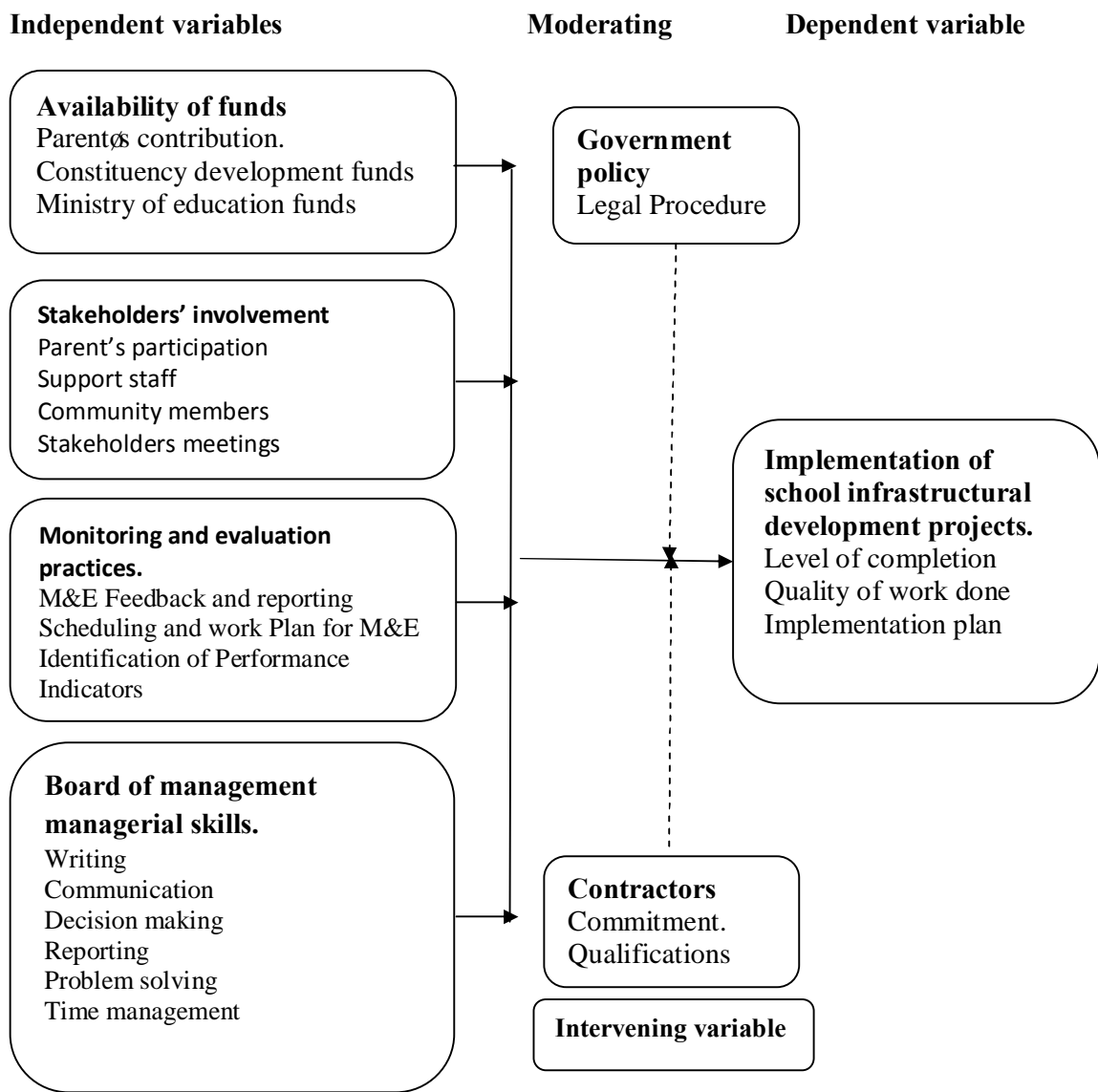


Figure 1: Conceptual Framework

2.10 Discussion of the conceptual framework.

The conceptual framework is comprised of four independent variables and one dependent variable. The independent variables are availability of funds, stakeholder's involvement, Monitoring and evaluation practices and B.O.M managerial skills have an influence on the dependent variable in this case which is implementation of infrastructural development projects in public secondary schools. The moderating variable which is government policy can affect the strength of the independent and dependent variable especially where there are government policies to be abided to. The relationship between the independent and the dependent variable can further be explained by the intervening variable which in this case is the contractor where his commitment in the implementation of the projects is vital. Independent and dependent variables are elaborated in the literature reviewed whereas moderating and intervening variables are not further discussed.

2.11 Summary of literature reviewed.

From the literature reviewed, Project implementation is a very important part of the life cycle of a project since it is the actual execution of the project design which involves what is required to successfully complete the project along dimensions of time, budget, and quality. Monitoring and evaluation is an important instrument for the management of school projects and employs quantitative and qualitative measurement tools. As such it contributes to improving the implementation of projects by enabling continuous feedback of their performance as well as allowing for the identification of the problems as they arise. Stakeholder participation means empowering development beneficiaries in terms of resources and needs identification, planning on the use of resources and the actual implementation of development initiative. The B.O.M through the school head is to offer instructional leadership as well as connecting the school to the outside world and the school resources. The B.O.M plays a big role in implementation of the change because it is the one to shape the organization conditions necessary for the success and monitor that which has been implemented. Availability of funds is very crucial in implementation of the school projects where different parties such as the government, CDF and parents need to fund the school projects.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology of the study. It highlights research design, study population, sampling techniques, sample size, research instruments, instrument validity, reliability of the instruments, ethical consideration, data collection procedures and data analysis techniques.

3.2 Research design

This refers to the nature of research to be conducted. It is described as the plan, structure and strategy of investigation conceived to obtain answers to research questions. It is the researcher's plan for the study, which includes the methods to be used, what data to be gathered, where, how and from whom. The study adopted descriptive survey design. Descriptive survey research was defined by Kerlinger (1973) as a method that was used to study large and small population by selecting and studying the samples chosen from the population to discover the relative incidences, distributions and interrelations of sociological and psychological variables. He adds that survey research focused on people, vital facts of people and their beliefs, opinions, motivations and behaviours. It involved systematic collection of data on an entity or group of entities or operations or drawing conclusions from what the data shows. (Wiersma 1985) defines survey research as a method conducted to determine status quo and gathering facts than manipulation of variable. It was a method of collecting information by interviewing or administering questionnaire to a sample of individuals. In this study, the researcher used descriptive survey design because there is need to describe study respondents in regard to their attitude and opinion about factors that influence implementation of infrastructural development projects in public secondary schools in Meru central sub-county Kenya. Qualitative researchers maintain that once the research has been designed, it must be followed throughout the study Ary, Jacobs and Razavieh (2002).

3.3 Target Population

Target population is a group of individuals or items from which samples are taken for measurement. John and James (2006). It refers to all members of the population which research findings can be generalised and is an accurate record of the sampling from which the samples are drawn.

The study targeted all the public secondary schools in Meru central sub -county. There are 44 public secondary schools in Meru central sub county. 17 schools are in Abothuguchi central, 16 in Abothuguchi west, 6 in Abothuguchi East and 5 in Kiagu, Ministry of education, (MOE) 2017) .There are 44 principals, 44 B.O.M chairpersons, 44 Teacher representatives to the B.O.M and 44 school bursars , from which the respondent sample was drawn.

Table 3.1: Target population

Categories	Population
Abothuguchi Central Division	17
Abothuguchi West Division	16
Abothuguchi East Division	6
Kiagu Division	5
Total	44

Source: (M.O.E, 2017)

3.4 Sample size and sampling procedure

Sampling is the procedure which a researcher can use to gather people, places or things to study (Orodho and Kombo, 2002). It is a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group.

