PARTICIPATORY MONITORING AND EVALUATION PROCESS, SCHOOL ENVIRONMENT AND PERFORMANCE OF LITERACY AND NUMERACY EDUCATIONAL PROGRAMME IN PUBLIC PRIMARY SCHOOLS IN NAIROBI COUNTY, KENYA

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Thesis Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Doctor of Philosophy in Project Planning and Management of the University of Nairobi.

2020

DECLARATION

This thesis is my original work and has never been submitted for an academic award in any other university.

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DEDICATION

This thesis is dedicated to my husband Christopher Njui and our children Emmanuel Mutwiri and Diana Gacheri for their invaluable support and great desire to see me through my studies.

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LIST OF ABBREVIATIONS AND ACRONYMS

BOM	Board of Management
CSO	Curriculum Support Officer
EdData 11	Education Data for Decision Making
EGMA	Early Grading Mathematics Assessment
EGRA	Early Grade Reading Assessment
KNEC	Kenya National Examination Council
M&E	Monitoring and Evaluation
PM&E	Participatory monitoring and evaluation
MoEST	Ministry of Education Science and Technology
NGOS	Non- Government Organizations
PM&EP	Participatory Monitoring and Evaluation Process
PRIEDE	Primary Educational Developments Projects
PRIMR	Primary Math and Reading Initiative
RTI	Research Triangle Institute
SPSS	Statistical Package for the Social Sciences
SSME	Snap Shot of School Management Effectiveness
TUSOME	Tusome Means Reading in Kiswahili
UNESCO	United National Educational Scientific and Cultural Organization
UWEZO	Ability, Capability, Power
SMART	Specific, Measurable, Achievable, Realist and Timely
UNICEF	United Nations International Children's Emergency Fund
DFID	Department for International Development

ABTRACT

Education is an important element in human right, which helps in acquiring knowledge, and skills in developing a person in holistic and integrated way. Kenya has a detailed way of selecting intervention educational projects even though there is still questionable performance of these projects due to low learner's academic performance. Despite much efforts put by key stakeholders in education to improve learner's outcomes little has been achieved. This is through allocating enough finances so as to improve school facilities, ease access to education, professional teachers and providing learning materials still students' learning skill performance is low. The purpose of the study is to establish the extent to which participatory Monitoring and Evaluation process, school environment influence the performance of L&N educational programme in public primary schools in Nairobi County, Kenya. The objectives were: to establish the extent to which stakeholders engagement influence the performance of L&N educational programme; to determine how stakeholders capacity building influence performance of L&N educational programme; to examine how data collection influence performance of L&N educational programme; to determine the extent to which data management influence performance of Literacy and numeracy educational programme; to assess how implementing change influence performance of Literacy and numeracy educational programme; to establish how combined PM&E process influence performance of Literacy and numeracy educational programme; to assess the moderating influence of school environment on the relationships between Participatory Monitoring and Evaluation process and performance of Literacy and numeracy educational programme in public primary schools in Nairobi county, Kenya. There were seven hypotheses which were tested. The study was anchored on pragmatism paradigm. Descriptive research survey design and correlation research designs were used in this study. Pilot study was carried out in Kiambu County and the tool was found to be reliable and valid as verified by the supervisors and monitoring and evaluation experts. Further, simple random sampling and purposive sampling technique was adopted for selection of the participants in the study. A sample size of 335 was drawn from a target population of 2053. Hence, 281 questionnaires were returned represented by 86% of the total sample size. Questionnaires were used to collect data from 33 head teachers and 291 grade one to three teachers. Interviews guide were administered to 3 Curriculum Support Officers and 5 Research Triangle Officers. Data was analyzed and presented in tables, frequencies, arithmetic means, and standard deviation and overall composite mean was generated. Data analysis techniques, descriptive statistical and inferential statistics were used in the study. Regression analysis were performed at 5% level of significance. The null hypotheses were all rejected as per the following results: first hypothesis, $R^2 = 0.480$, $\beta = 0.497$, $t=16.061$, $p=0.000<0.05$; second hypothesis, $R^2 = 0.456$, $\beta = 0.490$, $t=15.280$, $p=0.000<0.05$; third hypothesis, $R^2 = 0.434$, $\beta = -0.137$, $t=14.689$, $p=0.000<0.05$; fourth hypothesis, $R^2 = 0.288$, $\beta=0.408$, $t=10.616$, $p=0.000<0.05$, fifth hypothesis, $R^2 = 0.337$, $\beta=0.445$, $t=11.917$, $p=0.000<0.05$;sixth hypothesis, $R^2 = 0.568$, $F=71.453$, $p=0.000<0.05$; finally, for the seventh hypothesis results for F-value showed that statistical significance at $\{F(6,269) = 43.481, p=0.000<0.05\}$. In conclusion the study established that improvement of literacy and numeracy skills wholly depends on involvement of all the stakeholders in education sector, well-structured polices, capacity building, implementing change and conducive school environment for better performance. It was established that, although literacy and numeracy skills are pertinent to schools, teachers were a bit reluctant in embracing the new technology in delivering the content and opted the traditional way of teacher centered methodology. However the pupil's attitude in embracing the new textbooks had s significant influence on the performance learnt skills. The study recommends that new policies governing the implementation of the programme by the schools and other implementing partners should consider mainstreaming participatory Monitoring and Evaluation process in order to acquire good results. The schools, Research Triangle Institute International, Curriculum Support Officers and all other players in literacy and numeracy educational programme in public primary schools in Nairobi County should review their Monitoring and Evaluation practices based on the study findings that there are no proper trainings for M&E on teachers and other stakeholders. The study is significant since it adds value to project management body of knowledge by giving informative information on policy makers, curriculum developers, projects implementers and monitoring and evaluation processes to review their monitoring and evaluation practices while involve all the stakeholders in programme implementation. It is evident that participatory monitoring and evaluation process is still weak within education sector but it can be realized fully through proper supervision which can lead to an increase in performance of literacy and numeracy educational programme. There is need to improve supervision and implementation of educational intervention projects especially literacy and numeracy. The study recommends for other researchers to carry out the same study in other counties and also in private primary schools.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Participatory M&E process has several steps in learning which guides in bringing change to the desired outcomes in every learning institutions. In connection to education is an important aspect to every human being and a right which needs to be observed keenly. Education is a primary driver of sustainable growth UNESCO (2018) though this can be made a reality if a predictive relationship between numeracy and literacy skills in academic is clear and learners are able to get the learning concepts well. In this case it means that for developing countries to achieve this goal intervention programme must be implemented in a cohesive and integrated and synergistic manner focusing interventions identified (Crouch and Destefano, 2017). This will enhance improving classroom teaching, assessments on learner's activities and address critical elements in literacy and numeracy skills (Kim, Boyle, Zuilkowski and Nakamura, 2016).

Education helps in promoting accession of understanding, skillfulness, and a holistic turn of events to an individual which helps one to acquire good morals and manners. Education is also recognized as single drivers of growth and social evolution aspects. Despite so much efforts made by key stakeholders in education, performance is still low and specifically on literacy and numeracy which is the backbone of basic education. Much resources like finances, human services and other materials have been put in place to improve school infrastructure so as to assure that the child has friendly schools environment in order to improve in there learning skills (Freudenberg and Davis 2017). There are educators who exist having been coached on how to instruct learners in schools and students have been able to access schools but the trend on students' performance is still low and requires instant observation (Mulongo, 2013; Ohanyido, 2012).

Quality education needs potential collaborative practices from key education stakeholders in order for any improvement to be experienced. Much emphasizes has been put to every individual involved in learning process so as to acquire the desired learning skills. International education literature highlights that there are desirability of

participation in implementing collaboration-based processes in the community development which has proved to have very little success in trying to meet the required standards (Conn 2017; McEwan, 2015; Murnane and Willett 2011). Also the combined re-arrangement in teaching fraternity according to constitution of Kenya 2010 in trying to meet the global competition in getting quality education that is sustainable for development of holistic individual (Ministry of Education, 2013). In conjunction of meeting the aim of achieving the set goals of making Kenya an industrialization country by 2030. Although this can't happen if there are precedents resources transferred to schools which are undertaking primary education programme .this cannot work well in over populated classrooms thus affecting teacher-pupil ratio and then compromising the achievement of quality education (Kibukho and Jempkemei, 2015). This can only be a reality if all the stakeholders are involved in the learning systems.

Stakeholder collaboration and involvement in trying to define, implement, checking the measurement tools which are used in monitoring and evaluating projects is very vital. There is an increase in the likelihood of policy formulation that are effectual in gathering essentials information from various funders, community and beneficiaries of the projects. In this case the stakeholders have fewer and intended sustainable goals to be achieved as posited by (Galza 2005). Participatory approaches are in concurrence with the democratic principles that the top-down movement of partnership models of international development should be agreed upon for any benefits to occur and improvement outcomes to be realized (Fullan 2016; Elmore, 2016) Education is recognized as drivers of profitable and social national growth whereby primary education lays foundation of individuals and helps one to get courage and confidence in expressing themselves.

Globally, the development of pupils basic skills as contained in national curricula have not been achieved, since 40 percent of primary school learners cannot comprehend English word well as found by (Provost, 2014; Ohanyido, 2012; World Bank, 2003; Colclough Al-Samarrai, Rose and Tembon, 2003). According to UNESCO (2014), an estimated 250 million students are not able to understand simple arithmetic calculations and reading simple words of their grades in both languages Kiswahili and English. Further, UNESCO, (2014) points out that, many students are frequently a number of

classes behind the designed syllabus and they struggle interpreting Literacy and Numeracy skills taught.

According to Global Campaign for Education (GCE, 2015), the problem could be worse even in other classes but low little is done to curb the menace. The GCE, United States Chapter points out that the full scale of the learning crisis is most likely under-estimated since access to education is only part of what counts, yet what is learnt is not important (GCE, 2015). Similarly UNESCO and UNICEF (2013) supports the GCE and emphasize that what works for pupils enrolled in schools is more important than gaining access to school and acquiring the right concepts. Therefore, efforts by the Global Partnership Education (GPE) objective 3 focuses on increasing quantity of students in schools may remain a myth. Mastery of contents taught on L&N skills in class 1to 3 may remain an illusion if gaps identified are not curbed (UNESCO, 2014). Built on this circumstances, this study consequently focused on stakeholder engagement and stakeholder capacity building and performance of L&N educational programme where involvement of every stakeholder is key in learning situations.

Africa being on the line of working for education progress has continued to measure the progress of continued facilitation and participation of key educationist, who are more efficient with teaching methodologies to better learners' production as put by (Grosser, 2007). A similar result was confirmed by Sanyal (2013) who focused on how Africa has been able to formulate good policies governing education. Therefore trained professional teachers, sufficient resource supply for learning purposes and proper learning structures in enhancing proper learning skills has been not left out in the process of improving learning outcomes. Thus necessities for improving quality of continuing education standards, advancement attempts have been done although learning outcomes are still very low in sub-saharani region.

In Africa, Education participation is remarkably experienced in taking part towards the extension and development of citizen's economies. Many countries like Ethiopia, Zambia, Tanzania, Uganda and Kenya are among other countries involved in literacy and numeracy assessment programme to a large extent. These programme were conducted by the funding agencies using data collected through EGRA tool. The findings triggered the need for intervention programme started by USAID and DFID

under an organization named as Research Training Institute International (RTI international 2014) which became the main funding agent to twenty five countries.

In Lesotho sharing of examination results is done by government but if teachers are not involved in proper teaching of literacy low performance is experienced as was observed by Tracy (2016) on sharing the looking glass: examination action research with early literacy teachers in Lesotho. This is experienced in Botswana as argued by Mogapi (2016) on examination negative wash back effects affecting curriculum presentations are challenging and hinder successful implementation of curriculum hence poor performance of end of year exams. One major challenge to literacy at Mountain Kingdom Primary School was lack of literacy instructional materials in the learners' native language, Sesotho and second language and English. This led to Literacy instruction failure in addressing early literacy skills that are important to developing reading early grades.

Mmasa (2016) in exploring teaching of learners in classroom set up, found that learning was affected due to late enrolment of learners to schools, lack of learning materials and teachers among many other problems. The same case applies to all developing countries and learning of Phonological recognition, word identification, interactive reading articulacy in writing were not spared either due to inadequacy of the instructional materials. Methodology practices focused on teacher centered, instead of learner centered learning hence led to low student engagement within the lessons and low performance of results experienced. More emphasis on the same by (Dubcek and Gove 2015; Pretorius 2015; Sailors and Flores, 2014) showed that the learners had fewer opportunities to advance high ranking of thinking skills and apply literacy to develop reading and writing skills. From classroom observations and teacher interviews, several important supports were identified that could be leveraged to improve instruction. First, the teachers and learners valued literacy and felt need to better their skills and become literate. Teachers are committed to academic achievement and are of the idea of improving the learners' literacy methodology of how to instruct the learners during learning but did not have access to these instructional materials. Dubcek and Gove 2015; Pretorius 2015; Sailors and Flores, (2014) in their studies they have failed to explain how literacy and numeracy skills is a problem in their Country. However there is a positive attitude of wanting to learn but there are no resources. The study found out

that in Kenya, resources are also inadequate according to Curriculum Support Officers and lower primary school teachers differed with the head teachers on the opinion that there are enough materials.

On this view head teachers are fearing to be held accountable on the funds distributed to schools and also three text books provided by RTI International, though not all schools had the same feeling. Some have enough three text books but never used in the classroom, they are kept in the cupboards. Many teachers responded that the concept used in the books were hard for them to initialize so they kept the books and used the old methods of teaching. For those who embraced the new concepts their learners had improved drastically. Improvement on both languages Kiswahili and English had greatly increased meeting the benchmark of 34-50% for English and 37-66% for Kiswahili meaning there was a significant impact as determined by previous studies (Piper and Zuilkowski 2015; Freudenberger and Davis 2017).

However some empirical study show that several education programme have brought some encouraging results and slight improvement on early L&N end results. However in underdeveloped nations, programme intervention plans have not resulted in better ways since the methods used in evaluating and monitoring these programme have yield little improvement on literacy and numeracy outcomes as argued by (Piper and Zuilkowski, 2015). They continue to argue that identification of who is involved in the projects and how and when remains a mystery. Policy makers experience inadequate evidence as to how the programme should be implemented by teachers who are professionals and have knowledge on the content to be implemented without interference.

Hinnant-Crwaford (2016) on how teachers view themselves as educationists and policy actors in constructing the instruments that measures their beliefs in advocating changes in education policies asserts that. Overall teachers lack confident and ability to belief that they are the implementers of change and not creators of education policy. Trainings of teachers on new methodologies, learner's resources allocations, and technological information is required for the programme performance to be experienced. Wanger (2012) posits that learning of literacy and numeracy skills in basic education have been a thorn on the flesh for so many years and so something needs to

be done immediately. The study revealed that impact of literacy and numeracy education programme are inadequately researched on hence need for more investigation to help the policy makers in making proper planning on the activities of M&E. A study conducted by UWEZO (2012) titled 'Are our children learning' in schools. They found out that lack of mechanism to monitor progress have contributed to poor performance of literacy and numeracy educational programme.

Hafner, Chik, and Jones (2015) on digital literacies and language learning as also been an issue on learning literacy, in that exams done nationally does not factor in the digital aspect leaving the teachers with no option but to think that digital learning is just an add but not inclusive to the curriculum. Pronounced weak leadership in institutions and poor instructional methodology used to deliver content in the classroom as posited (Kiarie & Mugo, 2017). The role played by teachers in lower grades is significant in promoting language and arithmetic skills mandatory to every person in order to handle day to day activities in life.

Kenya has been on the lookout of how to improve literacy and numeracy skills in basic education on lower grades. This has been made a reality by Programme undertaken by different non-governmental organizations like CEMASTEA (Centre for Mathematics, Science and Technology Education in Africa) and JICA, (Japan International Cooperation Agency) who have really contributed to the wellbeing of education intervention programme. Perusal to acquire knowledge in the programme being executed at Ag Khan Foundation financed by the United States agency for international development (USAID) and finally William and Flora Hewlett Foundation among many organizations in the country have greatly been of help to the government. This contributed to establishing displeasure according to end results of EGMA 2009 Early Grade Mathematics Assessment (EGMA) in Malindi district by (Reuben and Kline 2009) and (MOEST) who joined hand in hand with USAID in assisting educators to achieve good standards methodologies in teaching mathematics. Languages like Kiswahili and English were not left out since they helped in communicating adequately. Primary Math and Reading (PRIMR) were executed in seven Counties in the country in 2011-2014 by USAID and UK Department for International Development (DFID) in year 2012-2015. Their main objectives were to supply learners with learning materials

and teachers guides, while also taking them through trainings on the new instructional materials.

Proper learning of languages and simple arithmetic in lower grade helps one be able to conceptualize ideas according to (Glennerster, Kremer, Mbiti and Tvakavarasha, 2011).Kenya has a long history of many non-governmental organizations carrying out piloting programme to intervene for education through the government to make sure that they have citizens who are literate and can be able to express themselves. Organizations focusing on educational projects and especially literacy and numeracy have really been in increase lately, trying to intervene and assist where possible to make necessary changes in all the sectors and education is one of the beneficiaries of these projects. Recent developments have been depicted by many challenges encountered by teachers and learners in lower primary school.

Grades one to three in public primary schools have been mostly hit by the challenges Since the start of free primary schooling and many changes in curriculum programme introduced in the country according to the assessment done by (Mulongo 2014).This assessment was done on learners so as to measure quality education. One of these organizations is TUSOME national programme which is funded by USAID, and a state-level ascending up of foregoing Literacy and Numeracy programme to help in formulating functional, simple mechanisms to track progress and give feedback of performance against benchmark expectations. Learning institutions should swift away from bureaucratic administration towards the development of managing relationships that are coherent for learning instead of being rigid (Pritchett 2015)

In Kenya the results for national examinations shows that some learners had low learning outcomes according to the education planning documents GoK, (2010), with low performance in learning skills in English and Kiswahili. This blame is believed to have been attributed to low motivation in reading and arithmetic's competences as posited by GoK (2010) in their reports of what is happening in schools. This has led to literacy and numeracy educational programme to be undertaken as the national government intervention programme. Further, much effort has been put, but still Kenya's willingness to change education reform and attain the expected good performance of Education for All (EFA) is lacking. prioritizing in ensuring that

governance and accountability in schools is observed, teachers empowerment to enable them manage learners character and teachers' capability is required to enhance stakeholder capacity building, data collection and managing it in implementing change where necessary so as improve performance of literacy and numeracy educational programme (MOEST, 2015).

Kenya's basic education has really been affected by many changes in the reforms of education and many issues have been left out hence low performance in schools (MOEST, 2015). Understaffing of teachers and resources allocations have hindered progress in basic education in line with education policies which is fundamental human right that obliges each youngster to access school and achieve quality education. In this case it should help the Kenyan government to achieve what is intended in Vision 2030 in making sure that all the teachers receive the basic trainings so as to be acquainted with the industrialization of community development of the country by 2030 (MoDP). Nevertheless, Kenya National Examinations Council possess proof that displays substandard pupils' performance in secondary schools in final exams KNEC (2012), which are consequences of substandard reading skills in bottom classes which is the foundation of every subject in learning fraternity. The implementing NGO of literacy education programme is TUSOME in conjunction with national government. The objectives of TUSOME are to improve teacher's capacity for effective delivery of the curriculum and enhance access to appropriate textbooks and supplementary material, provide enough staff to train on instructional supervision and have a successful M&E systems. They also need to enhance capacity within departments in education to sustainably improve literacy and numeracy outcomes in collaboration with partners. Enhancement of ICT to support literacy and numeracy learning skills through teachers, curriculum support officers, head teachers and all the stakeholders who are involved in teaching fraternity.

Literacy and numeracy education programme are composed of several projects namely EGRA (early grade reading assessment) which were tried in a few chosen a few public primary schools in some selected counties in 2007-2009.The base-line and mid-line report gave good results hence conception of PRIEDE (Primary Educational Developments Projects), PRIMMR (Primary Math and Reading Initiative) and then EGMA (early grade mathematics assessment). All these programme have been under

way but still a lot remains to be done since literacy and numeracy in the country remains a menace in the lower grades (Piper and Zuilkowski, 2015).

1.1.1 Performance of Literacy and Numeracy Educational Programme

Performance of projects have been operationalized in different ways by different authorities among them Kerzner (2003) who argued that project performance has to be completed within planned time, specified level of performance, planned budget and corporate culture. Performance in education can only be a reality if all the stakeholders are involved in the project. These stakeholders are either involved directly or indirectly in education system as argued by (Adebayo, 2013and Kufi, 2013). To achieve good quality performance in education teachers are key stakeholders in producing quality grades and ensuring effective teaching as was as well as meeting the market demands of literate citizens examined by (Munirul, 2015; Thangeda, Baratiseng and Mompaty, 2016).

The main aim of literacy and numeracy educational programme was to meet the specified indicators in trying to improve the literacy and numeracy skills. The intervention programme needs funding and timeframe to be able to accomplish its goal. So it was on this reference that performance of literacy and numeracy educational programme in grade one, two and three learners were selected. Performance in this case is reading learning skills. Simple arithmetic, letter recognition, beneficiaries' satisfaction, proficiency skills in writing, listening and speaking and finally timely acquisition of Literacy and Numeracy skills were also a major concern for this study. All these indicators were to be acquired if the programme was to be completed within the specified time, continued funding to enable trainings for the teachers to improve the reading and arithmetic skills (Piper and Mugenda, 2012). In view of government officers attention and time are sparse and competing with demands that statistically significant making it impossible to achieve the desired results in this learning skills as posited by (Gove et al 2017; piper et al 2018)

Worldwide, organizations are striving to put in place systems that are aimed at improving project performance in sub-saharan Africa since literacy rates remain low (UNESO, 2012). Performance of literacy and numeracy programme have been of major concern in the world and specifically in Kenya where there is an outcry of mass failures

at end of national exams in primary and secondary levels due to language issues among many others. Numerous projects have been initiated, majority of them focusing on pilot studies and then later being implemented. After completion of these projects some are never sustained according to (Wasanga, Ogle and Wambua, 2011). Failure of sustainability of the projects is could be contributed to lack of proper supervision and continued funding from the funders hence becoming difficulty to continue with the projects.

Globally initiatives like result participatory monitoring and evaluation process, increases customer awareness, guest for satisfaction, accountable leadership have transformed the project management environment (Piper and Zuilkowski, 2015). Literacy is being able to listen attentively, reading and communicating comfortably, being able to write what one has understood and speak courageously and in comfortable manner without fear. This allows effective communication and making sense to a variety of words hence improvement on reading fluency. It is a unitary process with two complementary aspects reading, writing and expanding ones knowledge in order to develop ones thinking and learning for the purpose of understanding oneself and the world. Numeracy is being able to read, reason and do simplest arithmetic's concepts like comprehending facts on mathematics like putting together, takeaway or minus, repeated addition and sharing of items in division work. Numeracy compliments reading which is also called mathematical literacy and they complement one another in order to function entirely in the current situation in emerging changes in the world (Jodi and Martinez, 2013). Performance of L&N education programme wholly rests at the key stakeholders involved in education sector.

1.1.2 Participatory Monitoring and Evaluation Process

Participatory M&E is a procedure which shareholders are engaged in different levels either evaluating or monitoring a programme, project, policy or contribute content of results acquired during the process and identifying the corrective actions to be taken in the programme (Hilhorst and Guijt, 2006).Evaluation is judging, determining and appraising the worth of a programme (Beatrice, Allan and Emily, 2015). In education evaluation is concerned on determining worthiness of teaching and learning process in a participatory manner (Sim, 2014). PM&E focuses on tracking and giving feedback,

strengthening and deepening participation, valuing performance review and making joint decisions on what has been achieved through teaching and trainings.

Through monitoring and evaluation critical decisions are made out of information generated in drawing conclusions to have updated programme in terms of relevancy, efficiency, effectiveness it sustainability (Anicet and Apphrodis, 2017). As an evolving world different scholars like Estrella, Laurent,camplain, Gaventa, Guijit, Johnson, and Ricafort,(2000) have come up to an agreement that PM&E process builds around coming together and agreeing that the process builds up on the expected results and making joint decisions. It still posits that, tracking progress, collecting vital data, undertaking joint analysis (Guijt and Gaventa 1998; Otieno, 2018). Their definition concurs with the four principles that PM&E process involves planning, collecting data, data analysis and presentation. Documentation, report writing and sharing of information.

PM&E state that engaging primary stakeholders who are ordinarily complicated in PM&E and the customers of the project goods and facilities. Participatory M&E process is essential in strengthening primary stakeholder's involvement as active participants in interventions which lead to tracking and analyzing the progress and the quality of project success. As the projects become more complex to meet the demands of the beneficiaries, this shift of results based project management required tracking project performance (Kusek and Rist, 2004). The current study differ with these studies since proper processes of participation are never followed as was observed in this study when it was being carried out.

Participatory M&E process gives stakeholders means of gauging the outcome guidelines given, helping them be responsible for their firmness and interventions (Njuki, Kaaria, Colleta and Sanginga, 2006). It is envisaged that if people have power they can agree and believe their wellbeing as addressed according to their expectations and ensure their service delivery demands are met. In this case every single stakeholders in L&N educational programme need to be involved in the participation of programme activities so that they can be able to own the project. Identifying stakeholders and engaging them in the programme is very vital especially when measuring changes

resulting from specific interventions, organizational strengthening and institutional learning.

This directional requirement of participatory monitoring and evaluation process makes it difficult when gauging influence of stakeholder capacity building and managing these results in performance of projects. This is no difference in learning projects which require a lot of keenness and proper engagement in public primary schools in Nairobi County. It is hoped that every shareholder to perform well in projects which have concern in PM&E process. Performance is key to projects based on traditional critics rather than factors using the criteria of time, full participation of members, quality of service delivery and managing what has been changed while the projects are underway (Judd, Muller and Yzerbyt, 2005; Estella *et al*., 2000).

Despite the setting of critical standards of gauging the performance, different projects have varied in sizes and complexities that proved an opportunity to assess unique individual projects using criterion capacity building, gathering of information and managing it to related dimensions. From the empirical study the influence of participatory M&E process has been accepted in social development projects in health and education (Okello and Mugambi, 2015). The same was supported by Steyn (2014) that education has taken the lead on embracing the process. However the combined influence of participatory M&E process namely the identification of stakeholders, stakeholder capacity building, data collection, management of data gathered and implement change in moderating school environment has not been established so the study solicit to examine the influence of participatory M&E process in performance of L&N educational programme in public primary schools Nairobi County.

1.1.2.1 Stakeholder Engagement.

Stakeholder engagement is a systemic and a continuous process by which institutions and organizations establish a constructive dialogue which must have a fruitful communication with all the stakeholders involved. The purpose of stakeholders being involved is to convey a certain message, help in decisions-making, and provide input to participatory process which becomes a guiding element for learning and change in an organization (Donaldson and Lipsey, 2006); Olander, 2007).The stakeholders involved in a project are either single persons, groups of people who have helped in

the programme and expecting good outcome from the performance of the project dominating it either dismissively or positively (Newcombe, 2003; Freeman, 1984) he continues to contend they might possibly be either extrinsic or intramural and everyone anticipating assistance from the project. Olander (2007) says recognition and understanding of key supporters actively involved in a project have concerns, needs of management and purpose of involving all the stakeholders. Involvement of stakeholders in education in the 21st century for academic excellence embraces the involvement of parents, school committees among many other stakeholders participating in making decisions (Gichohi 2015). On this point every organization must have a need which needs to be achieved while engaging the stakeholders. When involving stakeholders it helps in building trust relationship and improving the strategies while identifying the areas of interest.

Stakeholder engagement in any discussion revolves around the question of what is being done, in which manner is it done, time of the activity to be done and the reason of it being done in order to promote wellbeing of participants in different teams (Donaldson and Lipsey, 2006;). Stakeholder participation is to empower development of beneficiaries in terms of allocations and identifying the process of planning how to facilitate in the activities of implementations of development initiatives (Chambers, 1997; Chitere, & Ireri 2004; Muiga, 2015).This process should be handled with considerable supervision reason being, substantial participation of stakeholders can lead to catastrophe while least involvement would lead to those involved in evaluation taking control of the process and sidelining others (Patton, 2008).

During the identification process the relevant stakeholders who are affected or could influence the project should be handled with integrity else mistakes can occur later. So in this case a good methodology should be formulated to identify stakeholders who can contribute to achieving the purpose of the engagement process and effects they have on the end product of engaging them in the organization. Identification of all stakeholders involved in project are crucial exercise, it needs a lot more time and being very keen on who is to be involved and who is not (Olander, 2007). The stakeholders are identified in a methodological and logical manner for example those who are incidentally not any side the project, according to geographical location, organizationally and involving them in all the project phases. Identification of stakeholders helps giving clear

communication during updates and change of staff in the progress of the phases of the project which is very important in understanding effectiveness of addressing their expectations and lack of these elements leads to poor performance of projects.

So there was need to examine ways of how beginners and educators can be engaged so as yield good performance especially in L&N dexterity but results were that most teachers are engaged in learning process but have totally refused to embrace the new methods arguing they are lengthy procedure and consumes adequate time per lesson though others say it is the best method. According to researcher's point of view on the findings, low achievers in education are the ones who found trouble in welcoming change since it involved a lot of scrutiny and apprehension application which was a scarcity to some of them.

1.1.2.2 Stakeholder Capacity Building.

Stakeholder capacity building in essences is contributing towards performance of projects. Teacher's capacity building in real essence is a phenomena by itself since it is a continuous process of improvement. There are many problems underlying in this phenomena especially when teachers are not ready to be committed on their work. Even if government commitments itself on capacity building of teachers and they are not ready to change then teaching professional adversely affects other efforts of government. Robison, Myran, Strauss and Reed, 2014; Althauser, 2015; this could not be the only problem since education systems face other constrains beyond the teachers development and schools resources (Glewwe and Muralidharan, 2016 ; world bank 2017, 2018) .Efficacious implementation of M&E is attained on implementer's capability skills and stakeholders technical practitioners in the projects.

The staff tasked in monitoring and evaluation should be supported and motivated fully so as to perform effectively in their duties as depicted by (Aquinas and Kraiger, 2009) but this not in the case of education sector. Teachers need to be trained in monitoring and evaluation skills so as to improve the performance of projects which are critical and requires adequate time and people whom have proper knowledge while delivering the content of these skills. To enhance delivery of project outcome, recruitment of qualified and skilled monitoring and evaluation staff is mandatory of every organizations intending to sustain quality projects performance (Midida, Gakure and

Orwa, 2013). For this to happen, clear roles and identification of people involved in the process must be well informed and engaged fully in the programme so as achieve the required performance of the programme.

In the current study stakeholder capacity building process examined the context of training for M&E workshops, training for monitoring and evaluation seminars, aligning trainings gaps identified, enhancing M&E awareness and skillfulness acquired as predictor variables in influencing the performance of L&N educational programme. It was therefore presumed that stakeholder capacity support or obstruct behavior and views of those directly connected to produce performance of educational programme. Lower Primary School Teachers have diverse professionalism which covers a wide range of different specialization hence inadequate teacher professionalism and laxity in teacher endeavor (Ganimian and Murnane, 2016). While engaging the stakeholders there should be a link on how the two can be joined in capacity building and the relationship they have on the influence of the learners.

To show how the two can be linked Kandie, (2014) focused on the connection linking lower primary school educators' mathematics self-assurance with the performance of students in arithmetic's in Kericho sub-county. This shows that the concept of mathematics development is a fundamental skills in early years which forms a strong layout for future math's achievements. Bridging the aperture in Kadie ,(2014) study, current study went deeper to establish the influence on performance of simple arithmetic calculations by embracing new methodology of breaking apart which was introduced by the intervention project in educational programme. How to relate on the two the study still left a gap on how planning of teachers work, training of seminars and workshops helped in the teaching of mathematics hence this study. This can also be enhanced by involving Parents in their children learning process since it increases learners performance in schools.

The parents involvement is very important to the young children since in their overall development depends on them. As Clark, (2007) puts it that early literacy experiences within natural settings for example home motivates the learner's opportunities and encourage parents to become more active partners of early childhood educators in their child literacy development. This also coincides to Crystal, (2013) who focused on the

consequences of parental capability of reading and writing in the participation youngster being interested on reading habits to enable growth of emerging skills adapted by parents. It is explained in teaching statistical findings which are significant and unique variances in students understanding skillfulness in communication channels. In this case it agrees with (Andrews, Hood and Conlon, 2008) on their outcome that reading a storybook at home environment exposes how much the learner has been able to acquire in learning oral language skills.

Thus a gap was experienced in what manner parent's participant in teaching the youngsters which has yield emergent results in literacy skills on the alphabetical skill and print knowledge on oral language skills. To measures how learning takes place in a classroom while teaching literacy, class environment observations made are insensitive or inadequate hence more elements for student's emerging for the ability of being able to read and write thus low performance. Teachers and parent's involvement strategies should be integrated to the learning of these young ones. Therefore this study sought to establish the extent to which stakeholder capacity building influence the performance of L&N educational programme in Nairobi County.

1.1.2.3 Data Collection

Data collection is a systematic approach which helps in generating and measuring information from a wide area of interest so as to get required information on the basis of accuracy and completeness. Many countries in the world have introduced the use of data in education for decision making, accountability, performance management and feedback for the learner's results (Tine and Skedsmo, 2017). Data use is defined as the activities that take place during the interaction of test scores, grades and other assessment data related to school (work Spillane, 2012).

Little, (2012) argue that data become reliable when analysis and interpretations have been carried out so that data can be of use. Through data collection an individual or an organization can be able to ask relevant questions, make predications and analyze the outcomes. Data collected for education purposes in schools assessment are used by policy makers, administrators and teachers (Moller, 2015). To this an individual needs to source quality characteristic that will test and measure, the importance of data collected and how to use that data. Both methods of collecting data for example

quantitative and qualitative was applied in the current study. Data collection enables researchers or teams to prepare, test working assumptions through a process of developing useful facts that leads to the advancement of project performances while educators draw a range of knowledge sources when deciding their instructional strategies (Heitink, Van der Kleij,Veldkamp, Schildkamp, and Kippers,2016)

Many developed and developing countries have numerous projects in an attempt to improve their education systems, infrastructure and health among many other projects (UNESCO, 2018). Large sums of monies are put into activity which the organizations expect to get value of it. Kenya is no exceptional, and many non-governmental organizations have been met with growing concern about how to intervene for the Country and especially in education sector where there is an outcry of low performance in L&N programme.

Performance of any project which can be measured through the extent to which results have been achieved is dependent on availability of resources and enough data collected for making any learning changes. Learning institutions require systems which are updated and can give transparency information to compete with the global economy as posited by (Day, 2013). Allocation of resources to many organizations is an accountability issues requiring a system to help measure the value for resources against achievement of organizational goals and objectives. An effective system will help in assisting to meet the demands by holding the employees accountable and address those who are under performing (Zbar, Marshall and Power 2007; Zatynski, 2012) Implementation of an effective M&E system in education requires a participatory M&E process in identifying key stakeholders and engaging them in the project cycle.

Data gathering is very important in any project. In this programme data is collected through TANGARINE tool which is capable of acquiring enough and extensive span of information from learners. This collection tool was formulated in USA to collect a wide range of data from early grade children and give feedback immediately. The tablet transmits the facts of read words per minute by the learner during class observation and analysis it into percent immediately (RTI, MOEST, 2011). Formulation of data collection instruments which is formulated during the planning stage. Data to be collected needs to help in measuring and assessing the progress of the projects and the

mastery of content from teachers. Collection of data and monitoring of learning process must be continuous in all learning institutions for both teachers and learners for implementing change as required (Kimbui, 2012).The study found out that class participation is essential and data collected through feedback information differed in schools as posited by (Laursen and Hassi, 2012). However the study data collected through exams and reading fluency in classrooms showed great improvement of the intervention programme.

1.1.2.4 Data Management

Data analysis are procedures of assembling facts while interpreting it in a manner that proper and adequate information can be drawn while making conclusions using analytical and logical thinking in examining every item of the data provided. Analyzing data and interpretation is very important in every organization and so these literacy and numeracy educational programme are no exceptional (Angela, 2008, Barone; William and Micklos, 2017). Data management and sharing effectively is a challenge as acknowledged by many researcher that they dearth competency and encounters needed to control and allocate data accordingly when required (Federer, Joubert, Welsh and Brandys 2015; Tenopir, Sandusky, Allard and Birch, 2016). Similarly, Proudlock and Ramalingam, (2008) observed that impact process of evaluating, analyzing, interpreting results greatly improved participation of stakeholders in developing, making corrective judgments of the programme.

Reading in lower grades has been and will remain the starting journey of an individual in education progress, attitudes and behavior which are formed at this lower level has was focused by (Parker, 2004). The study evaluated the learning of student in reading attitudes and how it affects individual behavior. Prior studies suggest positive correlation but according to the study by Parker, (2004) there is no correlation of the two. This was as a result of experiments done on two sub-groups and it was found out that no correlation between attitude and ability in reading skills hence no effect on attitude to ability.

Parent involvement in children learning has been a myth since most parents take hold of their children in learning institutions and expect the teacher to help their children in everything that pertains education and life as observed by (Muir, 2009). He argued that

parental involvement on children learning while at home increased their learning performance but parents were less interested in assisting their children full. A different opinion that parent admire being involved in their children activities in schools hence making tremendous impact on education (LIamas and Tuazon, 2016; Sapungan and Sapungan 2014). Guardians are provided with results of their youngsters from the teacher's data base information stored in schools as well as class registers.

Study conducted by Gichohi, (2015) found that there were significant differences between parent's education and level of involvement in parenting, learning at home, decision and communicating channels that involved parents in learning in 21st century. However there are challenges encountered by learners, teachers and educators in implementing the curriculum thus hindered good performance. The intervention projects points out that parents should be given the right information about their children so that they can give a hand back at home. Several approaches should be applied to promote parents involvement in trainings involving education so as to enhance the school and home environment as stated by (Desforge and Abouchaar, 2003; Harris and Brown, 2014; Masombo, Muchopa and Kuoth, 2017). So that information generated cab be used and then disseminated to parents about their children performance.

1.1.2.5 Implementing Change

Implementation of change in any school depends heavily on teachers' readiness and willingness to adapt change and use integrative tools in utilizing new methods of instructions which are very influential in enhancing learning outcome. Buchanan and Fredrich, (2013). Learnt skills during trainings should be implemented at the specified time and within the scope as it was anticipated during the planning time.

Utilization of Monitoring and Evaluation information for future use is very vital in any organization especially in managing projects to deliver some outcomes which will add value to the organization. The way of gathering and collecting this information is more structured form of gauging the performance of projects (Raymond and Bergeron, 2008). One way of collecting data is through instruments designed appropriately in generating the right information needed for monitoring and evaluation so as to give the right report, making any changes needed in the projects. Management of Monitoring and Evaluation

information is supposed to be consistent and participatory for it to be sustainable (Fadel and Brown, 2010). The utilization and managing of M& E information is very vital to project leaders, M&E staff, key stakeholders participating in projects for quality and corrective measures, procedures of tracking information and making changes where need be in the projects. This will enhance resources allocation and consistency in monitoring and evaluation activities in project performance (Karim, 2011).

Implementation change has been noted to be an issue for most of the projects as posited by (Nzweke, Olandenjo and Emoh, 2015). On evaluation of facts necessary for accomplishing the implementation of project in Anambra state, Nigeria states. Factors responsible for project success are numerous when there are good steps at correlation between them in relation to data analysis and management. However demonstration of extent to which implementing change happens projects was not clearly stated hence the current study. Ouko, (2015) have emphasized that implementing change for PM&E has revealed that pupil's performance improved in the levels of numeracy than opposed to literacy in schools where learners have started in pre-primary grades unlike those who have started directly in grade one.

In Kenya it is not a prerequisite for a parent to take their children in pre-primary hence compromising the quality of education. The study majored on entry of the learner in grade one but did not show how they learnt these skills in preschool which helped in grade one entry. Consequently impact it has on upper grades like grade one to three. However the study did not show the extent of implementing change for PM&E and performance of L&N educational programme hence need of carry out the study.

1.1.3 School Environment

The School environment is defined as facts influencing teaching and acquisition of knowledge in having a relationship to one another (Nduta, 2014). These factors could probably be school infrastructure, instructional materials for example text books for these subjects, sanitation and water, the school compound to teach physical education which is very vital to growth and development, ventilation of the classrooms, the toilets and pit latrines among many other elements of the environment. The classrooms should have appropriate learning materials according to the age of the learners and have an enriched environmental support intervention among many other things which will

increase the outcome of the learners in conducive environment (Cantor, Osher, Berg, Steyer and Rose, 2018).

The information should cater for learner's interest and level so that they can capture so that the lesson and be motivating and interesting to avoid boredom of the learner. School environment provides appropriate learning facilities, well managed classrooms among many other equipment's. School environment determines the extent to which a learner behaves and interacts with the others at the same time improves the learning performance (Berkowitz, More, Astor and Benbensihty, 2017). Absence of conducive environment leads to poor performance. The school environments tends to mound the behavior of the learners so as to meet the demand of life either positively or negatively and this can be categorized by many elements within the school environments. The intensity of surrounding begins to affect the extension and evolution of a person's right from the mother's uterus to the external forces after birth. At the same time teachers'-learner relationship yields good performance within the school environment meaning school environment has become important educational in most countries (Wang and Degol, 2016).

Motivation is a good predicator of positive results if given to the culprit's performing the activity. Mugambi and Wang'eri, (2014) on squint instruction on predictor of perusal motive and reading efforts amongst grade 2 students in Nairobi and Tharaka Nithi county found out that peer teaching predicated reading motivation but did not inform how this levels of teaching is done, who are the main participants hence a gap since it is not addressing the problem fully on how each stakeholder in the learning process are involved in learning activities. Therefore the investigation establishes the extent to which participatory process involve all the stakeholders in the classroom situation and teaching methodology used in teaching the skills. Another study by Marima, (2015) preferred having technique used in educating literacy methodology early year's grades in Dagoretti and Wetlands divisions in Nairobi, identified proficiency in reading being the main reliable indicators of how learners attain proper knowledge achieve through academic process and make one suitable and active in society.

The findings reveled that there was inadequate reading skills among learners and two main teaching methods were phonics and whole word Approach which was missing to most teachers teaching the subject. Most teachers 70% in pre-schools teachers accepted the challenges in teaching the skills and 100% class three teachers said lack right procedures in teaching the reading skills since what they learnt in college was the repetition styles and reading orally. The study did not address the key facts on how a teacher should address the phonetic teaching, at what level, the materials to be used, the age group of these learners per class and teaching aids to be used. Therefore this study solicit to establish the elements that influence the ability to read which is very vital and a requirement to help one in communicating fluently and be able to address other subjects in other disciplines.

An empirical study done by Chepkonga, (2017) on classroom habitant set up facilitation in standard teaching in public pre-school centers in West Pokot is pathetic and teaching effectively in the classroom is a major concern as it was found by other researchers that there is an outcry of Teacher-Pupil ratio in the world Kenya inclusive Mackatian, (2017) Student's performance is determined by several factors within the school environment as was explored by (Jepketer, Kisilu and Kyalo, 2015).Teachers' classroom strategy for helping in achieving the learners Performance in Public Secondary Schools in Nandi County has explained much on how performance is acquired through involving all the stakeholders in learning and specifically the pupils and teachers in classroom environment. Main emphasis being how teachers' classroom strategy enhances student outcomes and introduction of technology exposing the learners into a wider range of interactions to practice real life experiences (Parvin and Salam, 2015)

1.1.4 Performance of Literacy and Numeracy Educational Programme in Kenya

Performance of any project is measured by its potentiality for favorable outcome and attainment of set objects, aims and involvement of stakeholders in the programme.
Many nations have begun large-scale academic interceding in responding to inadequate literacy and numeracy instruction skills, evidence from information generated in piloted programme which focused in enhancing outcome Whilst rigorously using assessment and research designs (Murnane and Willett, 2011; Conn, 2017; McEwan, 2015; Piper, Destefano, Kinyanjui and Ong'ele , (2018). Despite increased access and high

enrollment of learners in Kenyan primary schools, literacy rates are significantly lower than expected and the government is seeking to improve learning outcomes.

This could be through developing materials that support multilingual literacy learning and enhancing teacher training resources to curb barriers in implementing educational programme. Teacher professional development is also another key area of improving intervention literacy programme (Dubeck, Jukes, Brooker and Inyenga 2015). Government to put into consideration of training teachers on development aspect which is very crucial, absence of this leads to low performance of literacy and numeracy skills Performance of literacy and numeracy in Kenya started way back in 2011 to 2014 on piloted projects by PRIMR initiative. The implementing group started much later on the basis of the weak areas in learning in 2015 by USAID and DFID which funded a programme Tusome Early Grade Reading Activity (TUSOME) meaning 'let's read' in English . This was to help improve approximately 7 million Kenya Children in grade 1-3 in more than 22,600 public primary schools, 5,027 private schools and 1,500 alternate basic educations institutions in informal settlements in Kenya under the leadership of MOEST, RTI and many other supporting organizations (Piper, Destefano, Kinyanjui and Ong'ele, 2018).

In every project stakeholders have great expectations in every phase of the project (Saleh, 2015). Projects have to meet set objective so as to meet the client's prerequisites and satisfaction (Turner, 2007). Performance of L&N educational programme in Kenya and specifically Nairobi County was able to meet their expectations through collecting data in classrooms using the Tangerine tool which allows stakeholders to gain actionable insights about what is working for teachers and pupils however (Chrstia, Czerwonko and Garofalo, 2014). However tablet-based interventions for children is ineffectual way of measurement. Curriculum support officers are the ones who give evaluation reports about the quality of the programme implementation and students assessment from classroom observations of teachers.

In this case also Kerzner, (2003) confirms that operationalization of project performance is determined by the duration taken to complete the project, how it is able to stay in the range assigned finances, genuine performance stating level of project the involvement of the stakeholders without disturbing the flow of the organization work

neither its culture. So with reference to the educational intervention programme in Kenya the principle is to intensify the performance of L&N educational programme in Kenya within the specified time, scope, quality and beneficiary satisfaction which meets the criteria sued to determine project performance (Richardson, 2015).

The phenomena of varied forms of organizations and learning issues are ancient in Africa. These organizations deal with education developments to make better learning expertise among the students and capacity building to those involved in the programs. In Kenya it is noted that teaching participation is a profitable development to individual growth as a whole. There is need to check on what is really required of quality and learning skills in the country. Dubcek and Gove;2015; Gove et al (2017) on the early grade reading assessment (EGRA) found out that pilot programme do not take into account the training and support of teachers in the classroom and the accountability of what is being taught is not measured at the required time only when the results are released. Crouch and Destefano, (2017) on wide spread improvement on learning and determination of restriction used to inform education on programme implementation and fundamental measures on literacy skills on the need of new starters readers in grade one to three. The gaps on how literacy and numeracy skills have not been exhausted fully by other researchers in grades 1-3 hence need for the study.

1.2 Statement of the Problem

PM&E process takes part in essential situations in ensuring that M&E undertakings have attained project end results and ascertaining project performance cannot be underrated. In spite of sundry attempt made by instructional stakeholders to accelerate learner's skill production, through supplementary fiscal benefits for making superior schools infrastructure, to produce conducive studying domain, to surpass entrance to education and qualified instructors, propensity of student's performance is still low and needs immediate scrutiny. Performance of L&N educational programme hangs on absolutely on stakeholder engagement and if there is no proper engagement of teachers who are principle executors of the programme then low performance will be experienced. Similar observations have been made on an annual review the appraisal report entitled 'Are our children learning? (Mugo and Oleche (2015). As revealed by some stakeholders who gave information on involvement of stakeholders such as teachers attending school in Nairobi County has 58% which is alarming in comparison

to other Counties like Kiambu, Meru, and Mombasa which has above 85%. This means that in one time or another a teacher is absent from school for one reason or another hence low performance in this learning skills.

Stakeholder capacity building is very paramount in any corporation since it assists personnel in obtaining new skills and acquire credence on anything they undertake. In the case of schools where children are learning these skills could be missing for example teachers might not be attending fresher courses to enhance their skills which they learnt in their initial training. Kenya being in developing country there are so many changes in education curriculum requiring the attention of teachers to be well equipped in order to make necessary changes but this could be missing. Similarly no idea of what is PM&E process as posited by (Piper and Mugenda, (2013).

There is need to investigate how teachers are trained on the emerging issues in teaching literacy and numeracy skills teachers and the usage of new materials provided. Also if the trainings helped in acquiring more knowledge on content delivery and mastery. There are many other factors that can hinder learning literacy skills and effective learning and implementation of this skills can only be attained by the implementers' capacity skills (Glewwe and Muralidharan, 2016). However this study is out to show the influence of stakeholders' capacity building on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

Data collection is a key thing for giving back feedback but if not handled well by the experts a problem occurs and that is what has been happening in these literacy and numeracy education programme. Participatory monitoring and evaluation approaches found out that data collection was a big problem since it was not made use neither documented well leaving scanty information which cannot be relied on (Matonda *et al*, 2013). The need for the current study to investigate how data is collected in the classroom and school level to the government offices and parents. Tools and methods of collecting data, storage of data in the data base and retrieving for use was a major concern hence need for this study to help bridge the gap. Parents were not able to get the results of their children on timely basis after some time and specifically when a learner goes on transfer to another school. Moller, (2015) posited that data collected for

education purposes is normally used by the educators, policy makers, administrators and teachers but if the data was not handled well then can lead to misleading information hence poor results for what it was intended to acquire.