3.4.1 Sample size

A sample is a set of a particular population selected for the purpose of the study to make conclusions about the population Mugenda and Mugenda (2003). Since census was used, the sample size was the total population of registered public secondary schools which were 44 in number.

3.4.2 Sampling procedure

Different opinion has been expressed by experts on sample size. Some had suggested 5% while others 10% (Saleem, 2008). He later adds that the greater the degree of accuracy required the larger the sample size should be. The sample population was selected using census meaning the entire population was studied. All Principals, B.O.M chairs, school

bursars and the teacher who represents teachers in the board of management from the 44 public secondary schools automatically became the respondents.

Table 3.2: Sampling frame

Category	Target size	Sample size
Abothuguchi central	17	17
Abothuguchi west	16	16
Abothuguchi east	6	6
Kiagu	5	5
Total	44	44

Table 3.3: Respondents Population and their Sample Size

Stakeholders	Total number	Selected sample	Percentage (%)
Principals	44	44	100
B.O.M chairpersons	44	44	100
Teacher representatives	44	44	100
School bursars	44	44	100
Total	176	176	100

3.5 Research Instruments

The study used questionnaires, to collect data from all the schools. (Kumar,R ,2005) defines a questionnaire as a written list of questions, the answers to which are recorded by respondents. The questionnaires contain questions related to the objectives of the study. Questionnaires were used since the study was concerned with variable that could not be observed such as opinions, views, perception and feelings of respondents. Questionnaire is the most suitable for such variables (Touliatos and Compton, 1988). Two categories of questionnaires were used; questionnaire for the Principals and questionnaires for stakeholders.

3.6 Pilot Testing

A pilot study was carried out in four schools in Imenti south sub county to ensure that there was no replication between the pilot study and the actual study. The pilot study involved 16 respondents who were picked at random and questionnaires administered to them. The pre-testing was important because deficiencies that were discovered were

rectified and the pilot exercise enabled the researcher to determine the validity and reliability of the instruments and necessary adjustments done.

3.6.1 Validity of the research instrument

Validity indicates the extent to which an instrument measures what it is intended to measure that is, the degree to which differences found with a measuring instrument reflect actual differences among those being tested (Kothari,C.R, 2009). According to Sunders (2000) a research is valid only if it actually studies what is set out to study and if studies are verifiable. Orodho,A.J. (2009) further focused on the degree on which results from analysis of data actually represents the phenomenon under investigation .Validity is accuracy and meaningfulness of inferences, which is based on research results. In this research validity was enhanced where questions were improved as well as format used where the supervisor and other experts in research field were consulted by the researcher for their comments on the validity of the questions and necessary adjustments were made.

3.6.2 Reliability of the research instruments

A measuring instrument is reliable if it provides consistent results. Mugenda and Mugenda (2003). Reliable instruments are consistent and stable hence can be depended upon to produce similar results and similar conditions (Borg and Gall, 1994).According to (Eshiwani 1996), pilot testing is important in the research process because it reveals vague questions and unclear instructions in the instrument. It also captures important comments and suggestions from the respondents that enables the researcher to improve efficiency of the instrument, adjust strategies and approaches to maximize the response rate. Pre-test was conducted by administering instruments in four secondary schools in the neighbouring Imenti south sub county, Meru County. The researcher then used this information to adjust the instrument where found necessary to ensure the reliability of the instrument.

3.6 Data collection procedure

A letter of identification was obtained from the University of Nairobi Meru Extra-Mural Centre, which was used to obtain a research permit from the National Council of Science and Technology prior to the commencement of the study. A letter of transmittal was written which introduced the researcher to the respondents and assured them of maximum confidentiality in their responses. In this study, data was collected through

administering questionnaires to the respondents. The whole process of data collection was administered personally by the researcher.

3.7 Data analysis technique

According to Kothari (2009), after collection of data it has to be processed and analyzed in accordance with the outline laid down for that purpose at that time of developing research plan. Data collected was edited for consistency and then coded for easy entry and analysis. Statistical Packaged for Social Sciences (SPSS) software version 21 was used to process quantitative data using descriptive statistics. This enabled the researcher to achieve statistical measures such as correlation between the variables, their mean, standard deviation which helped the researcher to come up with inferences about the topic under study. Descriptive statistics was then used where findings were presented using frequency table and percentages.

3.8 Ethical considerations

There was maintenance of high degree of confidentiality by the researcher by not revealing the identity of the respondent where by the information was collected from respondents with their consent and voluntarily. The researcher sought permission from the relevant authorities to allow in collection of information. The researcher ensured patient, honesty, respect and responsibility of the task carried out during data collection and made sure that the research was to benefit the respondents.

3.9 Operational definition of variables

Table 3. 4: Operational Definition of Variables

Research objectives	Type of variables	Indicators	Measurement	Data analysis approach
To determine the influence of availability of funds in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya.	Independent variable Availability of funds.	Parents contributions Ministry Fund Constituency development funds	Evidence of implemented projects Documents of government fund disbursement School receipt book Availability of financial plan	Descriptive
To establish the influence of monitoring and evaluation practise in the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya,	Independent variable Monitoring and evaluation practices	Regular check of projects on the site	Monitoring and evaluation report.	Descriptive
To establish the influence of stakeholders involvement in the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county in Kenya.	Independent variable stakeholders involvement	Regular visit in the site Stakeholders meetings	School logbook Minute of the Stakeholders meetings	Descriptive
To establish the influence of board of management managerial skills in implementation of infrastructural development projects in public	Independent variable Board of management	Time schedule for implementation Documents for decision made on	Minutes of the school BOM meetings.	Descriptive

secondary schools in Meru central sub-county in Kenya.	managerial skills.	implementation and problems solved.		
Implementation of infrastructural development projects in public day secondary schools in Meru central sub-county in Kenya.	Dependent variable implementation of the of the development projects	Funds allocated for projects Level of completion	Progress of Construction of classes, dining halls, laboratories, washrooms Implementation plan	Descriptive

CHAPTER FOUR
DATA ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter has covered the presentation, interpretation and analysis of the data collected on the factors influencing implementation of infrastructural development project in public secondary schools in Meru central Subcounty, Kenya.

4.2 Response Rate

The researcher targeted 176 respondents including principals, B.O.M chairpersons, school bursars and teachers representatives to respond to questionnaires. However, data was collected from 124 respondents giving a response rate of 70.5%. According to Kothari (2004), a response rate of 50 percent or more is acceptable for analysis.

Table 4.1: Response Rate

Stakeholders	Selected Sample	Response	Response Rate
Principals	44	31	70.5
B.O.M chairpersons	44	28	63.6
School bursars	44	33	75.0
Teachers representative	44	32	72.7
Total	176	124	70.5

4.3 Reliability Analysis

In this study, construct reliability was determined using Cronbach alpha coefficients that test internal consistency of items on a scale. The results of the reliability analysis are presented in the table 4.2.

Table 4.2: Reliability of Measurement Scales

	Cronbach's Alpha	Decision
Availability of funds	.812	Reliable
Stakeholders involvement	.786	Reliable
Monitoring and evaluation practices.	.831	Reliable
B.OM managerial skills	.876	Reliable

From the findings, the study revealed that B.O.M managerial skills with a coefficient of 0.876 was more reliable followed by Monitoring and evaluation practices with a coefficient of 0.831 then Availability of funds with a coefficient of 0.812 while Stakeholders involvement with a coefficient of 0.786 had the least reliability. All the variables were thus considered reliable if the as the results showed that the Cronbach Alpha associated with the variables of the study

were above 0.70 threshold as recommended by Leach (2016) where it is asserted that Cronbach Alpha α s should be in excess of 0.70 for the measurement intervals.