Lack of proper data collection methods and storage leads to inadequate management methods thus affecting the performance of L&N educational programme. It is believed that if any institution lacks proper management productivity is low and L&N educational programme are not exceptional to these problems. This was profound by Bernard, (2015) on the influence of monitoring project performance and implementation. There was need to bridge the gap on how literacy and numeracy educational programme were handled key stakeholders who were the teachers, curriculum support officers, officials from MOEST. Due to improperly methods of collecting data and storing it well for future use in the classroom or at school level leads to poor planning, inadequate feeding back information, lack of accountability and proper documentation of important information needed by concerned parties (Heitink, Van der Kleij, Veldkamp, Schildkamp and Kippers, 2016). Sharing of data is also a big problem more so to teachers who acknowledge that sharing data effectively is a challenge due to lack of skills and experience needed to manage data adequately as stated by (Federer, Juobert, Welsh and Brandys, 2015).

Implementing change is very critical to most programme and especially numeracy and literacy educational programme. There has been an outcry that most programme do not implement changes made, therefore carried on problem continues or becomes even worse. Implementation Change of these process has been inadequate hence resulting into failure to attain objectives of Literacy and Numeracy educational programme in Kenya. At the same time it is important to implement the new skills learnt during the trainings so as to enhance the delevry of the content (Buchanan and Fredrich, 2013). Piloted intervention programme found many gaps which triggered other funders to intervene but still there are gaps experienced which needs special attention. It is on the basis of this background that study seeks to establish how participatory M&E process influence the performance of L&N educational programme in public primary schools in Nairobi County.

School leadership has been an issue for many decades in the country and the selection of school administrators thus affecting the performance of L&N educational programme. School infrastructures like ratio of pupil –teacher in classrooms is alarming issue. Buildings which are conducive for learning environment could be a challenge hence need for this study to investigate how these schools cope with the situation without compromising the learner's performance. School environments determines the behavior of the learner while in school which influence the outcome of the learners performance (Berkowitz, More, Astor and Benbensihty, 2017). The main phenomena under investigations is how L&N education programme are supervised, funded and implemented. The issue at hand being learners in grade one to three cannot be able to read fluently and perform simple arithmetic calculations of a lower grade. Lack of enough teachers per school are really affecting the learning of these skills since the introduction of free primary education which saw swelling of enrollment and there was no additional teachers to handle the learners hence compromising the learners learning capability. So there is need to examine how these gaps are mitigated in order to have quality education and learners being able to read, write, calculate simple arithmetic's and have confidence in speaking any language fluently

Generally leaning of literacy and numeracy educational skills has been comprised hence need for intervention programme. So this study sought to establish how stakeholder engagement, stakeholder capacity building, data collection, data management, implementing change and school environment influence performance of literacy and numeracy educational programme.

1.3 The purpose of the Study

The purpose of the study is to establish the extent to which participatory Monitoring and Evaluation process, influence the performance of L&N of educational programs in public primary schools in Nairobi County. It also sought to assess the moderating influence of school environment on the relationships between participatory M&E process and performance of L&N educational programs in public primary schools in Nairobi County, Kenya

1.4 Objectives of the Study

The study achieved the following research objectives

1. To establish the extent to which stakeholders engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
2. To determine how stakeholders capacity building influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
3. To examine how data collection influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
4. To determine the extent to which data management influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
5. To assess how implementing change influence performance of literacy and numeracy educational programme in public primary schools in Nairobi county, Kenya.
6. To establish how combined participatory monitoring and evaluation process influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
7. To assess the moderating influence of school environment on the relationships between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi county, Kenya.

1.5 Research Questions

The study answered the following research questions;

1. To what extent does stakeholder's engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya?
2. How does stakeholder's capacity building influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya?
3. How does data collection influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya?

4.To what extent does data management influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya?

5.How does implementing change influence performance of literacy and numeracy educational programs in public primary schools in Nairobi County, Kenya?

6.How does combined participatory monitoring and evaluation process influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya?

7.What is the moderating influence of school environment on the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya?

1.6 Research Hypothesis

The study tested the following Null hypothesis.

1. **H_0** There is no significant relationship between Stakeholders engagement and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
1. **H_1** There is significant relationship between Stakeholders engagement and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
2. **H_0** There is no significant relationship between Stakeholders capacity building and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
2. **H_1** There is significant relationship between Stakeholders capacity building and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
3. **H_0** There is no significant relationship between Data collection and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
3. **H_1** There is significant relationship between Data collection and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya

4. **H_0** There is no significant relationship between Data management and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
4. **H_1** There is significant relationship between Data management and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya
5. **H_0** There is no significant relationship between Implementing change and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
5. **H_1** There is significant relationship between Implementing change and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya
6,**H_0** There is no significant relationship between combined participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
6. **H_1** There is significant relationship between combined participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
7. **H_0**There is no significant moderating influence of school environment on the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.
7. **H_1**There is a significant moderating influence of school environment on the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

1.7 Significance of the Study

PM&E process of stakeholder engagement, stakeholder capacity building, data collection and management in education programme is very vital in the society in the economic growth. Therefore this study provided information to the educational officers who would use the information to plan for future and make changes on already existing instructional methodologies used in delivering the skills of reading and numeracy. Results of teacher's stages of self-assurance would help head teachers in identifying

intrinsically motivated teachers for lower grades and particularly grade one where identification and enhancement of learner's competences is crucial.

It might be of help to teachers and the funding agencies who are the main implementers in making changes on the learning strategies in formulating and re-planning the programme. It is hoped that M&E projects staff will have enough information and learning skills to help them interact directly with the learners and teachers. This will be very vital since learners and teachers participation and engagement of all stakeholders in the programme is crucial. It might be of help to the MoEST in getting actual ideas occurring on the ground about primary institutions through information generated, analyzed and stored in the database with the help of TAGARENE tool. The expected outcome after the study may be of help to the government, researcher's, monitoring and evaluation officers who will acquire more knowledge through the information collected.

1.8 Delimitation of the Study

The study was delimited in establishing the influence of PM&E process, on performance of literacy and numeracy educational programme in public primary schools in Nairobi County. The influences of these variables on performance of L&N educational programme as moderated by school environment were deliberated on. Further the study was built on descriptive research survey design and correlational research design. Simple random sampling, systematic sampling, stratified sampling and purposive sampling were used to get suitable sample for the study. Questionnaires and in-depth interviews were used to collect data. The study focused on the financed educational programme in Nairobi County. The Head Teachers, Lower Primary School Teachers, Curriculum Support Officers' and Research Triangle International officers were targeted for the study.

The TUSOME and EGMA were the on-going projects which were considered in this study. Those completed projects were excluded from the study since the influence of PM&E process was measured in on-going projects. This study was part of a sample of projects financed by TUSOME conjunction with government of Kenya. The results were generalized to all other educational programme in Kenya. However there are other numerous factors that can influence the performance of L&N educational programme,

so this study delimited itself to PM&E process steps which included stakeholder engagement, stakeholder capacity building, data collection, data management, implementing change and school environment on performance of L&N educational programme.

1.9 Limitations of the Study

The study had some constraints. First the location of conducting the study Nairobi being the biggest capital city of Kenya has its own challenges especially traffic jam in the morning when going to collect data from Head Teachers who were available mostly in the morning section. In solving this challenge research assistants settled on using motorbikes when the traffic was much and walked where necessary. When traffic was few they used the normal mode of transport for example the use of vehicles.

The study area was divided into sub-counties for example Lang'ata, Westland, Kasarani, Njiru, Starehe, Kamukuji, Dagoreti, Makadara and Emabakasi. The enumerators visited every sampled school in each sub-county and each time they finished collecting data they cleaned, coded and verified the data for every day so as to save time. By doing this it helped setting up schedules for data analysis and giving feedback.

The second restriction was the existence of the necessary knowledge for example the study endeavored to collect information on each variable for example stakeholder engagement, stakeholder capacity building, data collection, data management, implementation for change and school environment which included the allocation of resources and classroom observation. Such information was considered sensitive by the targeted groups especially the Head Teachers who their findings really differed with the rest of the respondents especially on resource allocation. Confidentiality of the information's was really guaranteed and assurance of anonymity was given since information was only met for scholarly intentions only.

Some respondents who were involved to this kind of research for the first time, like the newly appointed Head Teachers took substantial time being elucidated on the significance of being involved in the research and later accepted to participate in the exercise after the assurance that the data is only used for academic work only.

The researchers herself interviewed the Curriculum Support Officers who really assisted in very crucial information and this was due to the fact that the researcher had comprehensive information about the area of study and has worked hand in hand with the CSO'S in implementing the programme. Also the Research Triangle International officers were helpful to the researcher, while on producing the required documents through via email to the deputy director who seek authority from the director who agreed and a confirmation call was made through the cell phone and the date was set for the in- depth interview. There was a prolonged interview and tape recording for verification later when coding the information incases the researcher forgot some information. The study therefore has some valuable input that regards the subsist body of knowledge on participatory M&E process, school environment and performance of literacy and numeracy educational programme in Kenya.

1.10 Assumptions of the Study

It is therefore assumed that the stakeholder engagement, stakeholder capacity building, data collection, data management and implementation change influences the performance L&N education programme.

It was presumed that all respondents replied with honesty and objectivity to the questions and that the variables not included in the current study did not affect the relationship under investigation or were kept constant. It is assumed that the interviewer interviewed the respondents well and they gave the right and truthful information on the questions asked.

The assumptions were also based on normality, test of linearity, interval data, muliticollinearity, homoscedasticity test and independence of residuals referring to various aspects of how data is distributed in scores and the nature of the underlying relationships between variables. The assumptions helped in analyzing the tests based on parametric.

1.11 Definition of Significant Terms Used in the Study

Data collection is a structured proposition of collecting and measuring information through proper methods of selecting M&E data instruments, sources of M&E in collecting data information, schedules of M&E activities and collation of information from a variety of sources to get a complete and accurate picture of the information required.

Data management in this study is the procedure of identifying specific data analysis methods, identifying staff responsible for data management, data analysis and interpretation and M&E reports writing so as to enable the programme succeed.

Implementing change is any relatively permanent change in behavior that occurs as a result of practices, experiences and incorporating the organizational tools that can be made useful helping human being become competent personal with transformational results in the adaption and actualization of change. In this study it will be realized through reviewing collected data, number of transmitted reports, utilization of M&E results and project intervention

Performance of literacy and numeracy educational programme is defined in this study as reading, listening, speaking, writing skills which have been achieved, letter recognition, simple arithmetic calculations, satisfaction of the beneficiaries in the programme, transition rate and average class performance has improved. Timely acquisition of L&N skills on educational programme have greatly improved.

School environment in this study school infrastructure for example classrooms. materials in those classes which are appropriate to the learners age and level, playgrounds and sanitation which have a great influence on teaching and learning process. The learning materials like textbooks, writing materials, and teacher pupil-ratio and school leadership have an influence on performance of L&N educational programme.

1.12 Organizational of the Study

The analysis is composed of five chapters. Chapter one deals with background of the study, statement of the problem, purpose of the study, research objectives, research questions, research hypothesis, Significance of the Study, delimitations and limitations of the study, assumptions of the study, definitions of significant terms and organizational of the study.

Chapter two is the literature review which includes other scholars work based on the study relevant topics, objectives and theoretical underpinnings, The study was guided by independent variables namely stakeholder engagement, stakeholder capacity building, data collection, data management and implementing change, moderating variable as school environment while the dependent variable was performance of literacy and numeracy educational programme, stakeholder theory, theory of change, Multiple Literacies Theory (MTL) conceptual framework, summary of literature review and knowledge gap.

Chapter three is the research methodology and focuses on the research paradigm, research design, target population, sample size, sampling procedures, data collection instruments, validity and reliability of the instruments, data collection procedures, data analysis and techniques, ethical considerations and operationalization of the variables.

In Chapter four data presentation and analysis, interpretation and discussions have been covered. This was captured through tables and figures. The data was analyzed using SPSS version 25 and hypothesis were tested and the results were that the null hypothesis were statistically rejected and alternate hypothesis was accepted hence there was influence on performance of L&N educational programme in Public Primary School Nairobi in County, Kenya.

Chapter five provides an overall summary of the findings, conclusions of the key areas in the study and key recommendations emanating from the issues analyzed according to the objectives and the variables under study. Finally further recommendations were made on the knowledge gap on the areas which the current study did not address but other researchers can carry out on them and make necessary contributions to the body of knowledge.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature to the study based on the following thematic and sub-thematic areas: performance of literacy and numeracy educational programme, PM&E process, stakeholder engagement and performance of Literacy and Numeracy educational programme, stakeholder capacity building and performance of Literacy and Numeracy educational programme, data collection and performance of Literacy and Numeracy educational programme, data management and performance of Literacy and Numeracy educational programme, implementing change and performance of Literacy and Numeracy educational programme, Participatory Monitoring and Evaluation process and school environment, Participatory Monitoring and Evaluation process performance of Literacy and Numeracy educational programme, theories underpinning the study, Theoretical framework, conceptual framework, summary of literature reviewed and finally the knowledge gaps identified in the study.

2.2 Performance of Literacy and Numeracy Educational Programme

Performance is the ability of a company to achieve goals, meet expectations and influence the results in an acceptable manner as stated (Gruning, 2002 and Okar, 2017) The performance end results of basic education are based on evaluation by various shareholders such as donors, customers, project funders and the community in assessing the performance of project in recognition of alphabetical letters, proficiency skills in reading, proficiency skills in speaking, proficiency skills in writing, proficiency skills in listening, simple arithmetic calculation skills, beneficiaries satisfaction, timely acquisition of Literacy and Numeracy skills, transition rate to the next class and class average performance in trying to attain set goal and objectives of the programme. In defining performance of Literacy and Numeracy educational programme, Performance project is as a results of activities of an organization or investing over a given duration, which is measured according to achievement of a assigned duty opposed to present familiar quality of how accurate one is, speed of the completing and the cost incurred.

Though the completion of tasks depends on application of knowledge, skills and abilities to perform a certain action, but Klagegg (2005) argues that there is a debate going on, the measure activity of the project outcome and performance is still on since

there is no conclusion which has been agreed upon. However stakeholder should be able to ascertain the project performance individually and get the feeling of owning the project at their best. Another argument from Kamrul &Indra (2010) says that completing any project within specified timeframe, cost, scope vary in dimensions that should have improved as referred to by project management executives in the anatomy of research. Thus performance of any project depends on the organizations objectives and the stakeholders involved.

Performance of projects remains an issue of concern in project management globally (Nzekwe and Emoh, 2015). This is so because projects involve defined objectives which need to be achieved and resources allocated effectively to the concerned entities. Performance of these projects is a concern because an assessment of how well the projects teams have done in pursuit of specific project goals have not been fully addressed and especially in participatory approach (Njuki et al., 2006). The goals of these projects vary from project to project since each project has different goal but all aiming at good performance hence great benefits to the beneficiaries. From a project management perspective, performance of projects measurement is considered as monitoring and controlling of projects on a regular starting points using specific indicators to measure performance (Ika, 2012). Projects performance indicators are related to identification and engagement of stakeholders, capacity building, school environment and stakeholder's satisfaction (Ochieng and Zoufa, 2014).

Performance of projects are influenced by various inter-related factors like leadership, clear and realistic objectives, skilled and sufficient staff, realist schedules, and involvement of key participants (Ngugi and Muhoro, 2014), project performance aspects needs to receive proper attention from leaders to ensure good attainment of project objectives. Teaching and learning out comes in the early grades are very low according to the UNESCO (2011) report. Globally many going to school children have access to school but student's evaluation reports from developing countries shows that many are not able to carry out reading activities (Kordia, Gove, and piper, 2017). Also less than 10% of children in some countries have not been able to reach the government bench mark according to their countries bench mark of 7%. Though most countries have made improvement to the quality of education and formulating the policies, setting goals and planning for future strategies, the results are still discouraging. Kordia, Gove,

and piper, (2017), profound that on scheming for scale –up throwbacks on round and round on, reading and writing progress in Kenya and Liberia. TUSOME and PRIMR programme took the initiative of implementing Literacy and Numeracy educational programme in the country but still there are many challenges facing projects performance hence government needs to strengthen the weak areas for better results (Piper, Ralaingita, Akachand King 2016).

In Kenya there has been several researches focusing on implementing intervention programme in improving learner's outcomes and increasing school attendances as profound by(Evans, Kremer and Ngatia 2014). However these studies were subjected to geographical limitations and generalization of the results for the country. Similar research results generated cannot be replicated to specific areas due to other factors which are not found on others areas (Bold, Mwabu and Sandefur, 2013). Secondly the piloting interventions only discussed large-scale education improvements programme with mixed results which could not be relied on. That means the authors argument is valid and needs to be taken into considerations and necessary measures taken to avoid more programme coming on board and delivering very little compared to other implementers or failing at all to meet the set goals.

Piloting so many programme at once and generating shortages has fewer educational effects. Gaps experienced were unrealistic expectations on the basis of how implementation of change will occur in a large scale of instructions, and many other factors which were not put consideration during the piloting of those programme (Gove, Poole and Piper, 2017). Confirmation of intercession impact on education in Liberia is in short supply at both broad and minor scales at all stages. Davidson and Hobbs, (2013) examined EGRA results and reading intervention, inadequate literature was observed to show how studies conducted leading low-performance reading. Both countries had similar characteristics and needed immediate interventions in literacy and numeracy educational programme though Liberia suffered a big blow due to Ebola attack in the country.

The government of Kenya together with USAID and other donor agencies came up with an agreement to intervene for the learning skills in literacy and numeracy educational programme situation in the Country after a report which was released after the piloting

study on EGRA and PRIMR assessment tools on reading skills and mathematics. The report was released by MOEST and the research triangle institute RTI international (RTI, 2014) which provided data on survey report from EdData 11, (2004). This was carried out by experts stationed in state and county government levels, donors and citizens to assess their education status in the country. The study found out that the stakeholders were engaged in data collection, analysis and utilization of results in M&E discoveries in L&N educational programme but some are not trained and others had no idea of what is monitoring and evaluation, meaning that there were no desirable results.

Monitoring and Evaluation of any project either government or non-governmental organization funded projects must be accountable and must yield good performance. So it is an essential tool in managing both government and non-governmental organizations developmental projects (Kamau and Mohammed, 2015). They asserts that a project continues to become more complex as it progresses and project beneficiaries demands their needs to be met. Although there is restricted details concerning monitoring and evaluation performance in education projects, Mukuria, Gakure and Kithae, (2013) on an assessment of elements influencing performance of primary schools main focusing the underlying issues leading to low performance. The study adapted a descriptive research design and questionnaire as a data collection tool which was used to get original information from the respondents. The details were examined and the findings were not encouraging due many schools having large numbers and little access to the teacher in the classroom set up. This is an outcome of free primary education introduced in the country hence compromising the behavior of pupils leading to low performance in KCPE results and literacy and numeracy skills. Support from education key stakeholders seems to be deemed necessary to enhance school administrations' programme in enhancing the skills in literacy and numeracy programme. This study concurred with (Loveth, Dan, Ejiofor and chukwudi, 2019). They profound that monitoring and evaluation has a positive effect on delivery of improved academic performance but they differed with study on monitoring and evaluation helping in building educational progamme, assess it in determining its achievements and its effectiveness (Disha 2017).

Similar results were found by Mbaki, Okoth and Matula. (2017) study argued that discipline cases have little impact on performance but cautioned on how parents are

involved in the learner's activities was discouraging. The study focused only on the overall performance results but did not specifically indicate if it is performance of literacy or numeracy or only the exams at different levels. There was no evidence if there was any involvement of stakeholder's and the process of implementing the projects in question, both information was reported back on how monitoring and evaluation was conveyed in tracking the progress of the programme. This study found out that there was minimal collaboration of all stakeholders' hence low performance of the learnt skills. In developing countries piloted projects fail after scaled up to national levels due to many factors. These factors include systems without data storage and management to provide information about the school performance (Lepine 2015).

Kenya has become a very conducive environment for any testing of development projects as found by Piper, Destefano, Kinyanjui, and Ong'ele (2018) examined whether TUSOME'S programme rolled out implemented the required objectives to enable government structures and officers to act swiftly in a new programme after the other programme had finished their piloting. Piper et al (2018) found out that the project clarified the expectation after the implementation and the subsequent results to be acquired at the national level for both languages Kiswahili and English as it was being communicated well at school level unlike before the intervention programme. Studies by McCormick, Clark and Raines (2015); Killian and Bastas (2015) proved that learning process involving learners actively increased the performance of results outcome.

This analysis in Kenya showed a positive developed functional, accountability, feedback mechanism in tracking the outcomes compared to the benchmark expectations. However this could led to proper utilization of results which encouraged greatly the stages of instructions supported in Kenya's level of education structures to have been really supported hence great improvement. Hilhosrt and Guijt, (2006) argued that there are limitations found in TUSOME project which were unsuccessful in exploiting the obtained classroom observation data to better instructional materials. The program external outcome displayed that programme effects of 0.6-1.0 standard deviations on English and Kiswahili studying end results.

TUSOME programme effected useful classroom observations results systems within government systems though the usage of these systems differed greatly across the country. Classroom visits were regular and never fall short of target rate of performance though in some situations teachers were provided with information which were not incoherence with their set target neither their relationship between teacher education quality and learners learning and achievement (Bourrke,, Ryan and Lloyd, 2016). This results differ greatly with other scholars about classroom observations and the outcome Hilhosrt and Guijt, (2006). The current study is going to investigate how implementing can be made consistence in government systems, supervision and timely feedback in literacy and numeracy educational programme.

In project management field over the years, the dimensions of project performance are considered and applied to measure project performance and stakeholder's satisfaction, resource management, capacity building, data collection and analysis in accomplishing project objectives. Importance of tracking project output levels are essential (Barclay and Osei-Bryson, 2010). An analysis carried out on inclusion of many categories on production and the progress of performance of literacy and numeracy are under way (WI and Jung, 2010). Performance of Literacy and Numeracy educational programme will be guarded using the conventional methods in terms of rate to complete project within stipulated time, completion of project within the finances and bearable standards. The study focused on team satisfaction basing the argument on a mixed method and performance qualifications of stakeholder's contentment (Toor and Ogunlana, 2010).
Additionally, basic education projects like literacy and numeracy in Kenya, main stakeholders are teachers, learners, parents, government and the funding agencies who are key in ensuring projects performance during the implementation period. Many studies have been carried out on access to, quality and outcomes of learning but very few have concentrated on participatory monitoring and evaluation process of involving the key stakeholders in the operation of teaching skills hence need for study.

Reading capability of learners in primary level and specifically on comprehensive problem solving is a predicament as stated by Cimmiyotti, (2013) on effect of arithmetic calculations in lower grades. The results found out that relationship linking reading and arithmetic's problem solving are missing since the concept of literacy was not well conceived making calculation of simple arithmetic not achieved. The study

analyzed the correlation between academic performance in reading and attainment performance of math's at the lowest stage. Data was collected from 95 students from grade 1, 3, 4 and 5 basing argument on three assessments on a great scope, eloquence and lexicon. Mathematics performance was conducted basing on summative assessment performed at different intervals in the year 2011-2012 academic year. The results proved that there was correlation that existed between reading and mathematics performance at every level. This was found at grade three and four which yields similar results that there was correlation that existed between the two subjects. Hughes, Powel and Stevens, (2016) argued that y the end of grade one learners are supposed to have to have understood the concept of literacy and numeracy well before proceeding to the next class but this is not the case in most instances.

In grade two no relationship between reading and mathematics performance was found since very little comprehension text are found in grade two and one. The study found gaps that were not addressed, among them the methodologies used in teaching the young learners and did not determine the directionality of the relationship of the two subjects thus led to the current study. The strength of reading is experienced in other grades like grade three, for, five whereby they have now developed an advanced learning skill than in lower skill (Cromley's, 2009). Still Vilenius-Tuohimaa, Aunola and Nurmia, (2008,) in their study they found that out practical reading capability could forecast a high of skillfulness at reading comprehension and mathematics issue solving but Yumbya and Githinji, (2019) differ with their findings in that, reading and calculation of arithmetic's wholly depends on learners ability to reading activities like sound, word, shape, fluency and color reading and not how one is really experienced. The study further explained how to control practical reading, the covariance connecting the word difficulty solving and reading comprehension was experienced. The explanation goes on to proofreader having substandard decoding skills struggles with reading the texts in a comprehension and usually they are never able to perform the tasks which requires reasoned thinking and think rationally in well planned manner. So in this case the study did not explain how the learner will be helped to get the concepts hence the need for this study which showed the skills needed in teaching the subjects so as the learners to acquire the skill.

Similarly, Piper, Ralaingitia, Akanch and King (2016) focused on making better procedures and ideas of mathematics results: confirmation from disarrayed and managed trials in Kenya. Their main aim was to better the teaching results through an intervention called PRIMR. They found out that numeracy program intervention in developing countries lacked support that help teachers in teaching and learning process, modelling and teachers coaching skills were inadequate in learning institutions. They cited an intervention program carried out by Research Triangle International officers (2014) undertaken in two countries namely Uganda and Kenya (EAQEL) East African Quality in Early Learning, to support educators to better standards of L&N guided methodologies in grades one up to three. The assessment showed that there was no effect neither in Uganda or Kenya upon the application of the intervention methodology since the results remained low. PRIMR program was implemented in four Counties both public and informal institutions in Nairobi County in year 2013. This program was built the Kenya Institute of Curriculum (KICD) which has many elements applicable to the basic primary outcomes but still there was low reading skills in literacy and numeracy. Gove et al. (2017) on improving education literacy outcomes in Kenya needs rigorous supervision and trainings in line with the new techniques in teaching skills

The findings of Piper, Ralaingitia, Akanch and King, (2016) found challenges experienced, inadequate supervision of Curriculum Support Officers, inadequate instructional support to teachers in the classrooms by government officials. This is confirmed by a study undertaken by Piper and Zuilkowski, (2015) who found that the participants of the program are the Curriculum Support Officers who have various roles and limited time to perform their duties effectively. Trainings of teachers during workshops took very few days specifically only seven days in a year meaning it was very short time to acquire enough knowledge teach literacy and numeracy skills hence low performance in delivering the content. Teacher training Colleges gives the initial training and teacher developments depended wholly on teacher attitude at the same time the knowledge and skills they acquire during their teacher education (Gregory and Robert, 2017). These teaching syllabus in these colleges are in short of methodology on Literacy and Numeracy skills hence need to investigating how capacity building on teachers is done and the influence it has on the learners' outcome.

Grimm, (2008) did a survey on early reading experts and developments in arithmetic's expertise and found out that the relationship in early skillfulness was different in arithmetic's as it was tested in wide-range. In trying to address these challenges data was collected to help in interpretation of mathematical concepts and a longitudinal approach was administered to third grade in reading comprehension and mathematical concepts whereby a positive significant relationship of change was observed. Data was collected from a very big Chicago public school with a number 46,373 grade three learners and were administered with the standardization measure from IOWAS test for basic skills. This was followed by formulating many models that were made to show the correlations between performances of the same learners from third to eighth grade. The study concludes that learners in third grade had different ways of understand and solving simple mathematics calculations. This findings concurred with the study by Rutherford-Becker and Vander wood, (2012) on the relationships linking reading and mathematics performance. The findings were that early studying skills are significant for victory in arithmetic's, and other related subjects. The current study focused on how literacy and numeracy influences the performance on educational programme. In this case literacy walks hand in hand with numeracy though a thorough investigation needs to be done on how mathematics concepts can be computed to enhance reading skills. Also perusing understanding as studied by the maze take part in a more powerful character in predicating relevant mathematics performance compared to spoken reading articulacy. The study did not explain more on methodologies used in teaching the subjects so as to yield better performance triggering the investigation of this study (Rutherford-Becker and Vander wood, 2012)**.**

Learning of mathematics has been an issue in schools (Shannon, (2014). He further continues to argue that literacy instruction in math's classes focused to address problems on methods of teaching mathematics in order to produce positive results. Secondary data was used to address the problem and 36 publications were used in the study. They further divided the study into categories groups, the relationship of reading and the reading performance to mathematic performance, the relationship of comprehension of reading and the comprehension of mathematics problem, vocabulary instruction in reading and mathematics and finally a specialized instruction in reading and mathematics. The findings produced a number of results like the problem of the

relationship of literacy and numeracy has been researched for so many years and the main problem being at the lower grade one to six.

The main finding proved some correlation between reading performance and mathematics performance but no mathematics to reading relationship. In the case of proficient reading performance there is a correlation which translates to mathematics proficient, but no mathematics proficient performance translated to reading skills and does not appear too directly correlate in reading skills. Though reading performance and mathematic performance happens to have a common correlation on instructional strategies of conducting thinking- aloud, providing direct instruction, modelling and using graphic organizers that may appear or have a positive impact on both literacy and mathematics learning hence good performance of the educational instructions.

Learning of languages in Kenya has been a concern for many years especially when the national exam results are released and an outcry that, either Kiswahili or English has been performed poorly concurring with an observation made by (Piper and Zuilkowski, 2015).

Literacy and numeracy education programme has very worrying results to the educators and community at large as stated in one title, assessing reading eloquence in Kenya, verbal or restrained assessment, found out that in the first years of implementation of these programme there was a slight improvement on reading outcomes but the participation of key stakeholders was absent hence poor performance of the skills (Piper and Zuilkowski, 2015). However extensive dissimilarities in education involvement have been noticed all over Kenya boundaries and Nairobi being one of them. This study was supported (Mugo, Kaburu, Limboro and Kimutai (2011). In their study they argued children can access school but what being is taught cannot be seen until the learners are tested and test scores gives the outcome of learning. They found out that most children could not read a lower class text fluently. They recommended that an M&E system should be practical and not theoretical manner so that supervision and accountability in the learning process can be made a reality. In their study they found out that most classes were left unattended due to absenteeism of teachers. Mugo and Oleche (2016) however concluded that lack of proper mechanism of supervision in education systems was much pronounced and need immediate action.

However research continues to show that literacy interventions are impactful on the reading ability of children but they have not been fully investigated on how they should be cubed to end the menace (Miller,et al 2014; Siddiqui, Gorard and See, 2016) . Literacy programme are implemented on a wide scale such as the Success for All in New Zealand and the United States have recorded impacts up to a meaningful information (Bowman, Kimberly, Chettleborough, Jeans, Rowlands, and Whitehead, 2015). Further, an impact evaluation of Reading Recovery programme among first graders in the United States established the effect of size results as confirmed(May, *Gay,* Sirinides, Goldsworthy, Armoj, Sam, Gillespiey & Tognatta,2013). A similar literacy programme implemented in public schools in South America found a positive effect of reading interventions on student achievement (Carnoy and Costa 2015). Nationwide interventions in Jordan and Egypt have recorded comparable results (Brombacher, Nordstrum, Cummiske, and Mulcahy (2014).Other African and Asian countries had moderate to large impacts of literacy interventions compared to Kenyan educational interventions.

The impact of the Literacy Boost programme implementing done in several countries including Mozambique, Pakistan, Ethiopia, Nepal and Malawi found to be moderate to large effect sizes of 0.27 to 1.21 by a study (Guajardo and Ochoa,2012).These results show that reading interventions have been effective in improving the reading skills of learners. However, there is a scarcity of factual proof on how improved reading ability translates to outcomes in the performance of languages as academic subjects (Gao, Mo, Shi, Wang, Kenny and Rozelle, 2018). Nairobi County is the head quarter of all intervention projects but little has been achieved on performance of literacy and numeracy educational programme in the County. For that reason this study establish the extent to which PM&E process and school environment influence the performance of learning skills, an appropriate approaches which will focus on the measures of programme performance(Fortune and White 2006). This will go beyond the classroom assessment, observation, stakeholder capacity building, data collection process and utilization of results. The study focuses on how data is collected, analyzed, managed and implementing change so as to make use of information gathered, well the projects are ongoing.

On literacy and numeracy educational project intervention study conducted by Linda (2013) on the use of intercessions on encouraging perusal growth amongst wrestling students consisted two studies containing different intercessions. The main aim of the intercession was to analyze both quantitative and qualitative feature of elucidating intercessions methods encouraging pupils reading growth. One study used computer-based method while the other applied both methods for example use of computer-based method and training programs. One programme focused on phonology while the other focused on reading comprehension.

The study targeted 25 pupils and 18 teachers, the results interviewed and showed a positive and successful reading ability of learners and motivation to both learners and teachers upon the completion of the intervention programme. In conclusion educational technology-interference in reading instructions and stern substructures combined with the individual participation with positive influence on the favorable interventions hence good performance of the skills acquired. Performance of mathematics in most schools is low according to the findings on educators interconnected elements influencing students' performance of arithmetic's at Kenya certificate of primary education in public schools in Likoni Sub County as observed by (Murungi, 2016). The educators readiness was absent in the conveyance of mathematics information, teacher methodologies and in-service trainings were inadequate and lack of motivation was experienced by teachers as posited by (Piper and Mungenda 2014). Njaggah, (2003) had similar results on influence of performance in arithmetic's among public secondary school students in Nairobi County which established the extent to which attitude of students and Mathematics teachers motivate the performance of the subject. The findings indicated that teachers do not motivate the learners since teachers are never also motivated. Preparation of learning was inadequate and not in line with the engagement plan of stakeholder plan. Both studies lacked the engagement process which requires good planning, motivation of both learners and teachers hence low outcomes. Proper engagement of stakeholders should take place in an organization such as learning institutions whereby proper channels of communication, assessments, resources and reporting should be given a priority so as to gain more benefits. To bridge these gaps the current study sought to establish if stakeholder engagement influences the performance of literacy and numeracy educational programme.

A study by Piper, Jepkemei and Kibukho (2015) on poverty-stricken areas (PRIMR) surpassing early reading skillfulness to learners from humble background in Kenya are endangered of having difficulties during schooling results complications, mostly in writing and reading. Many learning areas connect substandard reading end results with poor planning, assessing wrongly, and involving people who have no interest on literacy and numeracy programme hence poor performance both in primary and secondary schools. This poor attitude leads to very low inputs in the learning institutions which greatly affects the society economically, hence leading to poverty, when merged together exceedingly limits the educational opportunities for learners who have a humble background. In this case PRIMR starters devised a way of supporting studying boast in grade one, two students in the piloting schools in the country (RTI, 2015). The study used randomized controlled trail bespeak on literacy skills and educational methods. To align this they tried to establish the results of intercessions whereby it employed fundamental ability to read and write in choosing carefully rough calculation of temporary consequences in learning to gain good grades in grade one and two learners from humble background as also found by (Crouch and DeStefano 2017) . The study found out that PRIMR has efficiency in for pupils coming in poverty stricken families whereby ability to read and write intervention will be applied in improving the performance of literacy. So in this case all strategies applied were advocated since they helped in improving the performance.

Teaching methods vary according to various methodologies as put by (Marima, and Runo 2016). Instructional restrictions in educating of Readers in Early years grades in Nairobi County focused on identifying proceeds towards teaching reading in early years of learning and adapted the descriptive research design using the survey and observation technique which was carried out in 20 schools. Methodology used in the study was descriptive survey design, an in-depth interview, filling of questionnaires, retrieving of information from the tablet which was the simplest and easiest gadget to use in collecting data. This data was transmitted immediately after classroom observation to M&E site and all the shareholders participating in the programme.

The findings were, lack of resources which was the greatest challenge, poor methodology and techniques of teaching, lack of systematic techniques of reading and children not going through nursery school preparation. The study lacked

comprehensive information of how it collected data, analyzed it and later how it came into conclusions of the findings. There was a gap in explaining how literacy should be taught since the content in the syllabus does not suggest ways of how to teach it (Gathumbi, 2005). Marima (2014) support the findings that teaching literacy needs new methodology of teaching sounds and letter recombination. There is a gap which needs to be investigating by current study on how training of teachers can be improved on teaching methodology of literacy and numeracy specifically reading skills and arithmetic calculations in grade one, two and three respectively. The current study sought to examine the extent to which project intervention help in cubing the menace of poor reading and arithmetic calculations in public primary schools hence to avoid poor performance in national exams as reported by (KNEC, 2012).

2.3 Participatory Monitoring and Evaluation Process

Participatory M&E process is concerned on hardening primary shareholders' participation as energetic involvement in intercessions leading in tracing and inspecting advancements together and give the outcomes and decide on the way forward so that they can improve project performance (Kusek and Rist, 2004). This proposition play a part in ways of pre-planning and decisiveness and worked upon ways of accountability, with efficient way of channeling information and feedback loops in the programs and agencies. Participatory M&E process is a procedure used in involving stakeholders at levels and engaging them in M&E specific project, strategy, jurisdictions and procedures on end results of M&E pursuits taking part in recognition remedial steps (Guijt, 2009; Merlinna 2014).

The stakeholders who should decide on how progress should be measured must follow certain points of references in deciding the utilization of results, use of corrective textbooks and other necessities in education for better performance to be experienced (Gaventa and Guijt, 1998; Piper and Mugenda, 2014). In this case the concern should go beyond tracking progress by making use of data collected and analyzing it, while giving feedback to the beneficiaries of the projects and making proper utilization of the results gathered. PM&E process attempts an interior study procedures that authorizes individuals to throwback over encounters, inspect present-day real life, reverts objectives and expound later strategies by accepting separate shareholders' ideas and arranging inherent divisive opinions and profits (Estrella *et al* 2000). In these processes

the stakeholders participate in developing to measures and gauging, in accumulating and analyzing the data, taking corrective measures to modify pursuits learning and implementation process. They are also supposed to develop ordinary comprehension of PM&E concepts and goals same time identification of restricted lexicon and expressions identical practical word, use of methods and tools that encourage participation and the reason why it is important to their lives and the project (Merlinna, 2014).

A study by Sokol (2015) focused on executing of a participatory propositions to M&E; publications reviewed and a case study appealing to revealed that wide involvement of shareholders enhanced standard and acceptable M&E but did not explain much on the level of involvement and how they are engaged in data collection and analysis thus the inquiry is seeking to investing this aspect. Lucas, McEwan, Ngware, & Oketch, (2014) posited that improving primary school quality across country is quite involving and so all the stakeholders must have a hand on it.

A study carried out by Dubcek and Gove (2014) on the early grade reading assessment (EGRA) and its hypothetical footing, determination on demerits which used to inform education systems and programme on how to scurf fundamentals of literacy skills. For students beginning to reading at lower level grade focused only on very few items instead of showing how these projects are going to be monitored and by whom, when and where. The findings showed that the increasing volume of particulars to suffuse institutions is condemnatory to improve teaching students lacking fundamentals skills (UNESCO, 2014; Wagner, 2011). Study lacked proper steps of participatory process which is involved in learning so as to get the right results, therefore it is in this line that the study investigated the steps of PM&E process and observed that the concerned entities did not follow the right procedures in teaching methodology and lack of motivation both to learners and teachers was very much pronounced to the extent that teachers absented themselves from schools to do their own things which could give them an extra income.

Low numeracy skills and how they are used in daily basis correlate as profound (Redder 2017). Frequency of numeracy usage practices appears applausive from a specific context of economic constraints thus affecting adults who were not able to get the right

concept at lower grades hence more problems at advanced stage when one is a grown up (Green 2017).Studies on literacy and numeracy educational programme have been carried out among them Ouko (2015) on how to demonstrate grade one learners educational attainment in literacy and numeracy. The effects of nursery school educational involvement, and the effects on Literacy and Numeracy attainment which was conducted in Gucha District. The study targeted public and private primary schools in the District. Methodology applied was Purposive and stratified random sampling techniques consisting 154 students and 8 educators. Descriptive and inferential techniques methods was used to analyze data. Statistical Package for Social Sciences (SPSS) was made use of in data analysis. Analysis of Variance (ANOVA) methodology tested null hypotheses at 0.05 level of significance. Results disclosed that students performed well in arithmetic's in comparison to reading this is so since comprehension is more connected to mathematics reasoning and word problem solving (Bjorn, Aunola and Nurmi, 2016). Nursery school studying on occurrences of educators on self-reliance, kind of school they went affected the student's attainment in Literacy and Numeracy. The study emphasized critical character in taking part in nursery school involvement in upgrading educational attainment. Major commendation, were surpass pupils‟ improvement on L&N, parents and head teachers must make sure that learners qualify nursery school, have adequate school preparedness to grade one curriculum. More emphasis on government to formulate policies and curriculum to be made mandatory. This study emphasized on the entry of grade one but did not explain how they are taught neither give the process of learning while in school. The gap widens on how each participant was involved in the participation process of learning. The sought to establish the extent to which preparedness of pre-school learners influence the performance of grade one and in general the performance of literacy and numeracy educational programme.

A study by Runo, Kabutha and Kamau (2013) focused on teachers, methodology and resources exploring chances and predicaments in teaching to read in primary schools in Kenya. Discrepancies aimed at ascertaining teacher's capacity to teach reading, utilization of materials and challenges experienced while teaching reading by teachers are many but TUSOME programme slightly solved this problem by training teachers on how to deliver quality instructions in literacy and numeracy (Dubeck, Jukes, Brooker, Drake and Inyega 2015). A mixed method was used and a purposive sampling

of 8 urban schools in Nairobi and Nyeri, were sampled. They found that despite what test score you get, you proceed to the next grade. They resulted in final decision that several teachers neither taught reading nor knew methods to use in teaching reading.

A third of the teachers (31.1%) used phonetics, while the other group favored the whole-word method. This automatically shows that lower grade teachers are ill-equipped with methods of teaching reading, while remediation practice is hardly a focus. It is necessary to introduce reading as a subject at the teacher training level and designate reading time through the primary education course. This shows that there is a gap in teaching methodology in delivering the content to the learner's hence low performance on literacy and numeracy experts. On this basis current study posits to establish the extent to which teacher capacity who are the stakeholders can fully be addressed so as to help these learners.

An empirical study by Kathomi (2015) sought to demonstrate a relation linking parental participation in literacy evolution of preschool. The written work was reviewed and discussed on the understanding of parental predication according to the research, the position at institution parent's participation, parental inclusiveness early years of schooling and parent's ability to read and write and growth concentrated on diverse reading programme in separate countries. The investigation used a Correlational Research Study Design to narrate in quantitative expressions at a level to which parents participation in ability to read and write growth are interconnected. Stratified random sampling was used to prevail a stratified random sample from public and private schools in Langata Division.

The study demonstrated positive correlation linking parent's participation and literacy growth of pre-unit learners. This correlation is intensified by schools facilitating parental involvement by use of unfold parent-educator connections and putting in order institutions meetings bring together teacher and the parent together. In this regard of the outcomes, the study advices a policy to be formulated on parental involvement in the school program private and public. The study tried to bridge gap and only used research design, and in this case both descriptive survey research design and correlational research design will be used to bridge this gap. The current study sought to investigate how parental involvement influence learning of pupils in lower grades.

An annual teaching evaluation report dubbed "Are our children learning?' revealed that engagement of stakeholders like teachers in school attendance in Nairobi County is 58% while the other Counties is above 85% hence most of the time learners are not attended to (Mugo, Kaburu and Limboro, 2016). Further, the study demonstrated that lack of reliable data indicating the number of children out of school, those who have repeated, those who are not able to read and do simple mathematical calculations are scanty and cannot be relied on hence need for this study to bridge this gap. Similarly a study by Matonda *et al* , (2013) focused on quality, equity, access to and impacts thus performance outcome is left out which might help in gauging up the learning process. The study seek to establish whether quality assurance used in Kenyan education setup is really a way of PM&E process or a practice.

The findings of Mugo, Kaburu and Limboro, (2016) indicate that it was indeed that if it is quality assurance practiced or PM&E process though the officers concerned needed to go through a peculiar instructions on PM&E. Setting up of institutionalized framework to guide its operations is required so as to have formal trainings into practice and hence the teachers who are promoted directly from the classroom level and expected to generate inclusive reports without prior knowledge on the same. So this gap affected the usability of the assessment reports especially when transmitting data to the concerned offices. To some extent this study but failed to address the issues of engaging all the stakeholders, how capacity building was addressed, and how each stakeholder was involved in implementing the changes in education so as to yield good performance. This needs to be addressed comprehensively in the current study which is under investigation and the influence it has on the performance of literacy and numeracy learning skills.

The role of PM&E programme including government corporations development authority in Ewaso Ngiro as established by (Muriungi, 2015). He says there is an increasing demand for organization to boost the results of the project, which has led to several studies, although the take-up is small. The study method used was descriptive research and the target group was 149, using 113 respondents with a non-probability sampling. Data was collected using a questionnaire and analyzed using SPSS. The results are inadequate M&E skills, lack of resources, finances, staff shortages, weak infrastructure and lack of knowledge which hindered PM&E process, particularly in

line with the participatory method. Lack of accountability and involvement of stakeholders in the process. Guijt and Hilhorst, (2006) in their work state that each person or group of individual projects should participate entirely in all program activities, or they would lose trust and project ownership.

2.4 Stakeholder Engagement and Performance of Literacy and Numeracy Educational Programme

Identification of stakeholders is precondition for and participatory planning procedures in PM&E process which have procedures through which partners at different levels take part in discussing or evaluating a specific aspect in programme, follow-up procedures to review and assess monitoring and assessment. According to Tzanakis (2013) the PM&E process focuses on the diverse participation and involvement of important stakeholders at different levels. In a study investigated by Ngatia (2016) on institutional determinants of PM&E process system executing amongst members of projects in Kibera slums Kenya, found out that resources allocation, institutional accountability, management support, staff competency have a great influence on PM&E process system in executing for any project to succeed. In support also in engagement of stakeholders helps in solving project problems and can also help in getting more funding or assets of the projects (Rodriguez-Melo and Mansouri, 2011; and Greenwood, 2007).

Participation and engagement of TUSOME and EGMA projects are the ones currently undertaking the process of literacy and arithmetic intervention skills in schools and should try to see to it that they have involved stakeholders in acquisition of knowledge and implementation of the same so as to cub the already existing menace on low levels of performance on the projects (Piper and Mugenda, 2012; Piper and Spratt, 2013; Brombacher Mulichhahny, Downs, Nordistrun, Scumuskey and Davidson 2014). By doing this the stakeholders will solve a problem of who should have the skills required so as to have effective communication, be innovative, proactive, and prioritization of activities in the projects. The involvement of the stakeholders will help determine the stakeholders concern and integrate them in designing and collaborating them in the project development and communicating effectively among themselves (EL-Gohary, Osman and ELDiraby 2006. The engagement procedure might be in another place at separate levels according to the suitability project. The current study sought to examine

the extent to which engagement of stakeholders influence the performance of literacy and numeracy educational programme.

Parental involvement in children learning process is very vital and makes the child have courage in meeting the new challenges in life when they are coming out of home in the first time as was posited by Kathuku (2013) on the elements affecting parents' participation in youngster's educational attainment in early years schooling in Kathonzweni. Majority of the parents do not fully take part in early childhood education as shown by the results generated on most parents are below poverty level, literacy level, marital status and Cultural beliefs were significant in the way they participate in early years of schooling. The study failed in explaining the level of involvement, even if most of them are below the poverty line and more so explain how the cultures affects the learning of literacy and numeracy hence the need for the current study.

A gap in this study is that lack of proper participation of all the participants yield poor results and projects failure in implementation. Involvement of stakeholders needs to go past usage or gift of free work and money commitments and reaches out to approach choices. Individuals need to appreciate fundamental flexibilities in order to have the capacity to openly convey what needs be and to build up their maximum capacity in zones of their own decision. Long (2009) noted that acknowledgment and support for more prominent association of nearby individuals points of view, learning needs and aptitudes displays a contrasting option to benefactor driven and pariah drove development. The findings were that failure to proper engagement of stakeholder's leads to failure of projects performance. PM&E process does not only mean using participative skillfulness within a transmission of M&E set up but also critically analysis the starters ideas and takes up the procedure, at the same time the beneficiaries satisfaction (Guijit, 2006).

At the central part of PM&E process there are 4 big propositions. Participation-methods which Wide up the blueprint of the procedure, to combine most rightly pretentious, consenting to analyze data collectively; the incorporating Participatory M&E process , requiring discussions, agreeing on methods of gathering data, the tools used in gathering data and which methods were used in analyzing data. Criteria applied to share information and action taken by different stakeholders hence leading to

teaching becoming basis of subsequent improving and taking correct action in performance of projects which are ongoing. Finally the fourth step is the number of stakeholders, their roles, skillfulness of shareholders, their outside surrounding, and other elements changing as time goes on, to lead to suppleness of the team leaders which is very essential in project performance.

Nationally and global education law makers have increased in focusing standards of what children ought to undertake while in school and having in mind skills which are helpful after leaving school (Wanger, 2012). The insistence are revealed on recently developed suitable goals adapted in 2015, the fourth goal that safeguards inclusivity and balancing standards of education promoting lifelong teaching targeting the highest number by 2030 ensuring that all the youth and a substantial adult attain Literacy and Numeracy education skills (United Nations, 2015; Piper, Zuilkowski, Kwayumba and Oyango 2018). These assessment tools used in learning institutions are viewed to be instrumental in education transformation and boosting positive productivity while maintaining high performance in literacy and numeracy hence helping every individual to acquire self-confidence and reliance (Hanusheck and Kimbo, 2000).

Stakeholder or multi-shareholder analysis is a way forward of approaching course of action in obtaining comprehensive system through identifying the key players or shareholders in the organization structures in evaluating irrespective of their likes in the organizations (Grimble and Chan, 1995). These Stakeholders incorporate the particular categories high-flown or those influenced by the strategies, resolutions, measures methodology undertaken. Including key stakeholders in developing countries is critical and prosperous for PM&E structures, combining distinct views from all citizens and incorporating them into the project leads to ownership and possession. A stakeholder investigation is another aspect of helping in identifying and engaging stakeholders in any project activities (Rietbergen- and Narayan, 1998). Stakeholder's identification and their interests, their way of taking part and authority in the involvement strategy which is a mandate for all of them to be part of the progress. Stakeholder investigation makes certain stakeholders not be sidelined during PM&E process while also in sharing duties in PM&E process which will ensure success of the projects.

A study by Njuki *et al*, (2006) focused on PM&E process at organization alignment, separate stakeholders are incorporated in the research and evolution of projects inclusive of bodies who also participant in explaining project intentions and pursuit, in making decision of what to be monitored and evaluated. They take part in growth of indicators in choosing carefully the attainment of objectives and the affluent of completion of activities by key stakeholders hence project success. The findings were that PM&E process is integral in all institutions whereby if there is lack of proper learning will take place therefore low performance in any project being undertaken.

Also if key stakeholders participant in the project they require a lot of negations, prioritization of things to be done first, and by who and at what level should they be involved. For data collection process they found out that there should be specific stakeholders to collect data so that key issues to be put under consideration for making PM&E process well organized and successful. They were limited to the following while undertaking the process for example they were supposed to promote issues of culture reflections and learning, ascending of PM&E process and assessing the effects of procures, integrating gender and equity into PM&E process, negotiating and sharing roles and standardization and comparability. They also advocated ultimatum experiences for formulating indicators, objectives and execution of Participatory M&E structures. So the setting up of the systems should be very accurate so as to enhance the technical process of developing results, collecting data, analyzing and interpreting it for corrective measures and making decisions. There was another challenge of the process being very expensive in terms of time, human capital, resources and sustaining the Monitoring and Evaluation facilitation especially at the initial stages.

A study by Antill, (2013) focused on the accomplishment of early years on the ability to read and write and growth in educational favorable outcome in the academic formulation inferences instructive principal's instructors and the implications of not involving the key participants in learning. The study findings were, although early childhood education programme have improved significantly early learning and preparedness of learner's for formal education, doesn't suit pupils; however learners lack connectivity of home and school environment and the adoption of new things in a new environment of schools and introduction of literacy and numeracy skills which are

mandatory for starters.Leaders governing education and teachers should prepare well and face confrontations of making sure all learners, irrespective of educational capability and literacy growth before going to school, acquire stipulated standards in attainment of accepted grades. The execution of literacy intercessions should collaborate with all the education directorate with crucial instructions to educators on greatest application and execution of the syllabus, with the assistant of bringing up encouraging relationship linking the school and home, to most prepare for the literacy requirements of the learner (Fullan, and Quinn, 2015).

An investigation by Randall, (2011) focused on the effects of submissions of student's written works to understanding and behavior of both the classroom teachers and their learners. Application of Title Recognition Test (TRT) and Reading Attitude Survey (RAS), 3 hypotheses were correctly tested but they did not show any relationship towards teaching attitude and learners reading habit or performance of the learnt skill. A gap still exists since the study did not provide the way forward on how to handle this menace of teaching reading skills. So there is no engagement of the teachers on the learning skill of the children hence they need to engage themselves in learning for better performance hence need for the current study.

Participatroy monitoring and evalaution process encourages the participation of all the stakeholders in a project for better results as it was found by (Otieno, Munyua and Olubandwa, 2016). The analysis of impact of PM&E on stakeholder analysis and project expectations in the Local Authority Implementation Action Planning (LASDAP) in Bondo Sub-County, Kenya,. The study adopted descriptive statistics whereby analysis of data was conducted using frequencies, means, percentages and standard deviations to control the alliances and tendecys in the relations of variables. Findings of the study revealed that PM&E process changed the LASDAP procedure particularly stakeholder relationships and the output of the project inrespective of quality. Further, PM&E process was found to ehance good administation in terms of increased accountability and transparency and timely responsiveness to the citizens' needs. The study, however, would have adopted correlational examination to proof the connection on strength of variables, thus current study.

2.5 Stakeholder Capacity Building on Performance of literacy and numeracy educational programme

This process of stakeholder capacity building aims to develop a common understanding of the conception of ideas and propositions of involvement, M&E indicators, and application of diversify instruments and methodologies which include official study groups, seminars and conferences on training different levels of evaluation. It engages different techniques that urge involvement of single persons in the group. Building the capacity requires several methodologies for example maturity of proper thinking and involvement in PM&E process concepts and goals that will influence the performance of literacy and numeracy projects (Estrella *et al* 2000). The team leaders should be able to identify the restricted words that are equal to practical expressions for M&E, involvement and measures in facilitation projects success.

Several definitions of training have been defined differently by different scholars who have different views on what training is all about and what it entails. Nadeem and Sujuit, (2012) defined training as the process of transmitting and receiving information. Omo (2011) sees training as any process anxious with the extension and devolution of aptitudes, skills and abilities of employees in performing certain specific job skills with an aim of getting the desired results. Training is mainly met to improve the existing skills and add more knowledge and help in becoming different in attitude and behavior of the people attending trainings and in this case the teachers are the main culprits of the training being introduced by the funding organization.

The use of methodologies and apparatus that coax involvement of single persons in groups, like visuals, game-playing, class observations by the teachers and curriculum support officers, learners and the project implementers from the programs in question, planning and gathering information, analyzing it and managing to influence the performance of projects. Conversations on PM&E process is significant to existence of the people involved in the project is very vital because it changes the livelihoods through learning process (Njuki et al 2016). Another study by Stephanie and Sabrina, (2014) on stakeholder investigations and arrangements in projects on related outlooks to stakeholder relationships ontologically focused on why projects fail and the findings were unfitting communal interplay linking projects stakeholder and the project implementer's thus poor performance of the projects. The study focused only single

case which did generalization of the results and on a very minor section. This study will involve several projects and aims to collect enough data to make proper judgment about the projects under study.

Many reports concerning education in Kenya has brought lime light on what is to be done in literacy and numeracy learning skills which are a menace in the Country. This reports have helped in getting the baseline , mid-line and end-line information which has really given green light on how to handle the issue and one of them was given by Steering Group (2016) in Mombasa county on building capacity to address literacy challenges and enhance democratic engagement in västernorrland and Mombasa county. They encountered many myriads while undertaking the struggle to write report, from secondary literature on government and organization reports, empirical studies, and web articles on literacy and numeracy in Kenya .In spite of significant gains in more extensive opportunities to primary schooling, existing facts in literacy and numeracy outcomes in Kenya remains insufficiently ingredients. The findings in the report were, little has been done in relation to literacy and numeracy outcomes in Kenya and capacity building to inform better literacy outcomes thus the research gap necessitated the investigation on the influence of stakeholder capacity building on performance of literacy and numeracy skills in Nairobi Country.

Similar information was also given by UNESCO (2012) that although progress has been made still low performance is found in recent cases, however entry to teaching, how to read and write the output is at the bottom in most countries in sub-Saharan Africa. Cvelich and Gove 2010; Uwezo (2013) observed that many countries in sub-Saharan Africa has a big number of learners who do not attain useful information of literacy for classes 1-3. Achieving early-grade literacy is consequently the global policy items, as ascertained by several meetings to give initiatives of the way forward. The World Literacy Summit guided by Oxford declaration (World Literacy Foundation, 2015), requested for quintet fronts lines that needed strong evidence on the bases of why universal literacy is paramount to oneself, country's success strategies of practices that have great effect to the economy of the Country.

Stakeholder capacity building is another area which the research gap remains unknown and especially in offering trainings for monitoring and evaluation to officers (Amwayi,

2016; Makori, 2015). It is important to have trainings, regular reviews of what has been learnt so that there could be better results. Implementation and training of stakeholders in any programme is key since it is the only way of being able to select project indicators, information from baseline, mid-line and end line information all put together. It seems that if this area was well addressed a gap could not be experienced in these literacy and numeracy educational programme. Despite the ongoing literacy and numeracy intervention programme being implemented in Nairobi County, project implementers still report poor performance of projects and more so on the learning skill of reading and arithmetic in mathematics (Piper, Mugenda, Stephanie and Dubcek, 2014). Further, the study demonstrated that lack of reliable data indicating the number of children out of school, those who have repeated, those who are not able to read and do simple mathematical calculations are scanty and cannot be relied on hence need for this study to bridge this gap. Similarly a study by Matonda, Odieki, Morara, and Nyabienge, (2013) focused on quality, equity, access to and impacts thus performance outcome is left out which might help in gauging up the learning process.

An empirical study by Dunston (2018) surveyed relations linking reading and improved methods of carrying out language subjects being the main question, can reading be used as a predictor of literacy outcomes? This can be directed at enhancing the quality of education, interventions in literacy and more concentration on reading as a component of literacy at the expense of listening, speaking and writing which are other measures of literacy. The findings showed that reading cannot be taught in isolation from the other three components of literacy and that reading is a good proxy for measurement of literacy as also was profound by Juke, Turner, Dubeck, Halliday, Inyenga, Wolf and Brooker, (2017) So the paper recommends that further empirical research to establish the proportionate contribution of each of the four components of literacy on improved performance in language subject. This is supported by studies on Reading in prolonged time in classroom show that very low outcomes can be achieved in fluency and accuracy facts (Piper, King and Mugenda, 2016). The study did not indicate the methodology used or how the stakeholders are involved in the learning process hence need for current study on stakeholder capacity building to enhance strategies on how to deliver the content well in the classroom situations. (Steering Group, 2016) focused on building capacity to address literacy challenges and enhance democratic engagement in Vasternorrland and Mombasa County.

A study by Peter (2018) research on the opinions of teachers on primary school performance evaluations in Benue State, Nigeria, examined opinions on primary school teachers, evaluation on primary institutions performance A Quantitative analysis was used in the study. 200 questionnaires were administered to teachers from the selected primary schools using random sampling, but only 161 questionnaires were valid. The data collected was analyzed by use of IBM SPSS version 21.0 and descriptive statistics to measure teachers' opinions on performance in primary schools using four variable. Methodology used was inadequate and so did not give a comprehensive report on how performance was gained or not.

According to Njuki *et al,* (2006) in their study on building capacity for interpreting PM&E process, ideas and facts of participation of stakeholders in monitoring, evaluating and developing indicators for any project they found out that, there are several tools and methods which needs to be included. Through workshops and seminars capacity building can really be enhanced and learning of new skills can help improve the methods used in implementing the projects. In this workshops several methods are employed that encourage involvement of key stakeholders in every category formed. Capacity development involves several features like developing a common understanding of concepts and goals or objectives set per that programme.

Helps in identifying appropriate language to be used, methods and tools to be used and the importance of the stakeholders undertaking the trainings, the benefits they will acquire after the workshop both individually and as a group. This encourages every individual to participate in the workshops. This argument was supported by report on Mombasa County Steering Group, 2016 on building capacity to address literacy challenges and enhance democratic engagement in Vasternrrland and Mombasa County. The reports indicated that insufficient capacity to address the rapid changes of literacy proficiency of children and youth in the society was a menace. Lack of proper knowledge for handling the subject, correct methodologies to increase literacy skills, lack of proper collaboration and poor cooperation amongst stakeholders while undertaking the program was experienced. There is lack of motivation for teachers and learners at all levels hence poor results by the end of it all. Capacity building sessions were not well addressed and there was lack of proper written information and also participation of all the stakeholders was missing in action.

Similarly, in a study of the influence of PM&E on production of public secondary schools in Mutomo Sub-County of Kenya, stakeholders did not take part in the management of the schools' projects since most of them had little knowledge on PM&E as asserted by (Kathongo and Kamau, 2018). The study disclosed that most of the respondents were in agreement that there was need for training in PM&E so that organizational and institutional objectives are well achieved. In addition, the study suggested that meetings, seminars and equally open forums, meetings and seminars were key in ensuring that stakeholders get an atmosphere to express their views freely which is lacking in education systems.

2.6 Data Collection and Performance of Literacy and numeracy educational programme

Positioning data information, gathering and sharing of already analyzed data is key and vital to every person involved in the project. Information of data collected is divided simultaneously to stakeholders taking lead in teaching and changing activities methods keeping documents of their best practices. Involving all stakeholders in data collection is just half of the PM&E cycle which is very critical in sharing the information required in the programme as argued by (Hagen, Duvendack, Mallet, Slater, Carpenter & Tromme, 2012).Collection of data is very critical in tracking and assessment which includes all participants at different levels in obtaining the results and seeing the progress of the programme interventions. Looking at it as their own ideas and not an imposed thing into their lives. In participatory Monitoring and evaluation process, PRA Tools are used for collecting data from the field level to coding stages.

Data collection process helps in improving effort that provide accurate information which helps formulating correct decisions all through plan- do- check- act- cycle. Data collection authorizes a group to form and experiment work shouldering procedures in developing details guiding advancement of quality characteristics to product or service. In a classroom situation teachers normally draw upon a range of knowledge through many sources like class observation, formal data on assessment results and informal data on structured observation as argued by (Schildkamp and Kippers, 2016) .

In developing Countries an assessment tool called EGRA was widely used to measure Literacy and numeracy skills, which was first developed in United States of America

and later used in these developing countries, which lack most necessities to acquire these learning skills. The tool was administered in a few piloted areas whereby the process yield fruits hence a conception of other programme among them PRIMR, PRIEDE and which later became EGMA dealing with math. EGRA is an instrument used to sample based national systems and directed to survey intermissions in reading abilities amongst learners and to alert educationist in the ministry counterpart agencies as regards to systems requirements to improve educator professionalism growth and mainstreaming programme. EGRA has been used to addressing a big area of evaluation on foregoing projects which included snapshots of performance built on an incidental representative effect appraisal on classroom assessment purposes (Gove and Waterberg, 2011).

Assessment of any performance should be in line with the required policies and regulations on the assessment on learner's fundamentals ability to read skills, stakeholder law- makers, educationist and co-workers in organization addressed the low levels of literacy acquisition (Wagner, Mullis, Martin, Kanyee, Gove, and Dond, 2012).The debate on the assessment of learning procedures is very important in developing countries as argued in this study but the study did not fully exhaust which are the right ways of teaching literacy and numeracy but instead it only assessed the levels of timely acquisition hence low performance of the projects were experienced. There were measurement instruments used for example early grade reading assessment (EGRA), early grade mathematics assessment (EGMA) and SSME which helped for full information of how data was collected forming the basis of this study.

Educational data collection helped in making decisions (EdData 11) main task is to build on the measurement instrument developed and piloted under other EdData 11 in order to collect, coordinate data, analyze and report on learning outcomes with specific attention to early grade numeracy and conditions of learning as indicated by school management effectiveness measures. After the assessment was administered the report was not encouraging since the average analysis showed out that in urban- metropolitan towns reading fluency spanned 20% of learners getting zero score and in rural areas 91% in grade 1-2. Reading comprehension was found to be very weak and math scores were very weak especially on subtraction questions which took a pupil in grade three

15 seconds to solve a single problem. These are results from ten countries which study was done and Kenya was among them. (RTI & MoEST, 2014)

Proitz, Mausethagen and Skedsmo, (2017) posit that data used by school authorities on assessment of schools, classroom observations, and teacher and learner background is crucial to critically assess and discuss the possible consequences of the progress of education and particularly literacy and numeracy educational skills. Most countries analysis revealed that there was weak attention by teachers to the foundations of reading, little time to practice reading skill, ineffective and poorly distributed reading materials, weak pupil's feedback mechanisms, poor support for reading at home, very weak emphasis on the teaching of reading skills in teacher training program (RTI & MoEST, 2014).

In Kenya it is no exceptional because the report also gave similar reports from other countries. Engagement of key stakeholders was missing in the study since it was only the senior officers from the ministry of education were involved leaving out the other stakeholders like teacher who are the main implementers of the project. When the Kenyan government announced that it would launch a national reading programme, it drew the attention of UASID who were the main financiers but later joined by DFID in the initiatives as co financiers of (TUSOME Program). While this USAID AND DFID were working together, regional NGO Uwezo was stirring up public interest in early grade reading through its annual household reading assessment and its radio programs on the results (RTI,2014) hence many people coming on board to give appropriate information on education sector.

A survey was done in some countries like Kenya and Zimbabwe on how data information was collected from different schools and was made useful for future use. Collection of this data was through survey, whereby SAMEA gave good feedback on how the programme progressed. Capacity building and scheming of execution studying assessment was from the MOEST as depicted by (Godia, 2012). Data collecting if not done well leads to poor performance of the projects and wrong decisions made. The need to test, measure and monitor process learning for all EFA goals cannot be underrated. It helps to guide the formulation of evidence –based policies and targeted intervention. The Kenya EFA (education for all) reports has accepted the progress made

in EFA interventions since 2000, but there were impediments identified while implementing the process which proposed the involvement of all stakeholders in the education programme (Nelson,2014 and Lyn and John, 2014). The study does not concur that all stakeholders were collaborated in making decisions, formulation of curriculum and other major concerns related to education on literacy and numeracy programme (Godia, 2012).

Earlier on teachers have been teaching on self-centered methodology but after the intervention programme it turned out that for any progress to be made teachers have a great influence on the performance of the learners hence improvement on the intervention programme. Learning instructional materials used by teachers largely influence the performance of leaners when helping to collect data on materials which are appropriate in leaners achievement (Mackatiani, 2017; Kang'ahi, Indoshi, Okwash, and Osodo, 2012). As depicted by Mackatian 2017, Kang'ahi et al (2012) exam results only does not measure the holistic achievement of the learners hence the current study on literacy and numeracy learning skill.

A study by Mulongo (2014) on effect of teaching learning methodology on learner's involvement confirmed the persistency of connecting explanatory and inquisitive teaching strategies. This should be embraced by both educators and learners in classroom situation. The latter compared to teachers that had not followed the new methods (54.5% against 25%) were low. For those learners who were fully involved in the lesson and instructed by high level educators were at 90.1% and rated at 75%. Students instructed by high level takers of educators could recall the session information in comparison to those by low uptake educators. Therefore students instructed by high uptake instructors had higher ranking proceeds in comparison to those taken by low uptake educators. Overall, 82.7% students instructed by high uptake educators in comparison to 68.8% have confident in themselves

An empirical study by Kiptum, Mandela, & Murira (2018) assessed how work environment influences teachers' satisfaction in Elgeyo Marakwet county. Providing a conducive working environment for teachers is necessary to increase productivity as well as satisfaction. The purpose of this investigation is to assess how work, influenced teacher satisfaction, the study area was chosen owing to the high-stress levels due to

workload and other indicators of dissatisfaction experienced by school teachers according to the data generated by other researchers on instructor fulfillment. Individual instructive level watched that effect of fulfillment on bliss and prosperity is verifiable (smith, Buchell, Melgar and Rossi, 2010). This study does not inform well how data is collected in the classroom hence need for the current study to be undertaken.

Data collection has been noted to be an issue for most of the programme. This is emphasized by the study carried out by Matonda *et al,* (2013) on the influence of PM&E proceeds towards application of quality assurance in Kenya secondary schools. The study adapted a survey research design and a mixed manner approaches to analyze data. Despite the study adapting this methodology it did not establish the need for assurance and quality participation in these schools hence need for this study. The gap in the study experienced insufficient awareness data collection that influenced project performance. The study did not address how data is managed after collection and analyzed hence the need for the study. Participation of stakeholders in gathering and handling data analysis was also discussed and urged key stakeholders to engage in fully improved outcomes (Piper and Mungeda 2014).

Similarly, a study by Njuguna (2016) on elements affecting performance of M&E structures in private organizations companies financed education projects in Muranga found out budget allotment, stakeholder participation, teaching and sturdiness of the monitoring group influence M&E structures. The research has historically had a strong positive correlation between stakeholder involvement and a well measured form of funding, a strong positive association between instruction frequency and teaching, so the question of stakeholder participation in data analysis was not addressed well thus Management, supervision and project assessments therefore need for this study.

2.7 Data Management and Performance of Literacy and Numeracy educational programme

Data management has been an issue in learning institutions specifically on researchers who need data for planning, documentation, backup procures and storage for future use (Tenopir, Sandusky, Allard and Birch, 2014). The recent survey of how data is managed in institutions, data collection instruments vary according to the intended use and

separate apparatus are used to gather information. Other means of collecting school data are Class attendance, pupil's records, journaling and rubrics. Stakeholders make decision on instruments to generate details on which indicators, methods of samples to use, those involved in collecting and analyze data to gauge, how often it can be done and means and channels of sharing the details (RTI & MOEST, 2015). Data collection information should be shared in a responsible manner amongst researchers, teachers, project staff members and the implementing group, however careful measures must be put to avoid one being overwhelmed with the data gathering process and lose the major fact on the way (Piper, Destefano, Kinyanjui, Ong'ele, 2018).

Scaling up the information on the results of the data collected by Curriculum Sport Officers who need to gather details in comparison to other scholar are supposed to be given amongst all stakeholders details on how to distribute information to teachers' and likewise. An ordinary thinking procedure of collecting data information must reach all Curriculum Sport Officers and the RTI group has assumed that formulated indicators has a set objective in collecting data information. More often than not, the capacity of Curriculum Sport Officers is inadequate meaning analyzing of data collected requires more experts to come in and give a hand on the same. So in this case the RTI officers should provide sheets for CSO'S to record the details collected from the teachers which is appropriate according to the information needed (Piper, Destefano, Kinyanjui, Ong'ele, 2018).

Data management has been noted to be an issue for most of the programme. For instance an investigation done by Bernard (2015) on Influence of M&E on project performance, a case of African virtual university. The study showed that M&E has a direct proposition influence on performance of project and that monitoring and evaluation planned events be included well planning for the projects so that good results can be experienced but failure in doing that the performance of the project is compromised.

A study by Tavakoli, Jackson, Moneyham, Philips, Murdaugh & Meding, (2006) on data management plans, activities, stages and components has emphasized that data management has become so important to organizations and institutions to allow large and more complex data to be set and analyzed with a lot of ease. They found out that many investigators on data management don't have formal trainings in management of

data sets especially those who are new in specific skills hence requires an expert to take them through. The study applied longitudinal study where they described every component and activities in the study. The findings were that data management is a crucial exercise and if the procedural steps are not followed clearly multiple problems may occur. In this study it lacked the strategies applied while collecting data, respondents of the questions raised during data collection and how it was coded. The need for the current study.

Better the data you know Erica (2014) in his study about data youth developments in reading in institutions organized teaching atmosphere argued that we embrace in the epoch whereby people don't bother or make use of data either individually or at institutional levels. In education sector and at individual level, usage of data remains scarce since not many people know how to use it and for what intended purposes. In school set up the study found out that the staff is not aware of data collection methodologies, the purpose of that data and the benefits it has in the school. In the study several issues were raised that youth in the community are never involved in projects hence have little or no knowledge about data. The youth in this case are the students leaving both primary and secondary without proper acquisition of literacy and numeracy education skills hence need for the current study.

In learning institutions accessing data and managing it is very important since it helps in giving out an outcome at the end of a certain exercise which has passed. In higher learning data information is very vital since it gives a platform for librarians to get access to research life span of pupils. So the meaning of data literacy as defined by Prado and Marzil, (2013) is capability of communicating reading, creating data details though these information have been met by challenges regarding the effectiveness of common slants to data generated which does not enable people in using it in various areas of their work. Lloyd, 2010 and Carson, (2015) were in support that data should be used according to its purposes and be useful to the people who were targeted by the information needed. In the current study data management is very important since it is useful to the stakeholders who are the beneficiaries of the programme in one way or another. The study failed to give light on how data was collected, by whom, to which respondents and the methodologies used in the whole process up to managing that data.

The findings were all the staff members in an institution should be trained on data skills for them to yield good results which is lacking too many institutions.

Data management is very vital in informed learning since it emphasis learning as an outcome of an individual experiences (Bruce, 2008). His elaboration is in his several studies that there are 3 truth which preside over knowledgeable elites whereby new ways in handling context of any kind should be well managed so as to produce good results in an organization. In schools being the organization at this juncture new information is really needed so that the school administrators and the staff can be able to make decisions which are required to improvement learning skills of languages and arithmetic's. Bruce and Hughes, 2010; Bruce, Somerville, Stoodley and Partridge, H. (2012) argue that details in database should be used to the intended purposes and help educational professionals in using it the right way. It is not only educational professional who need the data information but also other stakeholders who are involved in learning process require data information.

Management and analysis of Monitoring and evaluation information need to be consistent and participatory for it to be sustainable, usable and useful to the organization. In an organization data analysis is a proven way of gathering information needed in making corrective measures and grow in production of performance of the projects in an organization. For data management two methods must be used for example data analysis must be either qualitative or quantitative so as to give right orders, and having concept of data formation and structures (Wallace and Alkins, 2007).

Monitoring and evaluation systems have several components which when followed well can give a comprehensive facts to guide the organizations and institutions as explored by Njuguna, (2018) on elements affecting the performance of Monitoring and Evaluation systems in non-governmental structures funding education projects in Murang'a County . The study adapted a descriptive survey design and data collection tool was an organized questionnaire and later data was analyzed using SPSS software. Everybody, actually all the stakeholders were used in the study hence no sample size. Data was descriptively analyzed, descriptive statistics and tables were presented. There was a strong influence on budgetary allocation, training and involvement of stakeholders in Monitoring and Evaluation systems. A strong positive correlation

between stakeholders and use of funds was prudent. There was also a strong positive connection linking frequency of instruction and capability. However the study did not address the issue of how and which level were they involved in data management and positive correlation in terms of what and how, so need for the study. Mwangi, Nyang'wara and Kulet, (2015) depict that monitoring and evaluation process is very important and a necessary tool that is very relevant in ensuring that the set goals and objectives have been achieved.

Moila, (2006) focused on technology in teaching mathematics in rural secondary schools found out that there were no plans of using the technology in teaching the subjects, there was inadequate educators who had trainings on how to use the gargets in the lesson development hence low performance when it comes in embracing the methodology. Collection of data using the tangerine tablet according to the current study is very important in order to store information collected in the database (Elmore 2016). Most teachers in Nairobi County have no knowledge of how to use the garget in collecting data, coding and later analyzing it. Though there is a disparity on usage of laptops which is the government project in the Country and to some extent some teachers in Nairobi County have been taught on how to use the Small gargets that have no data storage option, that offers more details about how the learner has progressed in lesson creation and allows potential comparison and for future use (RTI, 2014).

In general M&E is systematic techniques of collecting information, processing, data interpretation, analyzing, storing and then managing it according to the intended purposes. Due to high demand of accountability and transparency by the funding organizations M&E has been made to be a management tool to show performance and accountability to the stakeholders (Watson, 2006; Kusek *et al*, 2004). They continue to argue that when evaluating performance in schools and other sectors in the country, M&E was put into practice in the education sphere. During monitoring and evaluation data gathered needs to be stored and then managed. The report writing should also be accompanied in this process so as to give clear and well informed information about the programme in question hence good performance.

2.8 Implementing Change and Performance of Literacy and numeracy educational programme

Stakeholders start execution on PM&E process in evolving an ordinary creativity and coming together on ways of measuring end results and procedures that require monitoring and evaluating. The procedure of learning is an experience for participants who are actively working in projects and are willing in making any corrections for better performance in the projects. Much emphasis can be placed on identifying the lessons learned that will assist the participants improve the programme implementation and assess whether targets were achieved (Estrella *et al* 2000). This is a methodical process for coming into being with the results that are applicable on end results, production, operations and pursuits of projects. A number of activities play part in producing output, which led to an outcome, and a number of outcomes influence on the findings.

The collision shackles also incorporate procedures, such as structures, strategies, and methods that are applicable to attaint findings, and describe the happening connecting stakeholders as the project is ongoing on the implementation process hence project performance. Having this procedures helps groups and the community to analyze what is workable and what is not workable and give a report of why it is not working. Critical thinking sends back on how members ought to progress in the project in attaining its goals and recaps are necessary. Critical thinking is required in carrying out how result will be accessed by every member, activities, procedures and its guidelines, squarely that is being achieved through baseline, midline and end line reports of the piloting projects which earlier on done indication the performances achieved and what was not achieved. RTI (2015), as well as Njuki *et al*, (2006) emphasized on the same. Through the data analysis and critical thinking on what has been attained details of information collected by the evaluation staff from the implementing groups to the information calculated, costs and profits from production activities to check whether any progress has occurred. For this to happen better measures on participation in group activities should clarify who to be involved and who not involved in group meetings, activities and reflections made on analysis to enable the organization learn from the success or failures and different factors that hinder or facilitate project performance (Karemesi, 2010; Aremu, 2000; Mayama, 2012).

According to Daly (2015) execution of a literacy intercession 'Station Teaching' in baby institutions in Irish primary schools', numerous tactics and methods were vital to facilitate efficiency of educating in languages in nursery centers inclusive of phonology understanding phonetics, complex new words, eloquence, compacting and scribbling of new words. These tactics are performed in institutions where instruction take place. Early intercessions of starter's learners acquire languages correctly depending on the instructors. The expertise of the teacher is key to improving the literacy attainment of students though numerous and extensive instruction should be embraced in order to equip educators who are the main executors of syllabus and allocation of mere resources to schools so that program can go on. The study has not explained how teachers and administrators implement the necessary and required skills hence need for this study to be carried out. Teacher attitude can affect learning in the classroom as depicted by (Dihaisat 2016)

A study by Forster (2009) focused on L&N diagnostic tools an evaluation, to produce good results on L&N education, the Department of Education, Employment and Workplace Relations (DEEWR) have at glace considered methods of designing of L&N distinctive instruments to apply in Australian institutions. Exploring for possible instruments to be applied in Australian schools differ so much on conceptualization and intention, to hold up and bear the maintenance for educators in giving aid to all teachers and have a common tool to use was not possible hence low performance of the learning skills. Instruments used at bottom stages identifying ability comprising framework which describe the stages of attainment in comparison with learner's judgment on report and monitoring. Instructors gather proof of pupils' recognition and strong points and drawn from conclusions from rear side stage of framework specified, and assigned to different Levels of diagnostic powers.

By use of determined frames of power with each other in assessment methodology pupils involvement eases, intercession sessions, channels of communicating to parents, possibly recognizing the impediments in resources and details obtainable in education structures and the must action to be taken so as to bridge the gaps identified (Asikhia 2010). Therefore there is need for this study to assess diversity instruments in diagnosing authority and purposively get entry to L&N understanding, skillfulness and studying of the learners. Also to seek how schools and teachers can be able to get

assistance in selecting apparatus of appropriate determined different motives and added assets in order to have effectiveness in identification of information in the institutions, classroom and single pupil stage. A study by Ercikan, (2009) on the assessment of the literacy evaluation and monitoring program (LAMP) / UNESCO institute for statistics (UIS) also emphasized the point on teacher diagnostic power but lacked more information on teacher learner relationship hence need for the current study.

A study by Mege (2014) focused on influence of school environmental elements instructing-teaching operations in public primary schools in lower Nyokal division, to establish influence school environmental elements on the instructing-educating operations the study adopted descriptive survey design. Questionnaires as a collection tool was used giving details from educators and school leaders in focusing at discussions in groups in guiding students learning issues. The results exhibited learning institutions have insufficient substantial infrastructure, others totally unreachable and guiding resources inadequate. Umar (2015) depict that school environment manifested in classroom arrangement is very vital as also found by Hassan (2016) that books are very essential in learning. Numerous institutions have many students per class which most teachers are not comfortable with. To sum it all educators propose to have accessible schools with closeness to sufficient social facilities and structures. Study lacked to expound further how they learn and implement changes in their schools after they try to manage the large numbers of children in the classrooms hence need for the current study on school environment on performance of literacy and numeracy educational programme.

2.9 Participatory Monitoring and Evaluation Process, School Environment and Performance of Literacy and Numeracy Educational Programme

In learning institutions like schools PM&E process is a very basic tool which is used for enhancing performance of educational programme and improving the effectiveness and efficiency. Rossman (2015) assert that participatory process leads to learning among all the participants leading to corrective action subsequent improvement of programme which are well planned, well set goals and objectives, utilization of results, data management and implementation. PM&E process enhances in developing new ways which stakeholders participated monitoring and evaluation planning, developing projects objectives and selection of leaders in schools environment so as to change the

performance of Literacy and Numeracy skills. It is in this learning process that creates conducive environment for change action and offer evidence basing on selecting and designing intervention developments that are effective in fostering good outcome (White and Raitzer, 2017).

Jackson and Kassam,1998;Hilborst and Guijt 2006; Rossman, (2015), puts it in their definition of PM&E process as a procedure of evaluation, acquisition of knowledge, cumulative action of collecting information, the stakeholders progamme collectively intervene and expound appraisals, collecting data and analyzing it. Finally when facts are collected coded, then analyzed the action is taken on what they have learnt in the process hence involvement of key stakeholders in programme. The study failed to specify how this knowledge is transmitted to the learners in lower grades hence a gap which the current study bridged by examining the extent it has influenced the performance of literacy and numeracy educational programme. Participation of teachers and parents in the warfare of the learners emphasized the point that the there is good participation key stakeholders in projects. In Kenya, PM&E process is not widely done due to a variety of factors for example inadequate knowledge on PM&E, insufficient funds for this procedure, lack of training and understanding the value of PM&E process among many other factors and education is part of this process hence low outcomes (Jamaal, 2018; Sangole, Kaaria, Lewa and Mapila, 2014).

An investigation by Ogutu (2016) focused on the effects of free primary education on instructing and educating learners in reading and writing in public primary schools in Eldoret. He found out that Learning facilities were inadequate to undertake proper teaching and learning hence needed Support from parents whereby there should be a structured way of doing it, Educational and learning infrastructure should cater for the inundation of students in these institutions due to FPE. The study adapted descriptive survey as a research design and a targeted audience of 4200, respondents were randomly selected. The study fails to address how it determined the sample size, the formula to get the categories hence need for this study to empirically investigate how sample size is determined and which method was used to give categories of sample size. Dinham, 2013; Santoro and Kennedy, 2015; loghran and Hamilton, (2016,) focused on the results of schools outcome. Their argument is on the teacher and learner participation in bringing out the outcome which is conducive to every stakeholder in

the education sector which is lacking. Teachers are the biggest participants in school for the achievement of learners' outcome and could be lacking in many school hence low performance of literacy and numeracy learning skills.

Kathogo and kamau, (2018 asserts that influence of PM&E process on performance of public secondary schools in Mutomo sub-county had collaborated with stakeholders in managing projects of the institutions. Stakeholders were not well trained during seminars and workshops which are normally organized by the government and the implementing organizations. Most of the stakeholders have no knowledge of what is PM&E process is, how they can be involved in the school environment meaning that they are not fully informed their roles and responsibilities in the school issues hence low performance of literacy and numeracy skills in this schools.

Antill, (2013) in his study found out that for any project to be a success all the stakeholders should be involved in setting up the missions and visions of the projects. For this case of the implementing organization TUSOME and other NGO'S who have been in the front line of intervening for the government on literacy and numeracy programme are no exceptional thus they have really been working hard to see their projects become a success. Despite them working so hard they have been met by many challenges when implementing the projects hence leading to low improvement on their efforts.

Bayer, (2002) points out that PM&E process is management tool which is used by project managers in assessing if the objectives were achieved, how data was collected and utilized in helping make decisions for future use. This process provides managers with crucial information which is logically and timely according to the project which enhances the performance of the programme and the ownership of the beneficiaries as put by (Njuki *et al*, 2006).

The process of gathering information in most cases is not very well done as found by Coupal,(2005) in his study on how information is collected for particular purpose, he argues that participatory monitoring and evaluation process helps stakeholders acquire new knowledge and guides on how to tell if the resources have been utilized in the right way or not. He continues to argue that it helps the institutions in strengthening the

methods used in capacity building of stakeholders in order to help them undertake their activities better in implementation of the projects. The study failed to explain who are involved in participation of the projects and who are supposed to implement these projects. The campaign for vision 2030 that education for all should be made a reality must be taken into consideration by the government, through interventions by the implementing organizations so that the programme in education and especially literacy and numeracy can become a reality and all the citizens to be literate people who can be able to express themselves in any field in their lives.

Nduta, (2014) on assessment of the use of PM&E approach: a case of constituency developing funding programme Ndagoretti South sub-county Nairobi established that shareholders are not adequately inclusively in M&E of the CDF projects and their participation was very low in all the stages of PM&E process. It also found out that the way information was documented and data managed was inadequate. The study did not address the way data was collected, how projects were monitored and evaluated thus failing of these projects due to lack of proper management (Behn 2003).

In other countries like Malawi a study was conducted on how to involve the stakeholders in education programme among them parents, teachers, government officials, local authorities and pupils who worked as a team and the results were wholesome. There was participation of all the stakeholders in education and every person had a role to play hence ownership of the programme. In Kenya a study by Matonda *et al*, (2013) did a similar study on the participation and involvement of stakeholders in the school environment specifically on engaging the parents, teachers, pupils and local communities was a total failure since most of them were not fully involved more so in giving their ideas as was the case in Malawi study meaning in Kenya participatory monitoring and evaluation in schools is never embraced hence low performance of literacy and numeracy skills.

Many scholars have conducted studies on M&E and not specifically on PM&E process on literacy and numeracy educational programme and those who have done it have examined other areas and not on literacy and numeracy educational skills (Campbell 2014). Argue that grouping learners in their ability makes learners perform better as they are trying to cope in groups and mostly on sounds pronunciations. PM&E process

allows the participants to accept that their abilities, expectations, weakness and availability of resources can allow the projects to progress in a better way according to (Suarez-Herrera, J.C and Springelt. C.K 2009). This can be achieved through the participants learning from their experiences and taking the correct actions for future use. On a closer perspective other government bodies like teachers service commission has not been so supportive on teacher's deployment on schools which are understaffed, supervision of school resources and the discipline of teachers. This lack of committee leads to low participation of the major bodies of government officials like CSO'S and other supervisory officers hence low performance of the programme which leads to unsustainability of the projects when the implementing organizations had over to the government.

A study by Moonga, (2016) an evaluation of the use of early literacy learning and teaching materials by grade 1-4 teachers in selected schools of chikankata district of Zambia established that the training of teachers on how to use the learning resources was not very encouraging since the methodology used was not sufficient and effective. Learners were not able to access learning materials hence low performance of literacy and numeracy skills.

The school environment is explained representatives that influence the educational learnings process and are linked together with one another meaning that each factor affects the other and if one is withdrawn the other one is affected (Njuguna, 2016). These factors could probably be school infrastructure, instructional materials, sanitation and water, the school compound, ventilation of the classrooms, the toilets and pit latrines among many other elements of the environment. It is a school environment which is said to provide appropriate learning facilities, well managed classrooms among many other equipment's. School environment determines the extent to which a learner behaves and interacts with the others. May be the absence of this kind of environment leads to poor performance. Schools and educational authorities in developed countries often lacked the skills and resources to systematic monitor, evaluate, communicated and subsequently improve the quality of the education they provide to children (UNESCO, 2015).

The school environments tend to mound the behavior of the learners so as to meet the demand of life either positively or negatively and this can be categorized by many elements within the school environments. The maintenance of the school environment should be well monitored and repair done so as to avoid it causing problem to the learners, though there should be clear participation guidelines. The intensity of inhabitant begins influencing growing and developing of persons from mother's womb to the external forces after birth. Zimmerman and Wool, (2014) noted that external and internal forces influence the learning performance. So the learning environment matters a lot and it has an influence on the performance of every language learnt. A child learns the first language from the mother since children are born with no language and this has a connection with the mother's environment when the child is born. Learning starts from zero day to the last day in the tomb. Participation of the mother and the community is very vital in helping learning of each youngster who is can access learning institution.

School infrastructures are very important in a school because they really help in smooth learning and helping attaining good performance. Nyagah, (2016) focused on the influence of school organizations and schooling production in public primary schools in Ruiri location-Meru County, Kenya, the findings were that only one public primary school has a library, inadequate study materials, overcrowded classrooms and poorly maintained roofs. The study inquired on relations linking school underpinnings and the studying of literacy, numeracy educational programme. A classroom that has a variety of age-appropriate learning materials and teachers with early childhood education training were closely associated with better performance both in reading and mathematics tasks (Ouko, 2018). Therefore the achievement in literacy performance is an index of a learner's future in today's world.

The methodology applied was descriptive survey research design and knowledge gap was that most schools lacked enough teaching staff, inadequate basic resources, lack of stakeholders' involvement in decision making and inadequate classrooms. So this line of study seek to explore how school environment influence the performance of literacy and numeracy educational programme and ways of sourcing for enough resources to enhance learning Another study on the influence of school managers applications in classroom control, school environment, academic Underperformance noted that these issues affected the performance on learning skill Morgan, (2015). Results were that

there was disconnect on leadership styles and teachers methods of teaching hence low performance on the academic results. Based on this results the current study tries to bridge the gap on how school environment influences performance of literacy and numeracy educational programme.

A study by Muthusamy, (2015) focused on educator's incidents with the overflowing rooms in normal institutions explored different experiences of teachers on how they handle the large numbers of learners in the classes. The study adopted a qualitative research methodology where arranged questionnaire put into operation of collecting data teachers who are the main implementers of teaching programme. The end results were teachers are ever stressed by the overcrowded classrooms since there is no enough space in the room, security issues among the learners due to small spaces left hence risk to health hazards. With the overcrowded classes very low learning takes place since some learners might be funny and the teacher cannot be able to see them. At the same time teacher moves with the bright learners hence disadvantaging the low learners whom the teacher has no extra time for them. The study used only one type of research hence comprising the information gathered. The current study employed mixed method and a descriptive research survey design which really helped in obtaining large data about the study. Lack of enough classrooms has really affected the learning of literacy and numeracy educational skills and education at large (Petro 2016). The found study a reliable information on what is seen overflowing halls as educators look at the pupils eyes who really affected by the outcomes hence failure in their teaching well.

Teachers Education in any country is viewed as monopoly drivers in growth developments which cares for accession of understating, skillfulness and altitudes important to every individual in this world (Gathumbi, Kanini and Maithya, 2017). Influence of pupil-teacher ratio on performance in Kenya certificate of Primary Education in Makueni County adapted descriptive survey design with the target population of 196 sample size of 143. Questionnaires were used to gather information and descriptive statistics analyzed data. Results indicated lack of enough teachers in overflowing classes affected KCPE results, which is also a big debate in the whole world over the class size differences between the teacher –pupil ratio and the availability of learning materials in the classroom.

According to Kunje and Selemeni-Meke, (2009) did an inquiry of the effects of high enrollment of pupil affected attainment of arithmetic's, English and Chichewa. Exams were administered in 3 themes to 6000 students in 100 primary schools and findings indicated that there was poor attainment in English and Mathematics in town institutions which had a teacher- pupil ratio of 70 learners in a class. High achievement were on those leaners taught by trained teachers despite few resources they performed better than those taught by untrained teachers. Other factors were the level of education of mothers, children who had educated mothers had better results than those who their mothers had low level of education. Lack of text books was also another issue though those who had a few textbooks performed better than those who didn't have any at all despite the teachers having passed the training colleges. Overcrowded classrooms is another challenge in many schools in the world. Countries have inadequate infrastructure leading to low outcome of learning skills.

Marias, (2016) explored the effects of teachers who are on training specifically challenges when teaching overcrowding class. An explanatory investigation design and qualitative research methods became applicable and suitable method whereby facts gathered meant non- committal writing arranged trainers in modules. Constructivist learning theory and socio constructivist was applied theoretically framework. Several impedes encountered teacher learner while teaching in overflow classrooms hence low teacher pupil interaction in the class. The integration between the learner and the teacher was very low meaning that most learners were not properly attended due to the large numbers in the classroom. The recommended number in class is 40:1 according to Motshekga(2012) while in Kenya is 50:1 though in the urban centers and especially in non-formal settlement the class can swell up to120:1(MOEST, 2012)

An empirical study by Tuba (2017) focused on reading habit of environmental and history of teachers in underdeveloped society, influenced families and learning institutions. Educators' role models in learning institutions and main stakeholder in implementing the learning process, a mixed method tackled quantitative and qualitative directions but how the target population was sampled remained a mystery, although Beth (2015) concurred with the study by Tuba, (2017) since she had the same findings in his study. The current study focused on how learning materials were distributed to

all learners and teachers to get guides to help deliver the content effectively and assess the impediments associated with these scenarios.

2.10 Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational programme

General background on PM&E process and performance of L&N education background is a big phenomenon in most institutions and organizations which has varied forms of organizations learning and termed as ancient issues in Africa. These organizations deal with the education developments to improving learning experts among the students in capacity building those involved in the programme. In Kenya it is noted that education acts to be vital driver in profit developments in individual growth as a whole. Though there is need to check on what is really required of quality and learning skills in the country.

An empirical study carried out by (Dubcek and Gove, 2014) on the early grade reading assessment (EGRA) and its theoretical footing, determination and restriction which used to inform education systems and programme on how to gauge fundamentals of literacy experts that scholars require for starters reading at lower level grade focused only on very few items instead of showing how these project are going to be monitored and by whom, when and where. The study did not fully tackle the issues of participatory monitoring and evaluation process and explain which methods teachers use in teaching reading, listening and calculating simple arithmetic in lesson progress.

The learning aspect of participatory monitoring and evaluation process requires powerful prominences in order to have stability linking on how to focus execution and incorporate teaching in participatory monitoring and evaluation process facts in measuring correct and valuable decisions. Demonstrating a supportive participatory monitoring and evaluation process systems is costly, in terms of scope, human and material apparatus for starting and sustaining Monitoring and evaluation and due intensive facilitation required in the startup levels. So organizations will require the skills to support the procedures and be laid advance before takeoff. According to this turn of events of different stakeholders being inclusive, there are proposals of developing methods of incorporating all different stakeholders on board.

Nthenge, (2014) undertook a study to establish the influence of PM&E on production on public private partnership projects in Nairobi County. In his study he aimed to seek fundamental factors in achieving its objectives. Descriptive survey research design was adapted. Facts were gathered by using questionnaire and analyzed qualitatively. Results found, involvement of all the stakeholders with varied views strengthens the institutions which is in consensus with participatory monitoring and evaluation which provides better ways of bringing change to the already learnt experiences (Dubcek and Gove, 2014). So in finality the study concluded that the stakeholder's perspective had the greatest effect on the performance of public private partnership projects in Nairobi County. Gap in the study is that it did not expound more on how stakeholders should be integrated in collecting data managing it and finally implementing change of what has been acquired (Piper and Mugenda, 2017).

PM&E process is a learning process which involves several steps and people. Those main implementers of learning at school are the teachers. According to Kasiisa and Bakaluba (2013) on teachers participation in learning process concluded that significant relation on teacher's qualifications and the pupil's attainment achievement fully determined by how the teachers expressed themselves and how they delivered the information to the learners. Kosgei, Jairo, Odhiambo and Ayugi, (2013) who carried out similar inquiry in Nandi County had a differing information of no relationship connecting instructor quality of education and learners' academic achievements but they observed that the leaners achievements wholly depended on the teacher's experiences in teaching.

Participatory M&E process has many stages which needs to be followed in any organization so as to succeed or any project to achieve its goals. In this line Nyonje, Ndunge and Mulwa, (2012) outlined steps in M&E process as an indicator on identification, setting of target for all selected indicators, Identification of performance measurements, Comparison between measured results versus the earlier set standard. Finally the flexibility of the organization itself. In this study the main issue is to investigate how different stakeholders are involved in learning and the influence it has on the performance of teaching literacy and numeracy educational programme in Nairobi County.

Teacher participation in learning is very crucial according to Leigh and Mead, (2005) which they argued teachers with enough understanding and experts tend to teach learners effectively than the teachers who have low ability and experience in teaching thus low achievements experienced. This is supported by Omo, 2011 and Goe, (2007) maintaining that teachers quality of education has an influence on the performance of learners achievement hence good results are experienced.

The emphasis on PM&E process as a learning process is fully explored by Gichuru, (2016) on his study on the effects of instructor standards on students' performance in mathematics in class six state exam, a survey which was conducted in private primary schools in Kigali Rwanda. The investigation only delimited itself on private schools, leaving out the public schools which may be are the majority in the country hence giving limiting information which cannot be fully relied on to give comprehensive information to help make any decisions or get funding. The results were that teachers with effective teaching practice had a big influence on the performance of the learner's achievement unlike those with ineffective teaching strategies and practice in teaching and also communication skills were lacking to most teachers (Omo, 2011 and Goe, 2007. Most teachers in Nairobi County have the required qualifications but still performance of literacy and numeracy skills is low meaning has no relationship linking the qualification of educators and the scholarly attainment of learners. Since if this is the case then learners in Nairobi County could the best in the Country in learning the literacy and numeracy skills due to many educators having the highest grades in education sector.

2.11 Theoretical Framework

Theoretical framework has a combination of different well organized ideas with a purpose of breaking down of variables and investigating a certain phenomenon in a particular area bringing up several variables together which are related to one another (Kothari, 2004). Theoretical approach in this study was anchored on various theories which has a relationship between the variables and acknowledges that there exists interdependence between various variables during implementation of the projects. Theories that guided this study were stakeholder theory, Theory of change and Multiple Literacies Theory. The main theory crowning this study is stakeholder theory.

2.11.1 Stakeholder Theory

Stakeholder theory is grounded on the work of Barnard, but Freeman did his first publication in 1984 in San Francisco. He is believed to be the father of stakeholder theory based on strategic management, corporate planning, and systems and organizational theories. Stakeholder theory is based on argument of Wood, Agley and Mitchell (2007), which stated that an organization relation commitment involves more than one party in engaging for service delivery on behalf of others in making corrective advice to the authority. Stakeholder theory is a participatory theory which influences collective actions on numerous person in decision formulation. Stakeholder participation is influenced by theories promoting collection of facts which accepts the logics that people will calculate the cost and profits before deciding the next action. The participated end results will influence involvement of all in getting more funding.

Alternative expectations can be experienced form the findings acquired during the course assessments and people can decide on what is best for them (Heikkila and Gerlak, 2005). Reciprocals initiated developing of theory by Simmons and Birchal (2005) suggest incentives organizations from socio-psychological and profit incentives and misplacements are inevitable for participation to select rational involvement and be able to inform theory group, steps and inspired usual profits Olson, (2000) socio specification theory Rowley, (2017) participatory theory by Freeman in 1930. The above concur with Simmons and Birchal, (2005) that participation is very important in an organization, institution or a firm. Stakeholder theory is mainly concerned with participation of every key participant in the project to give ideas and views about what they intend to achieve and the outcomes of their activities and formulation of policies and implementation of the set objectives and goals.