4.4 Demographic Information

In this study, data was collected from different groups of respondents based on their stakeholder membership, gender, how long they have served in the school, highest academic qualification, how long they have been in the teaching profession and the category to which their schools belongs to.

4.4.1 Gender of the Respondent

Data was collected based on the respondents' gender. This data was then summarized and presented in table 4.3.

Table 4.3: Gender of the Respondent

	Frequency	Percent
Male	42	34.2
Female	82	65.8
Total	124	100

According to the results in table 4.3, most of the respondents were revealed to be female as shown by 65.8 % while the rest were male as illustrated by 34.2%. This infers that the researcher considered all the respondents irrespective of their gender to obtain and gather valid information on the subject under study.

4.4.2 Stakeholder Membership

The respondents were asked to indicate their stakeholder membership. Their replies were as shown in Table 4.4.

Table 4.4: Stakeholder Membership

	Frequency	Percent
B.O.M chairpersons	28	30.11
School bursars	33	35.48
Teacher representative in the B.O.M	32	34.41
Total	93	100.0

From the findings, 30.11% of the respondents indicated to be B.O.M chairs. Again 35.48% of the respondents indicated they were school bursars while 34.41% of the respondents indicated that they were teacher representatives. These were among schools' stakeholders and could

understand factors influencing implementation of infrastructural development project in public secondary schools. Therefore, they availed reliable information to the researcher.

4.4.3 Period Respondents have served in their Schools

The researcher further explored how long the respondents have been serving in their respective schools. The results are in table 4.5.

Table 4.5: Respondents Period of Service to School

	Frequency	Percent
0-1 year	16	13.7
2-5 year	51	40.4
6-9 year	44	35.6
10 years and above	13	10.3
Total	124	100

Majority of the respondents indicated that they had been serving their respective schools for a period of 2-5 years as shown by 40.4%. The remainder indicated they had been serving in their respective schools for a period of 6-9 year as shown by 35.6%, 0-1 year as shown by 13.7% and 10 years and above as illustrated by 10.3%. This shows that many of the respondents were familiar with what the researcher was studying and were more reliable to obtain information from.

4.4.4 Respondents Highest Level of Education

Enquiry on the respondents' highest level of education was done by asking the respondents questions based on their highest level of education. Table 4.6 is a summary of their responses.

Table 4.6: Respondents Highest Level of Education

	Frequency	Percent
A level	24	19.9
Diploma	41	32.9
Bachelor's degree	48	39
Master's degree	8	5.5
PhD	3	2.7
Total	124	100

On the respondents' highest level of education, majority of the respondents indicated to have a Bachelor's degree as illustrated by 39%. Other respondents indicated to have a diploma as shown by 32.9%, A level as shown by 19.9%, master's degrees illustrated by 5.5% while those who had PhD were 2.7%. The findings present respondents with a capability of understanding the subject under research and therefore could be relied upon on data collection.

4.4.5 Respondents Period in the Teaching Profession

The respondents were further enquired to tell how long they have been in the teaching profession. Their replies were as illustrated in Table 4.7.

Table 4.7: Respondents Period in the Teaching Profession

	Frequency	Percent
1-10 years	10	32.2
11-20 years	21	65.4
21-30 years	1	2.4
Total	32	100

As per the findings, 65.4% of the respondents had been in teaching profession for 11 to 20 years, 32.2% were in the teaching profession for less than 10 years while 2.4% were in the teaching profession for 21 to 30 years. This shows that majority were in teaching profession for long enough to comprehend and give reliable and accurate information on the subject under study.

4.4.6 Respondents Schools Category

The researcher asked the respondents to indicate the category to which their school belongs to. Table 4.8 shows their replies.

Table 4.8: Respondents Schools Category

	Frequency	Percent
Sub-county school	24	73.9
County school	8	26.1
Total	32	100

From the findings, most of the respondents indicated to belong to sub-county schools category as shown by 73.9% while county schools were 26.1%. This reveals that the researcher obtained reliable information from categories of schools which enhanced generalization of findings.

4.5 Factors Influencing Implementation of Infrastructural Development Project

Under this section the researcher will present the findings on the factors influencing implementation of infrastructural development project which include availability of funds, monitoring and evaluation practices, B.O.M managerial skills and stakeholders involvement.

4.5.1 Availability of Funds for Implementation of Projects

The respondents were asked to indicate how they would rate availability of funds for projects implementation in their schools. Their replies were as shown in Table 4.9.

Table 4.9: Availability of Funds for Projects Implementation in Schools in percentage

	Frequency	Percent
Poor	24	19.2
Good	85	68.5
Very Good	15	12.4
Total	124	100

Majority of the respondents indicated that availability of funds for projects implementation in their schools was good as shown by 68.5%. Other respondents as illustrated by 19.2% indicated that availability of funds for projects implementation in their schools was poor and very good as shown by 12.4%. This shows that availability of funds for projects implementation in schools was good.

Further the respondents were asked to indicate the extent of agreement in funding of school infrastructural development projects by the stated parties. Their replies were as illustrated in Table 4.10.

Table 4.10: Agreement in Funding of School Infrastructural Development Projects

	Mean	Std. Dev.
Parents are the main funders of the infrastructural development projects in this school	4.021	0.859
Infrastructural development projects in this school are funded by the government of Kenya through the ministry of education.	3.788	0.778
Constituency development fund is the main source of funds for infrastructural development projects in this school	3.812	0.823
Infrastructural development funds are sourced through other means	4.014	0.770
I don't know the source of funds for infrastructural development projects in this school.	2.143	0.617

As per the findings, the respondents agreed that parents are the main funders of the infrastructural development projects in schools as expressed by a mean of 4.021 and that infrastructural development funds are sourced through other means as illustrated by a mean of 4.014. The respondents also agreed that constituency development fund is the main source of funds for infrastructural development projects in their schools as shown by a mean of 3.812 and that infrastructural development projects in their schools are funded by the government of Kenya through the ministry of education as expressed by a mean of 3.788 but disagreed that they don't know the source of funds for infrastructural development projects in this school as shown by a mean of 2.143.

The researcher asked the respondents to indicate the extent of agreement that funds for the school are sourced through other ways. Their replies were as shown in table 4.11.

Table 4. 11: Statements on how school funds are sourced.

	Mean	Std. Dev.
Donors are source of funds for infrastructural development projects in this school	3.941	0.635
Credit institutions give funds for infrastructural development projects in this school.	2.000	0.812
Well-wishers are source of funds for infrastructural development projects in this school	3.357	0.572
Infrastructural development projects are funded by the alumni of this school.	3.958	0.613
Funds for infrastructural development projects are sourced through an Harambee	4.012	0.709

From the findings, the respondents agreed that funds for infrastructural development projects are sourced through an Harambee as shown by a mean score of 4.012, that Infrastructural development projects are funded by the alumni of their schools as expressed by mean score of 3.958 and that donors are source of funds for infrastructural development projects in their schools as illustrated by a mean of 3.941. However, the respondents were neutral that well-wishers are source of funds for infrastructural development projects in their schools as shown by a mean of 3.357 and disagreed that credit institutions give funds for infrastructural development projects in this school as indicated by a mean score of 2.000.

4.5.2 Monitoring and Evaluation for Project Implementation

The researcher also asked the respondents to indicate the extent to which they agree or disagree that the various people carry out monitoring and evaluation for implementation of infrastructural development projects in the school. Their replies were as shown in Table 4.12.

Table 4.12: Statements on Monitoring and Evaluation for Project Implementation

	Mean	Std. Dev.
The school principal is the one who carries out monitoring and evaluation in implementation of infrastructural development projects in this school	3.976	0.811
Monitoring and evaluation in implementation of infrastructural development projects is carried out by the board of management.	4.333	0.867
External team is the one that carries out monitoring and evaluation in implementation of infrastructural school development projects.	3.310	1.047
Internal expertise is used in carrying out the monitoring and evaluation in the implementation of school development projects	2.571	1.272

As per the findings, the respondents agreed that B.O.M is the one that carries out monitoring and evaluation in implementation of infrastructural school development projects as shown by a mean score of 4.333 and that monitoring and evaluation in implementation of infrastructural development projects is carried out by the school principal as illustrated by a mean of 3.976.

However, the respondents were neutral that external expertise is used in carrying out the monitoring and evaluation in the implementation of school development projects as indicated by an average of 3.310 and that the internal team is the one that carries out monitoring and evaluation in implementation of infrastructural development projects as illustrated by a mean of 2.571.

The respondents were also asked to indicate when monitoring and evaluation is carried out. Their replies were as shown in Table 4.13.

Table 4.13: Period when Monitoring and Evaluation is Carried Out

	Frequency	Percent
Quarterly	5	4.8
Annually	35	28.1
Monthly	59	47.9
Any time	24	19.2
Total	124	100

Table 4.13, shows that majority of the respondents indicated that monitoring and evaluation is carried out monthly (47.9%), annually (28.1%), anytime (19.2%) and in a quarterly (4.8%). This made it clear that most of the schools monitoring and evaluation is carried out monthly.

Further the respondents were asked to indicate the extent to which they rate practicing of the various monitoring and evaluation practices in the implementation of the infrastructural development projects in the school. Their replies were as shown in Table 4.14.

Table 4.14: Rating of Monitoring and Evaluation Practices

	Mean	Std. Dev.
Monitoring and evaluation feedback and reporting	4.066	0.735
Scheduling and work plan for monitoring and evaluation	3.738	0.592
Identification of performance indicators	3.482	0.997

The respondents highly rated monitoring and evaluation feedback and reporting as shown by a mean of 4.066 and that scheduling and work plan for monitoring and evaluation as shown by a mean of 3.738. However, the respondents moderately rated identification of performance indicators as indicated by a mean score of 3.482.

Finally, the respondents were asked to indicate the extent to which they agree or disagree on the effectiveness of the various monitoring and evaluation practices in the implementation of

infrastructural development projects in their school. Their replies were as shown in the Table 4.15.

Table 4.15: Agreement with Effectiveness of the various Monitoring and Evaluation Practices

	Mean	Std. Dev.
Reporting and feedback of M&E on the implementation of the infrastructural development projects is done on time	2.857	0.647
Feedback and report from monitoring and evaluation is used in making informed decisions in the implementation process.	4.286	0.596
Scheduling and work plan for monitoring and evaluation of this school projects improves quality of infrastructures	4.333	0.687
Identification of performance indicators improves input, output, outcomes and results of the implemented structures	3.310	0.975

The findings agreed that scheduling and work plan for monitoring and evaluation of their school projects improves quality of infrastructures as shown by a mean of 4.333 and that feedback and report from monitoring and evaluation is used in making informed decisions in the implementation process as expressed by a mean score of 4.286. However, the respondents were neutral that identification of performance indicators improves input, output, outcomes and results of the implemented structures as indicated by a mean of 3.310 and that reporting and feedback of M & E on the implementation of the infrastructural development projects is done on time as illustrated by a mean score of 2.857.

4.5.3 Stakeholders Involvement in Implementation of developmental infrastructural school Projects

The researcher asked the respondents to rate participation of stakeholders in implementation of school projects in the school. Their replies were as shown in the Table 4.16.

Table 4.16: Rating of Level of Stakeholder Involvement in Percentage

	Frequency	Percent
Very good	61	48.8
Good	46	37.2
Poor	11	9.3
Very poor	6	4.7
Total	124	100

From the findings, the respondents indicated that participation of stakeholders in implementation of school projects in the school was very good as shown by 48.8%, good as shown by 37.2%, poor as shown by 9.3% and very poor as shown by 4.7%. This shows that

there was a good participation of stakeholders in implementation of school projects in the school.

The respondents also indicated when meetings of the various stakeholders in the implementation of school projects are held. Their replies were as shown in Table 4.17.

Table 4.17: Frequency on when stakeholders Meetings are scheduled in respondents Schools

	Frequency	Percent
Beginning of a new project only	19	15.1
Monthly	31	24.7
Once a year	74	60.2
Total	124	100

Most of the respondents indicated stakeholders meeting in their schools is scheduled once a year as shown by 60.2%, monthly as shown by 24.7% and beginning of a new project only as shown 15.1%. This shows that scheduling of stakeholders meeting in most of schools is done once a year.

The respondents were also requested to rate their involvement in the implementation of the school infrastructural development projects. Their responses were as shown in Table 4.18.

Table 4.18: Rating of Stakeholders Involvement in the Implementation of School infrastructural development Projects

	Mean	Std. Dev.
B.O.M members have cooperated in the implementation of school infrastructural development projects.	4.381	0.764
School staff has participated well in the implementation of school infrastructural development projects.	3.976	0.811
Parents have been effective in the implementation of school infrastructural development projects.	4.333	0.687
Community has participated well in the implementation of school infrastructural development projects.	2.810	1.065

The findings indicated that B.O.M as shown by a mean of 4.381, parents as shown by a mean of 4.333 and school staff as shown by a mean of 3.976 are highly involved in the implementation of the school infrastructural development projects. The respondents however, revealed that the community was least in participation as shown by a mean of 2.810.

Finally, the respondents were asked to indicate the extent to which they agree or disagree in the involvement as a stakeholder in the implementation of school projects. Their replies were as shown in Table 4.19

Table 4.19: Rating on Involvement as a Stakeholder in the Implementation of the Infrastructural Development School Projects

	Mean	Std. Dev.
Have been involved in monitoring and evaluation in implementation of the school project.	3.316	0.578
Have been involved in sourcing of funds for school project.	4.075	0.839
Have been involved in advisory on the implementation of the school project.	3.884	0.867
Have been involved in decision making on the implementation of school project.	4.199	0.776

From the findings, the respondents agreed that stakeholders have been involved in decision making on the implementation of school project as shown by a mean of 4.199, that respondents have been involved in sourcing of funds for school project as shown by a mean of 4.075 and that stakeholders have been involved in advisory on the implementation of the school project as illustrated by a mean score of 3.884. However, the respondents were neutral that stakeholders have been involved in monitoring and evaluation implementation of the school project as illustrated by a mean of 3.316.

4.5.4 School B.O.M Managerial Skills

The researcher requested the respondents to indicate whether they have been trained in project management. Table 4.20 shows the replies of the respondents.

Table 4.20: Response on Whether Respondent have been Trained in Project Management

	Frequency	Percent
No	116	93.8
Yes	8	6.2
Total	124	100.0

Most of the respondents (93.8%) indicated that they havenot been trained in project management with only 6.2% indicating they have been trained. This implies that most schools have not trained their stakeholders in project management.

The respondents also show how frequent do they have projects review meetings. Their responses were as shown in Table 4.21

Table 4.21: Frequency on review meetings for developmental infrastructural school projects.

	Frequency	Percent
Never	6	4.8
Annually	35	28.1
Quarterly	59	47.9
Monthly	24	19.2
Total	124	100

From Table 4.21, the respondents indicated that have projects review meetings quarterly as shown by 47.9%, annually as shown by 28.1%, anytime (19.2%) and monthly as shown by 4.8%. This made it clear that most of the schools frequently review projects through meetings.

Further, the researcher requested the respondents to indicate the extent to which they agree or disagree that B.O.M utilized the various project management skills in the implementation of the school infrastructural development projects. Their responses were as shown in Table 4.22.