It is widely used by policy makers, developing agencies academics and practionnaiers which has helped it become a key issue in management. Though diffused idea vary in interpretation of separate shareholders. Stakeholder's participation theory has a part to play in developing policy-making and execution. The interpretation of participant's difference depends emphasized aspects. However adding information corrective means and processes influences implementation and performance of the projects into tangible inputs and outcomes that benefit the beneficiaries. The goals and missions of the experts

and deliberated shareholders involvement visualized and in all probability influence the explanation of data collection hence generating constructive information.

The principle goal of stakeholder participatory approach is the methodology applied and the service measures assessment stages in participating and empowering stakeholders in project performance. The relationship of stakeholder theory and the variables under study is that, there is full participation of stakeholders in the planning process in PM&E process and performance the projects. Data collection, analysis and explanation is also another aspects which bring a very close relationship in that the stakeholders must involve M&N findings and implementing change as recommended by the implementing groups in the project. Selection of M&N tools are measured analyzed with help of this theory in that it is used for identification, initiatives and utilization of the findings. Participation of stakeholders in different levels link up with the theory in that when stakeholders are developing projects objectives and M&E plans are stickily guided by the theory. Stakeholder capacity building is another area whereby most of the stakeholders if not all are involved in trainings of workshops and seminars which enlighten them the way forward in project hence good production.

During these seminars there are issues identified and the later dealt with according to the results of the activities undertaken during the implementation of the project. A study conducted by Makori and Oderi, (2013) found out that training and capacity on M&E were very important because they helped in designing and developing project indicators, reviewing the projects regularly and involving the stakeholders in all the phases of projects was very vital in evaluating the trainings of secondary schools principle and trained teachers who teach learners after they proceed to the next level. A differing information from a study conducted by Njuki, *et al*, (2006) says apart from participation there are tools and methodology required to make the trainings a success and conception of new ideas and formulating SMART objective and goals which are measurable and attainable in projects. So stakeholder theory based on different groups of people coming together to make decisions then supports this study and helps it to investigate further on the issues affecting the engagement of all the stakeholders in any programme.

This stakeholders theory has a link with this study in that, when the assigned stakeholders who are responsible in data collection and especially selection of monitoring and evaluation of data instruments, collation of information, and schedules of monitoring and evaluation activities fully participate in the activities which is the main concern of the theory that it is participative in nature. Mulongo, (2013) and Hagen's *et al* (2012) concur with this theory that involving all the stakeholders is very vital since most of the information is shared and tools sued are appropriate since they designed by the same people. Though Kiptum, Mandela and Murira (2018) differ with the earlier statement that involving stakeholders full yield good results. In their opinion for any good to be realized there must be a conducive environments which will influence the productivity and satisfaction of the activity performed in any level. Stakeholder theory deals with the institutional management and ethics which deals with moral and values affecting planning and management in schools directly or indirectly on how the schools manages the relationships among the parents, learners, teachers, policy makers in education and funding organizations according to Freeman *et al* (2007). If this steps and activities are properly followed then the performance of the projects is experienced and then theory of change is profound.

2.11.2 Theory of Change

It is thought to be a new approach but some experts traced it back to the late 1950s with kirkpatrick's four levels of learning evaluation model. There were other people considerably to be involved in the body of theoretical and applied development in the evaluation field like Huey Chen, Peter Rossi, Micheal Quinn, Pattorn and Carol Weiss who are believed to have been focused on program theories to evaluation. A theory of change explains how the activities were undertaken by an intervention such as projects, program or policy and contribute to a chain of results that lead to the intended outcomes.

Theory of change is a central process by which change comes about to an individual, a group and an organization in the community derived from formal research based on theory and understanding of how things work in an institution. Theory of change helps in linking up the project activities to the desired change that a projects is targeting to change (Roger, 2000). The study solicit change of perception to stakeholder's involvement of project cycle participation in all the stages/ steps of PM&E process. For this study, theory of change explains how the M&E will be implemented so as to meet

the set objectives of the projects which needs to bring changes in learning of literacy and numeracy skills and enhancement of knowledge acquisition.

Theory of change helps in developing interventions aiming to achieve objectives and pursuits accurately organized in readiness. In this research the objectives and activities of the projects are already set at the begging when preparing the monitoring and evaluation plan which helps in identifying the stakeholders, their roles, types of stakeholders, and an in-depth of involvement preparations and execution of projects. This allows room for change and adapts any emerging issues and accepting any responses made by partners and other stakeholders focusing mainly efficiency and effectiveness on peace building interventions in any projects. Theory of change therefore specifies structures of preparations, participating formulas, evaluation and monitoring for nonprofit making organizations and the government sectors which need to promote social change.

The variables in the study concur with this theory in that the planning process, conceptualization and operationalization which include a situation analysis in identifying the nature and the extent of the problem or opportunities to be addressed is fully investigated. Valters (2014) noted that Theory of change can define immediate, intermediate, short-term, long-term and ultimate outcomes and shows the intended outcomes and contributions to addressing the problems. It is a road maps that leads to better planning and a detailed way of how activities are linked to one another and how change happens. It helps in measuring progress towards achievements of long-term goals even beyond the identification of program outputs, reviewing collected data, number of transmitted reports, and dissemination of M&N findings of the project intervention. For project intervention Morrell *et al*, (2014) found out that there were improvement on literacy level and attendance of learners in marginalized schools and the girls changed their attitude and their character upon the intervention programme.

Butt, Kratochvil, and Balakrishnan (2015) recognized the value of evaluation on theory of change on stakeholder participation and knowledge management and social identification and student commitments on the achievement of organizing the results whereby (Blake and Ottoson, 2009) also agreed together that there elements that form the variables understanding utilization are noted as three aspect namely, taking into

account awareness, use of understanding and meaning of multiple knowledge utilization. The relationship of this theory and this study is that it helps in identifying the problem under investigation and tries to look for solutions, planning and making decisions on the projects objectives. So they have a relationship in that they try to bring changes to individuals, groups involved in the project and institutions in general. The opinion of the researcher is that, the theory is completely in line with the study under investigation, since it is investigating on how change can come about in learning projects and especially the reading skills which is the bone of contention in the Country.

2.11.3 Multiple Literacies Theory (MTL)

Multiple Literacies Theory (MLT) was first coined by a group of scholars from new London who comprised ten academics from Great Britain, Australia and United States in 1996. Their main aim was to shift from dormant print text to a more varied ways of literacy in the new millennium and teaching through technology (Cope, Bill and Mary, 2015)

Multiple Literacies Theory (MTL) is influenced by philosophical work on literacy and numeracy learning, it is a theoretical framework which has an influence on philosophical work by Deleuz and Guattari, (1987) and the social theory of Gilles Deleuze with Félix Guattari to footing of language ideas. In their combined work of multiplicity in critical thinking of changing the nature of learning Deleuze and Guattari, (1987) in their book they argue that Multiple Literacy Theory was conceived by a group of people so as to put together things happening in the contemporary world about literacy to quest community justness in cultural diversity contexts. Helps to curb the issue of information about the process of literacy and bring a closer understanding of how literacy is currently constructed. The idea and concept of literacy has really been of concern to the educators and much debate has been liberated on, this is a synthetic term that encompasses writing, speaking, listening and reading practices to communication processes.

Multiple Literacy Theory posits the simplicity in explaining the conception of literacy from the start of literacy communication to literacy development. According to Annadale, Bindon, Handley, Johnston, Lockett and Lynch, (2004) they argue primary growth takes a form of linear aspect in school curriculum and syllabuses which are used

in teaching separate work in listening, speaking, reading, writing, spelling and oral language, yet it is known by educators that linear aspect of learning is just a myth. This is because learners develop their learning skills at different levels depending on the learning environments they are in per that time. Learners may be fully engaged in classroom activities but they might find it boring hence no literacy skill acquired since the learner was not interested in the lesson.

Deleuze and Guattari, (1987) in their combined work on the history of philosophy and hypothetical settlements on differences and reiteration and science of thinking in new ways of thinking approaches. Also understanding the process and practices involved in learning environment which should be conducive to the leaner. Particular relations connecting the learners, teachers, the institution and organization of the lesson preparation and the way the school leaders handle the teachers at large.

The methodology of teaching literacy and numeracy is also another area which needs to be taken care of as argued by Blikstad-Balas and Søvik (2014), empirically literacy investigations profit the learners much in the classroom setup especially when learners are encouraged and given an opportunity to explore the reading and writing aspect on their own unlike when the teacher is theoretically teaching. The learning should be child centered and not teacher centered but both are supposed to be interactive in the lesson process.

This theory was chosen since it strives for an implementation of literacy that links the school literacy to the real world from the informal learning at home to the school environment. It is not restricted to one particular place, time or a certain style of learning. Learners are able to apply the learnt skills in school in a collaborative manner and handle issues in the community as directed by the intervening programme in their learning new books which incorporates team work and service to the community.
The goal for this theory is to help students build an understanding of how multiple literacies can affect their lives beyond school and how they can chose their careers in future.

2.12 Conceptual Framework

This study is guided by the following conceptual framework. The conceptual framework exemplifies presented relationships themes to be investigated. The dependent variable is performance of literacy and numeracy of educational programme. The indicators which will be used to measure performance of literacy and numeracy educational performance include allocation of resources, stakeholder involvement and accountability.

This is based on measurement on monitoring performance point of references in projects (Barcklays and Osei, Bryson, 2010). This is traditionally affiliated to variable of schedule, value and standards of what is being delivered on iron triangle. Participatory monitoring and evaluation process and independent variable the study which is studied in ways of stakeholder engagement, stakeholder capacity building, data collection, data management and implement change and how they can influence performance of literacy and numeracy educational programme. The moderating variable in the current study is school environment whereby it is measured in terms of school infrastructure, type of school leadership and the teacher – pupil ratio influencing the performance of the programme in question.

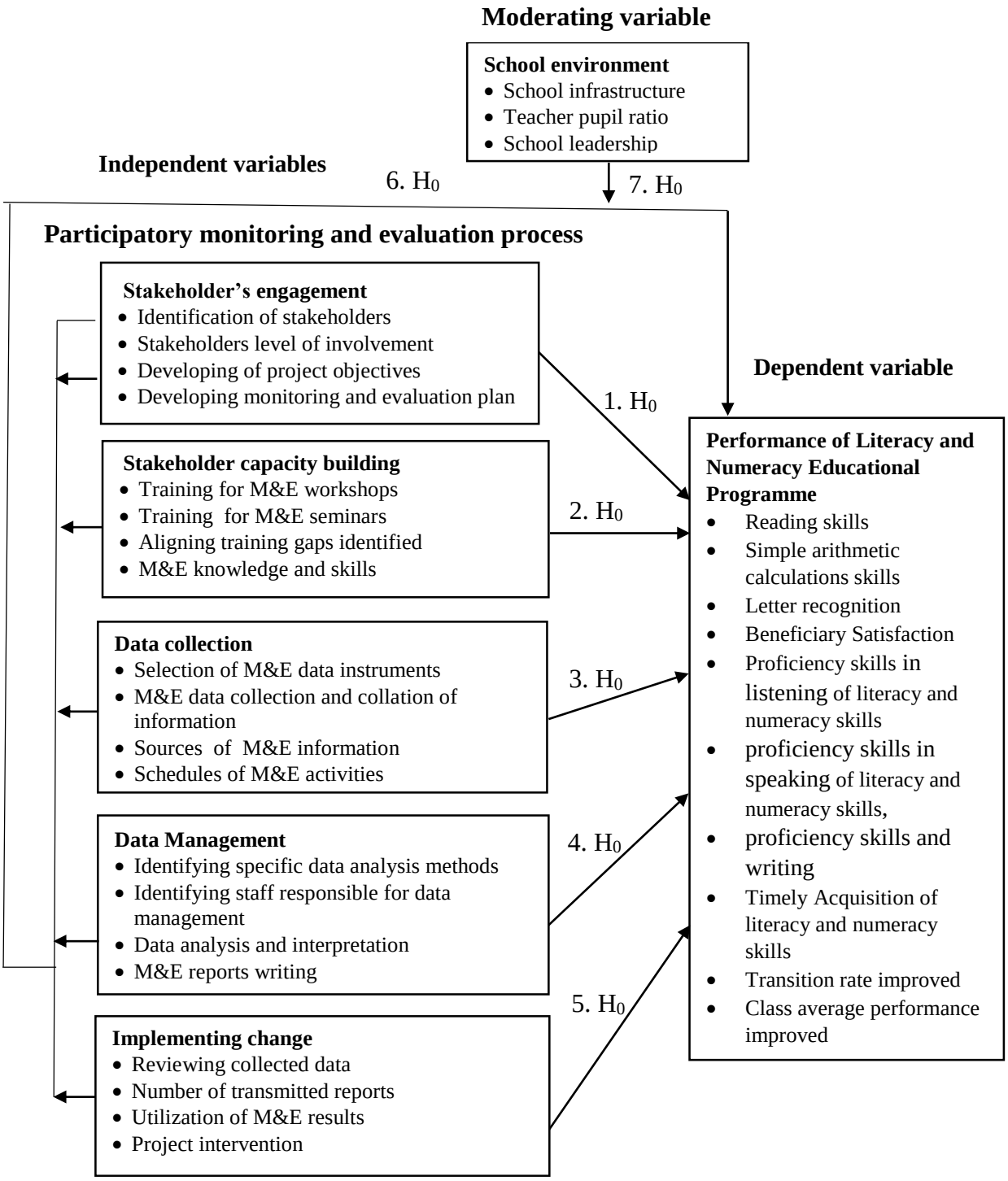


Figure 1: Conceptual frame work of participatory of monitoring and evaluation process, school environment and performance of literacy and numeracy educational programme

The variables in the conceptual framework had an influence and a relationship with each other. For the first objective on stakeholder engagement had indicators such us identification of stakeholders who were identified according to the programme for example the main targets were the lower grades pupils from grade one to three which is the foundation of learning in any country. There several stakeholders involved in the programme and each of them had a role to play hence of lack of proper involvement of them led to low performance of the skills. According to the current study it was established that all stakeholders should be involved in the programme but gaps were experienced in the areas which stakeholders were not fully involved thus low performance of the learning skills experienced.

It was also noted that during the development project objectives and monitoring and evaluation plans most stakeholders were not incorporated but later in the trainings and the implementation stages then at least making a slight improvement in the programme. In totality there was a relationship between stakeholder engagement for monitoring and evaluation and performance of literacy and numeracy educational programme since there was improvement in listening, speaking, and reading, writing and simple arithmetic calculations.

Stakeholder capacity building was the second objective and had an influence on the performance of the skills being implemented in the programme. The trainings for M&E workshops and seminars largely influenced the performance of L&N skillfulness. This was through help of gaps identified during trainings additional of new M&E knowledge skills acquired during the training adding to the already existing one making all the difference in the improvement of the teaching methodologies therefore great improvement released in the average class performance.

Data collection was very important to the programme since it helped the organization implementation the programme to be able to get the primary information ad especially why the other programme were not able to fully be sustained and also have improvement. The current study found out that there was scanty information on a few piloted schools in the whole country hence inadequate information led to low performance of the programme. There was relationship on how you collect data, the

instruments used, how information was collated, and source of information thus then on how activities were managed also influenced the performance of the learning skills. The fourth objective also influenced the performance of literacy and numeracy educational programme which was on how data was managed precisely identification of how data was analyzed and interpreted, the staff responsible for data management and later writing the monitoring and evaluation reports for future use really had a great influence for any successfully programme. There was improved on record keeping by heads of schools, ministry of education since data was easily available in the data bases. To bring the new changes in reality many stakeholders were furnished with the proper data on the data bases which helped them in making decisions and correcting the mistakes done, balance the staff according to the area of need and learning their strengths in order to better them well. Timely acquisition of literacy and numeracy skills were experienced and beneficiaries being satisfied by the outcome of implementing changes in the programme meaning there was relationship and an influence on the performance of programme.

School environment as moderating variable influenced the performance since learning of any kind needs a comfortable and conducive environment. School infrastructure, teacher pupil-ratio and school leadership were the indicators for the variable which greatly influenced performance of educational programme which really relied on good performance to be experienced. In the current study the findings were divisive since most schools had enough staff while others had fewer, the number of teachers per class and that of the learners was a major concern. Though there was an influence a lot needs to be done to curb this menace of 120 pupils in one room where the space is a major concern. In conclusion the variables related to one another and they had a relationship.

2.13 Summary of Literature Review

Main essence in literature review is to critique related work of other scholars and examine how other factors could possibly influence on the problem being investigated are interrelated. This chapter covers literature review, theoretical underpinnings of the study and the conceptual framework. In empirical literature review, relevant literatures on the variables under study will be reviewed. These will include literature on performance of literacy and numeracy educational programme, participatory monitoring and evaluation process, stakeholder engagement and performance of

literacy and numeracy educational programme, stakeholder capacity building and performance of L&N educational programme, data collection and performance of L&N educational programme, data management and performance of L&N educational programme, Implementing change and performance of L&N educational programme. Moderating influence of School environment on the relationship between PM&E process and performance of literacy and numeracy educational programme in Nairobi County

Performance of Literacy and numeracy educational programme according to the current study there was improvement of reading skills. Simple calculation arithmetic which most learners could not perform earlier on before the project intervention was administered. Listening skill was enhanced and a slight improvement was experienced though there is still a problem on pronunciation which is affected by mother tongue challenges. Lack of proper pronunciation leads to poor writing since you write what you pronounce. However, the performance of the programme improved on the aspect of general class performance thus transition rate to the next level was experienced. Generally the performance improved in all the categories but still there is room for more practice on the areas where weak correlation was found.

Participatory M&E process being a procedure of learning taking place and bringing change to the institutions and in this case the public primary schools in Nairobi County. Therefore, stakeholders should be fully engaged up to the latter for better productivity in any programme or organization. The current study showed a positive results indicating fair participation of most stakeholders but in different levels. For this to be realized adequate participation must be experienced and this was witnessed by many responds agreeing that there was learning which took place. Consequently during trainings knowledge was acquired which enhanced teaching methodologies.

Stakeholder's engagement statistically influenced performance of literacy and numeracy educational programme. Even though there was positive influence some respondents had varied responses on how Stakeholder were identified. Identification process was not carefully done and that there is need for improvement on this aspect if at all performance has to be realized in literacy and numeracy educational programme though the selection process of stakeholders was ensured on gender parity was adhered to. This could be as a result of Kenyan constitution which emphasizes on a third of

opposite gender in every working place and mostly public institutions whereby equality in selection process of stakeholders would lead to performance of literacy and numeracy educational programme in Nairobi County.

Stakeholder capacity building results on plans for Monitoring and evaluation workshops reveled that they were not well-planned hence they negatively influenced the programme whereby there is need to review the content of workshops plans to help improve the programme delivery. On the practices applied after these workshops do not really have much influence on the performance of literacy and numeracy educational programme since they are inadequately prepared and conducted. This may also mean that workshops were handled in a hurry hence some stakeholders who are the teachers were left an unequipped, specifically with the current methodology which is required to improve the literacy and numeracy educational programme, hence the need to restructure how these Monitoring and evaluation workshops ought to be conducted and improve the performance of literacy and numeracy educational programme. However there was positive results on how the experts handled the trainings though much practice is required since there was no consistency on how the workshops and seminars were conducted and there is need to have consistency so as whatever is acquired can be put across all the schools in the country.

Data collection tools were designed to collect data are made readily available for effective and efficient data collection processes among the stakeholders for the sake of the programme success. Data collection had a significant influence on performance of literacy and numeracy educational programme. Stakeholders who are not competently trained in data coding should seek to be trained and also practice more to perfect the skill to avoid current anomalies that are being experienced as far as proper coding is concerned. Even though the data collection tools were not appropriately used for the intended work M&E data collected was verified and analyzed accordingly hence positively influenced the information required and informed the best practices. M&E information collected came from the right respondents, meaning that engaging the right people to give the required information would reflect true reflection of how the programme is running and inform the best decision making process where necessary. Data management methods used were appropriately identified, reliable and relevant based on empirical evidence supported with reliable data and positively influenced performance of L&N educational programme.

Implementing change and performance of L&N educational programme in Nairobi County was also carried out and the findings were gotten. Report writing and counter checking of TARGERINE reports to allow corrections and reliability before transmission did not include all the participation that is the key stakeholders were missing in action. Those who were identified through the transmitted reports had a positive influencing performance of literacy and numeracy educational programme. Number of transmitted reports indeed led to improvement of results and the quality of project intervention in the programme. This means the use of TANGERINE tool yield some positive results and should continuously be used in the programme implementation but needs redesigning and prior planning done so as to acquire more appropriate information and involve all the stakeholders.

Theories underpinning this study include stakeholder theory, theory of change and Multiple Literacies Theory (MTL). Stakeholder theory is a participation theory influencing collective action of many people coming together to make a certain decision. Stakeholder involvement is influenced by theories underpinning collection steps which accepts logical thinking of person's calculations, cost and benefit of any thoughtful way of doing things. They participated in giving out feed backs which influence the participative decisions or get more funding or not. Theory of change can define immediate, intermediate, short-term, long-term and ultimate outcomes and shows the intended outcomes and contributions to addressing the problems. It is a road maps that leads to better planning and a detailed way of how activities are linked to one another and how change happens. It helps in measuring progress towards achievements of long-term goals even beyond the identification of program outputs. Butt, Kratochvil and Balakrishnan (2015) recognized the value of evaluation on theory of change on stakeholder participation and knowledge management whereby (Blake and Ottoson 2009) also agreed together that there elements form variable awareness and utilization of noted three aspect namely, adding up things to bring awareness, use of understanding ideas and meaning of multiple knowledge utilization.

2.14 Knowledge gaps

In the current study several gaps were identified and assumptions were made according to each thematic area. The summary is in the table below.

Table 2.1
Knowledge Gaps

Variable	Author (year)	Title of the study	Methodology	Findings	Knowledge gap
Stakeholder engagement	Stephanie and Sabrina (2014)	Stakeholder analysis and engagement in projects; from stakeholder relational perspective to stakeholder ontology	Research design was qualitative longitudinal, data was collected through interviews and observation and analyzed using an ATLAST/Ti software.	In appropriate social interaction between project stakeholders hence project failure	There is a gap in the way the stakeholders are involved in participating in project cycle. The current study investigated how stakeholders are identified and engaged in the project phases
	Llusweti, (2014)	Assessing reading to learn literacy intervention of school improvement programme on lower primary school pupils‟ literacy skills in Kwale district	The study adopted a cross-sectional survey research design targeting all the schools, teachers, head teachers, pupils and School Improvement Programme (SIP) officer implementing, Reading to Learn (RtL) programme in Kwale District.	The findings are likely to assist in identifying contingencies to be tackled in literacy learning. This study is likely to benefit NGOs in their literacy interventions to identify challenges and come up with ways to improve the programs	Gaps remain in Reading to learn literacy intervention of lower primary school literacy skills and how every participant in learning process is involved in the process hence a gap. So this study investigate how this gap will be bridged so as to improve the learning skills.
	Kinyua (2013)	Influence of monitoring and evaluation process on teaching and learning among public primary schools in Gatanga sub county, Murang'a county, Kenya	The study adopted a Descriptive Survey Research design. The target population was 56 head teachers 336 panel heads 6 DQASOS	Teachers do not sign in registers when they report or leave work. Monitoring and evaluation leads to effective teaching and learning in all schools but it is not the case in Gatanga sub-county therefore poor results of managing these projects.	Proper and adequate funding should be provided to aid activities of monitoring and evaluation which is slagging behind. The gap is no monitoring and evaluation systems are put in order and if they are there they are not fully exhausted. The study intends to bridge the gap by identifying the key stakeholders who will be involved in monitoring and evaluating and observing the teachers work hence program performance

Variable	Author (year)	Title of the study	Methodology	Findings	Knowledge gap
	Kathuku (2013)	Factors influencing parents' involvement in children's academic chievement in early childhood education in Kathonzweni district	The data for this study was drawn from respondents through purposive, stratified and simple Random sampling procedures from the entire population of ECE centers in the district. The samples included Head teachers, pre-school teachers, parents and pre-school children.	The findings were majority of the parents do not fully take part in early childhood education. It is evident from the findings that, the parents' poverty level, literacy level, marital status and Cultural beliefs were significant in the way they participate in early childhood education.	Lack of participation of parents in early schooling leads to poor performance in literacy and numeracy. The study failed to highlight how the parents needs to be engaged in the learning process and how target population was determined only leaving a gap in the methodology hence need for the study on stakeholder engagement and the process of identifying the right way of determining the target population and data analysis for monitoring and evaluation
Stakeholder capacity building	Nyagah (2016)	The influence of numeracy and literacy training program on curriculum implementation by early grade teachers in public primary schools in Mombasa county	The study used a descriptive survey in obtaining information on the influence of numeracy and literacy training program for early grade teachers. The target population was the 15 public schools in the program.	The findings indicate that for children to attain better outcomes at exit level, strong emphasis on attainment of literacy and numeracy skills should be placed at the foundation stage and proper supervision should be observed and teachers be taken to fresher courses on the same.	The current study focuses on stakeholder capacity building so as to hence proper trainings have taken place in order to increase the existing knowledge.
	Makori (2013)	Implementation of Universal Primary Education in Kenya: An Analysis of its Impact and Progress towards Achieving the EFA Goal in Kisii District	The study employed a quantitative research design and used purposeful Sampling technique involving twenty head teachers drawn from twenty primary schools in Kisii district.	The analysis reveals that the implementation of FPE policy created a positive outcome evidenced by increased enrolment in schools but there was, increased enrolment which had a number of setbacks, for	Studies links them to poor or lack of planning, poor distribution of teachers resulting in some schools having more teachers than others therefore affecting the teachers/ students ratio hence low performance in learning process The study will examine the methodology on stakeholder capacity building in correcting poor methods

Variable	Author (year)	Title of the study	Methodology	Findings	Knowledge gap
				instance, high teacher pupil ratio and inadequate physical facilities was experienced in almost all the schools in the country.	of delivering the content and distribution of human resources.
Data collection	Matonda ,Ondieki, Morara, and Nyabienge (2013)	Influence of participatory monitoring and evaluation approaches on the practice of quality assurance in Kenya secondary schools	The study adopted a survey research design and a mixed mode approach to data analysis. Officers need undergo specialized training in participatory monitoring and evaluation	It was established that indeed as practiced, quality assurance in schools was a form of participatory monitoring and evaluation and recommends that Quality Assurance and Standards lacked formal trainings in the practice.	The study established that quality assurance as opposed to monitoring and evaluation lacked an institutionalized framework to guide its operations. Quality assurance officers lacked formal training in the practice The study will examine how data collection for monitoring and evaluation and trainings will influence performance of literacy and numeracy educational program
Data management	Phiri (2015)	Influence of monitoring and evaluation on project performance: a case of African virtual university, Kenya	A mixed research design of ex-post facto and survey to determine a possible monitoring and evaluation project performance relationship place if a positive influence of M&E has to be seen.	The study has shown that monitoring and evaluation has a directly proportional influence on project performance and that an M&E plan should be included well planning for the projects.	inadequate knowledge on the influence of M&E on project performance a situation that this study addresses The study sought to establish the extent to which data analysis and management can influence project performance and bridge the gap of monitoring and evaluation activities

Variable	Author (year)	Title of the study	Methodology	Findings	Knowledge gap
	Njuguna (2016)	Factors influencing the performance of monitoring and evaluation systems in non-governmental organizations funded educational projects in Murang'a county.	A descriptive survey design was used for the study where structured questionnaires were used to collect data which was analyzed using SPSS. No sampling was done as all the M&E staff and project managers in NGOs implementing educational projects were to participate. Data was analyzed descriptively using descriptive statistics and tables as appropriate.	The findings showed that budgetary allocation, stakeholder involvement, training and strength of the monitoring team influence M&E systems. The study also established that there is a strong positive correlation between the participation of stakeholders and prudent use of funds (r=0.643). There was also a strong positive relationship between frequency of training and competence (r=0.617).	The gap in this study is that there should be more involvement of the stakeholders in planning, design, implementation, monitoring and evaluation of projects. The project implementer should ensure that stakeholders meet regularly to be appraised on project progress. Local communities should be sensitized on the need for M&E and data management. Also there is need to empower the teams carrying out M&E activities so that they can give credible information. The study establish that there is no adequate cohesion in these teams. Though the teams are adequately competent, there is little commitment and teamwork. There is need for emphasis on team building. In this case the study did not address the issue of data management hence the need for study.
Implementing change	Nzweke, Olandejo, and Emoh (2015)	Assessment of factors responsible for successful project implementation in Anambra state, Nigeria	Used survey design, sample of 100 was obtained through random sampling. Five Likert scale questionnaire. SPSS was used for analysis.	The factors responsible for project success are numerous but there is a good level of correlation between them	There is need for more research to provide enlightenment about the factors that may lead to project success Participatory monitoring and evaluation process and performance of literacy and numeracy educational programs.
	Ouko (2015)	Determinants of standard one pupils' achievement in literacy and numeracy in Gucha district, Kisii county Kenya	Purposive and stratified random sampling techniques were employed, descriptive and inferential techniques were employed to analyses data, and SPSS was utilized in data analysis. The study underscored the crucial role played by pre-primary school	The findings of the study revealed that pupils‟ performed better in numeracy compared to literacy. Pre-primary school learning experiences, teachers‟ self-efficacy, and type of school attended influenced pupils‟	When learning occurs there are positive results and management change can influence the performance of learning and proper supervision can yield good results hence the need for this study.

Variable	Author (year)	Title of the study	Methodology	Findings	Knowledge gap
			experiences in promoting academic achievement.	achievement in literacy and numeracy.	
Participatory monitoring and evaluation process	Muriungi (2015)	The role of participatory monitoring and evaluation programs among government corporations: a case of Ewaso Ngi'ro north development	The research used descriptive in that it described the role, challenges and strategies at ENNDA. The population for this research included 149 ENNDA staff and 12 community members	The study established that lack of time, insufficient monitoring and evaluation skills, poor pay lack of enough funds, inadequate staff, lack of skills, technological challenges, lack of awareness and poor infrastructure hindered Participatory Monitoring and Evaluation	There need for more research on evaluating the effectiveness of performance measurement systems to enable efficient allocation of increasing scarce resources. Participatory monitoring and evaluation process and performance of literacy and numeracy educational program in strengthening learning and accountability in institutions
	Nthenge (2014)	Influence of participatory monitoring and evaluation on performance of public private partnership projects in Nairobi county, Kenya	This study used descriptive survey research design. The population of this study was composed of various stakeholders in the PPPs including government totaling 252. A combination of stratified sampling and simple random sampling was used Through simple random sampling, 152 respondents were picked from the population	The study concluded that stakeholder perspectives had the greatest effect on the performance of PPPs projects and also institutional strengthening, and facilitated negotiations, while public accountability had the least effect to the performance of PPPs projects	Selection of appropriate indicators improving the quality of the project, open forums/meetings held which involve stakeholders and selecting the appropriate indicators in a PPP project has been difficult due to stakeholders' different preferences in Nairobi County. So the current study will try to apply Participatory monitoring and evaluation process methodology in identifying and engaging key stakeholders whose power and interest can influence in selecting the right indicators hence project performance.

Variable	Author (year)	Title of the study	Methodology	Findings	Knowledge gap
School environment	Oyuga, (2011)	Determinants of adoption of participatory monitoring and evaluation in management of public secondary schools in kisumu east district, kenya	The study adopted a descriptive survey design. Purposive random sampling techniques and analyzed data by use of	The study found out that the skills of principals and board of governors influences adoption of participatory monitoring and evaluation in public secondary schools Other factors identified included staff capacity, availability of funds, attitude of school managers, level of involvement of stakeholders, at politics and competence.	The current study seek to establish the extent to which school environment influence performance of literacy and numeracy educational programme in Nairobi County on the context of lower primary school classes which involves learners from pre-primary school. The main aim being how the learners are involved in learning together with their teachers
	Parnwell (2015)	Influence of school infrastructure on academic performance in public primary schools in Ruiri location-Meru County, Kenya	The study adapted descriptive survey research methods, purposive sampling, data analyzed through SPSS	The study finding indicates that only one public primary school has a Library, inadequate study materials, overcrowded classrooms and poor maintained.	The current study seek to bridge the gap of school environment on performance of literacy and numeracy educational program.
	Morgan (2015)	The Influence of School Leadership Practices on Classroom Management, School Environment, and Academic Underperformance	The School Leadership, Environment, Classroom Management Assessment Questionnaire (SLECMAQ) was developed for this study and used to collect the data.	The findings will contribute to a positive social change by supporting policies to implement leadership frameworks at underperforming primary schools and thus improving the quality of education in Jamaica	The study ought to investigate the better ways of handling school leadership styles hence improved performance of literacy and numeracy educational programs.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter focused on research methodology that was used to conduct the study. They include: research paradigm, research design, target population, sample size and sampling procedure, research instruments, validity and reliability of research instruments, data collection procedures, data analysis techniques, ethical considerations and operationalization of variable.

3.2 Research Paradigm

The study adapted non-committal pragmatism model structures of philosophy which in real life uses mixed methods in collecting data and analyzing it. In the current study the mixed methods research provides a more comprehensive composite phenomena meaning could not be accessed by any other methodology. This is so since the study captures both qualitative and quantitative aspect of participatory monitoring and evaluation process and performance of literacy and numeracy education programme hence pragmatism is the most appropriate for this study (Creswell and Plano, 2011).

Similar findings were from Shannon B. 2015; Charles, Sanders, Peirce and Creswell, (2003) argued that investigators question on how and what in solving a research problem. This paradigm is chosen because it prepares fundamentals of theoretical substructures for mixed-methods research according to (Tashakkori and Teddlie, (2009); Somekh and Lewin (2005). In this case some mixed – methods researchers range themselves analytically with the transformative paradigm as posited by (Mertens, 2005).The pragmatic paradigm put research phenomena at a central place implying that proceeds towards choosing a better way of giving perceptions into the queries with no philosophical faithfulness to no other paradigm option (Creswell, 2003). For the research problem "key," methods of collecting and analyzing data are chosen as the ones most likely to provide insights into the issue without any methodological allegiance to any alternative paradigm. It uses mixed models which includes both qualitative and quantitative methods and subsequently neutralizes or

cancels the limitations and biases inherent in any single method (Byrne et al 2007). The advantage of this paradigm is the flexibility in the investigation techniques applied because it allows the two methods to be used that is qualitative and quantitative techniques of collecting data.

This study sought to perceive the stakeholders' encounters and opinions on performance of literacy and numeracy educational program in public primary schools Nairobi County. Consequently, the study generated both qualitative and quantitate data which helped get a broad-spectrum of enough facts in assisting to form opinions. Purposes of using pragmatism is the beliefs on mixed methods understanding and the breaking down of the pecking order connecting positivist and constructivist, methods of telling things in a proper meaningful manner. Methodology applied here subsequent mixed method since it involved two variety of methods qualitative and quantitative, design mixed methods provided particular administration for processes in a research design (Creswell, 2012). Method used was proper because the reality of the environment for the phenomena in participatory monitoring and evaluation process and performance of literacy and numeracy educational programme can be investigated in a subjective and objective manner.

3.2.1 Research Design

This study was guided by descriptive survey research design and correlation research design. As posited by Cooper and Schindler (2003), a descriptive survey research design study is anxious in discovering the how, what and where of occurrences. Descriptive studies depicts parameters responding to who, what, and how inquiry. This method was chosen because it is more accurate and correct in involving the explaining of happenings, observation and explains the narratives statements in a carefully planned manner. This research design also depicts the attributes of inhabitants fully, techniques and tools for gathering facts on how that data is analyzed (Chandran, 2004). On the other hand correlation research design was employed to depict the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme .The study therefore generalized the findings to all the public primary schools in Nairobi County with the help of this research design.

Furthermore in the current study, the influence of PM&E process, school environment variables and performance of literacy and numeracy educational program were studied. Therefore, both descriptive research survey design and correlation research design were used in the study. Descriptive survey research design describes the problem while correlation research design explains the relationship by use of simple and multiple regression models. However the study adapted the grade design of mixed method whereby data collected was analyzed on qualitative and quantitative propositions of instruments for collecting data were questionnaires and interview schedules.

3.3 Target Population

The target population constitutes Head Teachers in 200 public primary school in Nairobi County, lower grade primary school teachers in grade 1-3, Curriculum Support Officers(CSO'S) and Research Triangle Institute International officers (RTI officers). The unit of analysis are the on-going literacy and numeracy educational programme and public primary schools and RTI international. This study comprised target population of 2053. The literacy and numeracy educational programme is a national government programme spread in the 47 Counties in the Country but the study was delimited in Nairobi.

According to Yurdusev (1993) target population restrains part of the body of team of researcher involved in examining the problem. Therefore, the findings generalizes population under investigation, since they all have common and significant traits in them. Long (2002) argued it is better applied to big samples under normal circumstances and where feasible and proper constrains are applied. The broad sample size is applicable in this study.

National government literacy and numeracy educational intervention program, on- going TUSOME programme in Kenya located in Nairobi but offering services to all the 47 counties, the 200 public primary schools in Nairobi County and a handful sample of Curriculum Support officers from the County. Sampled participants in the on-going program were studied. The participants were derived from lower public primary school teachers who are involved in the program, the head teachers in the 200 primary schools

who attends the courses offered by the implementing NGO and the CSO'S from the MOEST, and also the monitoring and evaluation officers from RTI were involved in the study.

These officers from RTI international were monitoring and evaluation officers, directors of the institute, deputy directors, project managers, project coordinators, ICT officers involved in transmitting data collected during class observations and the field officers who supervise the trainings of TUSOME when teachers and coaches are being trained Country wide.

Table 3.1

Target Population

Category of target population	Target population
Curriculum support officers	21
RTI staff members	32
Head Teachers	200
Lower grade teachers	1800
Total	**2053**

Source: MOEST (2018)

3.4 Sample Size and Sampling Procedure

Discussion of samples and sampling procedure were done in this section. Kothari (2007) elucidates a sample size as numerous objects picked in the surrounding to add up to a sample while sampling refers to the techniques used in choosing objects of sample.

3.4.1 Sample Size

The sample size used for the study was gotten using Yamane formula denoted by the population size and the acceptable margin of error of 0.05 as designated in the formula which was proposed by Alemenda et al. (2010). From the target population of 2053 using formula for population proportion as suggested Yamane (1967) also supported by (Owino, 2013).

Sample Size $(n) = \frac{N}{1+N(e)^2}$

Where;

N = target population

e = Precision error at 95% confidence level = 0.05

n = Desired sample size where population is less than 10,000

e^2 = $(0.05)^2$

Therefore, at N = 2053 at 95% confidence level. The sample size for this study is computed as shown below.

$n = \frac{2,053}{1+2,053(0.05)^2} = \frac{2,053}{1+2,053\ (0.0025)} = 334.773$ This should be 335

$\simeq$ 335 respondents

Table 3.2

Sample Size

Categories	Target population	Sample size
Curriculum support officers	21	3
Research Triangle Institute	32	5
Head teachers	200	33
Lower primary teachers	1800	294
Total	**2053**	**335**

3.4.2 Sampling Procedure

The Sampling unit of study were literacy and numeracy educational program in Nairobi. Sampling frame for schools implementing the projects was a normal list from education county director which had the titles of the schools, number of teachers per school, and the specific individual respondents from lower classes who were the main respondents in giving the information required by the researcher. Simple random sampling was appropriately selected since it is a subset of a statistical population in each member of the subset has an equal probability of being chosen. There were 200 public primary schools out of which 33 public primary schools were systematically randomly sampled. Purposive sampling was employed to 33 Head Teachers since they had in-depth information

pertaining to study constructs, while 294 lower public primary school teachers were selected through simple random sampling from the 1800 teachers. To be able to get the sample size of lower teachers the researcher created a raffle from 1-1800 and folded them. The papers were put in a hat and then mixed up whereby they were supposed to be picked by the teachers without replacement. Those who picked from1-294 formed the sample size of the lower primary school teachers. On the hand, out of 21 curriculum support officers from Nairobi County 3 officers were purposively sampled. In addition 5 officers from the implementing NGO (RTI) were purposively identified and participated in the in-depth interviews during data collection process. All the respondents were systematically sampled through simple random sampling procedure.

Simple random sampling methodology was used to Head teachers and lower primary teachers, was preferred because they have been trained on TUSOME projects hence were best suited to provide the information sought under this study. Creswell (2015) argues that random sampling offers a practicable and effective alternatives and higher accuracy of results than any other technique. Therefore, categories and sample size in the table below were determined by calculations using Yamane formula (1967).

Table 3.3

Sampling Procedure

Categories	**Target population**	**Sample size**	**Sampling procedure**
Curriculum support officers	21	3	Simple random sampling
Research Triangle Institute	32	5	Simple random sampling
Head teachers	200	33	Simple random sampling
Lower primary teachers	1800	294	Simple random sampling
Total	**2053**	**335**	

With sample size determined, proportional allocation was adopted to distribute the respondents among various categories shown as follows:

$n_1 = \quad n.p_1$

$n_2 =$ $n.p_2$

$n_3 =$ $n.p_3$

Where;

$n_1 =$ Category sample size

$n =$ Determined sample size above 335

$p =$ Proportion of population in each category

Hence for curriculum support officer represented by;

$n_1 = 335\ x\ \frac{21}{2,053}$ = 3 respondents.

RTI Monitoring and evaluation officers represented by;

$n_2 = 335\ X\ \frac{32}{2053} =$ 5 respondents

Head teachers represented by;

$n_3 = 335\ x\ \frac{200}{2,053}$ = 33 respondents.

While for lower primary teachers represented by;

$n_4 = 335\ x\ \frac{1,800}{2,053}$ = 294 respondents.

3.5 Research Instruments

Data was gotten by use of questionnaires and interview guide. Data collected in this study entailed responses thematic including participatory M&E process, school environment and performance of literacy and numeracy educational programme. The research instruments were delivered by researcher and four research deputies to the right people under investigation. For the Curriculum Support Officer's and the Research Triangle International officers an in-depth interview schedule was used to get the required facts.

3.5.1 Questionnaires for Head teachers and for Grade 1-3 Teachers

The study applied two research tools; questionnaires and interview guides to collect information from the respondents. The questionnaires used had both open and closed questions. According to (Bhaltacherjee, 2012) a research tool are composed of organized

queries deliberated apprehending responses from respondents in a systematics way. This tool considered appropriate since it helps in gathering facts in a large numerous respondents who are under investigation. Methodology selected was appropriate since it allows the respondents to accept insignificance of the study since they followed the steps of PM&E process, stakeholder engagement, school environment and the performance of literacy and numeracy educational program. This allows the respondents to be fully active in being involved in the learning and management process.

The respondents were enlighten about the determination of collecting facts before the questionnaire were administered and they were guaranteed privacy of the information given by them since they were only met for academic purposes. Respondents were requested to select from a fixed list of answers whereby they were supposed to select any one of the options given. This method facilitated coding and helped so much in quantifying the answers to the questions. Part one of the questionnaire collected information regarding the respondents' demographic information. The purpose of this section is facilitate the background information of the respondents while part two sought to acquire information on participatory monitoring and evaluation process. Part three seek information inscribing on stakeholder engagement, stakeholder capacity building, data collection, data management, implementing change, school environment and performance of literacy and numeracy educational programme. In this study respondents were requested to rate the statements of every variable in a likert scale of 1-5, with 1 indicating "strongly disagree". 2 disagree, 3 neutral 4 agree and 5 indicating strongly agree" in this way it helped the respondents in responding to the research statement and getting the information in an accurate manner with minimal assumptions.

3.5.2 Interview Guide for Curriculum Support Officers and Research Triangle Officers

Interview guide was used to collect qualitative data from key informants who oversee the programme, in the current study the key informants are the curriculum support officers from the MoEST and officers from the Research Triangle International Institute commonly referred as (RTI). These officers are monitoring and evaluation officers, directors of the

institute, deputy directors, project managers, project coordinators, ICT officers involved in transmitting data collected during class observations and the field officers who supervise the trainings of TUSOME when teachers and coaches are being trained Country wide. Bhattacherje, (2012) says that, interviews are personalized form of data collection methodology than questionnaires and are carried out by knowledgeable interviewers applying research methodology agreements as questionnaires surveys for example standardized set of queries. Bahattacherjie adds that in interviews, the interviewer has the chance or shed light on any quarry lifted by the respondents or ask probing or follow-questions.

The interview guide was divided into three parts. Part one to introduce interviewer to generate affinity with interviewee and demographic information on respondents. The other sections was guided by the questions based on the indicators for each variable in the study. The interview took averagely 25-30 minutes at their respective offices. The interview schedule was conducted from 12th November 2018 to 20th December 2018.The interview schedule focused on the variables under study and as the interviews progresses the interviewee elaborated more on the crucial information about the challenging issues in the programme under study. Interview schedule was administered to curriculum support officers who provided concrete information about the programme which was very important to the study. The data collected necessitated every respondent on the study themes including participatory monitoring and evaluation process, school environment and the performance of literacy and numeracy educational programme.

3.5.3 Pilot Testing of Research Instruments

Tools used for piloting were tested in some selected public primary school in the neighboring Kiambu County and the questionnaires were delivered to a few head teachers and lower grade teachers who have similar characteristics and are also implementing the same programme in the Country. The researcher administered 34 questionnaires to selected school which was a sample from 335 to 34 using the Mugenda (2008) who posits that 10% of the study sample is adequate for pilot study. The questionnaires were delivered through hand delivery and left to be filled so that they could be collected later to an agreed date by

both the researcher and the respondents. The researcher found out that the questionnaires were well filled, meaning that they were okay for data collection to the right respondents..

A pilot instrument which is a questionnaires should be clear, non- ambiguous, should contain simple questions and straight to the point. The current study used questionnaire's to collect data and before embarking on the main data collection process 10% of the sample size which was 327 was used in piloting at Kiambu County. Kiambu County was chosen because it had similar characteristics with Nairobi County so it was ideal for selection. The questionnaires were filled and any ambiguity and wrongly stated statements were corrected and validated by the supervisors and the Monitoring and evaluation experts before embarking on the major exercise. The instrument was found to be fit to collect the information required by the researcher. The instrument was reliable at 0.094 meeting the requirement of a god questionnaire. Interview guide was administered to one curriculum support officers in the same county to test the validity of the instruments. According to Priyanga (2017) the purpose of pilot study was to test the validity and reliability of research instruments. A pilot study is generally done on persons of pertinent audiences (Hulley, 2007) though different from those of final sample to avoid influence on later behavior of research subjects of already involved in the investigation.

3.5.4 Validity of the Research Instruments

A research is valid if it generally measures what is meant to measure and when data collected directly and precisely representing the respondent's opinions as stated by (Creswell and miller 2000). Validity of research instrument was ensured in pilot testing to help define the instruments. This was ensured through the institutions that had specific individual who responded to the questions well in the questionnaire. Prior to pre-testing, experts and peer opinion was sought on the representation and suitability of the questions. Suggestions for improvement were made where necessary and amendments made.

Validity refers to the correctness and meanings of deductions which are found research findings, in other words, validity is at the point of getting findings acquired from the analysis represent phenomena under study (Mugenda and Mugenda, 2003). Thus validity

is a subject concerning what can be measured. An instrument is validated by proving that items are representative of the characteristics that it is claimed to choose carefully (Otieno, 2003). Validity for interview guide was ensured through careful record keeping through voice recording during the interviews and note taking. My supervisors and qualified experts in this field were also used in assessing the authority of the data finally variables and ideas carried, sufficiently reflected problem being examination.

Content validity as defined by Kothari (2007), as the extent to which a testing of tools supply enough description of title under investigation. In the current study content validity helped in validating the accuracy of the questions asked in the questionnaires and the information which was required by the researcher for the study. In this case then the research objectives were achieved and questions were answered according to the research ideas. This was taken care of through operationalization of the research variables and ensured that translation reflected the true meaning of the content. The supervisors validated it to be correct and ready for intended use according to the objectives. Construct validity encompasses operationalization of research variables and ensures that translation reflects the true meaning of the construct. It also guides on how to frame questions, gives guidelines and instructions on how information should be filled.

Zohrabi, (2013) postulated that construct validity is how the researcher translates or transforms a concept or an idea into functional and operating reality. On the part of construct validity, theoretical definitions of the variable and selected indicators covering the domain and dimensions of each of the variables was provided This was measured by the expert in of education that area and the supervisors in the university.

3.5.5 Reliability of the Research Instruments

Reliability is the extent to which end results are congruous and precise constituting of the total population being probed and giving similar end results of the study even if they are repeated severally using the same of different methodology and type of procedures for collecting data and obtain the same information through different sources Bhattacherje (2012), he continues to argue that the same results are acquired if the scale is used to

measure the same construct implying that even if it is done multiple times it will yield the same results. Chakrabartty (2013) argues that reliability any tool of research is reliable if able to measure consistently, precisely, repeatedly, trustworthy results.

This is supported by Mugenda and Mugenda, 2003) by stating that reliability being chosen carefully the degree to which a researcher instrument yields consistent results after repeated trials (Borg and Gall, 1989) note that an instrument is reliable if it is internally consistent or stable over time. That is if it provides consistent results. Reliability was done by writing all the questions for interview schedule down and administering it in a comprehensive manner according to the questions as per the objectives while the quantitative data was filtered through a questionnaire using a likert scale of 1-5. A likert scale was appropriate because the study has a qualitative aspect in addition to seeking perceptions of the respondents pertaining to the study variable.