Table 4.22: Response on the Statements of B.O.M Project Management Skills

Management skills	Mean	Std. Dev.
Time management	3.412	0.772
Decision making on activities of the project implementation	4.208	0.519
Writing project proposal	2.812	0.836
Communicates the details of the project to the stake holders	3.641	0.519
Solves problems pertaining implementation of projects well	4.106	0.899
Report matters pertaining implementation of projects to the stakeholders	3.811	0.613

As per table 4.22, the respondents agreed that of the management skills decision making as a skill was well shown as revealed by a mean of 4.208, where problem solving followed as illustrated by a mean of 4.106, that reporting to the stakeholders as shown by a mean of 3.811 and communication as illustrated by a mean of 3.641. They were however neutral in time management of the project to the as illustrated by a mean of 3.412 and writing project proposal as shown by a mean of 2.812. Those were among the management skills that were believed to influence implementation of the school infrastructural development projects.

4.5.5 Implementation of Infrastructural Development Projects

The researcher requested the respondents to tell the trend of the various aspects of implementation of infrastructural development projects for the last five years. Their collective responses were presented in table 4.243

Table 4.23: Rating of Aspects on Implemented Infrastructural Development School Projects

	Mean	Std. Dev.
Level of completion	4.319	0.962
Quality of work done	3.876	1.034
Implementation plan	3.071	0.712

The study indicated that Level of completion (Mean=4.319) and that quality of work done (Mean=3.876) have improved for the last five years while implementation plan (Mean=3.071) remained constant.

4.6 Pearson’s Product Moment Correlation

To quantify the strength of the relationship between the variables, the study used Karl Pearson’s coefficient of correlation. The Pearson product-moment correlation coefficient (or Pearson correlation coefficient) is a measure of the strength of a linear association between two variables and is denoted by r . The Pearson correlation coefficient, r , can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicate a negative association. The findings are presented in Table 4.24

Table 4.24: Correlation Analysis

		Implementation of Infrastructural Development Projects	Availability of Funds.	Monitoring and Evaluation.	Stakeholders Involvement.	B.O.M Managerial Skills.
Implementation of Infrastructural Development Projects	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	124				
Availability of Funds	Pearson Correlation	.681*	1			
	Sig. (2-tailed)	.006				
	N	124	124			
Monitoring and Evaluation	Pearson Correlation	.636*	.247*	1		
	Sig. (2-tailed)	.021	.000			
	N	124	124	124		
Stakeholders Involvement	Pearson Correlation	.821*	.587*	.300*	1	
	Sig. (2-tailed)	.000	.000	.033		
	N	124	124	124	124	
B.O.M managerial Skills	Pearson Correlation	.711*	.613*	.079*	.415*	1
	Sig. (2-tailed)	.001	.005	.000	.006	
	N	124	124	124	124	124

*. Correlation is significant at the 0.05 level (2-tailed).

Results in table 4.24 indicates that the correlation between availability of funds and implementation of infrastructural development projects is positive and significant ($R=0.681$, p value= 0.006). This implies that an increase in implementation of infrastructural development projects is associated with an increase in availability of funds and a decrease in implementation of infrastructural development projects is associated with a decrease in availability of funds.

In addition, the study reveals that the correlation between monitoring and evaluation and implementation of infrastructural development projects is positive and significant ($r=0.636$, p value= 0.021). This implies that an increase in monitoring and evaluation is associated with an increase in implementation of infrastructural development projects and a decrease in implementation of infrastructural development projects is associated with a decline in monitoring and evaluation.

Further, the study reveals that the correlation between stakeholders involvement and implementation of infrastructural development projects is significant ($r=0.821$, p value= 0.000). This implies that an increase in stakeholders involvement is associated with an increase in implementation of infrastructural development projects and a decrease stakeholders involvement is associated with a decrease in implementation of infrastructural development projects.

Finally, the study establishes that the correlation between school B.O.M managerial skills and implementation of infrastructural development projects is positive and significant ($r=0.711$, p value= 0.001). This implies that an increase in school managerial skills is associated with an increase in implementation of infrastructural development projects and a decrease in school managerial skills is associated with a decline in implementation of infrastructural development projects.

Overall, stakeholders involvement had the greatest effect on implementation of infrastructural development projects in Kenya followed by school B.O.M managerial skills, then availability of funds while monitoring and evaluation had the least effect on the implementation of infrastructural development projects in Kenya. All the variables were significant since their p -values were less than 0.05.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn are focused on addressing the objective of the study.

5.2 Summary of the Findings and Recommendations

5.2.1 Availability of Funds for Implementation of Projects

The study sought to determine the influence of availability of funds in the implementation of infrastructural development projects in public secondary schools in Kenya. The study established that there was a good availability of funds for projects implementation in the schools. These funds were believed to have been contributed by parents who are considered the main funders of the infrastructural development projects in most schools as well as the government through the ministry of education. CDF also funded the infrastructural development projects. The infrastructural development funds were also revealed to be sourced through other means. An harambee to a greater extent, school alumni and donors also fund infrastructural development school projects. Moreover, well-wishers slightly fund infrastructural development projects in the school while credit institutions never give funds for infrastructural development projects in most of the schools.

5.2.2 Monitoring and Evaluation for Project Implementation

The study further sought to establish the influence of monitoring and evaluation practices in the implementation of infrastructural development projects in public secondary schools in Meru Central sub-county Kenya. Monitoring and evaluation in implementation of infrastructural school development projects in most of the schools is carried out by the B.O.M while in other schools it is done by the school principal. External team was also revealed to carry out monitoring and evaluation in the implementation of school development projects. Moreover internal expertise was least sought in carrying out monitoring and evaluation in implementation of infrastructural development projects in schools which was mostly done on monthly basis. The findings agreed that scheduling and work plan for monitoring and evaluation of their school projects improves quality of infrastructures and that feedback and report from monitoring and evaluation is used in making informed decisions in the implementation process.

However, the respondents were neutral that identification of performance indicators improves input, output, outcomes and results of the implemented structures as indicated by and that reporting and feedback of M & E on the implementation of the infrastructural development projects is done on time.

5.2.3 Stakeholders involvement in implementation of school infrastructural development Projects

The study sought to establish the influence of stakeholders' involvement in the implementation of the infrastructural development projects in public secondary schools in Meru central sub-county, Kenya. The study revealed that there was a good participation of stakeholders in implementation of infrastructural development projects in schools. The B.O.M members were revealed to have been highly involved in the implementation of the infrastructural development projects in most schools, the parents also were found to have participated well in the implementation of the infrastructural development projects in their schools where school staff was as well involved with the community being lowly involved. The study established that scheduling of stakeholders meeting in most of schools was once a year where the school head, parents and B.O.M are highly involved in the implementation of the school infrastructural development projects. The study further established that stakeholders have been involved in decision making, in sourcing of funds for school project and in advisory on the implementation of the school project and a slightly involved in monitoring and evaluation of implementation of the school project.

5.2.4 School B.O.M managerial skills.

The study finally sought to determine the influence of the school board of management managerial skills in the implementation of the infrastructural development projects in public secondary schools in Kenya. The study revealed that of the B.O.M management skills, the B.O.M made decisions well pertaining activities on implementation of the school infrastructural development projects, problems were well solved, B.O.M made reports pertaining implementation of the projects for the stakeholders, communicated matters of the projects on implementation to the stakeholders, fairly managed time and wrote project proposal.

5.3 Discussion of the Findings

5.3.1 Availability of Funds for Implementation of Projects

It was clear that in most schools funds were available for projects implementation in the schools. These funds were believed to have been contributed by parents who are considered the main funders of the infrastructural development projects in most schools. This agrees with GOK (2017) which notes that the government of Kenya funds most of the expenditure in secondary schools. However this money is not enough and therefore parents pay money which is used in developing the school through various projects, where the share of parents is increasing with the increasing levels of enrolment in higher levels of the education system due to free secondary education. Moreover, infrastructural development funds were revealed to be sourced from the government through the ministry of education as well as constituency development fund. This conforms to Obwari (2013) who notes that CDF funds have helped to facilitate the provision of physical facilities in public secondary schools in Kenya and are in line with Ngware *et al*, (2006) who argues that the constituency development funds are released to school projects at the location, divisional and district level in the constituency based on work plans and bill of quantities (BQ) as prepared by board of managements and school management committees according to poverty level (GOK, 2003). Each school project has its own Project Management Committee (PMC) within the Board of Managements under constituency development funding. The study again found that that, infrastructural development funds were sourced through other means such as the school alumni, donors and an harambee. Moreover, well-wishers slightly fund infrastructural development projects in the school while credit institutions never give funds for infrastructural development projects in the most schools.

5.3.2 Monitoring and Evaluation for Project Implementation

Monitoring and evaluation in implementation of infrastructural school development projects in most of the schools is carried out by the B.O.M while in other schools it is done by the school principal. External team was also revealed to carry out monitoring and evaluation in the implementation of school development projects. Moreover internal expertise was least sought in carrying out monitoring and evaluation in implementation of infrastructural development projects in schools which was mostly done on monthly basis. The findings agreed that scheduling and work plan for monitoring and evaluation of their school projects improves quality of infrastructures and that feedback and report from monitoring and evaluation is used in making informed decisions in the implementation process. This in line with Ayarkwa, J, Ayierebi, D, and Amoah, P, (2010) who Opines that monitoring and evaluation had a great

influence in the implementation of the said projects, on their research on external factors influencing the success of M&E on projects in tertiary colleges and secondary schools in Libya. These findings agree with Work (2015) who cited monitoring and evaluation as one of the major factors which was implemented by the government management bodies, the contractors and the school leaders for the success in implementation of the given projects, in New Delhi, India, where monitoring and evaluation is said to be an influencing factor in the implementation of the projects. However, the respondents were neutral that identification of performance indicators improves input, output, outcomes and results of the implemented structures and that reporting and feedback of M & E on the implementation of the infrastructural development projects is done on time.

5.3.3 Stakeholders involvement in implementation of infrastructural development Project in public secondary schools.

It was clear that there was a good participation of stakeholders in implementation of school projects in the school. The B.O.M members were revealed to have been effective in the implementation of the infrastructural development projects in most schools. The school staff was also found to have participated well in the implementation of the infrastructural development projects in their schools. These findings correlate with Forss and Carlsson (1997) who says that the growing need for efficiency, cost effective and results means that it is essential for stakeholders to have skills which enable them to perform to their best. Engaging stakeholders in discussions about, the what, how and why of program activities is often empowering for them and additionally, promotes inclusion and facilitates meaningful participation by diverse stakeholder groups.

The study established that scheduling of stakeholders meeting in most of schools is once a year where the school head, parents and B.O.M are highly involved in the implementation of the school infrastructural development projects. The study further established that stakeholders have been involved in decision making, in sourcing of funds for school project and in advisory on the implementation of the school project and a slight involvement in monitoring and evaluating implementation of the school project. This is in line with Jones *et al.* (2011) who recognize the role of stakeholders by indicating the grassroots organizations, at community and higher levels as important partners where they provide valuable insights on priorities and appropriate processes during the project's design phase and undertake some of the implementation and M&E activities of the projects. One of their most valuable roles is in

facilitating participatory process during implementation such as through participatory baseline survey, local impact assessment or annual project reviews.

5.3.4 School B.O.M Managerial Skills

The study revealed that of the B.O.M management skills, the B.O.M made decisions well pertaining activities on implementation of the school infrastructural development projects, problems were well solved, B.O.M made reports pertaining implementation of the projects for the stake holders, communicated matters of the projects on implementation to the stakeholders, fairly managed time and wrote project proposal.

5.4 Conclusions

The study concluded that availability of funds influenced the implementation of infrastructural development projects in public secondary schools in Meru central sub-county in Kenya positively and significantly. In most schools the main sources of funds for projects implementation in the schools were believed to have been contributed by parents who are considered the main funders of the infrastructural development projects in most schools. Again, funds for infrastructural development were deduced to be sourced from government through the ministry of education, constituency development fund and from other sources such as school alumni, donors and organised Harambees. Well-wishers were found to slightly fund infrastructural development projects in the schools.

The study concluded that monitoring and evaluation practices significantly influence the implementation of infrastructural development projects in public secondary schools in Kenya. The study deduced that monitoring and evaluation in implementation of infrastructural school development projects in some schools is carried out monthly by external team, school management committee and also school principal. It was clear that monitoring and evaluation feedback and reporting and scheduling and work plan for monitoring and evaluation was highly rated since feedback improves the quality of infrastructures and reports are used in making informed decisions in the implementation process.

It is further concluded that there is a positive and significant influence by stakeholders' involvement in the implementation of the infrastructural development projects in public secondary schools in Kenya. This was as a result of a good participation of stakeholders in implementation of school projects in the school, effectiveness of the stakeholders in the implementation of the infrastructural development projects in most schools. The scheduling of stakeholders meeting in most of schools is once a year where the school head, parents and

B.O.M are highly involved in the implementation of the school infrastructural development projects. The stakeholders have also been involved in decision making, in sourcing of funds for school project and in advisory on the implementation of the school project.

The study concluded that B.OM managerial skills have a significant and appositve influence on the implementation of the infrastructural development projects in public secondary schools in Kenya. The management skills included decision making, problems solving, making report, communication and writing project proposal.

5.5 Recommendations

From the study findings there is need for more stakeholder involvement in the process of implementation of infrastructural development projects in public secondary schools. This involvement should start from project conception and design all the way to project handing over. It was established that most of the stakeholders were not fully conversant with the specifications of the projects implemented in their schools.

The government through the Ministry of Education (MOE) should organize training programs on project management skills, project finance and project monitoring and evaluation for all the stakeholders involved in school infrastructure projects. The programs should be decentralized to county and sub-county levels and if possible, mechanism should be put in place to decentralize them further to the school level. This will enable training to reach as many stakeholders as possible.

The school management need to be trained in project management. This can be done through organised workshops, seminars as well as funded training programs. This will give stakeholders managerial skills that will make them more effective in carrying out the implementation of projects.

The government should encourage the school management to aim at diversifying their sources of funds by engaging in income generating activities. This will minimize the schools dependency on CDF,parents and government funds alone, thus ensuring successful completion of school projects. The school management and the government should discourage the stakeholders from politicizing education matters in order to ensure that school projects are implemented without any political interference.

The Ministry of Education should ensure that school leadership, through relevant tailor-made courses, is constantly equipped with the necessary knowledge on financial management and

accountability, and also conflict resolution, to enable it cope with situations in development and completion of projects as they arise. The education stakeholders should ensure that they work as a team with the school community by embracing a participatory approach so that they are aware of the daily running of the school as well as understanding the objectives of the school Project.

The government should also find ways of formally incorporating more professionals training for teachers (who later rise to be school heads) and involve them in the management of school projects in public secondary schools. Universities and other institutions training teachers should develop and offer a curriculum in management of school infrastructure.

BOM members should be encouraged to take personal responsibility and initiatives in equipping themselves with general management and project management skills through self-study, reading literature, attending seminars and workshops out of their own personal volition. Formal mentorship programmes for newly appointed BOM should be put in place whereby they can be attached to experienced and successful BOM in their neighbourhood or even to the Private sector for induction and mentoring.

The schools should advance use of external expertise in monitoring and evaluating infrastructural development school projects more, since they can give expertise opinion and advice on the implementation of the said projects.