Split half method was used by dividing instruments into two halves – odds and evens and then Pearson's correlation ® calculation was done between the scores of the two halves. Split half method was used to pretest the reliability of the instruments by subjecting 33 items in the questionnaires which represented 10% of the study population. The Pilot respondents were from Kiambu County public primary schools and then Cornbrash's Alpha was calculated. Correlation between the two computed scores were established using Cronbach's coefficient Alpha. As put by Haier et al. (2006), a scale is reliable if Cronbach's coefficient alpha of the scale is above 0.7.

Consequently Spearman- Brown formula was used to determine the reliability of the entire test, where reliability:

$$RX = \frac{2r}{1+r}$$

R = denotes estimated reliability of the entire test

r= the correlation between the halves which are measured to be strictly parallel

RX is the estimated reliability of the entire test

Hence reliability was determined according to Frankel and Wallen (2010) and alpha above 0.7 is acceptable

$$r = \sqrt{\frac{N\varepsilon xy - (\varepsilon x)(\varepsilon y)}{[N\varepsilon x^2 - \varepsilon(x)^2]\,[\varepsilon y^2 - (\varepsilon y)^2]}}$$

Where;

N = number of pairs of scores

$\sum xy$ = sum of the products of paired scores

$\sum x$ = sum of x scores

$\sum y$ = sum of y scores

$\sum x^2$ = sum of squared x scores

$\sum y^2$ = sum of squared y scores

The split halves was transformed into an appropriate reliability estimates for the entire test and Spearman – Brown prophecy formula was applied.

Where RX is the estimated reliability of the entire test and r is the Pearson correlation between the two halves. Hence reliability was determined according to Frankel and Wallen (2010) and alpha above 0.7 is acceptable. The current study had a composite reliability value of 0.994 which was greater than 0.7 meaning that the research instrument was reliable and appropriate for the study.

The results in Table 3.4 shows that all the themes were reliable since they had a Cronbach alpha coefficient above 0.7 which is considered as sufficient in the study and being in consistent with the propositions by orodho, (2009) which posited that a value of not less than 0.7 is sufficient and acceptable. This was established through the variable components used in the study and the performance of literacy and numeracy educational programme was assumed to have acceptable level of reliability.

Table 3.4

Results for Reliability Test of the Study

Variable	No of items	Cronbach's alpha Coefficient (a)
Performance of literacy and numeracy	10	0.986
Stakeholder engagement	10	0.996
Stakeholder capacity building	12	0.995
Data collection	11	0.997
Data management	16	0.995
Implementing Change	18	0.996
school environment	13	0.993
Total	**90**	**0.994**

3.6 Data Collection Procedure

Prior to going on board to data collection process pertinent acceptances was obtained. First an introductory letter from the University of Nairobi was obtained so as to facilitate in getting the research permit from National Council for Science and Technology. In addition, a letter from the employer was obtained to assist in collecting the information of public primary schools and the number of teachers from County director's office. An authorization letter from the ministry of education to allow data collection from the sampled schools was provided. An introductory letter for the research assistants to collect data was also made available and they embarked on the exercise. Collection of primary data was administered through questionnaires and interview schedules which were sampled to a few respondents.

The two research assistants were instructed on research morals, research instruments administrations, interview skillfulness and data coding. The researcher oversaw the whole exercise; made spot checks to ensure conformity to standards and guidelines. A covering letter stating the purpose of the study was attached guaranteeing respondents privacy. Questionnaires were delivered through hand delivery and were picked later at an agreed date by both the researchers and the respondents. Though in some cases some respondents

opted immediate feedback and gave out the questionnaires after filling them. On completion of data collection, the tools were cross examined, cleaned information coded ready for analysis.

3.7 Data Analysis Techniques

In this study descriptive and inferential statistics were utilized to analyze qualitative and quantitative data. The data collected using questionnaires were checked for completeness and was subjected to Normality test which examined visibility by use of plots, by significant tests of comparing the sample distribution to a normal one as argued by Field (2009). On the hand qualitative data was analyzed through content analysis thematic themes derived from an in-depth interview schedule was meshed together with the quantitative data to enrich the findings of the study.

3.7.1 Descriptive Statistics

Descriptive analysis was adapted in this study. Quantitative data was obtained and analyzed appropriately through the use of a statistical package for social (SPSS) version 25, instrument were used to capture descriptive and inferential statistics. By use of descriptive data analysis, frequencies and percentages were obtained. In this study, arithmetic mean was the measure of central tendency as a statistical tool which was used in the analysis also Pearson's Product Moment Correlation, multiple regression and linear Regression.

3.7.1.1. Quantitative analysis

According to Brymer and Cramer (2005), data is analyzed in order to fulfill research objectives and give solutions to research questions. Descriptive data was analyzed by using frequencies and percentages. Both the arithmetic mean and standard deviation were used as statistical tools to measure central tendency and dispersion respectively. These statistical tools are, according to Gakuu, Kidombo, Keiyoro (2018) ideal for the interval data. The position about where items tend to cluster is indicated by the measure of central tendency and it was considered the most representative statistics for the whole set of data. Validity and reliability of data was triangulated to ensure that data collected from different participants and different localities was actually reliable and valid according the

instruments administered. Data obtained was cross checked for consistency of specific and factual data items which were recorded in the data collection instruments. Data was triangulated using the information from the Head Teachers, lower primary school teachers and information from the CSO'S and RTI international institute officers.

3.7.1.2. Qualitative analysis

According to Bodgdan and Biklen (2003) they argue that qualitative data analysis is operating with data, breaking it into smaller units for ease in working with them, coding that data must be coded and synthesis so that it can be researchable. This means when searching you are able identify explain and search patterns links for facts collected. So, qualitative data procedures involves analysis of transcripts, which help in identifying the themes gathering information which needs to be put together as texts (Burnard et al, 2008). A critical assessment of each response was performed as a result of interviews and analyzed using thematic analysis in conjunction with the study key objectives and subsequently presented with the report in narrative extracts. Stake (1995expalins this form of data analysis by grouping it according to themes and definitions into categories.

3.7.2 Inferential statistics

The inferential analysis was performed by use of correlation and regression to show the relationship, direction and strength of the independent variable and dependent variable.

3.7.2.1 Correlation analysis

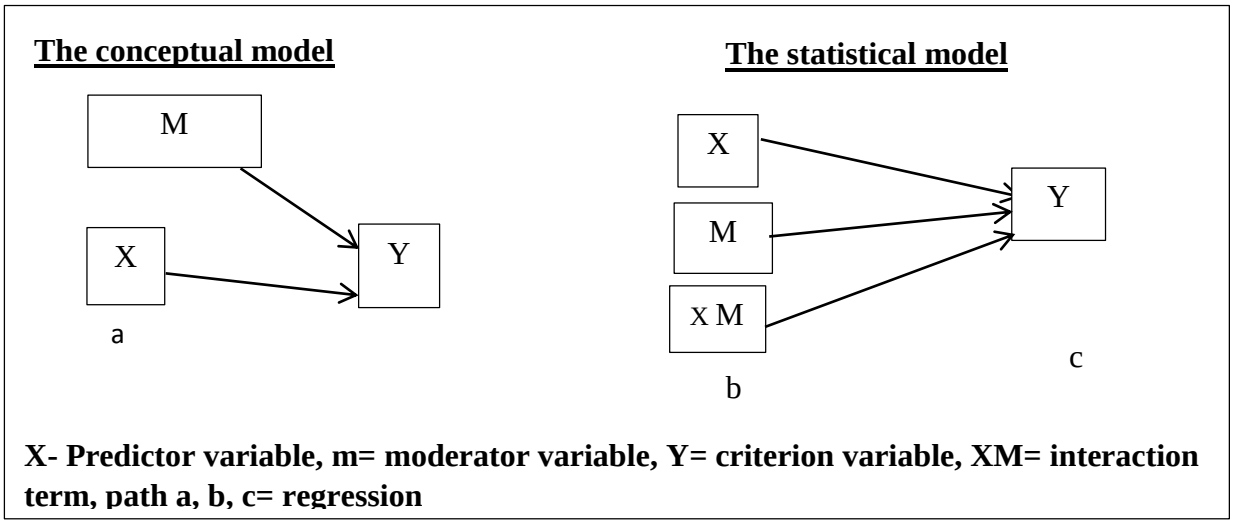
Correlation analysis is a statistical method which is applied to give resolutions and find if any connection existed a between themes Bluman (2009). Pearson's product moment correlation coefficient (r) is universally applied to social sciences as a measure of power in liner dependence between two variables which have a strong relationships between dependent and independent variables. In this case Pearson's product moment correlation coefficient (r) was adapted.

3.7.2.2 Regression Analysis

Regression analysis is a statistical measure which describes nature of relationships between variables either negatively, positively, linear or nonlinear according to (Mugenda and Mugenda, 2003). Whom continues to argue that any data acquired from area of raw data, it is very hard to explain it unless it is cleaning, coding and key-punched in the computer and then later analyzed for correct and accurate information required. Regression analysis was used to analyze and influence the variables under investigation. Scatter diagrams were plotted to indicate the linear relationship between the dependent and independent variables and test the two-tail test which will either allow the positive or negative influence when testing the hypothesis. The combined variables were analyzed by use of multiple regression analysis for example participatory M&N process, performance of literacy and numeracy educational programme. Based on this the study examined the existence of significant association between respondents' profile, participatory monitoring and evaluation process, school environment and performance of literacy and numeracy educational programme.

Regression analysis (of the form, $\hat{Y} = a + bX$, where Y is an estimate of the average value of Y corresponding to a given value of X. given that X is the definite value of the independent variable, a- a constant that is an estimate of α, the y intercept of regression line and b is an estimate of β, the slope of regression line – a constant. However, note that the expression above implies a straight line, i.e. perfect relationship because this is never the case in real research, we have an error term or residual denoted byεi. Therefore, $Y_i = \beta_0 + \beta_1 Xi + \varepsilon i$ with β instead of b and a will be used to test hypothesis, to decide the existence of significant relationship between variables under study.

Numbering of the Regression models developed for analysis and relationship of the themes is done. When regressing, for this study conceptual and statistical models were adapted in simple moderation as suggested Baron and Kenny, (1986) explaining moderator as a qualitative for example gender, colour, status and quantitative as examples of levels in rewards, variables that affect the strength and direction of the relationship linking an independent or predictor variable and dependent criterion variable. The portrayed conceptual and statistical models as shown in figure 2.



Source: Baron and Kenny (1986)

Figure 2: Conceptual and Statistical Models for Simple Moderation

Figure 2 indicates a conceptual model applied in this study, test of themes of moderator influences the relationships linking the independent variable and the dependent variable at the same time statistical model designates regression conveyed at 'path a' as the predicator influence on Y, 'path b' as the moderator influencing on Y while 'path c' as interplay term influencing on Y. the moderator hypothesis is assisted when interplay (path c) was significant.

Dependent variable:

Y - Performance of literacy and numeracy educational programme

Indicators: Improved reading skills, letter recognition, listening skills, speaking skills, writing skills, Simple arithmetic calculations, improved transition rate, Satisfaction of programme beneficiaries, class average performance, timely acquisition of literacy and numeracy skills.

Independent variables:

X_I - stakeholder engagement

X_2- stakeholders' capacity building

X_3- data collection

X_4- data management

X_5- Implementing change

X_6- combined participatory monitoring and evaluation process

β_0 - Constant term

β_1 - Beta coefficient

ε - Error term.

Performance of literacy and numeracy education programme

Moderating variables:

X_7- school environment

Regression model of hypothesis one

In hypothesis one it was linear thus it guided the regression model in data analysis;

Model 1

Linear regression was used to test 1. H_0: there is no significant relationship between stakeholder's engagement and performance of literacy and numeracy educational programme as indicated in the equation

$Y=f(X_1, \varepsilon)$

$Y= \beta_0 + \beta_1 X_1 + \varepsilon$

Where ε is a random error

Regression Model for hypothesis Two

In hypothesi**s** two linear regression model was used to test the data analysis;

Model 2

Linear regression was used to test 2. H_0: there is no significant relationship between stakeholder's capacity building and performance of literacy and numeracy educational programme as indicated in the equation.

$Y = f(X_2, \varepsilon)$

$Y = \beta_0 + \beta_2 X_2 + \varepsilon;$

Where ε is a random error

Regression Model for hypothesis Three

Hypothesis three was linear regression hence the regression model was used to test the data analysis;

Model 3

Also hypothesis three was linear regression thus the following regression model guided the data analysis;

Linear was used to test 3.H_0 there is no significant relationship between data collection and performance of literacy and numeracy educational programme as indicated:

$Y = f(X_3, \varepsilon)$

$Y = \beta_0 + \beta_3 X_3 + \varepsilon$

Where ε is a random error

Regression Model for hypothesis Four

Model 4

Also fourth hypothesis is linear thus the following regression model guided the data analysis;

Linear regression was used to test 4. H_0 there is no significant relationship between data management and performance of literacy and numeracy educational programme as indicated in the equation.

$Y = f(X_4, \varepsilon)$

$Y = \beta_0 + \beta_4 X_4 + \varepsilon$

Where ε is a random error

Regression Model for hypothesis Five

Model 5

In hypothesi***s*** five linear regression was used.5. H_0 Implementing change has no significance influence on performance of literacy and numeracy educational programme,

$Y= f(X_5, \varepsilon)$

$Y=\beta_0 + \beta_5 X_5 + \varepsilon$

Where ε is a random error

Regression Model for hypothesis Six

Model 6

Hypothesis six was multiple regression so regression model guided the data for analysis;

Multiple regression was used to test 6. H_0 the combined effect of PM&E process and performance of literacy and numeracy educational programme, combined participatory monitoring and evaluation process has no significant influence on performance of literacy and numeracy educational programme.

$Y=f(X_1, x2, x3, x4, x5, \varepsilon)$

$Y=\beta_0 + \beta_1 X_I + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon;$

Where ε is a random error

Regression Model for hypothesis Seven

Model 7

Multiple regression was used to test the moderating influence between PM&E process and performance of literacy and numeracy educational programme.

$Y=f(X_1, X_2, X_3, X_4, X_5, \varepsilon)$

7.H_0;$Y=\beta_0+\beta_1 X_I+\beta_2 X_2+\beta_3 X_3+\beta_4 X_4+\beta_5 X_5+\beta_6 X_{6+}\beta_0 X_1 M+\beta_8 X_2 M+\beta_9 X_3 M+\beta_{10} X_4 M+ \beta_{11} X_5 M$ there is no significant moderating influence of school environment on the relationship between PM&E process and performance of literacy and numeracy educational program, multiple regression was used. Qualitative data was analyzed through content analysis, which Bryman (2012) defines as a proposition of investigation in records texts seeking to quantify content in terms of prearranged classification in a systematical and duplicable manner. Field notes were used to summarize the information collected during the day's activities on participatory monitoring and evaluation processes, school

environment, project leadership and performance of literacy and numeracy projects, and the emerging themes put together on aggregate basis for systematic analysis of data.

3.7.3 Summary of Test of Hypothesis

Various hypotheses were tested in line with the objectives of the study. Table 3.5 illustrates the summary of the research objectives, null hypothesis, Model of testing hypothesis, the analysis and results were interpreted.

Table 3.5
Summary of Statistical Test of Hypothesis

Objective	**Null hypothesis**	**Model of testing hypothesis**	**Type of analysis**	**Interpretation of the results**
1. To establish the extent to which stakeholders engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County.	**1. H_0** There is no significant relationship between Stakeholders engagement and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	Using a linear regression analysis $Y= \beta_O + \beta_1 X_1 + £$ Y=Performance of literacy and numeracy educational programs β_O= constant term β_1= Beta Coefficient X_1= Stakeholder engagement for monitoring and evaluation £= error term	Simple Linear regression	If the P-Value is $\leq$ 0.05, $1.H_O$ is rejected and $H_1$is accepted
2. To determine how stakeholders capacity influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	**2. H_0** There is no significant relationship between Stakeholders engagement and Stakeholders capacity building and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	Using a linear regression analysis $Y= \beta_O + \beta_2 X_2 + £$ Y=Performance of literacy and numeracy educational programs $\beta_{O=}$ constant term $\beta_{2=}$ Beta Coefficient $X_{2=}$ stakeholder capacity building for monitoring and evaluation £= error term	Simple Linear regression	If the P-Value is $\leq$ 0.05, $1.H_O$ is rejected and $H_1$is accepted
3. To examine how data influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	**3. H_0** There is no significant relationship between Data collection and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	Using a linear regression analysis $\mathbf{Y}= \beta_O + \beta_3 X_3 + £$ **Y**=Performance of literacy and numeracy educational programme $\beta_{O=}$ constant term $\beta_{3=}$ Beta Coefficient $X_{3=}$ data collection for monitoring and evaluation; £= error term	Simple Linear regression	If the P-Value is $\leq$ 0.05, $1.H_O$ is rejected and $H_1$is accepted

Objective	**Null hypothesis**	**Model of testing hypothesis**	**Type of analysis**	**Interpretation of the results**
4.To determine the extent to which data management influence performance of literacy and numeracy educational	**4.H_0** There is no significant relationship between Data management and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	Using a linear regression analysis $Y= \beta_O + \beta_4X_4+£$ Y=Performance of literacy and numeracy educational programme β_O = constant term $\beta_{4=}$ Beta Coefficient X_4= data management for monitoring and evaluation £= error term	Simple Linear regression	If the P-Value is $\leq$ 0.05, 1.H_O is rejected and $H_1$is accepted
5. To assess how implementing change influence performance of literacy and numeracy educational programme in public primary schools in Nairobi county, Kenya	**5. H_0** There is no significant relationship between Implementing change and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	Using a linear regression analysis $Y= \beta_O + \beta_5X_5+£$ Y= Performance of literacy and numeracy educational programme $\beta_{O=}$ constant term $\beta_{5=}$ Beta Coefficient $X_{5=}$ implementing change for monitoring and evaluation £= error term	Simple Linear regression	If the P-Value is $\leq$ 0.05, 1.H_O is rejected and $H_1$is accepted
6. To establish how combined participatory monitoring and evaluation process influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	**6. H_0** There is no significant relationship between Combined participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	Using a Multiple regression $Y=\beta_O+\beta_1X_1+\beta_2X_{2+}\ \beta_3X_{3+}\ \beta_4X_{4+}\ \beta_5X_{5\ +}£$ Y=Performance of literacy and numeracy educational programme $\beta_{O=}$ constant term $\beta_{1,=}$stakeholders engagement for monitoring and evaluation $\beta_{2,=}$stakeholders capacity building for monitoring and evaluation $\beta_{3=}$ data collection for monitoring and evaluation	Multiple regression	If the P-Value is $\leq$ 0.05, 1.H_O is rejected and $H_1$is accepted

Objective	Null hypothesis	Model of testing hypothesis	Type of analysis	Interpretation of the results
		,$\beta_{4=}$ data management for monitoring and evaluation $\beta_{5=}$ implementing change for monitoring and evaluation £= error term		
7.To assess the moderating influence of school environment on the relationships between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi county, Kenya.	**7. H_0** There is no significant moderating influence of school environment on the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.	Using a Multiple regression $Y= \beta_O + \beta_1X_1+£ \beta_2X_2+ \beta_3X_3 \beta_4X_{4+} \beta_5X_{5+} \beta_6M_+ \beta_7X_IM+ \beta_8X_2M_+ \beta_8X_3M \beta_8X_4M \beta_8X_5M$ Y= Performance of literacy and numeracy educational programme $\beta_{O=}$ constant term $\beta_{1,=}$stakeholders engagement for monitoring and evaluation $\beta_{2,=}$stakeholders capacity building for monitoring and evaluation $\beta_{3=}$ data collection for monitoring and evaluation ,$\beta_{4=}$ data management for monitoring and evaluation $\beta_{5=}$ implementing change for monitoring and evaluation M=School environment £= error term	Multiple regression	If the P-Value is $\leq$ 0.05, 1.H_O is rejected and $H_1$is accepted

3.8 Ethical Consideration

Throughout the research processes ethical issues were observed and basic aspects of social research were considered. Written communication seeking authority to collect data was done from National Council for Science, Technology and innovation (NACOSTI), also wrote an introduction letter to RTI International offices for approval to visit their offices and lastly to education county director Nairobi. The two letters were provided hence commencing of the data collection which finally led data analysis and reporting.

A transmittal letter to be allowed to collect data from the respondents was written explaining to the importance of their participation at the same time giving truthful information to this study. An in depth interview schedule was carried out and comprehensive information was acquired. All the time the researcher adhered to ethical issues for example being honest, have confidentiality ethics, disclosure, check on cultural sensitivity, do voluntary participation and be sensitive on security. When data was being analyzed the researcher observed acceptable practices for writing a good report.

3.9 Operationalization of the Variables

Operationalization involves description of operations which are used in measuring the study variables (Mugenda and Mugenda, 2003). In this study the independent variables or explanatory variables includes; participatory monitoring and evaluation process, PM&E reporting and participatory dissemination of M&N results; moderating variable as school environment with indicators of school leadership, teacher-pupil ratio infrastructure while the dependent variable is performance of literacy and numeracy educational programme. Operationalization of variables in this study are presented in Table 3.5.

Table 3.6
Operationalization of Variables

Objectives	Variables	Indicators	Measurement	Measurement Scale	Tools of Data Analysis	Data Analysis Techniques
1. To establish the extent to which stakeholders engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	Stakeholders Engagement	• Identification of stakeholders • Stakeholders'' level of involvement • Developing of project objectives • Developing monitoring and evaluation plan	• Stakeholders analysis list with areas of interest of each one of them • Existence of developed objectives • Existence of stakeholders' management plan.	Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient Simple linear Regression	Descriptive statistics Inferential Analysis
2. To determine how stakeholders capacity building influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	Stakeholders' capacity building	• Trainings for monitoring and evaluation workshops • Trainings for monitoring and evaluation seminars • Aligning training gaps identified • M&E knowledge and skills	• Baseline plan • Mid-line plan • End-line plan • Seminar / workshop review meetings • Monitoring and evaluations practices	Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient Simple linear Regression	Descriptive statistics Inferential Analysis
3. To examine how data collection influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	Data collection	• Selection of monitoring and evaluation data instruments • M&E data collection and collation of information methods	• Existence of TANGARINE tablet • M & E documents • Ministry of Education reports • Existences of Gantt chart	Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient	Descriptive statistics Inferential Analysis

		• Sources of monitoring and evaluation information • Schedules of monitoring and evaluation activities			Simple linear Regression	
4. To determine the extent to which data management influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	Data management	• Identifying specific data analysis methods • Identify staff responsible for data management • Data analysis and interpretation • Establishment of M&E database • M & E reports writing	• M & E documents • Existence of responsibility matrix • monitoring and evaluation documents • monitoring and evaluation system • monitoring and evaluation documents	Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient Simple linear Regression	Descriptive statistics Inferential Analysis
5. To assess how implementation of change influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	Implementing change	• Reviewing collected data • Number of transmitted reports • Utilization of monitoring and evaluation results • Project intervention	• monitoring and evaluation document • monitoring and evaluation reports • Closure reports of monitoring and evaluation results in implementation	Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient Simple linear Regression	Descriptive statistics Inferential Analysis
6. To assess how the combined participatory monitoring and evaluation process influence performance of literacy and numeracy educational programme in public primary	Participatory monitoring and evaluation process	• Stakeholder engagement • Stakeholder capacity building • Data collection • Data management • Implementing change	• Level of stakeholder involvement • Training works • Identification of tools • Data records • Utilization of M&E results	Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova	Descriptive statistics Inferential Analysis

schools in Nairobi County, Kenya.					Coefficient Multiple linear Regression	
7. To assess how the moderating influence of school environment on the relationships between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme	School environment Participatory monitoring and evaluation process	• School infrastructure • Allocation of resources • Teacher/pupil ratio • School leadership • Identification of stakeholders • Stakeholders'' level of involvement • Trainings for monitoring and evaluation workshops • M&E data collection and collation of information methods • Identify staff responsible for data management • Utilization of monitoring and evaluation results • Availability of resources • Project sustainability Data reliability	•Existence of physical facilities •Availability of learning materials •Teacher/pupil ratio •School leadership • Stakeholders analysis list with areas of interest • Existence of developed objectives • Baseline plan • Mid-line plan • End-line plan • M & E documents • Ministry of Education reports • Existence of responsibility matrix M&E reports • Continued funding by donors • Ratio of resources allocation	Interval Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient Multiple linear Regression Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient Multiple linear Regression	Descriptive statistics Inferential Analysis Descriptive statistics Inferential Analysis

	Performance of literacy and numeracy educational programme	•Reading skills •Writing skills •Proficiency skills •Class average performance •Timely acquisition •Proficiency in speaking skill •Letter recognition •Simple arithmetic calculations • Beneficiaries satisfaction •Transitional rate improved	• Learning materials • Trainings of workshops • Trainings of seminars • Employment of more Teachers • Learning skills in proficiency improved • Academic performance improved	Interval	Frequencies Percentage Mean score Standard Deviation Correlation Anova Coefficient Multiple linear Regression	Descriptive statistics Inferential Analysis

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the study results and how data was analyzed based on the themes drawn from the study objectives. The variables include: questionnaires return rate; background information of the respondents; basic statistical assumptions; engagement of stakeholders for Monitoring and Evaluation and performance of Literacy and numeracy educational programme; stakeholders capacity building and performance of Literacy and numeracy educational programme; data collection and performance of Literacy and numeracy educational programme; data management and performance of Literacy and numeracy educational programme; implementing change and performance of Literacy and numeracy educational programme; school environment and performance of Literacy and numeracy educational programme; and moderating influence of school environment on the relationship between PM&E process and performance of Literacy and numeracy educational programme.

4.2 Questionnaire Response Rate

The study administered 327 questionnaires to respondents comprising 33 head teachers and 294 lower primary teachers. In this study, an interviews schedule was conducted to 3 Curriculum Support Officers (CSO, S) and 5 Research Triangle Institute International officers (RTI). The study, therefore, comprised a total of 327 respondents. Out of these, 281 questionnaires were correctly filled and returned, while all the 8 interviews were completed. In total, the study attracted 281 out of the possible 327 responses; representing a response rate of 86% and purposive Curiculum Support Officers and RTI Officers which was higher than 70% as recommended by Mugenda (2008). The return rate was higher because there was direct involvement with the concerned teachers and the Head Teachers who were available in the sampled schools. The results of the questionnaires return rate are presented in Table 4.1.

Table 4.1
Questionnaire Return Rate

Response	Frequency	Percentage
Filled Questionnaires	281	86
Unfilled Questionnaires	46	14
Total	**327**	**100**

The return rate on the Table 4.1 is in line with cooper and schindler, (2006
); Nachmias and Nachmias, (2005, 1996) who argues that a response rate of 75% is achievable for data analysis. Babbie, (2010) posits that 70% and above is deemed to be adequate enough for any study. For this study it was within range as 84% was and above 75% making it possible for the study to proceed. Others such as Saunders, Lewis, and Thornhill (2003) argue that 30-50% response rate offers high information for statistical generalization that are acceptable in any valid information for data analysis in any empirical study.

4.3 Background Information of Respondents

Background information about the respondents are an important part in social research since it informs the nature of responses obtained. Age of the respondents, for instance, is deemed important in attempt to understand their views about a phenomenon. Gender is also a major consideration in understanding the dynamics about the respondents. The level of education of the respondents also played a critical part in deciding of nature of responses obtained from a study since it determines the manner in which the educationally diverse respondents express opinions about a research problem. Level of experience is equally deemed important since it determines the quality of responses, in terms of the validity of the responses obtained. 4.3.1 These are discussed in the sub-sequent sub-themes;

4.3.1 Distribution of Respondents by Gender

The study was interested to understand the gender of the respondents given its dynamics. Therefore the respondents were asked to state their gender. The results are presented in Table 4.2

Table 4.2
Distribution of Respondents by Gender

Categories of gender	values	frequency	percent
Gender	Male	83	29.5
	Female	198	70.5
	Total	**281**	**100**

The results shown in Table 4.2 revealed that out of 281 respondents who were involved in the study 83(29.5%) of the respondents were male while 198(70.5%) were female. The data indicated that both genders participated in responding to their views about how literacy and numeracy educational programme being implemented. It was also necessary to offset biasness that could have accrued as a result of different gender viewing the issues in different ways. Since the number of female participants was more than twice the number of their male counterparts, it can be concluded that the teaching profession and particularly the literacy and numeracy educational programme was dominated by female gender which was okay in line with the constitution 2010 that requires one third of either gender should be involved in the allocation of jobs in the country.

Female participants were more in the study because according to the data given by the county director's office there were more females than males in the Nairobi County. This is so because many women follow their husbands who work in Nairobi, at the same time many of them have upgraded themselves to higher levels and especially in education programme and literacy and numeracy being one of them unlike their male counter parts. They have also undertaken trainings on literacy and numeracy programme organized by the MOEST of education in conjunction with the implementing organizations. Also most teachers who teach lower primary in grade one to three classes are female's teachers. This is so because most of the public Primary Schools in Nairobi County the biggest number are the females whereby in a school you might find one male teacher who is the Head Teacher meaning that the majority are the females teaching those grades and also fully involved in TUSOME trainings. In this case, there is a gap in gender distribution which does not conform to the Kenyan constitution that the ratio of 2/3 in the job allocation.

Also the grade one to three teachers were able to dominate the study since most female teachers tend to be motherly to these young one who are still very young and so many schools find it appropriate to give female teachers the classes rather than giving the male teachers. They are characterized by being quick and sensitive to make a decision concerning a young child hence they rarely consult on the warfare of the child at this stage unless the issue persists. In this case they help the learner to understand the concepts of learning faster hence positive contribution to the performance of literacy and numeracy educational programme.

The implication of this findings to the study given that female gender were almost twice the male counter parts, is the female participated more in the programme hence giving them more opportunity to learn more new skills than the male teachers who are few and not really interested in teaching these young ones whom they claim it is the work of women to do that forgetting that is why they employed in the first place. In this case, they have very little influence on the performance in teaching these grades but they only influence on allocating teachers who are to be trained and provide funds to be used by teachers during the trainings either in workshops or seminars.

4.3.2 Distribution of Respondents by key stakeholders in the programme

The respondents were asked to state the stakeholders group they belong to in the programme. The results are presented in Table 4.3

Table 4.3
Distribution of Respondents by key Stakeholders in the programme

Categories of key stakeholders' in the programme	frequency	percent
Head Teachers	33	11.7
Lower Primary School Teachers (grade 1-3)	240	85.4
Curriculum Support Officers	3	1,1
RTI Officers	5	1.8
Total	**281**	**100**

Table 4.3 shows that majority of the respondents were grades 1-3 teachers, 240(85.4%), followed by head teachers, 33(11.7%), and Curriculum Support Officers (CSO) workers,

5(1.8%), and Research Triangle Institute International (RTI) workers, 3(1.1%), respectively. This distribution of participants was equitable with respect to the sample size. The dominance of the lower primary schools teachers in grades 1-3 is also due to the fact that they are normally at the core of the implementation of the literacy and numeracy educational programme. The number of head teachers was 33(11.7%), meaning that they were very few in the programme compared to female teachers which actually brings a very great disparity in the study. For Head Teachers there is actually very low chance of contributing significantly to the performance of the programme directly in teaching from the classroom area but they can contribute to other factors within the school environment which actually can lead to good performance of literacy and numeracy educational programme Main contribution of Head Teachers is the distribution of learning materials as given by the funding project through the MOEST.

The category of Curriculum Support Officers (CSO'S) is very vital because they are the agents of the ministry of education directly in supervising and training of teachers and the Head Teachers in the schools. There are 21 Curriculum Support Officers (CSO'S) in Nairobi County. The ones sampled in the study included all the categories 1.1%. The number of CSO'S to supervise schools is too small in comparison to number of primary schools in the county hence need for more officers in order to give information required on timely bases.

The RTI International officers was another category which was interviewed and they comprised 3(1.1%). This is the implementing organization which have joined hands with the ministry of education to foresee the programme come to reality and at least minimize the outcry of learners finishing primary school education unable to write and read in both languages either English or Kiswahili languages and simple arithmetic calculations as it is the cases today in our public primary schools, (Uwezo 2012) group 'that are our children learning'? RTI International has been very instrumental in literacy and numeracy education programme since its inception and piloting stages until the time it is going to hand over to the government to continue with the program which has already been rolled out in all the primary schools in the Country. They funded the programme from day one and helped the ministry of education to come out with strategies in cubing the menace of reading in both Kiswahili and English and arithmetic calculations at Country. They also provided reliable information in their database which they normally share to

all the parties participated at program also provided teaching materials for example the text books for the three subjects in curriculum based competency (CBC) for the new education system in the country.

4.3.3 Distribution of Respondents by Age brackets

The study sought to establish age of respondents according to their age groups since it was considered an important factor. The respondents were, therefore, requested to indicate their age groups. The results are presented in Table4.4

Table 4.4

Distribution of Respondents by Age brackets

Categories of Age bracket	frequency	percent
30 years and below	23	8.2
31 to 35 years	13	4.6
36 to 40 years	53	18.9
41 to 45 years	63	22.4
45 to 50 years	75	26.7
51 to 55 years	34	12.1
56 years and above	20	7.1
Total	**281**	**100**

The results in Table 4.4 showed that majority of the respondents, 75(26.7%) were between the age 46 to 50 years, 63(22.4%) were between 41 to 45 years, 53(18.9%) who were between 36 to 40 years, 34(12.1%) were between 51 to 55 years, 23(8.2%) were 30 years, below, 20(7.1%) were 56 years and above, and 13(4.6%) were between 31 to 35 years of age, in that order. Majority of the respondents were of the age bracket 46 to 50 years this is shows that grade one to three classes are taught by mature and experienced teachers in the profession due to delicacy of the young learner in these classes. At the same time they are the ones who have attended the trainings and seminars organized by the implementing organization so they have enough knowledge on literacy and numeracy programme. Also some of these teachers have been involved in training of other teachers during support trainers in the programme, during seminars and workshops hence becoming experts on literacy and numeracy programme. Based on this information many respondents are in the age bracket of (41-50) a total of 191(68%) respectively. This is a very prime age whereby one is very productive in terms of performance and willingness

to be part and parcel of the work performed hence good results are experienced at the end of the programme.

4.3.4 Distribution of Respondents by Highest Academic Qualification

The study sought to establish the highest academic qualification of the participants according to their age groups since it was considered an important factor. The respondents were, therefore, asked to indicate their level of education. The results are presented in Table. 4.5

Table 4.5
Distribution of Respondents by Highest Academic qualification

Categories of Highest Academic qualification	frequency	percent
Certificate	7	2.5
Diploma	103	36.7
Bachelor	149	53.0
Masters	18	6.4
Others	4	1.4
Total	**281**	**100**

Table 4.5 showed that majority of the respondents 149(53.0%) had bachelor's degree, while diploma were 103(36.7%). The other category was master's degree holders 18(6.4%) and those with certificates were 7(2.5%). Those who had other qualifications were 4(1.4%) respectively. These included different fields outside education but were participating in L&N educational programme. Therefore numerical dominance of the bachelor's degree could be attributed to the education explosion in Kenya, and probably because educational qualification was an important factor considered for the teachers to be involved in the literacy and numeracy educational programme hence good performance of the programme. Based on the information from the respondents many teachers have acquired a higher qualification other than the one they got from the teachers colleges which was PI. P2, P3 (P represents primary teacher) and others as untrained teachers.

In summary most teachers have the right qualifications which is required by the government especially the diploma in management which has been made a must for every teacher teaching in the country and for promotion purposes among many other requirements. The implication of this results to the focus of the study is that, since most teachers have the right qualification they

stand a better chance of understanding the concept required in teaching these skills in literacy and numeracy hence good performance of the programme. It is assumed that the higher the qualification in learning the better skills earned and mastery of content is experienced.

4.3.5 Distribution of Respondents by Work Duration

The study sought to establish the period worked by the respondents in the current organization, sub-county and school this was deemed important because the length of service was a measure of conversance with the thematic areas under investigation. The participants were, therefore, asked to state their length of service. The results are presented in Table 4.6

Table 4.6
Distribution of Respondents by Work Duration

Categories of Work Duration	frequency	percent
3 years and below	20	7.1
4 to 7 years	28	10.1
8 to 11 years	62	22.1
12 to 15 years	74	26.3
16 years and above	97	34.5
Total	**281**	**100**

Table 4.6 shows that majority of the participant had worked for a period of 16 years and above, 97(34.5%); followed by those who had worked for between 12 to 15 years, 74(26.3%); those who had worked for between 8 to 11 years 62(22.1%); those who had worked for 4 to 7 years, 28(10.0%). Those who had worked for 3 years and below were 20(7.1). The findings indicate that majority of the participants had worked in the current station for more than 15 years, implying that they were conversant with the issues under investigation in the study, hence could provide valid data. The length of service was also an indicator of the level of experience, hence the numerical dominance of those with 16 years and above and which actually facilitated the success of the programme since they had acquired the right knowledge and skills on the same from piloting stages to the implementation time.

4.4 Basic Tests for Statistical Assumptions

This section presents analysis of various tests for linear and multiple regression assumptions. Tests for statistical assumptions were done to ensure that basics for parameters were observed.

This typical assumptions and analysis were found to be necessary whereby they included normality, linearity, and muliticollinearity and homoscedasticity test. These are further discussed in the sub-sequent sub-themes.

4.4.1 Normality Tests

The study used Shapiro-Wilk test (SW-test) as opposed to Kolmogorov-Smirnov (KS-test) ascertain that data was normally distributed since this is one of the assumptions of linear regression analysis. This test for normality was introduced by Shapiro and Wilk (1965) for a complete sample. According to Razali and Wah (2011), normal distribution of data is a key assumption of many statistical procedures including t-tests, and linear regression analysis, discriminant analysis, as well as the analysis of variance.

The most commonly used tests for normality include graphical methods (histograms, box plots, quartile-quartile); numerical methods (skewness and kurtosis indices); and the formal normality tests. There are four formal tests for normality, namely: Shapiro-Wilk test, Kolmogorov Smirnov test, Lillierfors test, and Anderson Darling test. The Shapiro-Wilk test is the most powerful, followed by Anderson-Darling test, Lillierfors test, and Kolmogorov-Smirnov test. Nevertheless, all the four formal tests for normal distribution of data are not robust to small samples. For example, Tabachnick and Fidell (1996) opines that Skeweness and Kurtosis are not appropriate for establishing normality when the sample size is above 150 because no much difference would be expected or revealed. The concept of normality has been argued to be important when applying most statistical techniques. In this regard, many statistical operations such as correlation, regression, analysis of variance, and other parametric tests assume that the population from which the sample was drawn displays normal distribution of characteristics.

The normality assumption should be taken seriously; otherwise, it would be difficult to draw an accurate and reliable conclusion about reality. Shapiro Wilk test gives values referred to as W statistics. It is recommended that Shapiro Wilks to be used for small samples above 200. This current study qualified Shapiro Wilk since n=281. According to Bonini, Hausman and Beirman (1997), this is to mean that when W statistics is near or is equal to one (1) then it is assumed that data presented is perfectly normal. Therefore the value of W statistics for the variable in this

study ranged from 0.906 and 0.969. as result to this it implies that data used in this study was closer to normal as the values were not far from one (1). At this point it could be noted in normal circumstances and real life situations data may not be perfect normally distributed. The results of Kolmogorov-Smirnov and Shapiro- Wilk tests are shown in table 4.7

Table 4.7 Results of Kolmogorov Smirnov and Shapiro Wilk Tests

Variables	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Stakeholder engagement	0.111	280	0.000	0.963	280	0.000
Stakeholders' capacity building	0.148	280	0.000	0.947	280	0.000
Data collection	0.112	280	0.000	0.906	280	0.000
Data management	0.131	280	0.000	0.969	280	0.002
Implementing change	0.122	280	0.000	0.926	280	0.000
School environment	0.170	280	0.000	0.957	280	0.000

The results in Table 4.7 reveal that stakeholder engagement, stakeholders' capacity building, data collection, data management, implementing change, and school environment were normally distributed. This is because all the W Statistics Values were closer to 1.

Test of compliance to normal, linear, homogeneity by data collected, scatter plot diagram and plot of residuals which were standardized against predicated dependent values were used in the study. According to Razali and Wah (2011), normal distribution of data is a key assumption of many statistical procedures including t-tests, and linear regression analysis, discriminant analysis, as well as the analysis of variance.

They further argue that validity and reliability of statistical inferences are greatly compromised when normality assumption is violated. The concept of normality has been argued to be important when applying most statistical techniques. In this regard, many statistical operations such as correlation, regression, analysis of variance, and other parametric tests assumed that the population from which the sample was drawn displays normal distribution of characteristics. The

normality assumption should be taken seriously otherwise, it would be difficult to draw an accurate and reliable conclusion about reality.

On the residual values as demonstrated in a distributed pattern which formed a cluster around the straight line in a probability plot which confirmed normality assumptions. In this case the results helped in verifying the normality assumptions for all the points on the normal P-P plot on average spread in a linear as indicated in Figure 3.

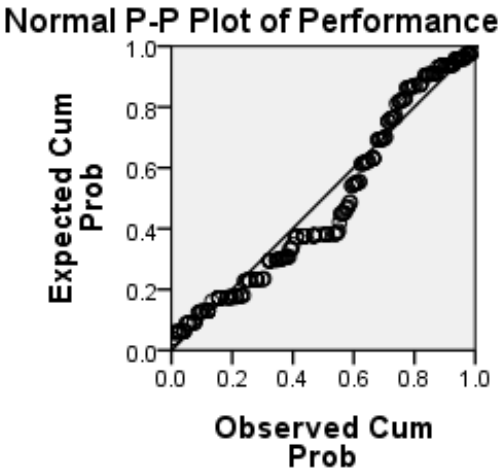


Figure 3: Normal PP plot for Performance of literacy and numeracy educational programme

Data collected was demonstrated and compiled to normality test for the residual values of normality test for the values of the study variables, which was standardized and concentrated around the center along Zero (0) point. This had an implication that there was no violation of the assumptions of normality, linearity and homoscedasticity test. This supported by Hair et al (1998) who argues that random and even distribution of residuals values thought the scatter plot mean that the linearity assumptions had been met as illustrated in figure 4.

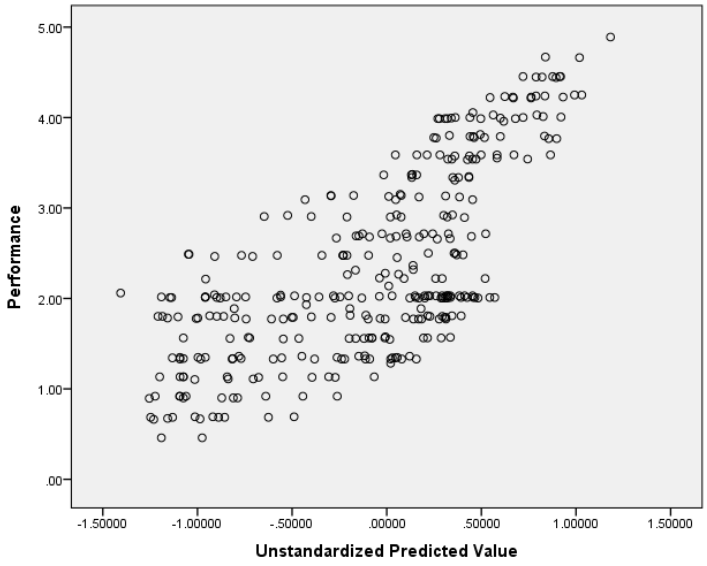


Figure 4: Scatter plot

4.4.2 Test of linearity

Regression analysis assumes that there is a linear relationship between the independent and dependent variables (r>0). In this study the linearity of relationship was done using scatter plots. For this end, performance of literacy and numeracy of educational programme was treated as the dependent variable while stakeholder engagement, stakeholder capacity building, data collection, data management, and implementing change and combined PM&E process and school environment were independent variables. The test established that there was liner relationship between the independent and dependent variables thereby make a good justification of the use of linear regression. The Table 4.8 shows the results.

Table 4.8: Test for linearity

Variables			Sum of Squares	df	Mean Square	F	Sig.
Performance * Stakeholder engagement	Between Groups	(Combined)	141.889	109	1.302	4.021	0.000
		Linearity	99.560	1	99.560	307.552	0.000
		Deviation from Linearity	42.329	108	.392	1. 211	0.132
	Within Groups		55.356	171	.324		
	Total		197.245	280			
			Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Performance * Stakeholders capacity building	Between Groups	(Combined)	140.025	107	1.309	3.368	0.000
		Linearity	94.415	1	94.415	242.990	0.000
		Deviation from Linearity	45.609	106	.430	1.107	0.274
	Within Groups		67.220	173	.389		
	Total		207.245	280			
			Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Performance * Data collection	Between Groups	(Combined)	134.223	103	1.303	3.159	0.000
		Linearity	90.382	1	90.382	219.078	0.000
		Deviation from Linearity	43.8409	102	.430	1.042	0.402
	Within Groups		73.022	177	.413		
	Total		207.245	280			
			Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Performance * Data management	Between Groups	(Combined)	127.080	116	1.096	2.241	0.000
		Linearity	59.627	1	59.627	121.983	0.000
		Deviation from Linearity	67.453	115	.587	1.200	0.142
	Within Groups		80.165	164	.489		
	Total		207.245	280			
			Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Performance * Implementing Change	Between Groups	(Combined)	97.740	59	1.657	3.679	0.000
		Linearity	69.905	1	69.905	155.259	0.000
		Deviation from Linearity	27.835	58	.480	1.066	0.364
	Within Groups		99.505	221	.450		
	Total		197.245	280			

4.4.3 Tests for Multicollinearity

When two or more predicator variables in a multiple regression model are highly correlated a Mulitiicollinearity occur as argued by Bickel, Ritov, & Tsybakov (2009). Multicollinearity is a statistical phenomenon whereby more than two predicator variables are highly correlated according to Gujarat and Porter (2009) which is caused by inter-correlation among the explanatory variables. They also argue that the most logical way to test for mutlicollinearity problem is to obtain correlation coefficients between pairs of explanatory variables. It is a situation whereby the predictors correlate strongly amongst themselves. Regression analysis technique assumes that there is no multicollinearity .O'Brien, (2007) gave suggestion that tolerance of less than 0.20 and a VIF of 5or 10 or higher indicates that a multicollinearinty problem has been experienced. In this study, both correlation coefficients (through correlation

matrix), and variance inflation factors (VIFs) were examined for significant multicollinearity problem. Any VIF values exceeding 10 are usually indicator of significant multicollinearity. Otherwise, multicollinearity problem is insignificant. The results were as shown in Table 4.9.

Table 4.9
Test for Collinearity

Variable	Collinearity Statistics	
	Tolerance	**Significant VIF**
Stakeholder engagement	0.661	1.513
Stakeholders capacity building	0.635	1.575
Data collection	0.532	1.880
Data management	0.532	1.881
Implementing Change	0.539	1.856

The results in table 4.9 for collinearity statistics testing were above 0.2 thus did not meet the muliticolliniearity testing. In this case all the values did not exceed 10 meaning that they did not meet the muliticollinearity test.

4.4.4 Homoscedasticity Test

Since there was approval of compliance to test on normality using normal and scatter plots, homogeneity test was approved. This was so because there was existence of homoscedastic state on the links between the study variables. The results are presented in Table 4.10

Table 4.10
Correlation Matrix for Independent Variables

		Performance	Stakeholder engagement	Stakeholders capacity building	Data management	Data collection	Implementing Change	School environment
Performance	Pearson Correlation	1	0.693**	0.675**	0.536**	0.660**	0.581**	0.690**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000
	n		281	281	281	281	281	281
Stakeholder engagement	Pearson Correlation		1	0.542**	0.668**	0.564**	0.542**	0.531**
	Sig. (2-tailed)			0.000	0.000	0.000	0.000	0.000
	n			281	281	281	281	281
Stakeholders capacity building	Pearson Correlation			1	-0.406**	0.506**	0.467**	0.562**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
	n				281	281	281	281
Data management	Pearson Correlation				1	-0.428**	-0.450**	-0.488**
	Sig. (2-tailed)					0.000	0.000	0.000
	n					281	281	281
Data collection	Pearson Correlation					1	0.452**	0.523**
	Sig. (2-tailed)						0.000	0.000
	n						2 81	281
Implementing Change	Pearson Correlation						1	.471**
	Sig. (2-tailed)							0.000
	n							281
School environment	Pearson Correlation							1
	Sig. (2-tailed)							
	n							

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

In Table 4.10 it indicates the summary of the independent variables as indicated from each variable and their correlation.

4.5 Performance of Literacy and Numeracy Educational Programme

Data collected on dependent variable was descriptively analyzed in both qualitative and quantitative forms. Performance of literacy and numeracy has a notable contribution towards economic growth, poverty eradication and level of learners is improved through these programme. Performance improved upon the intervention of the educational programme.

This study found it necessary to ascertain respondents opinions on performance of literacy and numeracy educational programme In order to establish the magnitude to which literacy and numeracy project performance was influenced by reading skills, simple arithmetic calculations, letter recognition, beneficiaries satisfaction, proficiency skills in listening of literacy and numeracy skills, proficiency skills in speaking of literacy and numeracy skills, proficiency skills in writing skills, timely Acquisition of literacy and numeracy skills, transitional rate improved, class average

The respondents were subjected to several statements asking their opinion on their level of agreements or disagreements using a likert scale of 1-5 whereby; Strongly disagree(SD)=1, Disagree(D)=2,Neutral(N)=3,Agree(A)=4 and Strongly Agree(SA)=5. Line mean score and standard deviation of each of the opinions was compared with the respective composite scores for interpretation. The results are presented in Table 4.11.