5.6 Suggestions for Further Study

The research study was limited to Meru Central subcounty. Therefore, the same study should be done based on other sub counties to investigating the factors influencing implementation of infrastructural development project in public secondary schools in Kenya. Further research would be required to determine the influence of other determinant factors on the implementation of public school infrastructure projects.

The study portrayed that a glaring gap existed between the available funds for the implementation of the school infrastructure projects, the status of the public-school infrastructure and the magnitude of school projects to be implemented. The researcher therefore suggests more exploration on influencing factors on effective utilization of raised funds in the implementation of school infrastructure development projects.

With the government paying tuition expenses and leaving the task of developing school infrastructures to the parents and C.D.F there is need for assessment and further studies on the

challenges this will pose to the successful implementation of school infrastructure projects bearing in mind that not all schools are able to get the funds.

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APPENDICIES

**APENDIX ONE
TRANSMITTAL LETTER
KOOME DOMENIC MUNYUA,
P.O BOX 1653-60200,
MERU.**

25/11/2017

Dear respondent

REF: REQUEST FOR DATA COLLECTION

You have been randomly selected to participate in this study which is determining influencing factors in implementation of infrastructural development project in public secondary schools in Kenya a case of Meru central sub-county. I kindly request you to fill the attached questionnaire to help in generating data required for this study.

Your assistance and cooperation will be highly appreciated. Confidentiality of information provided will be highly observed where your name and the name of the school will not be revealed. This information will be purely used for academic purposes.

Yours faithfully

Koome Domenic Munyua

L50/83667/2015

University of Nairobi

APENDIX TWO
QUESTIONNAIRE FOR SCHOOL HEAD

This research study aims at determining factors influencing implementation of infrastructural development projects in public secondary schools in Kenya, a case of Meru central sub county.

In order to conduct research study questionnaire attached below has been developed as the main instrument of data collection it is the researchers request that the respondent answers all the questions freely and honestly. Your responses will be kept confidential. Please tick (✓) in the appropriate box.

SECTION A

Demographic Data

1 Indicate your gender.

- (a) Male () (b) Female ()

2 How long have you served in this school?

- (a) 0-1 year () (b) 2-5 year () (c) 6-9 year () (d) 10 year and above ()

3 Tick against the category that matches with the highest academic qualification

- (a) A level () (b) Diploma () (c) Bachelors degree () (d) Master degree ()
(e) PhD ()

4 How long have you been in the teaching profession?

- 1-10 yrs () 11-20 yrs () 21-30 yrs () 31-40 yrs () 41-50 yrs () 51-59yrs ()

5 Indicate the category to which your school belongs

- (a)Extra county () (b) County school () (c) Sub-county school ()

Section B: school board of management Managerial Skills and the implementation of infrastructural development school project.

1. Has school board of management been trained in project management?
Yes () No ()
2. How frequent does school board of management hold projects review meetings
Annually () Quarterly () Monthly () Weekly ()
3. How often does the school board of management provide progress report?
Never () Annually () Quarterly () Monthly () Weekly ()
4. Which school project has the BOM implemented in your school in the recent past? ()
Please tick appropriately

	Project	Complete	Incomplete
1			
2			
3			
4			

5. Indicate the extents to which you agree or disagree that as a school head board of management utilized the following project management skills in the implementation of the school infrastructural development projects.

(a) 1 Strongly Disagree,(b) 2 Disagree(c) 3 uncertain (d) 4 Agree (e)5 Strongly agree)

Management skills	1	2	3	4	5
Communicates issues concerning the implementation of infrastructural development projects in your school.					
Makes informed decision on the implementation of infrastructural development projects in your school.					
Makes good report on the implementation of infrastructural development projects in your school.					
Solves problems arising from the implementation of infrastructural development projects in your school well.					
Implements the school infrastructural development projects within the set time.					
Writes good project proposal					

Section C: Stakeholders' Involvement in Implementation of infrastructural development school Project.

1 How would you rate participation of stakeholders in implementation of school infrastructural development projects in this school?

(a) 1 Strongly Disagree, (b) 2 Disagree (c) 3 uncertain (d) 4 Agree (e) 5 Strongly agree)

Level of stakeholder involvement	1	2	3	4	5
Very good					
Good					
Poor					
Very poor					
Unable to tell					

2 Indicate the extent to which you agree or disagree in the involvement of the following stakeholders in the implementation of school infrastructural development projects.

(a)1. Strongly Disagree, (b) 2 Disagree (c) 3 uncertain (d) 4 Agree (e) 5 strongly agree

Stakeholders involvement	1	2	3	4	5
BOM members have cooperated in the implementation of school infrastructural projects in your school					
Parent have been effective in the implementation of the infrastructural development projects in your school					
School staff has participated well in the implementation of the infrastructural development projects in your school					
Community has participated well in the implementation of the infrastructural development projects in your school					

3 How often do you schedule stakeholders meeting in your school?

- Beginning of a new project only ()
- Monthly ()
- Once a year ()
- Never ()

Section D: Availability of funds for implementation of infrastructural development school projects

1. Please indicate how you would rate availability of funds for projects implementation in this school?

- (a)Very good () (b) Good () (c) Poor () (d) Don't know ()

2 Indicate the extent to which you agree or disagree in funding of school infrastructural development projects by the stated parties.

(1)Strongly disagree, (2) Disagree (3) uncertain (4) Agree (5) Strongly agree

Party	1	2	3	4	5
Parents are the main funders of the infrastructural development projects in this school					
Infrastructural development projects in this school are funded by the government of Kenya through the ministry of education.					
Constituency development fund is the main source of funds for infrastructural development projects in this school					
Infrastructural development funds are sourced through other means					
I don't know the source of funds for infrastructural development projects in this school.					

3 Indicate the extent to which you agree or disagree that funds for the school are sourced through other ways stated below.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4)Agree (5) Strongly agree

Other means of getting funds for infrastructural development projects	1	2	3	4	5
Funds for infrastructural development projects are sourced through an harambee.					
Credit institutions give funds for infrastructural development projects in this school.					
Well wishers are source of funds for infrastructural development projects in this school					
Donors are source of funds for infrastructural development projects in this school					
infrastructural development projects are funded by the alumni of this school					

Section E Monitoring and evaluation for project implementation

1 Indicate the extent to which you agree or disagree that the following people carry out monitoring and evaluation for implementation of infrastructural development projects in this school.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4) Agree (5) strongly agree

Party that carries out monitoring and evaluation	1	2	3	4	5
The school principal is the one who carries out monitoring and evaluation in implementation of infrastructural development projects this school					
Monitoring and evaluation in implementation of infrastructural development projects is carried out by the school board of management.					
External team is the one that carries out monitoring and evaluation in implementation of infrastructural school development projects.					
Internal expertise is used in carrying out the monitoring and evaluation in the implementation of school development projects					

2 When is the monitoring and evaluation carried out?

Quarterly ()

Annually ()

Monthly ()

Any time ()

3 To what extent can you rate practicing of the following monitoring and evaluation practices in the implementation of the infrastructural development projects in this school?

(1)Very high (2.) High (3.)Moderate (4). Low (5) Insignificant

Monitoring and evaluation practices	1	2	3	4	5
Monitoring and evaluation feedback and reporting is carried out on the implementation of school infrastructural projects in your school					
Scheduling and work plan for monitoring and evaluation is done on the implementation of school infrastructural projects in your school					
Identification of performance indicators evaluation is done on the implementation of school infrastructural projects in your school					

4 State the extent to which you agree or disagree on the effectiveness of the following monitoring and evaluation practices in the implementation of infrastructural development projects in your school.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4) Agree (5) strongly agree

Practice	1	2	3	4	5
Reporting and feedback of M&E on the implementation of the infrastructural development projects is done on time					
Feedback and report from monitoring and evaluation is used in making informed decisions in the implementation process.					
Scheduling and work plan for monitoring and evaluation on the implementation of school infrastructural projects in your school improves quality of infrastructures					
Identification of performance indicators improves input,output,outcomes and results of the implemented structures					

Section F State the extent to which you agree or disagree on the various aspects of implemented infrastructural development projects for the last five years.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4) Agree (5) strongly agree

Aspect	1	2	3	4	5
All Implemented projects are complete					
The work done on implemented projects are of good quality.					
Implemented projects reflects implementation plan.					

APENDIX THREE

QUESTIONNAIRE FOR STAKEHOLDERS

This research study aims at determining factors influencing implementation of infrastructural development projects in public secondary schools in Kenya, a case of Meru central sub county.

In order to conduct research study questionnaire attached below has been developed as the main instrument of data collection it is the researchers request that the respondent answers all the questions freely and honestly. Your responses will be kept confidential. Please tick (✓) in the appropriate box.

Section A. Demographic Data.

Please indicate your stakeholder membership.

- 1 Teacher representative in the BOM () BOMChair () School bursar ()
- 2 Indicate your gender.
(a) Male () (b) Female ()
- 3 How long have you been a stakeholder in this school?
(a) 0-1 year () (b) 2-5 year () (c) 6-9 year() (d) 10 years and above ()
- 4 Tick against the category that matches with the highest academic qualification
(a) A level () (b) Diploma () (c) Bachelors degree () (d) Master degree ()
(e) PhD ()

SECTION B School board of management Managerial Skills and implementation of school infrastructural development projects.

- 1 Has school board of management been trained in project management?
Yes () No ()
- 2 How frequent does school board of management hold projects review meetings
Annually () Quarterly () Monthly () Weekly ()
- 3 How often does the school board of management provide progress report?
Never () Annually () Quarterly () Monthly () Weekly ()
- 4 Which school project has the BOM implemented in your school in the recent past? (Please tick appropriately

	Project	Complete	Incomplete
1			

2			
3			
4			

- 5 Indicate the extents to which you agree or disagree that as stakeholder board of management utilized the following project management skills in the implementation of the school infrastructural development projects.
- (a) 1 Strongly Disagree,(b) 2 Disagree(c) 3 uncertain (d) 4 Agree (e)5 Strongly agree)

Management skills	1	2	3	4	5
Communicates issues concerning the implementation of infrastructural development projects in your school to relevant parties.					
Makes informed decision on the implementation of infrastructural development projects in your school.					
Makes good report on the implementation of infrastructural development projects in your school.					
Solves problems arising from the implementation of infrastructural development projects in your school well.					
Implements the school infrastructural development projects within the set time.					
Writes proposal for projects					

Section C: Stakeholders’ Involvement in Implementation of infrastructural development Project.

- 1 How would you rate participation of stakeholders in implementation of school infrastructural development projects in this school?
- (a) 1 Strongly Disagree, (b) 2 Disagree (c) 3 uncertain (d) 4 Agree (e) 5 Strongly agree)

Level of stakeholder involvement	1	2	3	4	5
Very good					
Good					
Poor					
Very poor					
Unable to tell					

- 2 Indicate the extent to which you agree or disagree in the involvement of the following stakeholders in the implementation of school infrastructural development projects.
- (a)1. Strongly Disagree, (b) 2 Disagree (c) 3 uncertain (d) 4 Agree (e) 5 strongly agree

Stakeholders involvement	1	2	3	4	5
BOM members have cooperated in the implementation of school infrastructural projects in your school					
Parent have been effective in the implementation of the infrastructural development projects in your school					
School staff has participated well in the implementation of the infrastructural development projects in your school					
Community has participated well in the implementation of the infrastructural development projects in your school					

3 Indicate the extent to which you agree or disagree in the involvement as a stakeholder in the implementation of school infrastructural development projects.

(1) Strongly Disagree,(2) Disagree(3) uncertain (4) Agree (5) Strongly agree

Area of involvement	1	2	3	4	5
Have been involved in monitoring and evaluating implementation of the school project.					
Have been involved in sourcing of funds for school project to enhance its implementation.					
Have been involved in advisory on the implementation of the school project.					
Have been involved in decision making on the implementation of school project.					

As a stake holder when do you attend school meetings?

Beginning of a new project only ()

Monthly ()

Once a year ()

Never ()

Section D: Availability of funds for implementation of projects

1 Please indicate how you would rate availability of funds for projects implementation in this school?

(a)Very good () (b) Good () (c) Poor () (d) Don't know ()

2 Indicate the extent to which you agree or disagree in funding of school infrastructural development projects by the stated parties.

(1)Strongly disagree, (2) Disagree (3) uncertain (4) Agree (5) Strongly agree

Party	1	2	3	4	5
Parents are the main funders of the infrastructural development projects in this school					
Infrastructural development projects in this school are funded by					

the government of Kenya through the ministry of education.					
Constituency development fund is the main source of funds for infrastructural development projects in this school					
Infrastructural development funds are sourced through other means					
I don't know the source of funds for infrastructural development projects in this school.					

3 Indicate the extent to which you agree or disagree that funds for the school are sourced through other ways stated below.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4)Agree (5) Strongly agree

Other means of getting funds for infrastructural development projects	1	2	3	4	5
Funds for infrastructural development projects are sourced through an harambee.					
Credit institutions give funds for infrastructural development projects in this school.					
Well wishers are source of funds for infrastructural development projects in this school					
Donors are source of funds for infrastructural development projects in this school					
infrastructural development projects are funded by the alumni of this school					

Section E Monitoring and evaluation and implementation of infrastructural development school project.

1 Indicate the extent to which you agree or disagree that the following people carry out monitoring and evaluation for implementation of infrastructural development projects in this school.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4) Agree (5) strongly agree

Party that carries out monitoring and evaluation	1	2	3	4	5
The school principal is the one who carries out monitoring and evaluation in implementation of infrastructural development projects this school					
Monitoring and evaluation in implementation of infrastructural development projects is carried out by the school board of management.					
External team is the one that carries out monitoring and evaluation in implementation of infrastructural school development projects.					
Internal expertise is used in carrying out the monitoring and evaluation in the implementation of school development projects					

2 When is the monitoring and evaluation carried out?

Quarterly ()

Annually ()

Monthly ()

Any time ()

3 To what extent can you rate practicing of the following monitoring and evaluation practices in the implementation of the infrastructural development projects in this school?(1)Very high (2.) High (3.)Moderate (4). Low (5) Insignificant

Monitoring and evaluation practices	1	2	3	4	5
Monitoring and evaluation feedback and reporting is carried out on the implementation of school infrastructural projects in your school					
Scheduling and work plan for monitoring and evaluation is done on the implementation of school infrastructural projects in your school					
Identification of performance indicators evaluation is done on the implementation of school infrastructural projects in your school					

4 State the extent to which you agree or disagree on the effectiveness of the following monitoring and evaluation practices in the implementation of infrastructural development projects in your school.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4) Agree (5) strongly agree

Practice	1	2	3	4	5
Reporting and feedback of M&E on the implementation of the infrastructural development projects is done on time					
Feedback and report from monitoring and evaluation is used in making informed decisions in the implementation process.					
Scheduling and work plan for monitoring and evaluation on the implementation of school infrastructural projects in your school improves quality of infrastructures					
Identification of performance indicators improves input,output,outcomes and results of the implemented structures					

Section F State the extent to which you agree or disagree on the various aspects of implemented infrastructural development school projects for the last five years.

(1)Strongly Disagree, (2) Disagree (3) uncertain (4) Agree (5) strongly agree

Aspect	1	2	3	4	5
All Implemented projects are complete					

The work done on implemented projects are of good quality.					
Implemented projects reflects implementation plan.					