Table 4.11
Performance of Literacy and Numeracy Educational Programme

Statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
1.There is improvement in reading learning skills of the pupils due to the operation of this programme	4 (1.4%)	65 (23.2%)	27 (9.6%)	136 (48.4%)	49 (17.4%)	3.57	1.070
2.There is improvement in simple arithmetic calculations skills of the pupils due to the operation of this programme	4 (1.4%)	63 (22.4%)	32 (11.4%)	117 (41.6%)	65 (23.2%)	3.63	1.111
3.Learners improved in recognition of alphabet letters due to the operation of this programme	4 (1.4%)	57 (20.3%)	40 (14.2%)	126 (44.8%)	54 (19.3%)	3.60	1.058
4.Programme beneficiaries are satisfied with the benefits	2 (0.7%)	59 (21.0%)	44 (15.7%)	104 (37.0%)	72 (25.6%)	3.66	1.097
5.Listening learning skills was enhanced through the operation of the programme	7 (2.5%)	48 (17.1%)	58 (20.6%)	161 (57.3%)	7 (2.5%)	3.40	0.886
6.Speaking learning skills was enhanced through the operation of the programme	2 (0.8%)	53 (18.6%)	52 (18.6%)	168 (59.9%)	6 (2.1%)	3.44	0.843
7.Writing learning skills was enhanced through the operation of the programme	4 (1.4%)	51 (18.1%)	50 (17.8%)	169 (60.1%)	7 (2.6%)	3.44	0.865
8.Transition rate of learners has increased	15 (5.3%)	54 (19.2%)	23 (8.2%)	47 (16.7%)	142 (50.6%)	3.88	1.352
9.The class average performance has improved	19 (6.8%)	50 (17.8%)	20 (7.1%)	143 (50.9%)	49 (17.4%)	3.54	1.168
10.Acquisition of literacy and numeracy within times was experienced while undertaking the programme	2 (0.7%)	52 (18.5%)	40 (14.2%)	176 (62.7%)	11 (3.9%)	3.50	0.859
Composite Mean and SD						**3.56**	**0.995**

As shown in Table 4.11, the overall composite mean was 3.56 and the standard deviation was 0.095.
In Table 4.11, on the first statement, there is improvement in reading learning skills of the pupils due to the operation of numeracy and literacy educational program, the results showed that 4(1.4%) of the respondents strongly disagreed and 65(23.1%) disagreed meaning that a total of 70(24.6%) did not agree with the statement. Those who were neutral were 27(9.6%). Those who agreed were 136(48.4%) and strongly agree were 49(17.4), indicating that a total of 185(65.8%) were in agreement. This had a line item mean score of 3.57 and standard deviation of 1.070 which was above the total mean score of 3.56 and standard deviation of 0.995. The implication here is that there was improvement in reading learning skills to the pupils due to the operation of this programme. This further implies that the great improvement upon the operationalization of the programme and the intervention has significantly helped the learners who were involved in the program and teachers who were trained on the new methodology. Therefore there was need for the skill to be applied to other learners in the future. Thomas and Collier, (2002) argue that children learn more while using their mother tongue more than the second language.

There was a project in Nigeria known as Ife was conducted by Fafunwa, Macauley and Sokoya (1989); and Ani, (2017) demonstrated that using the Nigerian language learners yield good academic performance while also in Zambia a study by Williams, (1996) had the same findings. In Mali a study by Fomba *and* Diarra, (2003) on assessment learning skills had differing information the other two Countries Nigeria and Zambia. According to Heugh, Benson, Bogale and Yohannes, (2007) form Ethiopia agreed on the use mother tongue as a means of teaching produces better results unlike the second language which is introduced immediately after entering the PP1 grade hence confusing the learner. In Kenya the government has really tried to introduce the teaching of mother tongue in public schools but it has not always been received well by the implementers thus they end up teaching either Kiswahili or English during literacy lesson. Also books for mother tongue are written in Kiswahili or English leaving the Kenyan teacher in a state of confusion of what to teach during mother tongue lesson. Still teachers teaching those grade most of them have no knowledge of how to teach the language since it is never taught in teachers training colleges especially the blending of word sounds.

On the second statement there is improvement in simple arithmetic calculations skills of the pupils due to the operation of the numeracy and literacy programme. About 4(1.4%) of the respondents strongly disagreed and 63(22.4%) disagreed meaning that those in disagreement were 67(23.8). On the same line item 32(11.4%) were neutral. Similarly, 117(41.6%) agreed and 65(23.1%) strongly agreed representing 182(64.8%) of the respondents who agreed with the statement. This statement produced a mean score of 3.63 and standard deviation of 1.111 compared to the composite mean score of 3.56 and standard deviation of 0.995 which indicates that opinions were divergent. This implies that that there was improvement in simple arithmetic calculations skills of the pupils due to the operation of this program. Hence, this shows that the programme helped the learning skills of the learners at an advanced stage something that need to be materialized in policy for the benefit of both private and public schools.

On the third statement, learners improved in recognition of alphabetical letters due to the operationalization of the program. In this respect, 4(1.4%) of the respondents strongly disagreed, 57(20.3%) disagreed meaning that 61(21.7%) out of 281 disagreed with the statement. The other respondents were 40(14.2%) who remained neutral and may be they had no idea of the program. On the same statement, 126 (44.8%) agreed and 54(19.3%) strongly agreed. This indicates that 180(64.1%) of the respondents agreed with the statement. This statement had a line item mean score of 3.60 and standard deviation of 1.058 which was higher than the composite mean score of 3.56 and standard deviation of 0.995. This implies that although opinions were divergent, improvement in alphabetical letter recognition skills of the pupils was achieved. This outcome influence performance of literacy and numeracy educational programme positively.

This results concurs with Piper and Zulshwoki (2015) and Mugenda, (2014) results that there was improvement in alphabetical letter recognition skills hence this influenced the performance of literacy and numeracy educational programme after the intervention projects was undertaken. On the contrary Mugo, Kaburu, Limboro and Kimutai (2011) argued that even though the intervention project helped in getting some improvement, still the quality of learning in early primary school remains low. Wasanga, Ogle and Wambua (2010) state that evidence of low reading achievement was reflected in household surveys and the government's National Assessment for Monitoring Learning Achievement (NASMLA). Though the learners were able to at least recognize alphabetical letters still some learners in grade three could not recognize

some letters in lower grade, for example in grade two Mugo *et al*, (2011). Even though there is some improvement, still the performance has not achieved the government's bench mark 7% of every learner in the country, for example every learner have good ability well in grades they are. So there still exists a gap on who to curb this menace in the country although the current study has found out that there is improvement but though much is needed to cub the menace and able to meet the required benchmark with the other countries in the world.

The fourth statement based on whether programme beneficiaries were satisfied with the benefits accrued while undertaking the programme were achieved or not was undertaken and the results indicates that, in the first category 2(0.7%) of the respondents strongly disagreed while 59(21.0%) disagree, making a total of 61(21.7%) who were in disagreement with the statement. However, 104(37.0%) agreed and 72(25.6%) strongly agreed. In total, those who agreed were 176(62.6%). Those who held neutral opinion were 44(15.7%). This statement had a line item mean score of 3.66 and standard deviation of 1.097 which were above the composite mean score of 3.56 and standard deviation of 0.995. This implies that programme beneficiaries were satisfied with the benefits since it has brought a slight change in their learners learning process although there was divergence in opinions shared. This goes in line with a study done by Evans and Popova, (2015) who argued that several educational projects in Kenya's educational systems have been relatively well researched on and most of them have been implemented focusing on improving students outcomes or increasing school attendance but still there exists a problem of their performances on the levels they are in and even lower than the ones they have passed. Although the current study found out that there was slight improvement due to the program, a lot still needs to be done to have good performance in future.

On the fifth statement, the study sought to examine how listening learning skill were enhanced through operation of the program. The findings indicated 7(2.5%) respondents strongly disagreed while 48(17.1%) disagreed, in that case a total of 55(19.6%) were in disagreement. Those in agreement were 161(57.3%) agreed and 7(2.5%) strongly agreed. Overally, 168(64.4%) of the respondents agreed with the statement. At the other hand, 58(20.6%) was neutral. A mean score of 3.40 against a composite mean of 3.56 was generated which implies that proficiency skills like listening, was negatively influenced through the operation of the programme and many learners were not able to listen attentively and respond well even though the programme was

undertaken. The line item had a standard deviation of 0.886 lower than the composite standard deviation of 0.995 was indicated that opinions were diverse. Findings further revealed that some pupils could not comprehend what they have heard hence low performance in arithmetic calculation which needs a bit of critical thinking and application of the knowledge acquired. This also means that if the learners are not able to comprehend what they have read then simple calculation would be a problem. The implication of the results is even if learners have slightly improved still learners speaking fluently is a problem according to the findings of this study.

Similarly, they could be okay with listening but have a problem in speaking fluently as was found by Piper and Trudell (2016) who argued that many programme fail because they only emphasis the point of training and pay little attention on teaching methodology, which need teaching results and reflections with other educators and implementing the change in teaching methodology which is followed in teaching alphabetical sounds used in speaking skill. Though Schroeder and Trudell (2016) in their study on oral reading fluency and comprehension in Kenya found out that pupils attain minimal or reading fluency in English and only moderately comprehension skills in their languages since Kenya's national language policy or mother tongue as a medium of instruction in the early primary grades is consistently ignored in practice. The current study concur with Piper and Trudell (2016) but differ with Runo,Kabutha and Kamau (2013) on their studies that there was improvement of the skill on the application of the programme in the teachers methodology and enough equipment's to teach the reading skill. The findings of the current study are that the skill influenced the performance of literacy and numeracy educational programme negatively hence very low improvement was experienced since half of teachers neither taught reading nor knew methods to use in teaching reading learning skill.

Based on this point pupils become confused when trying to learn the second language in the class and differentiate it from the language spoken at home at the same time trying to get the pronunciations from the teacher orally. In his study on listening skills that the current study found out that teachers continue using the old method of teaching content rather than embrace the new instructional change process model of organized letter work, word attack activities, vocabulary reading story, perform activities of 'I DO', 'YOU DO' and 'WE DO' so as to improve the proficiency skills in listening, in the lesson development hence good performance.

On the sixth statement, speaking learning skill was enhanced through the operation of the program. The results showed that 2(0.7%) of the respondents strongly disagreed while 53(18.5%) disagreed, in that case a total of 55(19.2%) were in disagreement. Others who were in agreement were 168(59.8%) agreed and 6(2.1%) strongly agreed. Overally, 174(61.9%) of the respondents agreed with the statement. On the other hand, 52(18.5%) remained neutral. A mean score of 3.44 against a composite mean of 3.56 was generated which implies that proficiency skills like speaking was not enhanced through the operation of the programme and many learners were not able to speak fluently and pronounce the letter sounds correctly with the help of the teacher due to mix up of the first language and the second language. This supports (Rose 2016) on the study about how the first language which is the mother tongue is affected by second language. The findings from Kwanyumba, (2018) study had similar information that there is a great interference with the first language to the second language. However the current study differ investigated only on the second language English and Kiswahili which are the medium of instruction in schools. However still, the findings study results and opinions were diverging. The line item standard deviation of 0.843 below the composite standard deviation of 0.995 was an opinions convergence.

On the seventh statement, based on writing learning skill was enhanced through the operation of the programme. The results showed that those who strongly disagreed were 4(1.4%), and 51(18.1%) disagreed with the statement, hence a total of 55(19.5%) disagreed. Results obtained also showed that 169(60.1%) agreed with the statement and 7(2.5%) strongly agreed. Therefore participants who agreed were 176(62.6%) in total. Those who expressed their neutral opinions were 50(17.8%). A mean score of 3.44 and standard deviation of 0.865 which was less than the composite mean of 3.56 and standard deviation of 0.0995 were obtained.

This implied that writing skills was not enhanced through the operation of the programme. According to Wallace and Alkins, (2007) learners need to practice varied kinds of writing learning skills though the main determinant of what kind of writing to be acquired well by leaners depends wholly on the teacher guiding the learner. This enhances language achievement as learners experiment what they have learned through writing, words simple sentences to communicate their ideas and vocabulary they learned in class. Reading alone does not necessitate that learning is going on but also recognizing letters and coding words needs to be constructed

well and give a meaning through written text inform of alphabetical letters, this position has been supported by Dednam, (2011) and Mugo and Limboro, (2016). The current study support Mugo and Limboro, (2016) with the results that even though there is improvement in writing learning still, the learners have not been fully able to exploit their potentials.

The eighth statement, that transition rate has increased due to the programme was responded by the participants. The results showed that 15(5.3%) of the respondents strongly disagreed while 54(19.2%) disagreed, in that case a total of 69(24.5%) were in disagreement. Others who were really in agreement were 47(16.7%) agreed and 142(50.5%) strongly agreed. Overally, 189(67.2%) of the respondents agreed with the statement. On the other hand, 23(8.2%) remained neutral. A mean score of 3.88 and a standard deviation of 1.352 which was very high against a composite mean of 3.56 and standard deviation of 0.995 was realized. Findings shows that transition from one level to another has improved. The implication is that in the implementing programme no learner should repeat a class hence all learners should proceed to the next grade despite their performance in the previous grade according to government directive. A lower composite SD than line SD shows divergence opinion or views

On the ninth statement, the class average performance has improved through the intervention of the programme. The results showed that 19(6.8%) of the respondents strongly disagreed while 50(17.8%) disagreed, in that case a total of 59(24.6%) were in disagreement. Others who were really in agreement were 143(50.9%) and 49(17.4%) strongly agreed. Overally, 192(68.3%) of the respondents agreed with the statement. On the other hand, 20(7.1%) remained neutral. A mean score of 3.54 and a standard deviation of 1.168 against a composite mean of 3.56 and a standard deviation of 0.995. The implication of this line item is that there was no improvement of performance of learners upon application of the new methodologies from the programme intervention, so still more ideas re welcomed to cub the menace. Due to the introduction of the new methods and additional of resources for example textbooks and other reading materials have not contributed to great improvement of some learners learning skills whereby an average performance was experienced.

Lastly, the tenth statement acquisition of literacy and numeracy within time was experienced while undertaking the program. The results showed that those who strongly disagreed were

2(.7%), and 52(18.5%) disagreed with the statement, hence a total of 54(19.2%) disagreed. Results obtained also showed that 176(62.7%) agreed with the statement and 11(3.9%) strongly agreed. Therefore participants who agreed were 187(66.6%) in total. Those who expressed their neutral opinions were 40(14.2%). A mean of 3.51 and standard deviation of 0.886 which was less than the composite mean of 3.56 and standard deviation of 0.995 were obtained. This implied that acquisition of literacy and numeracy within time did not influence performance of literacy and numeracy educational program. This also means that if the learners are not able to comprehend what they have read then simple calculation would be a problem hence low performance on literacy and numeracy educational learning skills.

Results of the interviews with the curriculum support officers indicated that there was slight improvement on literacy and numeracy learning skills upon application of intervention programme. The results of the interviews were consistent with the quantitative data. These are some of the responses from the key informants who are the curriculum support officers:

> *Most learners who were not able to attend school in regular basis can now attend classes without interference since most of them have been provided with text books and writing material by the government and the implementing organization. Curriculum support officer Embakasi sub-county.(CSO, 2018)*
>
> *Listening, speaking and writing skills has been enhanced since many learners have their own text books and can be able to at least do some practice of the work taught in the absences of the teacher. Curriculum support officer Langata sub-County.*

Results of interviews with the RTI officials indicated that there was great improvement on literacy and numeracy learning skills and the intervention programme has really been of beneficial to the beneficiaries and the education sector at large.

> *More materials like textbooks for both learners and teachers guides which have been distributed to schools have really helped in improving the learning skills but more emphasis should be put into the usage of methodology. Research triangle monitoring and evaluation officer*

Some Teachers have ignored the usage of new textbooks hence follows the old methodology of self-centered instead of learner centered. Frequent visits to classroom should be embraced so as to encourage the teachers to adapt new teachers guide given by TUSOME which has the new methodologies of teaching these skills. Research Triangle monitoring and evaluation officer.(RTI, 2018)

4.6 Stakeholders engagement and Performance of Literacy and Numeracy Educational Programme

This section presents both descriptive and correlational analysis of Stakeholders engagement and Performance of Literacy and Numeracy Educational Programme. This was the first objective in the study. The views of respondents on dimensional of Stakeholder's engagement were identification of Stakeholders', stakeholders' level of involvement, developing of project objectives and developing monitoring and evaluation plan which are very vital in any project. The respondents were subjected to several asking their opinions on their level of agreement or disagreement using a likert scale of 1-5 whereby; Strongly disagree(SD)=1, Disagree(D)=2,Neutral(N)=3,Agree(A)=4 and Strongly Agree(SA)=5. Line mean score and standard deviation of each of the opinions were computed with the respective composite mean score and interpreted. The responses are presented in Table 4.12.

Table 4.12
Stakeholders Engagement and Performance of Literacy and Numeracy Educational programme

Statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
Stakeholder identification							
1.Stakeholders are carefully identified and listed	5 (1.8%)	63 (22.4%)	33 (11.7%)	131 (46.6%)	49 (17.5%)	3.56	1.075
2.Based on gender parity stakeholders were carefully selected	10 (3.6%)	59 (21.0%)	32 (11.4%)	99 (35.2%)	81 (28.8%)	3.65	1.201
3. Needs assessments was conducted to involve the views and areas of interest of key stakeholders.	6 (2.1%)	65 (23.1%)	25 (8.9%)	131 (46.6%)	54 (19.3%)	3.58	1.106
Stakeholder level of involvement							
4.Stakeholders were involved in the development of curriculum development	7 (2.5%)	63 (22.4%)	29 (10.3%)	122 (43.4%)	60 (21.4%)	3.59	1.128
5.The government officials from the MOEST were involved in supervising teachers	10 (3.6%)	61 (21.7%)	21 (7.5%)	129 (45.9%)	60 (21.3%)	3.60	1.149
6.RTI International officers participated in funding and training the stakeholders involved in the programme	7 (2.5%)	60 (21.4%)	30 (10.7%)	137 (48.8%)	47 (16.6%)	3.56	1.078
Developing of project objectives							
7.stakeholders participated in setting objectives which are SMART	5 (1.8%)	60 (21.4%)	39 (13.9%)	130 (46.3%)	47 (16.6%)	3.55	1.058
8.The objectives set were SMART and according to the programme	10 (3.6%)	55 (19.5%)	34 (12.1%)	136 (48.3%)	47 (16.5%)	3.54	1.088
Developing M&E Plans							
9.M&E plans were developed by all the stakeholders in the program	5 (1.8%)	50 (17.7%)	44 (15.7%)	139 (49.5%)	43 (15.3%)	3.59	1.007
10.We involved all the stakeholders in literacy and numeracy programme	5 (1.8%)	56 (19.9%)	38 (13.5%)	110 (39.1%)	72 (25.7%)	3.67	1.115
Composite mean and SD						**3.59**	**1.102**

As shown in Table 4.12, the overall composite mean was 3.59 and the standard deviation was 1.102. From Table 4.12, on the first statements stakeholder were carefully identified and listed. In this respect, 63(22.4%) disagreed and 5(1.8%) strongly disagreed while 131(46.6%) and 49(17.4%) agreed and strongly disagreed with the statement respectively. Neutral opinions were 33(11.7%) of the respondents. In total 180(64.0%) respondents were in agreement. Obtained on this line item was a mean score of 3.56 and standard deviation of 1.075 which were both slightly below the composite mean of 3.59 and standard deviation of 1.102. This implies that opinions gathered were converging. It also implies that the process of stakeholder identification is not carefully done and that there is need for improvement on this aspect if at all performance has to be realized in literacy and numeracy educational programme. The findings, however, contradict on other researchers who assert that for the programme to be a success, monitoring and supervision is required, public primary schools in Nairobi County may be lacking monitoring and supervision of teachers hence low performance. Lack of enough interaction with the teachers involved in the programme hence low performance in the outcome because most teachers needs guidance where necessary from the officers.

> *Lack of frequent supervisor from the ministry has made has made teachers to have laxity hence low performance. This has been contributed to few officers who are already overwhelmed by too much administrative responsibilities. Research triangle officer.*

In the Second statement, based on gender parity, stakeholders were carefully selected. The results showed that 10(3.6%) strongly disagreed and 59(21.0%) disagreed hence an aggregate of 69(24.6%) disagreed. However respondents who strongly agreed were 81(28.8%) and those that agreed were 99(35.2%) bringing to a total of 180(64.0%) in agreement with the statement. A few of the respondents 32(11.4%) were neutral in their views. Generated from this statement was a mean score of 3.65 and standard deviation of 1.201 this was above the overall composite mean of 3.59 and standard deviation of 1.102. It is clear from this results that that selection of stakeholders ensured that gender parity was adhered to. This could be as a result of Kenyan constitution which emphasize on a third of opposite gender in every working place in mostly public institutions. The opinions were however divergent. Based on the SD and Composite SD.

This therefore implies that equality in selection process of stakeholders would lead to performance of literacy and numeracy educational programme in Nairobi County.

On the third item, the study sought to establish whether needs assessment was conducted to involve the views of key stakeholders. The participants who strongly disagreed were 6(2.1%) and those who disagreed were 65(23.1%) hence in total 71(25.2%) disagreed with the statement. On the other hand, 131(46.6%) strongly agreed while 54(19.3%) agreed bringing to a sum total of 185(65.9) of views on agreement. On this statement, 25(8.9%) had neutral views. Yielded from the statement was a line item mean score of 3.58 and standard deviation of 1.106, against the composite mean of 3.59 and standard deviation of 1.102. The opinions were quite divergent although the results suggested that needs assessment was moderately done by involving the views of the key stakeholders. Lack or inadequate assessment of needs is likely to lead to mis-prioritization of goals and hence poor performance of the programme. Scholars like Walker, Shelly and Bourne (2008) hold the view that stakeholders should be fully involved in the project and conduct needs assessment meaning they also concurred with the current study that all stakeholders are supposed to participate needs assessment procedure.

The fourth statement was that stakeholders were involved in the development of curriculum revealed that 7(2.5%) strongly disagreed and 63(22.4%) disagreed. That is to mean that 69(24.9%) disagreed with the statement. The results showed that 60(21.4) strongly agreed and 122(43.4%) agreed. This resulted to a total of 182(64.8%) who in agreement. However, 29(10.3%) of respondents maintained a neutral position. The mean score of obtained on this statement was 3.59 and standard deviation of 1.128 same as the composite mean of 3.59 and standard deviation of 1.102, implying that development of curriculum development involves the stakeholders. However, this mean also would mean that the level at which the stakeholders and more specifically the teachers, are engaged is quite scanty and needs more improvement for program to achieve its main objectives or goals. The views from the respondents appeared to have been divergent given a higher standard deviation of 1.128 than composite SD of 1.102 standard deviation. The qualitative data collected from CSO through interviews had this to say.

> *Integration of teachers in curriculum development has really enhanced the involvement of all the stakeholders in the formulation of the content of what is required in every level of learning with the right materials and information. Curriculum support officer Langata sub-county. (CSO, 2018)*

A fifth statement sought from the respondents that government officials from MoEST involved in supervising teachers strongly disagree 10(3.6%), disagreed were 61(21.4%). These combined showed that 71(25%) disagreed, 21(7.5%) remained neutral, 129(45.9%) agreed, whereas those who strongly agreed were 60(21.4%). In line of this a total of 189(67.3%) agreed with the statement. The mean score for this line item was 3.60 against a composite mean score of 3.59 implying that supervision of teachers during implementation of the program involved government officials from the ministry of education. Standard deviation was 1.149 above the composite standard deviation of 1.102 indicating that opinions were rather divergent. It is evident that good performance is associated with proper supervision which should be encouraged in all stages of implementing educational programme to yield better results. This implies that MOEST supervision of teachers influence performance of literacy and numeracy educational programme positively.

The sixth statement sought from the respondents whether RTI international officers participated in funding and training the stakeholders involved in the programme. The responses received showed that 7(2.5%) disagreed while 60(21.4%) strongly disagreed making a total of 67(23.9%) of those who disagreed. Neutral opinions were held by 30(10.7%). On the other hand 137(48.8%) agreed and 47(16.6%) strongly agreed with this statement suggesting that 184(5.4%) were in agreement. Obtained from this statement was a mean score 3.56 which was below the composite mean of 3.59. Based on this mean results, RTI officers does not influence performance of literacy and numeracy educational programme. This might also mean that although RTI may have participated in funding, the aspect of training could have somehow been ignored and hence need to observe this aspect in the future. Standard deviation of 1.078 which was below the composite standard deviation of 1.102 was an indication that opinions gathered attracted divergence.

> *Training of the Head Teachers, Lower Primary School Teachers has a big impact on the learner's progress. Teachers were asked if they are happy with the workshops and trainings offered by the research triangle officers and they said that they are okay but they should be reschedule to normal school learning time instead of having them during the holidays. A statement from Curriculum support officer west lands sub-county. (CSO, 2018)*

On the seventh statement, stakeholders were involved in setting objectives which were SMART. Various opinions revealed that 5(1.8%) disagreed and 60(21.4) strongly disagreed, meaning that in total 65(23.2%) disagreed while those with neutral opinions were 39(13.9%). Also, 130(46.3%) agreed and those who strongly agreed were 47(16.6%) summing up to 177(62.9%) of respondents who agreed with the statement. The mean for this statement was 3.55 against a composite which read 3.59 suggesting that stakeholders never got chance to participate in setting SMART objectives hence they did not influence the performance of literacy and numeracy educational programme. This informs us that any deviation or challenges being experienced in the performance of literacy and numeracy program could be as a result of objectives that do not reflect the opinions of the majority stakeholders. Therefore, there is need to ensure full involvement of all stakeholders in planning and designing of objectives so as to improve on the implementation of the educational programme. Witnessed from this result was also a much lower standard deviation of 1.058 against 1.083 indicating that opinions were convergence.

On the eighth statement, the objectives set were SMART and measurable according to the programme. Based on this statement participants gave their views whereby several opinions were revealed. So various opinions revealed that 10(3.6%) disagreed and 55(19.6) strongly disagreed, meaning that in total 65(23.2%) disagreed while those with neutral opinions were 34(12.1%). Also, 136(48.4%) agreed and those who strongly agreed were 46(16.4%) summing up to 182(64.8%) of respondents who agreed with the statement. The mean score for this line item was 3.54 and standard deviation of 1.088 against a composite 3.59 and standard deviation of 1.083 suggesting that set objectives did not influence the performance of literacy and numeracy educational programme. Given that line mean score of 3.54 was lower than composite mean of 3.59 lower than composite SD shows convergence views

On the ninth statement that all the stakeholders were involved in developing M&E plans 5(1.8%) strongly disagreed and 50(17.8%) disagreed, meaning that 55(19.6%) were in disagreement. Neutral opinions were represented by 44(15.7%). Those agreed were 139(49.5%) while 43(15.3%) strongly agreed. A mean score of 3.59 and standard deviation of 1.007 was obtained which matched the composite mean 3.59 and standard deviation of 1.102. This implied that averagely the program encouraged all stakeholders to participate in developing plans for M&E influence performance of literacy and numeracy educational programme. A lower standard deviation of 1.007 against a composite standard deviation of 1.102 was obtained suggesting opinions remained convergent.

The tenth and last statement that we involved all the stakeholders in the programme. Opinions received indicated that 5(1.8%) strongly disagreed and 56(19.9%) disagreed, meaning that 61(21.7%) were in disagreement. Those who held neutral views were 38(13.5%). Further, 110(39.1%) agreed and 72(25.7%) strongly agreed. In total, 182 (64.8%) were in agreement. A higher mean score of 3.67 was computed against 3.59 composite mean. Thus, all stakeholders got involved in the literacy and numeracy programme and standard deviation of 1.115. A standard deviation of 1.115 was obtained against 1.102 implying that opinions were inconsistent. This shows that for any program to be fully supported and smoothly implemented there is need to put all on board stakeholders concerned planning so as promote the principle of ownership among the same group of people. This implies that involvement of all the stakeholders in the literacy and numeracy educational programme influences its performance positively.

All in all the results of the variable indicated that Stakeholder identification was not carefully done and that there is need for improvement on this aspect if at all performance has to be realized in literacy and numeracy educational programs though the selection process of stakeholders was ensured in that gender parity was adhered to. This could be as a result of Kenyan constitution which emphasizes on a third of opposite gender in every working place and mostly public institutions whereby equality in selection process of stakeholders would lead to performance of literacy and numeracy educational programme in Nairobi County. The level of how stakeholders and specifically teachers were engaged is quite scanty and needs improvement for programme

to achieve its objectives. Supervision of teachers during implementation of the programme should involve all the participants in order to yield better results.

Most stakeholders never got chance to participate in setting SMART objectives. Hence the deviation or challenges being experienced in the performance of literacy and numeracy programme could be as a result of objectives that do not reflect the opinions of the majority stakeholders. Therefore, there is need to ensure full participation stakeholders planning and designing of objectives so as to improve on the implementation of the educational programme. Stakeholders got involved in the literacy and numeracy programme this shows that for any program to be fully supported and smoothly implemented there is need stakeholders concerned in planning so as promote the principle of ownership among the same group of people.

The results of the interviews with key informants showed that stakeholder engagement influenced performance of literacy and numeracy educational program. The results of the interviews were, therefore, consistent with the quantitative data. The following are key responses obtained from the key informants who are the sampled CSO'S from Nairobi County.

> *"The stakeholders had no choice of agreeing if to be involved or not but they had to give in since it was a government requirement and He was the employer. During supervision most teachers are tensed and were never confident on themselves since they lacked motivation in the career hence fear and frustration can be read on their faces. These teachers despite going back to school to pursue their education, no promotion is given to them neither any kind of motivation. They have remained in one grade for so many years and frustration could be felt as they talk. Those who were promoted were faced with another challenge of delocalization hence several lost their lives and others deserted duty due to the transfers. Others were interdicted when they applied for early retirement. In shock they were served with interdiction letters which frustrated them the more. The program was good and beneficial, only that no accountability and responsibility of those who mismanage the funds and resources hence nobody is accountable of any offence committed. The advice is that the government should put on monitoring and evaluation systems which are workable and not theoretical so as to get the culprits". A statement from Curriculum support officer Lanagata sub-county. (CSO, 2018)*

4.6.1. Inferential analysis of Stakeholder's Engagement and Performance of Literacy and Numeracy Educational Programme

The inferential analysis was performed by use of correlation and regression to show the relationship, strength and direction of independent and dependent variables. It was based on the first objective to establish the extent to which stakeholders' engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi, County. The dimensions of stakeholder engagement modeled in the study were: Identification of stakeholders, Stakeholders level of involvement, developing of project objectives and developing monitoring and evaluation plan.

The data was correlated using Pearson's Product Moment techniques done to establish the relationship between Stakeholder's engagement and performance of literacy and numeracy educational programme. The results for the effect of Stakeholder's engagement and performance of literacy and numeracy educational programme obtained from the correlation analysis ranged between , +1 indicated a positive perfect correlation, 0.001 – 0.250 weak correlation, 0.251 – 0.500 a semi strong correlation, 0.501 – 0.750 strong correlation and finally 0.751 – 1.000 a very strong correlation. The results were presented in Table 4.13.

Table: 4.13
Correlations between Stakeholder's engagements and Performance of Literacy and Numeracy Educational Programme

Variables		Performance of literacy and numeracy educational programme	Stakeholder engagement
Performance of literacy and numeracy educational programme	Pearson Correlation	1	0.693**
	Sig. (2-tailed)		0.000
	n	281	281
Stakeholder engagement	Pearson Correlation	0.693**	1
	Sig. (2-tailed)	0.000	
	n	281	281

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

In Table 4.13, the output indicates that Stakeholder's engagement had a strong positive significant relationship with performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. (P-value=<0.000). Given a Pearson correlation of 0.693, a strong positive relationship between stakeholder engagement and

performance of literacy and numeracy educational programme existed. Thus (r=.0.693, p-value=0<0.05).

4.6.2 Regression Analysis of Stakeholder Engagement and Performance of Literacy and Numeracy Educational Programme

The first objective of the study was to establish the extent to which stakeholder engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. The indicators for stakeholders' engagement variable included stakeholder identification, stakeholder level of involvement, developing of project objectives and developing of M&E plan. The indicators for performance were reading learning skills, simple arithmetic calculations skills, letter recognition, beneficiary satisfaction, proficiency skills in listening, proficiency skills in speaking, proficiency skills in writing, timely acquisition of literacy and numeracy skills, transition rate improved and class average performance improved.

4.6.3 Test of hypothesis 1

The following hypothesis were tested using linear regression model to satisfy objective's requirements of the first objective on this study:

1: H_0 Stakeholders engagement has no significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

H_1 Stakeholders engagement has significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

The null hypothesis (H_O) was tested using the linear regression model:

$y = a + \beta_1 X_1 + \varepsilon$

Where:

y - Performance of literacy and numeracy educational programme

X_1 - Stakeholder engagement

b_1 - Regression coefficient

a - Regression constant

ε - Error term

The results are shown on table 4.14

Table 4.14
ANOVA for Stakeholder Engagement and Performance of Literacy and Numeracy Educational Programme

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	99.560	1	99.560	257.946	0.000[b]
	Residual	107.685	279	0.386		
	Total	**207.245**	**280**			

a. Dependent Variable: Performance

b. Predictors: (Constant), Stakeholder engagement

The overall F-statistic is 257.949 with a p-value of 0.000[b]<0.05 which implies that there was a statistically significant relationship between stakeholder engagement and performance of literacy and numeracy educational programme. The goodness of fit of the model was achieved when the critical value obtained was 0.386 less than the F value (257.949).

Table 4.15
Model Summary for Stakeholder's Engagement and Performance of Literacy and Numeracy Programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.693a	0.480	0.479	0.62326

a. Predictors: (Constant),

b. Stakeholder engagement for monitoring and evaluation

Table 4.15 shows that the R=0.693 and R-squared is 0.480. The degree and nature of correlation between stakeholder engagement on performance of literacy and numeracy educational programme was determined by the "R". This demonstrates that stakeholder engagement strongly influenced performance of literacy and numeracy educational programme by 0.480. Whereas the R^2 revealed that stakeholder engagement was able to explain 48 % variations in the performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. There are other factors which could influence the performance of literacy and numeracy educational programme which are explained by the remaining percentage 52%.

From Table 4.15, a positive beta coefficient for Stakeholder engagement is 0.497 suggesting a direct relationship exists as per the model. Probability of t-statistic which is 16.061 for β coefficient has a less value compared to significance level of 0.05. Based on the research

findings, we reject the null hypothesis and conclude that stakeholder engagement has significant influence on performance of literacy and numeracy educational programme.

Table 4.16
Model Coefficients for Stakeholder's Engagement and Performance of Literacy and Numeracy Educational Programme

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.133	0.037		-3.571	0.000
	Stakeholder engagement	0.497	0.031	0.693	16.061	0.000

Model: (β= 0.497, t=16.061, p=0.000<0.05)
Predictor Variable: Stakeholder Engagement
Dependent Variable: Performance of Literacy and Numeracy Educational Programme

The results in Table 4.16 indicate that stakeholder's engagement has statistically significant influence on performance of literacy and numeracy educational programme (β= 0.497, t=16.091, p=0.000<0.05) implying that stakeholder engagement had a significant influence on performance of literacy and numeracy educational programme supported by TUSOME programme in Nairobi County. The regression equation obtained from this output was thus substituted:

$Y= \beta_0 + \beta_1 X_1 + \varepsilon$

$Y = -0.133+0.497X_1 +e$

Where:

y - Performance of literacy and numeracy educational programme

X_1 - Stakeholder engagement for M&E

ε - error term

The results were as shown in Tables 4.15and 4.16.

The findings of the study indicate a statistical significance correlation between stakeholder engagement and performance of literacy and numeracy educational programme. This findings concur with Stephanie and Sabrina (2014) who focused on stakeholder analysis and engagement in projects, from stakeholder relational perception to stakeholder ontology. It determined that

inappropriate social interaction between project stakeholders caused project failures. This was also supported by Celine, Natecho, Victor and Llusweti (2014) who assessed literacy intervention of school improvement programme on lower primary school pupils. The study determined that stakeholder engagement has significant influence on performance of literacy and numeracy educational programme. This was also supported by the current study.

The current study found out that TUSOME and PRIMR projects involved all the stakeholders in education sector at different levels as the programme was on going. This involvement helped in learner's improvement in their literacy and numeracy learning skills as echoed by (Piper and Mugenda, 2014). The current study supports (Piper and Mugenda, 2014) since many respondents were in agreement that there was improvement of literacy and numeracy learning skills upon the intervention programme was undertaken. This has an implication that involvement of key stakeholders in educational programme is very crucial.

The current study differ with the study conducted by Antilla, (2013) and Randall, A. (2011) who only argued about school leaders as the only ones who can influence the stakeholder engagement in performance of literacy and numeracy skills. The findings of this study were that every stakeholder in learning has a role to play and therefore they can all influence the performance of Literacy and Numeracy educational programme.

Relations of foregoing comparable studies, current study has adduced empirical evidence in support of their earlier findings, despite no similar studies have been conducted in Nairobi County, Kenya. Therefore it is very essential to note that the significant relationship between stakeholder engagement and performance of literacy and numeracy educational progamme is important hence need to establish strong bases on stakeholders' engagement for good yields in education sector.

4.7 Stakeholders' Capacity Building and Performance of Literacy and Numeracy Educational Programme

This section presents descriptive and correlational analysis of Stakeholders' Capacity Building and performance of literacy and numeracy educational programme.

The need to build the knowledge and skills of engaging stakeholder in any programme is very important. This is to enable the various stakeholders to be able to capture information in a required manner. The study found out that it is complex to undertake stakeholders' trainings and how they influence the performance of literacy and numeracy learning skills. The study therefore sought opinion of participants on various statements about stakeholder capacity building. The respondents were subjected to several statements asking their opinions in the level of agreement or disagreement on a likert scale of 1-5 whereby; Strongly disagree(SD)=1, Disagree(D)=2,Neutral(N)=3,Agree(A)=4 and Strongly Agree(SA)=5. Line mean score and standard deviation of each of the opinions was compared with the respective composite mean scores for interpretation. They are presented in Table 4.17.

Table 4.17
Stakeholders' Capacity Building and Performance of Literacy and Numeracy Educational Programme

Statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
Training for M&E workshops							
There are plans indicating when M&E workshops will be done	5 (1.8%)	41 (14.6%)	43 (15.3%)	149 (53.0%)	43 (15.3%)	3.65	0.966
Adequate M&E workshops are conducted to inform exchange of best practices for knowledge management	6 (2.1%)	41 (14.6%)	48 (17.1%)	143 (50.9%)	43 (15.3%)	3.63	0.982
Workshops have led to exchange of best practices for knowledge management	7 (2.5%)	39 (13.9%)	44 (15.7%)	149 (53.0%)	42 (14.9%)	3.64	0.980
Training for M&E seminars							
Adequate M&E seminars are conducted to inform exchange of best practices for knowledge management	4 (1.4%)	45 (16.0%)	34 (12.1%)	113 (40.2%)	85 (30.3%)	3.82	1.079
Seminars have led to exchange of best practices for knowledge management	5 (1.8%)	35 (12.5%)	42 (14.9%)	114 (40.6%)	85 (30.2%)	3.85	1.045
Aligning training gaps identified							
Feedback from the workshops and seminars helped us to identify gaps in literacy and numeracy educational program	3 (1.1%)	43 (15.3%)	45 (16.0%)	138 (49.1%)	52 (18.5%)	3.69	0.979

Statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
The feedback from the workshops and seminars were well identified	4 (1.4%)	42 (14.9%)	45 (16.0%)	130 (46.3%)	60 (21.4%)	3.71	1.010
The process of identifying gaps was done in a participatory manner from M&E perspective	3 (1.1%)	47 (16.7%)	40 (14.2%)	121 (43.1%)	70 (24.9%)	3.74	1.045
M&E knowledge and skills							
Acquisition of M&E knowledge and skills was well developed	2 (.7)	40 (14.%1)	41 (14.7%)	102 (36.3%)	96 (34.2%)	3.89	1.055
Stakeholders M&E knowledge and skills was enhanced by trainings that were undertaken	4 (1.4%)	37 (13.2%)	41 (14.6%)	103 (36.7%)	96 (34.1%)	3.89	1.065
Technical experts undertaking M&E trainings led to proper practices of knowledge and skills	3 (1.1%)	39 (13.8%)	41 (14.6%)	102 (36.3%)	96 (34.2%)	3.89	1.063
M&E activities were well achieved through trainings and setting of objectives	3 (1.1%)	42 (14.9%)	39 (13.9%)	101 (35.9%)	96 (34.2%)	3.87	1.078
Composite Mean and SD						**3.77**	**1.033**

As shown in Table 4.17, the overall composite mean was 3.77 and the standard deviation was 1.033. From Table 4.17, the first line item, the study sought from the respondents whether there are plans were indicating when M&E workshops will be done. Out of 281 respondents who participated on the study 5(1.8%) strongly disagreed, 41(14.6%) disagreed in total 46(16.4%) were in disagreement while 43(15.3%) were neutral, 149(53.0%) agreed and 43(15.3%) strongly agreed. Overally, 192(68.3%) of the respondents agreed and 46(16.4%) disagreed. The mean score obtained was 3.65 lower compared to the composite mean of 3.77 and standard deviation of 1.033. This may also imply that plans were not there on M&E workshops which negatively influenced the program. Therefore there is need to review the content of workshops to help improvement in the programme delivery. Although gotten from this statement was a standard deviation of 0.996 against 1.033 which meant that opinions tended to converge.

On the second statement, adequate M&E workshops conducted to inform the exchange of best practices for knowledge management, 6(2.1%) of the respondents strongly disagreed, 41(14.6%) disagreed in total those who were in disagreement were 47(16.7%) while 48(17.1%) were neutral, 143(50.9%) agreed and 43(15.3%) strongly agreed. Although in overall 186(66.2%)

agreed with the statement, a mean score of 3.63 and standard deviation of 0.982 which was below the composite mean of 3.77 and standard deviation of 1.033. implying practices applied after these workshops do not influence on the performance of literacy and numeracy educational programme since they are inadequately prepared and conducted. This may also mean that workshops were handled in a hurry hence some stakeholders who are the teachers were left an unequipped, specifically with the current methodology which is required to improve the literacy and numeracy educational programme, hence the need to restructure how these M&E workshops ought to be conducted. With a standard deviation of 0.982 against composite standard deviation of 1.033, it can be concluded that opinions were consistent.

Thirdly, workshops yielded any positive results in terms of exchange of best practices, the participants views revealed that 7(2.5%) strongly disagreed, 39(13.9%) disagreed meaning that 46(16.4) were in disagreement while 44(15.7%) were neutral, 149(53.0%) agreed and 42(14.9%) strongly agreed. A mean score of 3.64 and standard deviation of 0.980 against a higher composite mean of 3.77 and standard deviation of 1.033 implied that workshops did not yield much results as far as best practices are concerned. Hence, best practices such handling three subjects in class and also having M&E officers on the ground to collect data from the teachers would be helpful since many Head Teachers are unable to advice the grade one to three teachers on the areas they did not understand well in the trainings. A standard deviation of 0.980 which is below the overall composite standard deviation of 1.033 points out that opinions converged.

Fourthly, the statement that adequate M&E seminars were conducted to inform the exchange of best practices for knowledge management. The results showed that 4(1.4%) strongly disagreed, 45(16.0%) disagreed, 34(12.1%) were neutral, 113(40.2%) agreed and 85(30.2%) strongly agreed. A total of 198(70.4%) were in agreement that adequate seminars were conducted to inform the exchange of best practices for knowledge. This was further supported by a mean score of 3.82 and standard deviation of 1.079 which was higher than the composite mean of 3.77 and standard deviation of 1.033 indicating that indeed M&E seminars were adequately conducted and influenced performance of literacy and numeracy educational programme. A standard deviation of 1.079 compared to 1.033 the composite standard deviation showed that opinions

diverged. There is therefore need to engage in more seminars to compliment workshops which the study has revealed are not adequately conducted.

Further, on the fifth statement the seminars had led exchange of best practices for knowledge management. The results showed that 5(1.8%) of the respondents who strongly disagreed, 35(12.5%) disagreed, 42(14.9%) were neutral, 114(40.6%) agreed and 85(30.2%) strongly agreed. A total of 199(70.8%) were in agreement that best practices are being exchanged as a result of seminars. A line item mean score of 3.85 and standard deviation of 1.045 which was higher as compared to composite mean score of 3.77 and standard deviation of 1.033. This implies that seminars led to exchange of best practices for knowledge management and positively influence performance of literacy and numeracy programs. A standard deviation of 1.045 against composite standard deviation of 1.033 demonstrated opinions were inconsistent. Due to the nature of seminars, it is likely the forum provides more room for learning as compared to normal workshops, hence need to invest more in the seminars to have more experiences shared among the stakeholders.

On the sixth statement, feedback from both the workshops and seminars helped in identification of gaps in literacy and numeracy educational programme. The results showed that 3(1.1%) of the respondents strongly disagreed, 43(15.3%) disagreed, 45(16.0%) were neutral, 138(49.1%) agreed and 52(18.5%) strongly agreed. A total of 190(64.4%) were in agreement with the statement. This line item had a mean score of 3.69 and standard deviation of 0.979 which was below the composite mean score of 3.77 and standard deviation of 1.033 suggesting that feedback from the attended workshops and seminars could not help in identifying the gaps in the program. This implies that stakeholders need to attend more workshops so as to acquire the necessary skills. Opinions received were converging given a standard deviation of 0.979 against the overall standard deviation of 1.033.

The seventh statement sought to establish if feedback from the workshops and seminars were properly identified. Out of 281 respondents who participated 4(1.4%) of the respondents strongly disagreed, 42(14.9%) disagree. Hence in total 46(16.3%) were in disagreement with the statement. Results also showed that 45(16.0%) were neutral views. Further, 130(46.3%) agreed and 60(21.4%) strongly agreed. A total of 190(67.7%) were therefore in agreement with the same

statement. A line item mean score of 3.71 and SD of 1.010 against a composite mean of 3.77 and standard deviation of 1.033. This implied that feedback from seminars and workshops were not identified in a proper manner. This could therefore mean (as per findings on the sixth statement) gaps in literacy and numeracy are still glaring. Hence, need to capitalize on maximization of the seminars and workshops for better results in the course of program implementation and further enhancement of program performance. A standard deviation of 1.010 obtained against a composite standard deviation of 1.033 implies that the opinions remained consistent.

The eighth statement sought the process of identifying the gaps was done in participatory manner in line of monitoring and evaluation guidelines. Thus, 3(1.1%) of the respondents strongly disagreed, 47(16.7%) disagree, 40(14.2%) were neutral. The analysis also showed that 121(43.1%) agreed and 70(24.9%) strongly agreed. The line item mean score was 3.74 and standard deviation of 1.045. This was lower than composite mean score of 3.77 and standard deviation of 1.033, meaning that the line item was not positively influencing performance of literacy and numeracy educational programme. With a standard deviation of 1.045 against an overall composite standard deviation of 1.033 it could mean the opinions were not converging.

On the ninth statement, acquisition of M&E knowledge and skills were well developed. Out of 281 respondents, 2(.7%) of the respondents strongly disagreed, 40(14.1 %) disagree. This gave a total of 42(14.8%) who disagreed in opinion, 41(14.7%) were neutral. Further, 102(36.3%) agreed and 96(34.3%) strongly agreed. In total, 198(68.0%) were in agreement that the acquisition of M&E knowledge and skills was well developed and influenced the performance literacy and numeracy educational programme. A mean score of 3.89 and standard deviation of 1.055 which was obtained was higher than the composite mean of 3.77and standard deviation of 1.033. A standard deviation generated was of 1.055 above the composite standard deviation of 1.033 which demonstrated that opinions gathered did not converge. This implies that the line item influences the performance of literacy and numeracy educational programme positively. There is need to maintain the same standards for sustainability.

The tenth statement, stakeholders' M&E knowledge and skills was enhanced by the trainings that were undertaken for this programme. The results revealed that 4(1.4%) of the respondents

strongly disagreed, 37(13.2%) disagreed, 41(14.6%) were neutral while 103(36.7%) agreed and 96(34.2%) strongly agreed. Overally, 199(70.9%) and 41(14.6%) agreed and disagreed; respectively. Those with neutral opinions accounted for 41(14.6%). A line item mean score of 3.89 and standard deviation of 1.065 which is higher compared to a composite of 3.77 and standard deviation of 1.033 proved that trainings enhanced M&E knowledge and skills of the stakeholders. A higher standard deviation of 1.065 against 1.033 indicated that views from the respondents diverged. This implies that the line item influences the performance of literacy and numeracy educational programme positively.

The eleventh statement that technical experts taking M&E trainings led to proper practices of knowledge. Out of 281 respondents who took part in the study 3(1.1%) strongly disagreed, 39(13.9%) disagreed, 41(14.6%) were neutral, 102(36.3%) agreed and 96(34.2%) strongly agreed. In overall, the statement was supported by 198(70.5%) of the respondents who agreed. Similarly, 39(13.9%) disagreed in total and 41(14.6%) held neutral views. This had a mean score of 3.89 and standard deviation of 1.063 which was above 3.77 and standard deviation of 1.033. This therefore implied that the trainings by the technical experts resulted to good practices of knowledge and skills. This therefore calls for consistency in trainings conducted by the experts to assure performance of the programme across in all schools on board. A higher standard deviation of 1.063 against 1.033 was obtained implying that respondents' opinions remained divergent.

Twelfth was the last statement of stakeholder capacity building which sought from the respondents whether M&E activities achieved by the trainings conducted and setting of program's objectives. Out of 281 respondents 3(1.1%) strongly disagreed and 42(14.9%) disagreed with the statement while 39(13.9%) were neutral. Similarly, 101(35.9%) agreed and 96(34.2%) strongly agreed. In overall, 197(70.4%) of the respondents agreed and 42(14.9%) disagreed. This had a line item mean score of 3.87 and standard deviation of 1.078 which were both higher than composite mean score of 3.77 and standard deviation of 1.033 respectively. From the mean point of view, Monitoring and evaluation activities were well achieved through trainings and setting of objectives and this had an influence on the performance of literacy and numeracy educational program. The opinions were however divergent.

Results of interviews with key informants showed that stakeholder capacity building influenced performance of literacy and numeracy educational programme. The results of the interviews were, therefore, consistent with the quantitative data. The following are key responses obtained from RTI International Officers:

> *"Lack of adequate finances made the trainings boring and not encouraging at all only that it was mandatory for everyone to attend. We don't need it since it is not adding any value to their constrained pay slip, if anything it is making them suffer psychologically. This is as a result of those trainings which are under taken during the holidays when the other teachers are on leave." Statements from some teachers, CSOs and officers from RTI International. (CSO and RTI, 2018)*

Results from the curriculum support officers indicated that stakeholder capacity building influenced greatly influenced performance of literacy and numeracy education programme. The results were therefore consistent with the quantitative data. The following are the responses from the key informants:

> *Training of Coaches, Head Teachers and then Lower Primary School Teachers was not easy task due to many factors hindering the process to be a success. CSOs and officers from RTI International. Trainings were met to equip Head Teachers and Lower Primary Teachers with adequate additional of knowledge and teaching methodology on how to use the new instructional materials. These materials and knowledge acquirement were vital in content delivery in the class for better results in literacy and numeracy learning skill. (CSO and RTI, 2018)*

4.7.1 Inferential Analysis of stakeholder capacity building of key stakeholders in the programme

The inferential analysis was performed by use of correlation and regression to show the relationship, strength and direction of independent and dependent variables. It was based on the second objective to determine how stakeholders' capacity building influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. The variable stakeholder capacity building was operationalized using the following indicators: training for M&E workshops, training for M&E seminars, aligning training gaps

identified and M&E knowledge and skills and performance indicators were : Reading skills, Simple arithmetic calculations skills, Letter recognition, beneficiary Satisfaction, proficiency skills in listening of literacy and numeracy skills, proficiency skills in speaking of literacy and numeracy skills, proficiency skills and writing, Timely Acquisition of literacy and numeracy skills, transition rate improved and class average performance improved

4.7.2 Correlation analysis of Stakeholder's Capacity Building and Performance of Literacy and Numeracy Educational Programme

The relationship between stakeholder's capacity building and performance was determined by Pearson Correlation coefficient. According to the analysis, +1 signaled a positive perfect correlation, 0.001 – 0.250 a weak correlation, 0.251 – 0.500 semi but strong correlation, 0.501 – 0.750 strong correlation and lastly 0.751 – 1.000 very strong correlation. Table 4.18 summarizes the results.

Table 4.18
Correlation between Stakeholder Capacity Building and Performance of Literacy and Numeracy Educational Programme

Variables		Performance	Stakeholders capacity building
Performance	Pearson Correlation	1	0.675**
	Sig. (2-tailed)		0.000
	n	281	281
Stakeholders capacity building	Pearson Correlation	0.675**	1
	Sig. (2-tailed)	0.000	
	n	281	281

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

In Table 4.18, the output indicates that Stakeholders' capacity building had a strong positive significant relationship with performance of literacy and numeracy educational programme in public primary schools in Nairobi County.(r=0.675) . According to the foregoing continuum of correlation strength, there was a strong positive correlation between Stakeholders' capacity building and performance of literacy and numeracy educational programme since the coefficient was 0.675.

4.7.3 Regression Analysis of Stakeholder's Capacity Building and Performance of Literacy and Numeracy and Educational Programme

The second objective of the study was to determine how stakeholder capacity building influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. The following hypothesis were tested using linear regression model to satisfy the requirements of the second objective in this study:

4.7.4 Test for hypothesis 2

A linear regression was used to test the hypothesis to satisfy the requirements for the second objective of the study:

2. H_0 Stakeholders capacity building has no significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

H_1 Stakeholders capacity building has significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

The null hypothesis was tested using the linear regression model:

$y = a + b_2X_2 + \epsilon$

Where:

y - Performance of literacy and numeracy educational programme

X_2 - Stakeholder capacity building

b_2 - Regression Coefficient

a - Regression constant

ε - Error term

The results are presented in Table 4.19and 4.20.

Table 4.19
ANOVA for Stakeholder's Capacity Building and Performance of Literacy and Numeracy and Educational Programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.415	1	94.415	233.466	0.000[b]
	Residual	112.830	279	.412		
	Total	**207.245**	**280**			

a. Dependent Variable: Performance
b. Predictors: (Constant), Stakeholders capacity building

Table 4.19 presents the results of Anova that established the fit of good fitness of the regression model. Thus the overall F-statistic is 233.466 with a (P-value of 0.000<0.05) which implies that there was a statistically significant relationship between stakeholder capacity building and performance of literacy and numeracy educational programme. The critical value obtained for this model was 3.875 less than the F value thus the model goodness of fit was achieved.

Table 4.20
Model Summary for Stakeholder's Capacity Building and Performance of Literacy and Numeracy Educational Program

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.675[a]	0.456	0.454	0.63593

a. Predictors: (Constant), Stakeholders capacity building

The results in Table 4.20 shows that R=0.675 and R-squared = 0.456. The "R" was used to determine degree and nature of correlation between stakeholder capacity building and performance of literacy and numeracy educational programme. This demonstrates that stakeholder capacity building strongly influenced performance of literacy and numeracy educational programme by 0.675. On the other hand the R^2 showed that stakeholder capacity building explained 45.6% variations in the performance of literacy and numeracy educational programme. Thus, other factors not found or covered under this model account for the rest of 54.4%.

Table 4.21
Model Coefficients for Stakeholder Capacity Building and Performance of Literacy and Numeracy Educational Programme

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.134	0.038		-3.523	0.000
	Stakeholders capacity building	0.490	0.032	0.675	15.280	0.000

Model: (β= 0.490, t=15.280, p=0.000<0.05)
Predictor Variable: Stakeholder Capacity Building
Dependent Variable: Performance of Literacy and Numeracy Educational Programme

The results in Table 4.21 show that stakeholder capacity building has statistically significant influence on performance of literacy and numeracy educational program (β= 0.490, t=15.280, p=0.000<0.05). Using the statistical findings, the regression model can be substituted as follows:

$Y = \beta_0 + \beta_2 X_2 + \varepsilon;$

$y = -0.134 + 0.490 X_{2+\ 0.032}$

Where:

y - Performance of literacy and numeracy educational program

X_2 - Stakeholder's capacity building

ε - Error term

From Table 4.20, a positive beta coefficient for Stakeholder capacity building is 0.490 suggesting a direct relationship exists based on this model. Probability of t-statistic 15.280 for β coefficient has less value as would be compared to significance level which is 0.05. These findings led to the rejection of the null hypothesis and conclusion drawn was that stakeholder capacity building has significant influence on performance of literacy and numeracy educational programme.

The study findings indicates a statistical significance correlation between stakeholder capacity building and performance of literacy and numeracy educational programme. The study is in line with (Piper and Mugenda, 2014) who found out that teachers who had trained on literacy and numeracy learning skills had significant influence on their learners performance unlike those who had not undergone the training. Therefore it was established that without trainings on the new methodologies little is achieved.

Piper et al (2016) on previous studies that when teachers undergo through trainings the outcomes of learning skills are improved drastically. The findings of this study found that not only training of workshops and seminars improved the learning skills but also pedagogical, content knowledge in critical technical areas that have a high impact on learners' reading development and instructional quality, such as phonemic awareness, reading comprehension, lesson planning, and curriculum coverage (USAID, 2017).

Head Teachers need to be trained in line with lower teachers so as provide instructional leadership in schools and be able to manage utilization, maintenance, acquisition of the newly acquired cores in the new instructional materials. Teachers training and supervision was conducted by curriculum support officers, Coaches and the RTI officials. So the findings of the second objective were linked to the previous empirical investigations that had earlier been reviewed. A study by Nyagah (2016) determined that stakeholder's capacity building for Monitoring and Evaluation significantly influenced performance of literacy and numeracy educational programme. Similar results were found by Makori (2013). The second objective was, therefore, supported by data since stakeholder's capacity building was found to significantly influence performance of literacy and numeracy educational programme. In relation to the foregoing comparable studies, the current study has adduced empirical evidence in support of their earlier findings, even though no similar study had been done in Nairobi County, Kenya and specifically addressing the lower grades one to three in public primary schools. Other studies have dealt with the performance of exams at the national level for example the KCPE performance but not literacy and numeracy which is the major component in addressing all the subjects concerned in the exams.

The study found out that apart from engaging stakeholders and involving them in the programme at different levels, they were supposed also to be trained on what they were supposed to carry out so that they yield better results. In this case most statement which were raised and responded to by the respondents showed that even though the workshops and seminars were carried out, most responses from the statements were below the overall composite mean, meaning that there are still gaps which needs to be addressed. Those which were above the overall composite mean showed a positive influence which helped in improving the performance of the programme but to a very low extent since there are still gaps which affected the performance of the learning skills.

4.8 Data Collection and Performance of Literacy and Numeracy Educational Programme

For this section it represents the results of descriptive and correlation analysis of data collection and performance of literacy and numeracy educational programme. Collection of data activities is key to inform any party involved in programme implementation to understand the progress

and any deviation arising from a programme. This study sought opinion of participants on the state of various parameters of data collection in light of the performance of literacy and numeracy educational programme. The opinion was measured using a 5-point likert-scale whereby: Strongly disagree (SD)=1, Disagree (D)=2, Neutral (N)=3, Agree(A)=4 and Strongly Agree (SA)=5. Line mean score and standard deviation of each of the opinions was compared with the respective composite mean score and interpreted. The results are presented in Table 4.22.

Table 4.22
Data collection and Performance of literacy and numeracy educational programme

Statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
Selection of M&E data instruments							
1.M&E data collection instruments were appropriate for the designed work	7 (2.5%)	49 (17.4%)	53 (18.9%)	93 (33.1%)	79 (28.1%)	3.67	1.134
2.There was available M&E data collection tool	6 (2.1%)	50 (17.8%)	53 (18.9%)	93 (33.1%)	79 (28.1%)	3.67	1.127
3.The M&E data collection methods used suited the information required	5 (1.8%)	51 (18.1%)	49 (17.4%)	96 (34.2%)	80 (28.5%)	3.69	1.121
M&E data collection and collation of information							
4.M&E data collected was sorted and stored in the data base	6 (2.1%)	49 (17.4%)	56 (19.9%)	97 (34.5%)	73 (26.1%)	3.65	1.109
5.M&E data collation was coded in the systems and filled for future use	15 (5.3%)	40 (14.2%)	54 (19.2%)	91 (32.5%)	81 (28.8%)	3.65	1.189
6. The M&E data collected was verified and analyzed.	16 (5.7%)	30 (10.7%)	56 (19.9%)	97 (34.5%)	82 (29.2%)	3.71	1.162
Sources of M&E information							
7.The sources of M&E information collected was reliable and trust worthy	6 (2.1%)	50 (17.8%)	61 (21.7%)	92 (32.7%)	72 (25.7%)	3.62	1.112
8.Data collected for M&E was from the right respondents	4 (1.4%)	30 (10.7%)	36 (12.8%)	91 (32.4%)	120 (42.7%)	4.04	1.055
Schedules of M&E activities							
9.Proper coordination for M&E activities was well planned	9 (3.2%)	53 (18.9%)	60 (21.4%)	110 (39.1%)	49 (17.4%)	3.49	1.083
10.Schedules existed that displayed how M&E activities were carried out	10 (3.6%)	70 (24.9%)	30 (10.7%)	72 (25.6%)	99 (35.2%)	3.64	1.285
11. Assigning of M&E responsibilities were properly fulfilled by those assigned to carry out the task.	5 (1.8%)	60 (21.4%)	35 (12.5%)	81 (28.8%)	100 (35.5%)	3.75	1.199
Composite Mean and SD						**3.69**	**1.015**

As shown in Table 4.22, the overall analysis on composite mean was 3.69 and the standard deviation was 1.015.

From Table 4.22, the first statement was that M&E data collection instruments were appropriate for the designed work. Out of 281 respondents who participated 7(2.5%) of the respondents strongly disagreed, 49(17.4%) disagreed, 53(18.9%) were neutral, 93(33.1%) agreed and 79(28.1%) strongly agreed. Overally, 172(61.2%) agreed with the statement compared to 56(19.9%) who disagreed. Neutral opinions were collected from 53(18.9%). This had a line item mean score of 3.67 and standard deviation of 1.134 against a composite mean of 3.69 and standard deviation of 1.015. This implies that data collection tools are used although not appropriately done for the intended work. There is need to improve the current data collection instruments to enhance objectivity in collection of required data as regards programme. Where help is needed, M&E experts among the stakeholders may be called upon to make corrections where necessary. A standard deviation of 1.134 above the composite of 1.015 indicated the opinions did not converge.

Second statement that there was availability of data collection tools for M&E. Subsequently, 6(2.1%) strongly disagreed; 50(17.8%) disagreed, 53(18.9%) were neutral, 93(33.1%) agreed and 79(28.1%) strongly agreed. Overally, 172(89.3%) agreed that data collection tools were made available as opposed 56(19.9%) who disagreed. A mean score of 3.67 derived on this statement compared to a composite mean of 3.69 and standard deviation of 1.127 which was lower than the composite mean of 3.69 and standard deviation of 1.015.this implies that data collection tools may have been done but not circulated for the respective team to make use of them. Hence, there is imperative need to ensure all the M&E data collection tools are made readily available for effective and efficient data collection processes among the stakeholders for the sake of the program. Standard deviation of 1.127 was above the composite 1.015 meaning that opinions were inconsistent.

Thirdly, statement that M&E data collection methods were suitable for information required. Subsequently, 5(1.8%) strongly disagreed, 51(18.1%) disagreed, 49(17.4%) were neutral, 96(34.2%) agreed and 80(28.5%) strongly agreed. Overally, 176(62.7%) of the respondents agreed M&E data collection methods were made available as opposed to 56(19.9%) who

disagreed; and 53(18.9%) who were neutral. According to the analysis a line item mean was same as the composite mean score of 3.69 Standard deviation 1.121 implied that data collection selected were averagely suitable and positively influenced the programme. A standard deviation of 1.122 against 1.015 showed divergence in opinions.

Fourthly, statement that monitoring and evaluation on data collection was sorted and stored in the right database, out of 281 respondents 6(2.1%) strongly disagreed, 49(17.4%) disagreed while those who were neutral were 56(19.9%). Further, 97(34.5%) agreed and 73(26.1%) strongly agreed. In overall 170(60.6%) agreed with the statement higher that those who disagreed at 56(19.9%) who disagreed. A mean score of 3.65 was obtained for the line item and Standard deviation1.109 which was lower than the composite mean of 3.69 and Standard deviation1p 1.105. This implies that the process of sorting and storing collected data was not being handled properly and hence it negatively influenced the program. This suggests that competence of skills should be strengthened around data sorting and storage so as to improve on the quality control measure for the data collecting to inform meaningful change. However, with a standard deviation of 1.189 against 1.015 opinions did not converge.

Fifthly, respondents shared their reactions on the statement that the collected data for M&E was appropriately coded and filled in the system for utilization in the future. Responses received were that 15(5.3%) strongly disagreed, 40(14.2%) disagreed, 55(19.5%) were neutral, 91(32.5%) agreed and 81(28.8%) strongly agreed. Overally, 172(61.3%) of the respondents agreed and 56(19.9%) disagreed. This had a mean score of 3.65 and a Standard deviation1of 1.189 which was lower than composite mean of 3.69 and Standard deviation of 1.015. This implies that the line item influences performance of literacy and numeracy educational programme negatively This suggests that stakeholders who are not competently trained in data coding should seek to be trained and also practice more to perfect the skill to avoid current anomalies that are being experienced as far as proper coding is concerned. A higher standard deviation of 1.189 proved that onions recorded lacked consistency.

On the sixth statement, that M&E data collected was verified and analyzed. The results showed that 16(5.7%) of the respondents strongly disagreed, 30(10.7%) disagreed thus a total of

46(16.4%) disagreed while 56(19.9%) were neutral. Those who agreed were 97(34.5%) and 82(29.2%) strongly agreed. In overall, 179(63.7%) agreed with this statement. This had a mean score of 3.71 Standard deviation1of 1.62 which was high than the compos mean 3.69 and Standard deviation1 of 1.015. This implies that M&E data collected was verified and analyzed accordingly and hence positively influenced the information required and informed the best practices. Further, this would positively influence performance of the programme. A standard deviation of 1.162, quite above the composite mean of 1.015 which indicated divergence in opinions shared by the participants in the study.

On the seventh statement that sources of Monitoring and evaluation information collected was reliable and trust worthy. Results showed that 6(2.1%) of the respondents strongly disagreed, 50(17.8%) disagreed, thus a total of 56(19.9%) disagreed. Similarly, 61(21.7%) remained neutral. Results also showed that 92(32.7%) agreed and 72(25.6%) strongly agreed. Thus, this added up to 164(58.3%) of the respondents who agreed with the statement. A line item mean score was 3.62 with Standard deviation1of 1.112 which was below the composite mean of 3.69 and Standard deviation of 1.015 which implies that sources of M&E information collected were not reliable and could not be trusted. Thus the line item influenced performance of literacy and numeracy educational programme negatively. Thus, it is important to involve all the stakeholders at every stage of the program implementation to contribute towards assessment of sources of information be utilized at this program. A high standard deviation of 1.112 was recorded against 1.015 which suggested that opinions did not converge on this statement.

On the eighth statement, that data collected for M&E was from the right respondents. Results showed that 4(1.4%) of the respondents strongly disagreed, 30(10.7%) disagreed, meaning a total of 34(12.1%) disagreed. Similarly, 36(12.8%) remained neutral. Results also showed that 91(32.4%) agreed and 120(42.7%) strongly agreed. Thus, a total of 211(75.1%) of the respondents agreed. A line item mean score obtained was 4.04 and Standard deviation of 1.055 which was above the composite mean of 3.69 and Standard deviation of 1.015 implying that M&E information collected came from the right respondents. This influences performance of literacy and numeracy educational programme positively. This implies that engaging the right people to give the required information would reflect true reflection of how the programme is running and inform the best decision making process where necessary.

On the ninth statement, that proper coordination of M&E activities was well planned. Findings showed that 9(3.2%) of the respondents strongly disagreed, 53(18.9%) disagreed, meaning a total of 62(22.1%) disagreed. Similarly, 60(21.4%) remained neutral. Results also showed that 110(39.1%) agreed and 49(17.4%) strongly agreed. Thus, a total of 159(56.5%) of the respondents agreed with the statement. A line item was a mean score 3.49 Standard deviation of 1.083 which was lower than a composite mean score of 3.69 and Standard deviation implying that the line item does not influence the performance of literacy and numeracy educational programme positively. This also implied that proper coordination lacked for M&E activities and that planning was not well. This further calls for proper delegation of assignments of who is supposed to do what and what point in time. A higher standard deviation of 1.083 was obtained against 1.015 which indicated that opinions did not converge.

The tenth statement, stated that schedules existed that displayed how M&E activities were carried out. Results showed that 10(3.6%) of the respondents strongly disagreed, 70(24.9%) disagreed, meaning a total of 80(28.5%) disagreed. Similarly, 30(10.7%) remained neutral. Results also showed that 72(25.6%) agreed and 99(35.2%) strongly agreed. In total 171(60.8%) of the respondents were in agreement with the statement. From this statement, a mean score 3.64 and standard deviation of 1.285 which was lower than the composite mean of 3.69 and standard deviation of 1.015 implying that schedules were not being carried out correctly to display Monitoring and evaluation activities. Hence, there is need to develop schedules using Gantt chart to avoid overlaps of activities and even time overruns during implementation of the program. A standard deviation of 1.285 against composite standard deviation of 1.015 obtained on this statement states that opinions did not converge.

The eleventh and the last statement that assigning of M&E responsibilities were properly fulfilled by those assigned to carry out the task. Results showed that 5(1.8%) of the respondents strongly disagreed, 60(21.4%) disagreed, meaning a total of 65(23.2%) disagreed. Similarly, 35(12.5%) remained neutral. Results also showed that 81(28.8%) agreed and 100(35.5%) strongly agreed. In total 181(64.3%) of the respondents were in agreement with the statement. From this statement, a line mean score 3.75 and standard deviation which was higher than the composite mean of 3.69 and standard deviation of 1.015 implying assigning responsibilities was properly executed by those who had been assigned to conduct the task.

Subsequently, in the case where tasks are not executed it could therefore either mean those assigned the task may not be aware on how to execute the tasks given to them or they lack time or even morale for to do the job required of them. It is therefore critical for follow up meetings to be conducted to ensure the assigned responsibilities are done to the latter. A standard deviation of 1.199 arrived at statement implied that opinions were not converging.

Results of interviews with key informants showed that data collection for M&E influenced performance of literacy and numeracy educational program. The results of the interviews were, therefore, consistent with the quantitative data. The following are key responses obtained from the key informants:

> "*The same data should be shared with all the stakeholders for better use; the information is only vital if it is stored and used appropriately, and only to the concerned officers. Data is shared only on demand and no initiative experienced in sharing the data. We need more data collection tools and also incorporation of the Teachers Performance Appraisal and Development (TPAD) for assessing teachers' progress in the teaching endeavor. If the Ministry wants the latest information about the programme they must first consult the RTI Directors first and then get what they require; the MoEST has no records of Private Schools in the country yet they are the ones responsible for basic education. Information is shared to all the concerned parties but it is never fully utilized, hence low performance on most programme in the MoEST". Statements from Curriculum Support Officer West land sub-county. (CSO, 2018)*

4.8.1 Inferential Analysis of stakeholder capacity building of key stakeholders in the programme

The inferential analysis was performed by use of correlation and regression to show the relationship, strength and direction of independent and dependent variables. It was based on the third objective to examine how data collection influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

The variable data collection was operationalized using the following indicators Selection of M&E data instruments, M&E data collection and collation of information, Sources of M&E information and Schedules of M&E activities. Performance of literacy and numeracy indicators were : Reading skills, Simple arithmetic calculations skills, Letter recognition, beneficiary

Satisfaction, proficiency skills in listening of literacy and numeracy skills, proficiency skills in speaking of literacy and numeracy skills, proficiency skills and writing, Timely Acquisition of literacy and numeracy skills, transition rate improved and class average performance improved

4.8.2 Correlation analysis of Data collection and Performance of Literacy and Numeracy Educational Programme

The relationship between data collection and performance was determined by Pearson Correlation coefficient. According to the analysis, +1 signaled a positive perfect correlation, 0.001 – 0.250 a weak correlation, 0.251 – 0.500 semi but strong correlation, 0.501 – 0.750 strong correlation and lastly 0.751 – 1.000 very strong correlation. Table 4.23 summarizes the results.

Table 4.23
Correlation Analysis for Data Collection and Performance of Literacy and Numeracy Educational Programme

		Performance of literacy and numeracy educational program	Data collection
Performance	Pearson Correlation	1	0.660**
	Sig. (2-tailed)		0.000
	n	281	281
Data collection	Pearson Correlation	0.660**	1
	Sig. (2-tailed)	0.000	
	n	281	281

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

In Table 4.23, the output indicates that data collection had a strong significant positive relationship with performance of literacy and numeracy educational programs in public primary schools in Nairobi County, Kenya. (P-value of 0.000<0.05). Given a Pearson correlation of (r= 0.660), a strong positive relationship emerged between data collection and performance of literacy and numeracy educational programme.

4.8.3 Regression Analysis for Data Collection and Performance of Literacy and Numeracy Educational Programme

The third objective was to examine how data collection influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. The indicators for data collection for comprised of selection of M&E data instruments, data collection

and collation, sources of M&E information, schedules of M&E activities. The indicators for performance were reading learning skills, simple arithmetic calculations skills, letter recognition, beneficiary satisfaction, proficiency skills in listening, proficiency skills in speaking, proficiency skills in writing, timely acquisition of literacy and numeracy skills, transition rate improved and class average performance improved.

4.8.4 Test of Hypothesis 3

A linear regression was used to test the hypothesis to satisfy the requirements for the third objective of the study:

H_0 Data collection has no significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

H_1 Data collection has significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya

The null hypothesis was tested using the below linear regression model:

$y = a + b_3X_3 + \varepsilon$

Where:

y - Performance of literacy and numeracy educational program

X_3 - Data collection

a - Regression constant

ε - Error term

The results are presented in Table 4.24 and 4.25.

Table 4.24
ANOVA for Data Collection and Performance of Literacy and Numeracy Educational Programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	90.382	1	90.382	215.779	0.000[b]
	Residual	116.863	279	0.419		
	Total	207.245	280			

a. Dependent Variable: Performance

c Predictors: (Constant), Data collection

From the Table 4.24 revealed that regression model's goodness of fit. The overall F-statistic is 215.779 with a p-value of 0.000<0.05 which implies that there was a statistically significant

relationship between data collection and performance of literacy and numeracy educational programme. The critical value was 3.875. This value was less than the calculate F value which is 215.779 thus concluding that the model is fit. Thus the model was significant

Table 4.25
Model summary for Data Collection and Performance of Literacy and Numeracy Educational Programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.660[a]	0.436	0.434	0.64720

a. Predictors: (Constant), Data collection

The results in Table 4.25 show that R=0.660 and R-squared = 0.436. The "R" was used to determine degree and nature of correlation between data collection for monitoring and evaluation and performance of literacy and numeracy educational programme. This shows that data collection for Monitoring and Evaluation strongly influenced performance of literacy and numeracy educational programme by 0.660. On the other hand the R^2 showed that data collection explained 43.6% variations in the performance of literacy and numeracy educational programme. Hence, there could be other factors not featured under this model that account for the rest of 56.4% and they are not under this study.

Table 4.26
Model Coefficients for Data Collection and Performance of Literacy and Numeracy Educational Programme

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.137	0.039		-3.538	0.000
	Data collection	0.479	0.033	0.660	14.689	0.000

Model: (β= -0.137, t=14.689, p=0.000<0.05)

Predictor Variable: Data Collection

Dependent Variable: Performance of Literacy and Numeracy Educational Programme

The results in Table 4.26 indicate that that data collection has statistically significant influence on performance of literacy and numeracy educational programme (β= -0.137, t=14.689, p=0.000<0.05). Using the statistical findings, the regression model can be substituted as follows:

$Y = \beta_0 + \beta_3 X_3 + \varepsilon$

$y = -0.137 + 0.479 X_{3+ 0.033}$

Where:

y - Performance of literacy and numeracy educational programme

X_2 - Data Collection

ε - Error term

From Table 4.26, a positive beta coefficient for data collection is 0.479 indicating a direct relationship exists in this model. Probability of t-statistic is 14.689 for β coefficient has less value comparable to significance level which is 0.05. The findings led to the rejection of the null hypothesis and hence concluded that data collection has significant influence on performance of literacy and numeracy educational programme.

The findings of the third objective were linked to the previous empirical investigations that had earlier been reviewed. The model was deemed significant and relationship between the two variables was correlated. Data collection influenced performance of literacy and numeracy educational programme. So it is in this connection that the current study show that data collection in a programme like TUSOME and PRIMR had significant influence on performance of literacy and numeracy learning skills. The study agree with the findings of Tine and Skedsmo, (2017) on good feedback of learners results. Data collected about the learners' progress by teachers and administrators in the school helps in future use as it was found in the current study whereby many respondents agreed data collection is an important measure of giving feedback.

Data collected for education purposes in schools assessment are used by policy makers, administrators and teachers to provide the parents with the results of their children and also guide the implementing organization on the best action to take when doing corrective measures Moller, (2015). The current study differed with this argument since this not the only way of getting data but agreed with (Piper et al 2016; RTI, 2014) who developed a Targerine for collecting data and giving analyzed data on the sport. The study found it crucial on this type of garget collecting data since it was only the curriculum support officers and the coaches who had the tool leaving out the key implementer who is the teacher out. There is a weakness on how data is collected for

this to be curbed the study established that there is need to get more ways of collecting data from teachers, learners and all the stakeholders involved in the programme.

A study by Matonda, *et al* (2013) determined that significant relationship between data collection and performance of literacy and numeracy educational programme. The study results, therefore, supports the previous studies that data collection has influences on performance of literacy and numeracy educational program. In relation to the foregoing comparable studies, the current study has adduced empirical evidence in support of their earlier findings, even though no similar study had been done in Nairobi County, Kenya and specifically on literacy and numeracy educational programme.

4.9 Data Management and Performance of literacy and numeracy educational programme

This section presents descriptive and correlation analysis on data management of key stakeholders. Data management is very vital when putting into consideration of measuring literacy and numeracy learning skills. This study determined the extent to which data management influenced performance of literacy and numeracy educational programme Data management in any organization is essential for any good yields to occur. This must be done with a lot of integrity and honesty so as to avoid biasness when giving out the results required. The views of the respondents on data management were assessed and measured using a 5-point likert-scale whereby; strongly disagree (SD) =1, Disagree (D) =2 Neutral (N) =3

Agree (A) =4 and Strongly Agree (SA) =5. Line mean score and standard deviation of each of the opinions was compared with the respective composite scores for both interpretation and conclusion purposes. The results are presented in Table 4.27.

Table 4.27
Data Management and performance of literacy and numeracy Educational programme

Statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
Identifying specific data analysis methods							
1.Data analysis methods used were relevant and reliable	5 (1.8%)	50 17.8%)	56 (19.9%)	94 (33.5%)	76 (27.0%)	3.66	1.110
2.he process of identifying specific data analysis methods used was appropriate	5 (1.8%)	53 (18.9%)	53 (18.9%)	90 (32.0%)	80 (28.4%)	3.67	1.132
3.Methods of specifying data analysis process was strictly followed	21 (7.5%)	50 (17.8%)	40 (14.2%)	120 (42.7%)	50 (17.8%)	3.46	1.189
Identifying staff for data management							
4.Responsibility matrix which depicted staff responsible for data management existed	7 (2.1%)	45 (16.1%)	59 (21.1%)	99 (35.3%)	71 (25.4%)	3.66	1.089
5.Staff responsible for data management were experts and knowledgeable	9 (3.2%)	42 (14.9%)	50 (17.8%)	109 (38.8%)	71 (25.3%)	3.68	1.104
6.The staff knowledge and skills for M&E led to proper data management information	11 (3.9%)	40 (14.2%)	59 (21.0%)	121 (43.1%)	50 (17.8%)	3.57	1.061
Data analysis and interpretation							
7.Data interpretation was based on the information analyzed	9 (3.2%)	46 (16.4%)	58 (20.6%)	100 (35.6%)	68 (24.2%)	3.61	1.116
8.M&E data had been established to screen and store relevant information for quick retrieval and feedback to all the stakeholders	9 (3.2%)	46 (16.4%)	50 (17.8%)	108 (38.4%)	68 (24.2%)	3.64	1.113
9.The plan for data analysis and interpretation was clear and to the point	9 (3.2%)	44 (15.7%)	52 (18.5%)	105 (37.4%)	71 (25.2%)	3.66	1.114
10.Stakeholders were actively involved in data analysis and interpretation	11 (3.9%)	43 (15.3%)	49 (17.4%)	107 (38.1%)	71 (25.3%)	3.65	1.130
11.Analysis and interpretation of M&E data was properly utilized and stored in the data bases	10 (3.6%)	33 (11.7%)	60 (21.4%)	97 (34.5%)	81 (28.8%)	3.73	1.107
M&E report writing							
12.After data collection, analysis and interpretation, M&E report writing was done	2 (0.7%)	52 (18.5%)	56 (19.9%)	124 (44.2%)	47 (16.7%)	3.58	0.998
13.M&E report was useful in improving the M&E activities and decision making	5 (1.8%)	49 (17.4%)	51 (18.1%)	133 (47.4%)	43 (15.3%)	3.57	1.005
14.Stakeholders were actively involved in the utilization of M&E results	2 (0.7%)	58 (20.7%)	50 (17.8%)	120 (42.7%)	51 (18.1%)	3.57	1.033
15.M&E reports helped in making concrete and decisive decisions	10 (3.6%)	50 (17.8%)	45 (16.0%)	125 (44.5%)	51 (18.1%)	3.56	1.088
16.M&E reports were written and shared to all stakeholders for dissemination purposes	7 (2.5%)	46 (16.4%)	61 (21.7%)	76 (27.0%)	91 (32.4%)	3.70	1.156
Composite Mean and SD						**3.62**	**1.098**

As shown in Table 4.27, the overall composite mean was 3.62 and the standard deviation of 1.098.

On the first statement that data analysis methods used were relevant and reliable. The results indicated that 5(1.8%) strongly disagreed, 50(17.8%) disagreed. In overall, 55(19.6%) were in disagreement. The respondents who held neutral opinion accounted for 56(19.9%). Those who agreed and strongly agreed were 94(33.5%) and 76(27.0%) respectively. This means 170(60.5%) were in agreement with the statement that data analysis methods used were relevant and reliable. This line item had a mean score of 3.66 and standard deviation of 1.110 which was above the composite mean of 3.62 and standard deviation of 1.098. This implies that analysis methods used in the program were more relevant and reliable. This should be a continuous exercise to ensure information shared is based on empirical evidence supported with reliable data. It could however be noted that opinions were divergent given a higher standard deviation of 1.110 against the composite standard deviation of 1.098.thsi line item influences performance of literacy and numeracy educational programme positively.

Secondly, a statement the process of identifying specific data analysis methods used was appropriate. The results indicated that 5(1.8%) strongly disagreed and 53(18.9%) disagreed adding up to a total of 58(20.7%) with disagreeing opinions. Neutral opinions were given by 53(18.9%). The respondents who agreed were 90(32.0%) and 80(28.4%) who strongly agreed. This analysis indicated the majority 170(60.4%) were in agreement with the statement. A mean score of 3.67 and standard deviation of 1.132 above the composite mean of 3.62 and standard deviation of 1.098 was recorded which implied that data analysis methods were appropriately identified and the line item influences performance of literacy and numeracy educational programme. It should be noted that proper methods of analyzing data in a program or project are very vital to ensure data generated gives an output of true reflection of what is happening on the ground. This could further aid in eliminating any obstacles that might be of a challenge to effective implementation of the program. With a standard deviation of 1.132, the opinions on the statement were not consistent.

Thirdly, the statement that the methods of specifying data analysis process were adhered to strictly, 21(7.5%) strongly disagreed, 50(17.8%) disagreed totaling 71(25.3%) of those who disagreed. Neutral opinions were received from 40(14.2%). 120(42.7%) agreed and 50(17.8%) strongly agreed, meaning that majority 170(60.5%) were in agreement. This line item had mean score of 3.46 and standard deviation of 1.189which was lower than the composite mean of 3.62 and standard deviation of 1.098. This implies that the line item moderately influenced performance of literacy and numeracy educational programme.

Fourthly, statement that responsibility matrix which depicted staff responsible for data management existed. The results shows that 6(2.1%) strongly disagreed, 45(16.1%) disagreed hence a total 51(18.2%) in disagreement. The neutral opinion were given by 59(21.1%), while 99(35.3%) agreed and 71 (25.4%) strongly agreed, thus in total 170(60.7%) were in agreement. This had a mean score of 3.66 and standard deviation of 1.089 which is bigger than the composite mean of 3.62 and standard deviation of 1.098. This implied that responsibility matrix existed for staff involved in data management. This had a positive influence on performance of literacy and numeracy educational programme on those involved in data management and not only help in getting to know who is the right person to pursue for what information at a given time in the course of the programme implementation but also flow of information is easily facilitated. Similarly, a lower standard deviation of 1.089 greater against the composite of 1.098 indicated the opinions converged.

Fifthly, the statement that staff responsible for data management were experts and knowledgeable. The results showed that 9(3.2%) strongly agreed, 42(14.9%) disagreed, and in total 51(18.1%) disagreed. Respondents with neutral views accounted for 50(17.8%) while 109(38.8%) agreed and 71(25.3%) strongly agreed. It appears majority 180(64.1%) were in agreement. This was further supported by a higher mean score of 3.68 and standard deviation of 1.194 which was above composite mean of 3.62 and standard deviation of 1.098. This means the line item positively influences management of the literacy and numeracy programme, data manageable are well trained and hence experts. Although this is the case, this outcome should also cascade to other areas where expertise is dire and if possible individuals involved in data management could be supported through training and refresher courses. With a lower standard

deviation of 1.104 against the composite mean of 1.098 that the respondents' opinions converged.

On the sixth statement, that the staff knowledge and skills for M&E led to proper data management information. The results showed that 11(3.9%) strongly disagreed, 40(14.2%) disagreed on the same item, hence in total 51(18.1%) were in disagreement while 59(21.0%) were neutral. Also, 121(43.1%) agreed and 50(17.8%) strongly agreed resulting to a total of 171(60.9%) of those in agreement. This had mean score of 3.57 and standard deviation of 1.061 which was lower than the composite mean of 3.62 and standard deviation of 1.098. This means that the line item negatively influences performance of literacy and numeracy educational programme. Also this means that proper data management was not influenced by the knowledge and skills possessed by staff in M&E. This would mean that the data management might be in place and that all involved in the program are aware of its utilization and not necessarily does it require much skills and knowledge. A standard deviation of 1.061 below the composite 1.098 implied that opinions converged.

On the seventh statement that data interpretation was based on the information analyzed. From the results recorded, it was revealed that 9(3.2%) strongly disagreed, while 46(16.4%) disagreed meaning that 55(19.6%) were in disagreement. Neutral opinions gathered indicated that 58(20.6%) took part in the study. Still on the same statement, 100(35.6%) agreed and 68(24.2%) strongly agreed, thus in total 168(59.8%) were in agreement. The statement had mean score of 3.61 and standard deviation of 1.116 almost the overall mean of 3.62 and standard deviation of 1.098. This implies the findings presented information was more reliable as far as the programme is concerned since the information analyzed proper data interpretation. This results shows that the line item influences the performance of literacy and numeracy educational programme moderately to a moderate extent. A standard deviation of 1.116 was above the composite meaning that opinions diverged.

The analysis results from the eighth statement that M&E data had been established to screen and store relevant information for quick retrieval and feedback to all the stakeholders indicated that 9(3.2%) strongly disagreed, 46(16.4%) disagreed, 50(17.8%) were neutral, 108(38.4%) agreed

and 68(24.2%) strongly agreed with the statement. In total, 55(68.6%) were in disagreement as opposed to 176(62.6%) in agreement. A mean score of 3.64 and standard deviation of 1.113 and a mean score of 3.62 and standard deviation of 1.098. This means the line item influences the performance of literacy and numeracy educational programme positively. With the above composite mean it was a clear indication that M&E data had prior been established, Screened stored and relevant information enabling faster retrieval and feedback was available. A standard deviation of 1.113 above the recorded composite of 1.098 indicates divergence in opinions from the respondents.

The ninth statement that plan for data analysis and interpretation was clear and to the point showed that 9(3.2%) strongly disagreed and 44(15.7%) disagreed. In total 53(18.9%) disagreed and 52(18.5%) held neutral views. The study also showed that 105(37.4%) agreed and 71(25.2%) strongly agreed hence in total 176(62.6%) were in agreement. A mean score of 3.66 and standard deviation of 1.114 which was over and above the composite mean of 3.62 and standard deviation of 1.098 indicated clearly that data analysis and interpretation plans were clear. This should be emphasized at all stages to ensure information generated would be relied upon for effective implementation of the programme. A standard deviation of 1.114 was realized above the 1.098 above the composite suggesting divergence in opinions from the respondents.

The tenth statement that stakeholders were actively involved in data analysis and interpretation as such, 9(3.2%) of the respondents strongly disagreed, 44(15.7%) disagreed and in total 54(19.2%) of the study participants disagreed. Those with neutral opinions were 49(17.4%). Those who agreed were 107(38.1%) and 71(25.3%) strongly agreed hence in total 178(63.4%) were in agreement. A mean score of 3.65 and standard deviation of 1.130 which was above the composite mean of 3.62 and standard deviation of 1.098. This means that the line item influences the performance of literacy and numeracy educational programme positively and stakeholders were active participants in data analysis and interpretation. A standard deviation of 1.130 above 1.098 indicated divergence in opinions.

On the eleventh statement that analysis and interpretation of M&E data was properly utilized and stored in the data base. Thus the results showed that 10(3.6%) strongly disagreed and

33(11.7%) disagreed. In total, 43(15.3%) were in disagreement. Neutral opinions were held by 60(21.4%). Those who agreed were 97(34.5%) and 81(28.8%) strongly agreed and hence 178(63.3%) were in agreement. A mean score of 3.73 and standard deviation of 1.107 was above the composite of 3.62 and standard deviation of 1.098 meaning that the line item had a positive influence on the performance of literacy and numeracy educational programme. This implies that data was properly used and also stored in the right data base. Proper storage of data is vital and is considered one of the quality control measures in safe guarding the integrity of information in program or project management. However this was observed as influencing performance of literacy and numeracy educational programme, given a higher standard deviation of 1.107 it could be deduced there was divergence of in views.

On the twelfth statement and interpretation data collection, analysis after, monitoring and evaluation writing report was done the results were disseminated to all the stakeholders. Those who strongly disagreed were 2(0.7%) and 52(18.5%) disagreed thus, 54(19.2%) were in disagreement whereas 56(19.2%) held neutral opinion. Those who agreed and strongly agreed were 124(44.2%) and 47(16.7%) respectively and hence totaling to 171(60.9%) of those in agreement. A mean score of 3.58 and standard deviation of 0.998 was quite below the composite mean of 3.62 and standard deviation of 1.098. The line item had a negative influence on performance of literacy and numeracy educational programme since it was below the composite mean. This implies that data collection, analysis and M&E report writing was not done properly. This could be a retrogressive move whereby the gains may not be available for sharing among the stakeholders for improvement of the program and knowledge sharing. A higher standard deviation of 0.998 than the composite signified opinions were rather divergent.

From the thirteen statement, Monitoring and evaluation report was useful in improving the Monitoring and evaluation activities and decision making showed that 5(1.8%) strongly disagreed and 49(17.4%) disagreed hence, 54(19.2%) were in disagreement. Neutral opinions were shared by 51(18.1%). Those who agreed were 133(47.4%) and 43(15.3%) strongly agreed with the resulting to a total of 176(62.7%) in agreement. A mean score of 3.57 and standard deviation of 1.005 for the line item which was composite mean 3.62 and standard deviation of 1.098. This implies that the line item was below the composite mean meaning that it influences

performance of literacy and numeracy of educational programme negatively thus M&E reports were not useful. It could be noted that from the twelfth statement reports were not done and this could be one of the reasons respondents failed to state the usefulness of the M&E reports in programme implementation. There is need to emphasize on report writing for benching marking.

Fourteenth, this statement state that stakeholder were actively utilization of monitoring involved in evaluation results utilization of monitoring and. This were revealed by 2(0.7%) who strongly agreed and 58(20.7%) disagreed totaling to 60(21.7%) of those in disagreement. Neutral opinions were rather held by 50(17.8%). On the other hand, 120(42.7%) agreed and 51(18.1%) strongly agreed resulting to an overall of 171(60.8%) in agreement. A mean score of 3.57 and standard deviation of 1.033 which was below the composite mean of 3.62 and standard deviation of 1.098. This implied that utilization of M&E results ignored active participation of the stakeholders. Whether stakeholders are involved in every other stage of the programme implementation and are essentially left out during result utilization stage, then it would remain baseless and in most cases lessons cannot be transferred. Obtained on this statement standard deviation of 1.033 which was below the composite suggesting opinions converged.

On the fifteenth statement, Monitoring and evaluation reports helped in making decisive decisions. 10(3.6%) strongly disagreed, 50(17.8%) disagreed hence a total of 60(21.4%) in disagreement. Responses of 45(16.0%) were neutral. Analysis also showed that both 125(44.5%) and 51(18.1%) agreed and strongly agreed respectively, giving a total of 176(62.6%) of those in agreement. A mean score of 3.56 and standard deviation of 1.088 which was below the composite mean of 3.62 and standard deviation of 1.098 implying that reports never helped in critical decision making process. This could be an alarming issue that need to be looked into otherwise such a wonderful programme and many others to come are bound to fail for lack of information to inform decision that would contribute to proper planning and improvement of the programme among other issues of programme or project management and standard deviation of 1.088. This was lower than the overall composite mean. It could be deduced that opinions converged given a lower standard deviation of 1.088 against overall standard deviation of 1.098.

On the last statement, Monitoring and evaluation reports were written and shared was among the stakeholders. Results showed that 7(2.5%) strongly disagreed, 46(16.4%) disagreed, hence 53(18.9%) were in disagreement. Those of neutral views were 61(21.7%). Similarly, 76(27.0%) agreed and 91(32.4%) strongly agreed resulting to 176(62.6%) in agreement. A mean score of 3.70 and standard deviation of 1.156 obtained was slightly above the composite mean of 3.62 and standard deviation of 1.098 showing that M&E reports were adequately disseminated. The line item had a positive influence on performance of literacy and numeracy educational programme. However, going by the previous views, the Monitoring and evaluation reports might have been shared but the stakeholders may have found them not useful for they were not involved and also could not help in decision making. Therefore, the quality of such reports should not only be checked in the current programme of literacy and numeracy but also future programme with similar characteristics. Given 1.156 as the standard deviation for this statement, it could be concluded that opinions were inconsistent.

Results of interviews with key informants showed that data management for M&N influenced performance of literacy and numeracy educational programme. The results of the interviews were, therefore, consistent with the quantitative data. The following are key responses obtained from the key informants:

> "*Data is collected in the classroom when the teacher is being observed while teaching. Learners are guided on which words to read at a set time in the TAGARINE tablet. They are supposed to read a certain number of words in a specified time upon which when the set time lapses the tablet closes down but gives the number of words read at what speed and the percentage. The response was data is collected from several stakeholders through either questionnaires, tablet or documents from the heads of the institutions data is transmitted through the use of tablets wherever you are and the moment it is keyed in it reflects to all the systems which are connected to the gadget. It is later cleaned and analyzed by the RTI officers who later share it to the respective groups who require this information. To manage data is not any easy thing but when called upon there is need to do so simply because it is a necessity to the organization. After all when the implementing organizations hands over the project to the government it is assumed that it will be sustainable." Statements from Embakasi sub-county. (CSO, 2018)*

Results of the interviews from the RTI officers agreed on the importance of embracing the new technology for giving immediate feedback from the classroom teaching and also as an additional learning material to the teachers in delivering the instructional content RTI officers

"The Tangerine tool was designed by RTI international as a tablet-based instructional support program for collecting data from the learners while the teacher is teaching in the classroom being observed by the curriculum support officer. The tablet is meant to deepen the quality of instruction but not a punishment as seen by some teachers". (RTI, 2018)

4.9.1 Inferential Analysis of Data Management and Performance of Literacy and Numeracy Educational Programme

The inferential analysis was performed by use of correlation and regression to show the relationship, strength and direction of independent and dependent variables. It was based on the third objective to examine how data management influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

The variable of data management was operationalized using the following indicators identifying specific data analysis methods, identifying staff responsible for data management, data analysis and interpretation and M&E reports writing. Performance of literacy and numeracy indicators were: Reading skills, Simple arithmetic calculations skills, Letter recognition, beneficiary Satisfaction, proficiency skills in listening of literacy and numeracy skills, proficiency skills in speaking of literacy and numeracy skills, proficiency skills and writing, Timely Acquisition of literacy and numeracy skills, transition rate improved and class average performance improved.

4.9.2 Correlation analysis of Data Management and Performance of Literacy and Numeracy Educational Programme

The relationship between data management and performance was determined by Pearson Correlation coefficient. According to the analysis, +1 signaled a positive perfect correlation, 0.001 – 0.250 a weak correlation, 0.251 – 0.500 semi but strong correlation, 0.501 – 0.750 strong correlation and lastly 0.751 – 1.000 very strong correlation. Table 4.28 summarizes the results.

Table 4.28
Correlation Analysis for Data Management and Performance of Literacy and Numeracy Educational Programme

		Performance	Data Management
Performance	Pearson Correlation	1	0.536**
	Sig. (2-tailed)		0.000
	n	281	281
Data Management	Pearson Correlation	0.536**	1
	Sig. (2-tailed)	0.000	
	n	281	281

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

In Table 4.28, the output results show that data management had a strong positive relationship with performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. (P-value of 0.000<0.05). Given a Pearson correlation of (r= 0.536), a strong positive relationship emerged between data management and performance of literacy and numeracy educational programme.

4.9.3 Regression Analysis for Data Management and Performance of Literacy and Numeracy Educational Programme

The fourth objective was to determine the extent to which data management influence performance of literacy and numeracy educational programme. The hypothesis was tested using linear regression model.

4.9.4 Test of Hypothesis 4

A linear regression was used to test the hypothesis to satisfy the requirements for the fourth objective of the study:

H_0 Implementing change has no significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

H_1 Implementing change has significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya

The null hypothesis was tested using the below linear regression model:

$y = a + b_4X_4 + \epsilon$

Where:

y - Performance of literacy and numeracy educational programme

X_4 - Data management

a - Regression constant

ε - Error term

The results are presented in Table 4.29 and 4.30

Table 4.29
ANOVA for Data Management and Performance of Literacy and Numeracy Educational Programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.627	1	59.627	112.695	0.000[b]
	Residual	147.618	279	0.529		
	Total	**207.245**	**280**			

a. Dependent Variable: Performance
b. Predictors: (Constant), Data Management

The overall F-statistic is 112.695 with a p-value of 0.000<0.05 which implies that there was a statistically significant relationship between data management and performance of literacy and numeracy educational programme. The calculated critical value gave a value of 3.875 which is less than the F value of 112.695 thus the model goodness of fit was achieved

Table 4.30
Model Summary for Data Management and Performance of Literacy and Numeracy Educational Programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.536[a]	0.288	0.285	0.72739

a. Predictors: (Constant), data management

From Table 4.30, the coefficient of correlation (R) was 0.536 which implied a weak positive correlation between data management and performance of literacy and numeracy educational programme. The R-squared was 0.288, meaning that 28.8 % of variation in performance of literacy and numeracy educational programme was explained by variation in data management. The remaining 71.2% variation in performance of literacy and numeracy educational programme was as a result of other factors not included in the model.

Table 4.31
Model Summary for Data Management, and Performance of Literacy and Numeracy Educational Programme

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.120	0.044		-2.751	0.006
	Data Management	0.408	0.038	0.536	10.616	0.000

Model: (β=0.408, t=10.616, p=0.000<0.05).

Predictor Variable: Data Management

Dependent Variable: Performance of Literacy and Numeracy Educational Programme

The results in Table 4.31 indicate that data management has statistically significant influence on performance of literacy and numeracy educational programme (β=0.408, t=10.616, p=0.000<0.05). Using the statistical findings, the regression model can be substituted as follows:

$Y=\beta_0 + \beta_4 X_4 + \varepsilon$

$y = -0.120 + 0.408X_{4} + 0.038$

Where:

y - Performance of literacy and numeracy educational programme

X_2 - Data Collection

ε - Error term

From Table 4.31, a positive beta coefficient for data management is 0.408 indicating a direct relationship exists in this model. Probability of t-statistic is 10.616 for β coefficient has less value when comparing with significance level which is 0.05. The findings led to the rejection of the null hypothesis and hence concluded that data management has significant influence on performance of literacy and numeracy educational programme.

The findings of this study shows that data management was statistically significant and has a relationship with performance of literacy and numeracy educational programme. The overall composite mean was 3.62 which above compared to line items composite mean which were

below it. This implies that data management guarantees performance of literacy and numeracy learning skills after using the information which was stored in the data base for easy access when in need of it. This study does not concur with (Tenopir, Sandusky, Allard and Birch 2016) on their opinion that sharing of managed data is not effective as acknowledged by many researcher. However they differ (Federer, Joubert, Welsh and Brandys 2015) on their opinion that data management lack people with technical skills and experience of how to manage and retrieve data for easy sharing and giving feedback.

The current study refute the claims of (Federer, Joubert, Welsh and Brandys 2015) who argue that training of teachers and other stakeholders in literacy and numeracy programme were well performed by experts from RTI officers and MOEST officials on how to analyze and manage data after class observations. According to this study this was not done for example training of data analysis.

So this objective is in support of data management which was found to be significantly influencing performance of literacy and numeracy educational programme. Therefore data management influences performance of literacy and numeracy educational programme

4.10 Implementing Change and Performance of literacy and numeracy educational programme

Descriptive and correlational analysis are presented in this section for implementing change.

Implementing change results is a crucial process which involves analysis, interpretation of data and implementing change found while undertaking the process. This means that every relevant information and experiences gathered from those who are directly affected increases the accountability of the participants who have a direct interest in implementation of the programme. In a bid to arrive at the realization of this process the fifth objective of the study examined the extent to which implementing change was achieved and the influence it had on the performance of literacy and numeracy educational programme in public primary schools Nairobi, county Kenya. The dimensions of implementing change were drawn from the following indicators: reviewing collected data, number of transmitted reports, utilization of M&E results and project intervention

The views of the respondents on implementing change were assessed and measured using a 5-point likert-scale whereby: Strongly disagree (SD)=1, Disagree (D)=2, Neutral(N)=3, Agree(A)=4 and Strongly Agree (SA)=5. Line mean score and standard deviation of each of the opinions was compared with the respective composite scores for both interpretation and conclusion purposes. The results are presented in Table 4.32.

Table 4.32
Implementing change and Performance of Literacy and Numeracy Educational Programme

statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
Reviewing collected data							
1.All stakeholders counter checked the number of TARGERINE transmitted reports for correction and reliability	6 (2.1%)	31 (11.0%)	91 (32.4%)	62 (22.1%)	91 (32.4%)	3.72	1.097
2.TARGERINE tool facilitated for accurate and adequate information for the program	7 (2.5%)	30 (10.6%)	89 (31.7%)	68 (24.2%)	87 (31.0%)	3.70	1.093
3.TARGERINE tool helped improve the implementation of the project activities such as collection of data during class observation	17 (6.1%)	20 (7.1%)	82 (29.2%)	74 (26.3%)	88 (31.3%)	3.70	1.161
4.The information collected improved the process of involving the stakeholders in transmitting reliable reports	15 (5.3%)	32 (11.4%)	50 (17.8%)	82 (29.2%)	102 (36.3%)	3.80	1.200
5.Stakeholders reviewed data collected and made changes to the identified gaps in the reports	15 (5.3%)	22 (7.8%)	60 (21.4%)	94 (33.5%)	90 (32.0%)	3.79	1.135
Number of transmitted reports							
6.Data collected from the TARGERINE report was reviewed and analyzed	6 (2.1%)	33 (11.7%)	89 (31.7%)	87 (31.0%)	66 (23.5%)	3.62	1.036
7.The number of transmitted report lead to improved results and the quality of project intervention in literacy and numeracy educational lessons	9 (3.2%)	30 (10.7%)	90 (32.0%)	65 (23.1%)	87 (31.0%)	3.68	1.117
8.Shared transmitted reports led to identifying areas with large number of participants and with less participants	19 (6.8%)	20 (7.1%)	50 (17.8%)	85 (30.2%)	107 (38.1%)	3.86	1.199
9.Transmitted report improved the allocation of resources for example the areas which needed more personnel's for supervising literacy and numeracy programme	31 (11.0%)	8 (2.8%)	45 (16.0%)	90 (32.0%)	107 (38.1%)	3.83	1.275
Utilization of M&E results							
10.M&E results were used to improve projects activities such as allocation of resources	7 (2.5%)	35 (12.5%)	89 (31.7%)	52 (18.5%)	98 (34.8%)	3.71	1.143

statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
11.The M&E results obtained from the programme excises were disseminated for utilization by all the stakeholders in order to better the results of literacy and numeracy educational program	11 (3.9%)	33 (11.7%)	80 (28.5%)	60 (21.4%)	97 (34.5%)	3.71	1.171
12.M&E results improved the quality of program intervention such as literacy and numeracy	10 (3.6%)	43 (15.3%)	71 (25.3%)	49 (17.4%)	108 (38.4%)	3.72	1.223
13.M&E results improved the use of financial and resource allocation	13 (4.6%)	46 (16.4%)	64 (22.8%)	48 (17.1%)	110 (39.1%)	3.70	1.267
14.M&E results improved the designs and performance of literacy and numeracy educational programme	13 (4.6%)	40 (14.2%)	70 (24.9%)	46 (16.4%)	112 (39.9%)	3.73	1.251
Project intervention							
15.The intended participants for the intervention were carefully identified and possible settings to each participants in the programme was done	23 (8.2%)	30 (10.7%)	60 (21.4%)	56 (19.9%)	112 (39.8%)	3.73	1.306
16. M&E activities for intervention were developed and materials gathered appropriately	28 (10.0%)	25 (8.9%)	46 (16.3%)	77 (27.4%)	105 (37.4%)	3.73	1.313
17.M&E resources for intervention were clearly specified and located	20 (7.1%)	33 (11.7%)	39 (13.9%)	77 (27.4%)	112 (39.9%)	3.81	1.272
18.Progress for intervention activities were well monitored and evaluated for the success of the program	19 (6.8%)	30 (10.7%)	43 (15.3%)	70 (24.9%)	119 (42.3%)	3.85	1.264
Composite Mean and SD						**3.74**	**1.198**

As indicated in Table 4.32, the composite mean was 3.74 and the standard deviation 1.198 for the study variable, implementing change.

In Table 4.32, the first statement that stakeholders counter-check the number of TANGERINE reports transmitted for corrections and reliability. Results showed that 6(2.1%) strongly disagreed, 31(11.0%) disagreed, 91(32.4%) were neutral, 62(22.1%) agreed and 91(32.4%) strongly agreed. In overall, 36 (12.1%) disagreed and 153(54.5%) agreed. The line item mean score was 3.72 and standard deviation of 1.198 which was slightly below the composite mean 3.74 and standard deviation of 1.198 implying that somehow counter checking of TARGERINE reports to allow corrections and reliability before transmission did not have participation of all the stakeholders. This means that it did not positively influence the performance of literacy and

numeracy educational programme. This may need to be corrected or relooked at in the future to ensure data collected is not cooked for the purpose of satisfying the interests of the few stakeholders at the expense of the beneficiary of the programme. A standard deviation of 1.097 was below the composite a 3.74 and standard deviation of 1.198 show that opinions converged.

The second statement that TANGARINE tool facilitated for accurate and adequate information for literacy and numeracy programme, the findings showed that 7(2.5%) strongly disagreed, 30(10.6%) disagreed, 89(31.7%) remained neutral, 87(31.0%) agreed and 68(24.1%) strongly agreed. In overall, 155(55.1%) of the respondents agreed with the statement as compared to 37(13.1%) who disagreed. This had a line item mean score of 3.70 and standard deviation of 1.093 which was below the composite mean of 3.74 and standard deviation of 1.198 implying that the accuracy and adequacy of information was not facilitated by the TANGERINE tool. This would mean that TANGERINE as a tool is not sufficiently utilized and therefore need for follow up to ensure all the stakeholders get to understand the importance of such a tool in implementation of the literacy and numeracy programme. A standard deviation of 1.093 against 1.198 indicated that respondents' opinions were more consistent with one another.

Third, on the statement that TANGARINE tool helped in improving the implementing of the project activities such as collecting data during class observations showed that 17(6.1%) strongly disagreed, 20(7.1%) disagreed, 82(29.2%) were neutral, 74(26.3%) agreed and 88(31.3%) strongly agreed. The overall totals show that 162(57.6%) were in agreement and 55(19.6%) in disagreement. A line item of mean score of 3.70 and standard deviation of 1.161 was realized which fell below the composite mean of 3.74 and standard deviation of 1.198. This means that TANGERINE tool did not help in improving the implementation of the project activities such as collection of data during the classroom observation meaning that it had a negative influence on the performance of literacy and numeracy educational programme. It would be important if the tool would be redesigned for easy use and also more stakeholders should be encouraged to use it. A lower standard deviation of 1.161 against the composite 1.198 was an indication that the views converged.

Fourth, on statement that information collected improved the process of involving the stakeholders in transmitting more reliable reports, 15(5.3%) strongly disagreed, 32 (11.4%) disagreed, 50(17.8%) were neutral, whereas 82(29.2%) agreed and 102(36.3%) strongly agreed. Thus in overall, 184(65.5%) were in agreement and 47 (16.7%) who disagreed. A line item mean score was obtained 3.80 and standard deviation of 1.200 which was higher than 3.74 and standard deviation of 1.198. The results means that the line item influences the performance of literacy and numeracy educational programme positively. A standard deviation of 1.200 was lower than the composite 1.198 hence opinions were inconsistent.

Fifth, on statement that stakeholders reviewed data collected and made changes to the identified gaps in the reports, 15(5.3%) strongly agreed, 22 (7.8%) disagreed, hence 47(16.7%) were in disagreement. Neutral opinions totaled to 60(21.4%). Those who agreed were 94(35.5%) and 90(32.0%) strongly agreed, as a result, majority 184(67.5%) were in agreement. The line item had a mean score 3.79 and standard deviation of 1.135 with composite mean of 3.74 and standard deviation of 1.198 implying that data collected was reviewed by the stakeholders and changes made to gaps identified in the reports. This had positive influence of performance of literacy and numeracy of educational programme. It is also important to accord the stakeholder a second chance to review the reports to ensure the information being disseminated is more reliable for use across board. A standard deviation of 1.135 below the composite 1.198 implied that opinions converged.

Sixth, statement that data collected from TARGERINE report was reviewed and analyzed, 6(2.1%) strongly disagreed, 33 (11.7%) disagreed. Thus in total, 39(13.8%) were in disagreement. However 89(31.7%) were neutral, whereas 87(31.5%) agreed and 66(23.5%) strongly agreed. It is evident that majority 153(55.0%) were in agreement. A line item mean score of 3.62 and standard deviation of 1.036 was obtained which was lower than the composite mean of 3.74 and standard deviation of 1.198, implying that reviewing and analysis done was not appropriate and this could be as a result either weak skills or lack of proper facilitations during workshops and seminar trainings. These two aspects must be checked and corrected to ensure smooth implementation of the programme. A lower standard deviation of 1.036 against 1.198 confirmed that opinions converged.

Seventh, statement that number of transmitted reports led to improved results and the quality of project intervention in literacy and numeracy educational program, 9(3.2%) strongly disagreed 3010.7%) disagreed, 90(32.0%) were neutral, 65(23.1%) agreed and 87(31.0%) strongly agreed. In overall, majority of respondents 152(54.1%) agreed as opposed to 39 (13.9%) who disagreed. A line item mean score of 3.68 and standard deviation of 1.117 was obtained. This was below the composite mean of 3.74 standard deviation of 1.198 implying that number of transmitted reports did not lead to improved results and the quality of project intervention in literacy and numeracy educational program. This could mean the quality of reports might have been compromised or reports were not delivered in time to deduce the best practices and make changes where necessary hence the need to observe some of these procedures in the future for good performance of the program. A lower standard deviation of 1.117 indicated that opinions were consistent to this statement.

Eighth, statement of shared transmitted reports led to identifying area with large number of participants and with less participants. Results showed that 19(6.8%) strongly disagreed, 20(7.1%) disagreed bringing to a total 39(13.9%) of those in disagreement. Another group of 50(17.8%) were neutral, while 85(30.2%) agreed and 107(38.1%) strongly agreed hence, 192(68.3%) were in agreement. A higher mean was subsequently obtained which was 3.86 and standard deviation of 1.199 which was greater than the composite implying that the number of participants, either large or small (small), were identified through the transmitted reports meaning that it was influencing performance of literacy and numeracy educational programme positively With standard deviation of 1.199 against 1.198 the composite, the opinions appeared to have diverged.

Ninth, statement that reports approved the allocation of resources for the areas which needed more personnel's for supervising the literacy and numeracy educational program, 31(11.0%) strongly disagreed, 8(2.8%) disagreed, 45(16.0%) were neutral, 90(32.1%) agreed and 107(38.1%) strongly agreed. In that case 197(70.2%) of the respondents were in agreement as opposed to 39(13.9%) who disagreed. Obtained on this statement was a mean score of 3.83 and standard deviation of 1.275 which was higher than the composite mean of 3.74 and standard deviation of 1.198 implying that number of transmitted reports indeed led to improvement of

results and the quality of project intervention in the programme. This means the use of TANGERINE tool is yielding results and should continuously be used in the program implementation to the latter. A standard deviation of 1.275 was above the composite hence opinions diverged.

Tenth, on monitoring and evaluation results were utilized in improving the projects' activities such as allocation of resources to facilitate class work, 7(2.5%) strongly disagreed, 35(12.5%) disagreed with the same statement and added that project activities like class observations did not facilitate the success of the program, in this case then it means that this responding group differed with the statement. In total those who disagreed were 42(15.0%), 89(31.7%) were neutral, 52(18.5%) agreed and 98(34.8%) strongly agreed. Hence, total of 150(53.8%) of the respondents were in agreement as opposed 42 (15.0%) in disagreement. The statement had a mean score of 3.71 and standard deviation of 1.143 which was lower than the composite mean 3.74 and standard deviation of 1.198 implying that Monitoring and Evaluation results were not used in improving class activities such resource allocation. It also means that the line item negatively influences performance of literacy and numeracy educational programme and is there need to fully make use of any information gathered through M&E for it is part of programme implementation and it can inform the best and reliable decision making process. A lower standard deviation of 1.143 against 1.198 indicated that opinions lacked consistency.

Eleventh, on monitoring and evaluation results obtained from the program exercises were disseminated for utilization by all the stakeholders in order to better the literacy and numeracy educational program, 11(3.9%) strongly disagreed, 33 (11.7%) disagreed hence an aggregate total of 44(15.6%) respondents disagreed. Neutral opinions were expressed by 80(28.5%). Those who agreed were 80(28.5%) and 97(34.5%) strongly agreed thus resulting an overall of 192(70.2%) of the respondents who were in agreement. A mean score of 3.71 and standard deviation of 1,143 which was the composite mean of 3.74 and standard deviation of 1.198 which implied that Monitoring and Evaluation results developed from program's activities were not disseminated. It should be noted that missing to disseminate vital Monitoring and Evaluation information developed from the program's implementation exercises can influence the program

negatively. A standard deviation of 1.171 below the composite standard deviation of 1.171 indicated that opinions converged.

Twelfth, statement on M&E results improved the quality of programme intervention such as literacy and numeracy skills, 10(3.6%) strongly disagreed, 43 (15.3%) disagreed. In total those who disagreed were 53(18.9%). On the contrary, 71(25.3%) were neutral. Further the analysis revealed that (17.4%) agreed and 108(38.4%) strongly agreed. This suggests that a total of 157(55.8%) respondents were in agreement. This had a line item mean score of 3.72 and standard deviation of 1.233 below the composite mean of 3.74 and standard deviation of 1.198 hence programme intervention were not improved by Monitoring and Evaluation results. The line item influences performance of literacy and numeracy educational programme negatively. There is still need, therefore, to train the stakeholders more on the importance of M&E results and part of implementing the program to reap extra benefits and enhance performance of literacy and numeracy program. A higher standard deviation of 1.223 against the composite mean of 1.198 meaning that opinions did not converge on this statement.

Thirteenth, statement that M&E results improved the use of financial and resource allocation 13(4.6%) strongly disagreed, 46 (16.4%) disagreed, making a total of 59(21.0%) in disagreement while 64(22.8%) remained neutral. Also from the analysis, 48(17.1%) agreed and 110(39.1%) strongly agreed. In that case 158(72.9%) were in agreement. This had a line item mean score of 3.70 and standard deviation of 1.267 which was lower than the composite mean of 3.74 and standard deviation of 1.198 which implies that it influence the performance of literacy and numeracy educational programme negatively and also results of monitoring and evaluation did not improve the quality of programme intervention in literacy and numeracy skills and this could have had a significant negative impact to both the implementers and the beneficiaries. With a higher standard deviation of 1.267 against the composite mean of 1.198, it could be noted that divergence was reported in the opinions.

Fourteenth, the study examined whether M&E results improved the curriculum designs and performance of program. Analysis showed that 13(4.6%) strongly disagreed, 40 (14.2%) disagreed making a total of 53(18.8%) who were in disagreement with the statement. Neutral

opinions were gathered from a group of 70(24.9%). Further, 46(16.4%) agreed and 112(39.9%) strongly agreed with the statement making 158(56.3%) of the respondents were in agreement. A mean score of 3.73 and standard deviation of 1.251 which was below the composite mean of 3.74 and standard deviation of 1.198. The line item influences performance of literacy and numeracy educational programme negatively which implies that M&E results did not contribute in improving the designs of the program. This would mean a lot still is pending in terms of extracting the best practices from the M&E results. It also means M&E is still undervalued and there is urgency for its institutionalization in the literacy and numeracy program. A standard deviation of 1.251 which was above the composite score of 1.198 is indicative that opinions diverged.

Fifteenth, the statement sought from the respondents whether identification of both intended participants for the intervention program and proper settings for the program were well done. The results showed 23(8.2%) agreed, 30(10.7%) disagreed, adding up to a sum total of 53(18.9%) of those in disagreement. Neutral opinions were collected from 60(21.4%), while 56(19.9%) agreed and 112(39.8%) strongly agreed resulting to an overall of 168(59.7%) of respondents in agreement. The mean score of 3.73 and standard deviation of 1.306 slightly below the composite mean of 3.74 and standard deviation of 1.198. The line item influences performance of literacy and numeracy educational programme negatively implying that the process of arriving at the intended participants for this intervention was wrongly done. Perhaps in the future there would be need to carry out needs assessment to avoid similar anomalies. With a higher standard deviation of 1.306 against 1,198 the opinions definitely did not converge.

Sixteenth, a statement on whether M&E activities for intervention were developed and if the materials gathered were appropriate, 28(10.0%) strongly disagreed, 25(8.9%) disagreed, hence 53(18.9%) were in disagreement. Neutral pinions were received from 46(16.3%). However, 77(27.4%) agreed with the statement and 105(37.4%) strongly agreed resulting to a total of 182(64.8%) respondents in agreement. A line mean score 3.73 and standard deviation of 1.313 slightly below composite mean of 3.74 and standard deviation of 1.198 which implies that Monitoring and Evaluation activities for intervention were not properly developed and the materials gathered were not appropriate in the implementation of the program. This begs the

question whether stakeholders were genuinely involved and if so, if their full participation was well sought or incorporated, hence need for improvement. A standard deviation of 1.313 was way above the composite and standard deviation of 1.198 indicated that there were inconsistencies opinions from the participants in the study.

On the seventeenth statement, that Monitoring and Evaluation resources for intervention were clearly specified and located, revealed that 33 (11.7%) of the respondents disagreed, 53(18.8%) strongly disagreed, 39(13.9%) were neutral, 77(27.4%) agreed and 112(39.9%) strongly agreed. In overall 189(67.3%) were in agreement 53 (18.8%) in disagreement. A higher mean score of 3.81 and standard deviation of 1.272 which was higher than composite mean of 3.74 and standard deviation of 1.198 which implies that the programme had been well planned with Monitoring and Evaluation resources. Although resources may be located and even specified for Monitoring and Evaluation work or activities, if the plan is not clearly outlining how these activities ought to be conducted, then it remains a challenge and hence myriad issues may start arising that would directly or indirectly affect implementation of the programme. A higher standard deviation of 1.272 against 1.198 indicative opinions diverged.

The last eighteenth statement, that progress for intervention activities were monitored and evaluated for the success of the program. In this respect, 19(6.8%) strongly disagreed, 30(10.7%) disagreed, hence a total of 49(17.5%) were in disagreement. Those who were neutral totaled to 43(15.3%). Further, 70(24.9%) agreed while 119(42.3%) strongly agreed resulting to a total of 189(67.2%) respondents in agreement. This had mean score of 3.85 and standard deviation of 1.264, this would imply that progress for intervention activities was well monitored and evaluated for the success of the program hence a positive influence on the performance of literacy and numeracy educational programme. It was however noted that opinions diverged given a higher standard of 1.264 against the composite of 1.198 on this statement.

Results of interviews with key informants showed that implementing change for Monitoring and Evaluation influenced performance of literacy and numeracy educational programme. The results of the interviews were, therefore, consistent with the quantitative data. The following are key responses obtained from the key informants:

> *"Since the implementing programme started there was great change and tremendous improvement on literacy and numeracy educational programme although, there a few challenges here and there on the implementation process. Leaners are able to read and calculate simple arithmetic." Statements from West lands sub-count.(CSO,2018)*

Results of interviews with RTI officers indicated that the overall implementing change had a great influence on performance of literacy and numeracy educational programme. That is the results of interviews were consistent with quantitative data. The information below was from the key informant from RTI International Officers:

> *Teachers' competency is key in teaching literacy and numeracy skills in grade one to three grades. Teachers need to adapt the new methodology and embrace using the new teachers' guides formulated by the TUSOME organization for better yields. Learners needs to be encouraged to learn on their own especially the homework activities in their workbooks so as to sharpen their learning skills. Frequent supervision by the ministry officials is highly recommended to check if what has been changed is being implemented well in the classroom. (RTI, 2018)*

4.10.1 Inferential Analysis of Implementing Change and Performance of Literacy and Numeracy Educational Programme

The inferential analysis was performed by use of correlation and regression to show the relationship, strength and direction of independent and dependent variables. It was based on the third objective to examine how implementing change influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

The variable implementing change was operationalized using the following indicators reviewing collected data, number of transmitted reports, utilization of M&E results and project intervention . Performance of literacy and numeracy indicators were: Reading skills, Simple arithmetic calculations skills, Letter recognition, beneficiary Satisfaction, proficiency skills in listening of literacy and numeracy skills, proficiency skills in speaking of literacy and numeracy skills, proficiency skills and writing, Timely Acquisition of literacy and numeracy skills, transition rate improved and class average performance improved.

4.10.2 Correlation analysis of Implementing Change for Monitoring and Evaluation and Performance of Literacy and Numeracy Educational Programme

The relationship between implementing change for M&E and performance of literacy, and numeracy educational program was determined by Pearson Correlation coefficient. According to the analysis, +1 signaled a positive perfect correlation, 0.001 – 0.250 a weak correlation, 0.251 – 0.500 semi but strong correlation, 0.501 – 0.750 strong correlation and lastly 0.751 – 1.000 very strong correlation. Table 4.33 summarizes the results.

Table 4.33
Correlation analysis of Implementing Change and Performance of Literacy and Numeracy Educational Programme

Variables		Performance	Implementing Change
Performance of literacy and numeracy educational programme	Pearson Correlation	1	0.581**
	Sig. (2-tailed)		0.000
	n	281	281
Implementing Change	Pearson Correlation	0.581**	1
	Sig. (2-tailed)	0.000	
	n	281	281

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

In Table 4.33, the output results show that implementing change has a strong positive relationship with performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. (P-value0.000<0.05). Given a Pearson correlation of(r= 0.581), a strong positive relationship emerged between implementing change and performance of literacy and numeracy educational programme.

4.10.3 Regression Analysis for Implementing Change and Performance of Literacy and Numeracy Educational Programme

The following hypothesis was tested linear regression was used to test the hypothesis to satisfy the requirements for the fifth objective of the study**.**

4.10.4 Test of Hypothesis 5

A linear regression was used to test the hypothesis to satisfy the requirements for the fifth objective of the study:

H_0 Implementing change has no significant influence on performance of literacy and numeracy educational programs in public primary schools in Nairobi County, Kenya.

H_1 Implementing change has significant influence on performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya

The null hypothesis was tested using the below linear regression model:

$y = a + \beta_5 X_5 + e$

Where:

y - Performance of literacy and numeracy educational programme

X_5 - Implementing change

a - Regression constant

ε - Error term

The results are shown in Table 4.34 and Table 4.35

Table 4.34
ANOVA for implementing change and performance of literacy and numeracy educational programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.905	1	69.905	142.010	0.000[b]
	Residual	137.340	279	0.492		
	Total	**207.245**	**280**			

a. Dependent Variable: Performance

b. Predictors: (Constant), Implementing Change

The overall F-statistic is 142.010 with a p-value of 0.000<0.05 which implies that there was a statistically significant relationship between implementing change and performance of literacy and numeracy educational programme. The calculated critical value was 3.875 less than the F value of 142.010 thus the model was fit.

Table 4.35
Model Summary for Implementing Change and Performance of Literacy and Numeracy Educational Programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.581[a]	0.337	0.335	0.70161

a. Predictors: (Constant), Implementing Change

From Table 4.35, the coefficient of correlation (R) was 0.581 which implied a weak positive correlation between implementing change and performance of literacy and numeracy educational programme. The R-squared was 0.337, meaning that 33.7% of the variation in performance of literacy and numeracy educational programme was explained by variation in implementing change. The remaining 66.3% variation in performance of literacy and numeracy educational programme was as a result of other factors not included in the model.

Table 4.36
Model Coefficients for Implementing Change and Performance of Literacy and Numeracy Educational Programme

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.151	0.042		-3.576	0.000
	Implementing Change	0.445	0.038	0.581	11.917	0.000

Model: (β=0.445, t=11.917, p=0.000<0.05)
Predictor Variable: Implementing Change
Dependent Variable: Performance of Literacy and Numeracy Educational Programme

The results in Table 4.36 indicate that implementing change has statistically significant influence on performance of literacy and numeracy educational programme (β=0.445, t=11.917, p=0.000<0.05). Using the statistical findings, the regression model was to be substituted as follows:

$Y=\beta_0 + \beta_5 X_5 + \varepsilon$

$y = -0.151 + 0.445X_5 + 0.038$

Where:

y - Performance of literacy and numeracy educational program

X_5- Implementing change

From Table 4.36 the results were that, a positive beta coefficient for implementing change is 0.445 indicating a direct relationship exists in this model. Probability of t-statistic is 11.917 for β coefficient has less value to significance level which is 0.05. The findings led to the rejection of the null hypothesis and hence concluded that implementing change has significant influence on performance of literacy and numeracy educational programme.

The current study findings from deceptive analysis of the variable outcome found out that even if improvement of literacy and numeracy learning skills has improved (statement on the sixth line has a mean of 3.62 against 3.74 the composite mean), checking of TARGERINE reports to allow corrections and reliability before transmission did not have participation of all the stakeholders. This means that involvement of stakeholders was limited hence low performance of educational programme. This may need to be corrected or relooked at in the future to ensure data collected is not cooked for the purpose of satisfying the interests of the few stakeholders at the expense of the beneficiary of the programme and changes must be incorporated as advised by the implementing team of the programme. Number of transmitted reports led to improved results and the quality of project intervention in literacy and numeracy skills, however the line item mean of 3.68 against 3.74 the composite mean meaning that the quality of reports might have been compromised or delivered late hence deducing the best practices of timely reports. The findings support the study by Piper, Destefano, Kinyanjui and Ong'ele (2018) who examined the impact on learning cost-effectiveness of training and the use of new materials provided meaning change of teaching strategies was implemented. This was to be realized through regularly monitoring teacher adoption of the practices and pupils results. Nzweke *et al*, (2015) determined that there was significant relationship between implementing change and performance of literacy and numeracy educational programme also in agreement were Ouko (2015), Nthenge (2014), and Muriungi (2015) arrived at similar conclusions but advised that more supervision needs to be followed, there was improvement in the way things were done in teaching methodology which has brought some improvement although teacher –pupil ratio is alarming. The current study is for the opinion that even though there was improvement in reading and numeracy skills, still a lot needs to be done especially in classroom teaching. Teachers needs to be monitored frequently in order to acquire enough information on how teachers are using the new teachers guide mode of subject delivery since the performance is still low. Implementing

change was found to significantly influence performance of literacy and numeracy educational programme.

The current study established that for change to occur in a desired manner teachers need to be supported through frequent coaching in specific instruction techniques and how to use the new instruction materials. The study found out that there is need to define education systems that should swift away from bureaucratic administration and focus on conducting rapid cycles of planning, communicating expectations, monitoring and accountability and agreeing meeting those expectations while intervening to assist learners and schools which are struggling and need support Crouch and DesStefano, (2017). The intervening project TUSOME used the findings from piloted programme to scale up through the government systems but since education sector is the largest social sector did not decentralize financial controls making it hard and complex to implement change on educational programme that attempt to work at scale Bold et al (2013). Therefore learning of literacy skills remains at the hands of the national government to foresee what is better and especially now with the implementation of Curriculum based education.

4.11 Combined Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme

Descriptive and correlation analysis of the combined Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme.

The study sought to determine the influence of combined PM&E process on performance of literacy and numeracy educational programme. The dimensions of participatory Monitoring and Evaluation process investigated were: stakeholder engagement; stakeholder capacity building; data collection; data management and implementing change. Correlation and inferential analyses were done to determine the influence of combined participatory Monitoring and Evaluation process on performance of literacy and numeracy educational programme. The composite means for the independent and dependent variables were presented in Table 4.37.

Table 4.37
Combined Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme

Variable	n	Mean	Std. Deviation
Stakeholder engagement	281	3.59	1.102
Stakeholder capacity building	281	3.77	1.033
Data collection	281	3.69	1.015
Data management	281	3.62	1.098
Implementing change	281	3.74	1.198
Composite Mean and Standard Deviation		**3.68**	**1.089**

In Table 4.37., the highest composite mean score was on the stakeholder capacity building with a score of 3.77; followed by implementing change, with mean score 3.74; data collection with mean score of 3.69; and data management, with a mean score of 3.62 and finally, stakeholder engagement. The composite mean score for dependent variable (performance of literacy and numeracy educational programme) was 3.56. Consistent scores were on data management, with least standard deviation which was 1.015.

The influence of the combined variable of participatory Monitoring and Evaluation process and performance of literacy and numeracy educational programme was established by computing the composite mean. Meaning that overall PM&E process was 3.68 and standard deviation of 1.089 whereby the most consistent scores were on stakeholder capacity building with a mean of 3.77 and SD of 1.033 against the composite mean of 3.66 and SD of 1.073. The second variable was implementing change with a mean of 3.74 and SD of 1.198 against overall composite men of 3.66 and SD of 1.073. The third was data collection with a mean of 3.69 and SD of 1.015 against the composite mean of 3.66 and SD of 1.073. The fourth was data management with a mean of 3.62 and SD of 1.098 against the composite mean of 3.66 and SD of 1.073.lastly, stakeholder engagement had a mean of 3.59 and SD of 1.102 against the composite mean of 3.66 and SD of 1.073 There is need for combined effort on participatory Monitoring and Evaluation process which has five steps in this study and every step in teaching has a significant influence on performance of literacy and numeracy skills. Therefore there is need for more participation and involvement of all stakeholders in teaching fraternity and mostly on lower grades which are normally neglected.

The results of the interviews with Curriculum support officers indicated that the overall on Participatory Monitoring and Evaluation Process influence the performance of literacy and numeracy educational programme at a great extent. The following were the key responses of the officers:

> *"Engaging all the stakeholders in a programme is very vital but if all are not involved a gap is experienced hence low performance of the learning skills in these subjects. Teachers being the main implementers of the programme should be involved in all the phase of the progamme so as to yield better results in literacy and numeracy learning skills".(CSO.2018)*

Results of the interviews from the RTI International officers indicated that the overall Participatory Monitoring and Evaluation Process influence the performance of literacy and numeracy educational programme at a great extent

> "*Learning skills in literacy and numeracy should be able to mitigate the issues in lower grades for not being able to read, write or comprehend what they have learnt. Stakeholder capacity building is very important in improving the performance of literacy and numeracy learning skills since training sharpens and adds knowledge to the concerned clients. All the combined variables are beneficial to learning and should be factored when formulating education policies and curriculum development". (RTI, 2018)*

4.11.1 Inferential Analysis of Combined Participatory Monitoring and Evaluation Process, and Performance of Literacy and Numeracy Educational Programme

The inferential analysis was performed by use of correlation and regression so as to show the relationship, strength and direction of independent and dependent variables. It was based on the sixth objective of how does combined participatory monitoring and evaluation process influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya? The combined variable was operationalized using the following indicators stakeholder engagement; stakeholder capacity building; data collection; data management and implementing change while Performance of literacy and numeracy indicators were: Reading skills, Simple arithmetic calculations skills, Letter recognition, beneficiary

Satisfaction, proficiency skills in listening of literacy and numeracy skills, proficiency skills in speaking of literacy and numeracy skills, proficiency skills and writing, Timely Acquisition of literacy and numeracy skills, transition rate improved and class average performance improved.

4.11.2 Correlation Analysis for Combined Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme

The relationship between combined participatory M&E process and performance of literacy and numeracy educational programme was determined by Pearson Correlation coefficient. Table 4.38 shows the results. The analysis was based on sixth objective of the study to sought how does combined PM&E process influence performance of L&N educational programme

Table 4.38: Correlation matrix of Combined Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme

Variable		Combined PM&E Process	Stakeholder engagement	Stakeholders capacity building	Data collection	Data management	Implementing Change
Performance of literacy and numeracy educational programme	Pearson Correlation	0.754	0.693*	0.675**	0.660*	0.536**	0.581**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	n	281	281	281	281	281	281

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

The results of the correlation matrix in Table 4.38 show that all the dimensions of participatory Monitoring and Evaluation process combined had statistically significant and strong positive relationship with performance of literacy and numeracy educational programme (R=0.754, $p<0.05$). This means that combined PM&E process had statistically significant and strong positive relationship with performance of literacy and numeracy educational programme. This is so because stakeholder engagement, stakeholder capacity building and data collection had $p<0.05$ and a strong positive correlation with performance of L&N educational programme (R=0.693, R=0.675 and R=0.660 respectively).While data management and implementing change had moderate correlation with performance of L&N educational programme (R=0.581 and R=0.536, respectively).

4.11.3 Regression Analysis for Combined Participatory Monitoring and Evaluation Process, and Performance of Literacy and Numeracy Educational Programme

The following hypothesis were tested using multiple regression model to satisfy the requirements of the sixth objective.

4.11.4 Test of Hypothesis 6

H_0: Combined participatory monitoring and evaluation process has no significant influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

H_1: Combined participatory monitoring and evaluation process significantly influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya.

The null hypothesis was tested using the following multiple regression model:

$$y=a+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+e$$

Where:

Y - Performance of literacy and numeracy educational programme

X_1 - Stakeholder engagement

X_2 - Stakeholder capacity building

X_3 - Data collection

X_4 - Data management

X_5 - Implementing change

a - Regression constant

ε - error term

From the combined model analysis, all the variables that is stakeholder engagement, stakeholder capacity building, data collection, data management and implementing change are significantly at 5%, which influences performance of literacy and numeracy educational programme as described by $R^2 = 0.568$ which is 56.8%. The results were as shown in the Table 4.39 and 4.40:

Table 4.39
ANOVA for Combined Participatory M&E Process and Performance of Literacy and Numeracy Programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117.812	5	23.562	72.453	0.000[b]
	Residual	89.433	275	0.325		
	Total	207.245	280			

a. Dependent Variable: Performance
b. Predictors: (Constant), Implementing Change, Stakeholder engagement, Stakeholders capacity building, Data collection, Data management

From Table 4.39, the calculated critical value of this model was 2.247 less than the F value of 72.453 implying that the model goodness of fit was met. So the model was considered significant.

Table 4.40:
Model Summary for Combined Participatory M&E Process and Performance of Literacy and Numeracy Programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.754[a]	0.568	0.561	0.57027

a. Predictors: (Constant), , Stakeholder engagement, Stakeholders capacity building, Data collection, Data management and Implementing Change
b. Dependent Variable. performance of literacy and numeracy educational programme

From Table 4.40, the coefficient of correlation (R) was 0.754 which implied a strong positive correlation between combined participatory Monitoring and evaluation process and performance of literacy and numeracy educational program. The adjusted R-squared was 0.568, meaning that 56.8% of the variation in performance of literacy and numeracy educational programme was explained by variation in combined participatory Monitoring and evaluation process. The remaining 43.2% variation in performance of literacy and numeracy educational programme was as a result of other factors not included in the model.

4.12 Correlation Analysis for Combined Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme

The relationship between combined participatory M&E process and performance of literacy and numeracy educational programme was determined by Pearson Correlation coefficient. Table 4.41 shows the results.

Table 4.41
Model Coefficients Combined Participatory M&E Process and Performance of Literacy and Numeracy Programme

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.154	0.034		-4.477	0.000
Stakeholder engagement	0.215	0.050	0.238	4.326	0.000
Stakeholders capacity building	0.212	0.049	0.174	4.367	0.000
Data collection	0.175	0.051	0.198	3.368	0.001
Data management	0.127	0.054	0.179	2.526	0.019
Implementing Change	0.123	0.049	0.099	2.540	0.012

a. Dependent Variable: Performance of literacy and numeracy educational programme

The results in Table 4.41 indicate that combined participatory Monitoring and Evaluation process has statistically significant influence on performance of literacy and numeracy educational programme since all the component dimensions were statistically significant at 5% level of significance.

The Table 4.41 shows that the beta (β) coefficients for the indicators were as follows: stakeholder engagement, 0.238; stakeholder capacity building, 0.174; data collection, 0.198; data management, 0.179; and implementing change, 0.099. These values indicate that a unit increase in performance of literacy and numeracy educational programme corresponded to 23.8% increase in stakeholder engagement: 17.4% increase in stakeholder capacity building; 19.8% increase in data collection; 17.9% increase in data management and 9.9% increase in implementing change. The null hypothesis (H_0) which was stated that the combined participatory Monitoring and Evaluation process does not significantly influence performance of literacy and numeracy educational programme was rejected since all the P-Values were less than 0.05. Therefore an alternate hypothesis (Ha) stated combined participatory Monitoring and Evaluation process significantly influence performance of literacy and numeracy educational programme was accepted.

Using the statistical findings, the regression model can be substituted as follows:

$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\varepsilon;$

$y=-0.154+0.238X_1+0.174X_2+0.198X_3+0.179X_4+0.099X_5+e$

Where:

y - Performance of literacy and numeracy educational programme

X_1 - Stakeholder engagement

X_2 - Stakeholder Capacity building

X_3 - Data collection

X_4 - Data Management

X_5 - Implementing change

b - Regression coefficient

ε - error term

Based on current study findings null hypothesis was rejected and concluded that combined participatory monitoring and evaluation process has a strong positive significant relationship with performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya. The findings support (Piper and Zuilkowski 2015) who pointed out that fully participation of teachers could lead to increased learning outcome if only the existing infrastructure can support new learning materials. However the current study differ with (Piper et al 2017) on the expansion and accountability of participation and monitoring of the programme since implementation of the programme still requires a lot of improvement on the side of teacher supervision, resource allocation, curriculum support officers and sub county directors accountability on data uploading which was not consistent and meeting expectations of the programme.

The findings of this study were compared to other prior empirical studies. Studies by Ouko (2018); Phiri (2015); Nzweke, *et al* (2015), and Njuguna (2016) differed on combined participatory M&E process and the influence it had on performance of literacy and numeracy educational programme. Hypothesis six was, therefore, supported by data since combined participatory Monitoring and evaluation process was found to have strong positive statistic significant relationship with performance of literacy and numeracy educational programme. The current study has demonstrated that assessing teachers is important to improve the model of assessment at arriving at the right competent teacher for future performance of L&N learning skills but this component is missing in teacher training capacities. This study resonate with the

findings of Piper, Zuilkowski, Dubeck, Jepkemei and King, (2018) posited that literacy and numeracy programme are not designed to evaluate which intervention ingredient is most essential to improve literacy and numeracy outcomes thus a gap in competency in delivering the content. So it in this line the policy makers lack evidence on whether the teacher professional development, instructional materials, learner materials, community support and use of technology are required to enhance programme performance and full participatory monitoring and evaluation process.

4.13 Moderating Influence of School Environment on the relationship between Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme

This section presents descriptive and correlation analysis of school environment as a moderator on the independent and dependent variable

The study sought to determine the moderating influence of school environment on the relationship between participatory Monitoring and evaluation process and performance of literacy and numeracy educational programme. The views of the respondents were assessed and measured using a 5-point likert-scale whereby: Strongly disagree (SD)=1, Disagree (D)=2, Neutral(N)=3, Agree (A)=4 and Strongly Agree (SA)=5. Line mean and standard deviation of each of the opinions was compared with the respective composite scores for both interpretation and conclusion purposes. The results are presented in Table 4.42.

Table 4.42
Moderating Influence of School environment on the relationship between Participatory Monitoring and Evaluation Process and Performance of Literacy and Numeracy Educational Programme

Statements	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	Mean	Std. Deviation
School infrastructure							
1.We have enough infrastructure to support the programme	23 (8.2%)	103 (36.7%)	56 (19.9%)	84 (29.9%)	15 (5.3%)	2.88	1.093
2.We are supplied with enough stationeries such as pencils, exercise books, text books rubbers and sharpeners to facilities our teaching in class	21 (7.5%)	99 (35.2%)	58 (20.6%)	83 (29.5%)	20 (7.2%)	2.94	1.110
3.We have enough playgrounds in our schools to support the programme	26 (9.3%)	100 (35.6%)	52 (18.5%)	80 (28.5%)	23 (8.1%)	2.91	1.155
4.The security in schools is adequate to facilitate smooth learning	27 (9.6%)	89 (31.7%)	60 (21.4%)	80 (28.5%)	25 (8.8%)	2.95	1.159
5.The available infrastructure is properly maintained and kept in good condition to support programme	26 (9.3%)	85 (30.2%)	65 (23.1%)	75 (26.7%)	30 (10.7%)	2.99	1.171
Teacher-pupil ratio							
6.The teacher-pupil ratio in our schools is as recommended by the 7.Ministry of Education	77 (27.4%)	60 (21.4%)	69 (24.6%)	63 (22.4%)	12 (4.2%)	2.55	1.227
The number of classrooms are adequate for all learners	80 (28.5%)	77 (27.4%)	40 (14.2%)	63 (22.4%)	21 (7.5%)	2.53	1.312
8.The resources allocated for teaching are adequate both for the learners and the teacher	87 (31.1%)	42 (15.0%)	67 (23.9%)	60 (21.4%)	25 (8.6%)	2.61	1.345
School leadership							
9.I believe our school has supportive leadership	61 (21.7%)	104 (37.0%)	53 (18.9%)	18 (6.4%)	45 (16.0%)	2.58	1.332
10.Our schools administrative frequently observe teachers teaching in the classrooms	65 (23.1%)	100 (35.6%)	43 (15.3%)	30 (10.7%)	43 (15.3%)	2.59	1.357
11.There is common planning time, peer observation and focused cross-grade meetings in schools to improve the program	50 (17.8%)	110 (39.1%)	43 (15.3%)	28 (10.0%)	50 (17.8%)	2.71	1.355
12.The school leaders motivate both teachers and learners for the success of the projects	52 (18.5%)	110 (39.1%)	41 (14.6%)	30 (10.7%)	48 (17.1%)	2.69	1.353
13.School culture and ethical leaderships facilities school improvements and allows teachers, parents and learners to trust the school environment	60 (21.4%)	120 (42.7%)	40 (14.2%)	40 (14.2%)	21 (7.5%)	2.44	1.188
Composite mean and SD						**2.72**	**1.258**

Table 4.42 the composite mean was 2.72 and the standard deviation 1.258 for the study moderating variable, school environment.

From Table 4.42, on the first statement, opinions were sought from the respondents whether schools had adequate infrastructure whereby 23(8.2%) strongly disagreed, 103(36.7%) disagreed, 56(19.9%) remained neutral. Similarly, 84(29.9%) agreed and 15(5.3%) strongly agreed. In overall, majority of the respondents 126(44.8%) disagreed as opposed to 99(35.2%) who agreed, and 56(19.9%) held neutral opinions. A mean score of 2.88 and standard deviation of 1.093 above the composite mean of 2.72 and standard deviation of 1.258 indicated that adequate infrastructure was available in the schools to support the programme. Opinions converged since the line standard deviation of 1.093 was below the composite mean of 1.258. The implication of the line item is many respondents agreed that the infrastructure was enough to support the programme hence improvement was experienced though not to satisfaction according to the beneficiaries' expectations.

On the second statement, we are supplied with enough stationery as pencils, exercise books, textbooks, rubbers and sharpeners were provided to facilitate teaching in class. The results pointed out that 21(7.5%) strongly disagreed, 99(35.2%) disagreed, 58(20.6%) remained neutral, 83(29.5%) agreed and 20(7.2%) strongly agreed. In overall, 120(42.3%) of the respondents disagreed and 103(36.7%) agreed. A mean score of 2.94 and standard deviation of 1.110 was high and above composite mean of 2.72 and standard deviation of 1.258 concluded that enough stationery was provided to support learning. However, there is need to keep constant supply of these stationery to avoid stagnation of programme. A standard deviation of 1.110 suggested convergence of opinions. The implication of the findings is that there might be enough materials in the classrooms but how they are distributed to the learners and how they are used as demonstrated by the teacher matters a lot. Proper guidance is required so as to help the learners use the materials appropriately.

The third statement we have enough playgrounds in schools to support the programme. The responses gathered showed that 26(9.3%) strongly disagreed, 100(35.6%) disagreed, 52(18.5%) were neutral, 80(28.5%) agreed and 23(8.1%) strongly agreed. In overall, 126(44.9%) of the respondents disagreed and 103(36.7%) agreed. A mean score of 2.91 surpassed the composite mean of 2.72 implying that enough playing grounds were available to fully support the programme. The role of the playing grounds is to give the children time to refresh their brains

after learning to ensure absorption levels are increased. A playground in school is very important because it helps learners explore their talents which is also equivalent to other learning subjects. Most schools in Nairobi County have play grounds though not adequate enough for all the leaners to use at the same time. In some schools like Olympic Primary School which has the highest population in the Country among public primary schools children have alternate time tables to go for play, meaning that even if the playgrounds are their they are not sufficient enough for the leaners. A standard deviation of 1.155 tended to be lower than 1.258 the composite mean implying that opinions converged.

Fourthly, the statement the security in schools is adequate to facilitate smooth learning. Result showed that 27(9.6%) strongly disagreed, 89 (28.5%) disagreed, 60(21.4%) were neutral, 80(28.5%) agreed and 25(8.8%) strongly agreed. In overall, 116(38.1%) disagreed and 105(37.3%) agreed. The line item had a mean score of 2.95 and standard deviation of 1.159 which was above the overall composite mean of 2.72 and standard deviation of 1.258. This implied that security was adequate in schools and pupils were safe from any danger within the school compound. However there is need to mobilize resources to maintain the security and safety of children among themselves in the absences of teachers and on their way home. A lower standard deviation of 1.159 meant opinions converged.

The fifth statement examined whether the available infrastructure was properly maintained and exist in good condition. The results showed that 26(9.3%) of respondents who participated in the study strongly disagreed, 85(30.2%) disagreed, 65(23.1%) were neutral, 75(26.7%) agreed and 30(10.7%) strongly agreed. In overall, 111(30.2%) disagreed 105(37.4%) agreed. The mean score of 2.99 and standard deviation of 1.171 was rather high implying that infrastructure was properly maintained. Moreover, a standard deviation of 1.171 was below the composite hence opinions converged.

The sixth statement examined whether teacher to pupil ratio was observed in schools as recommended by the Ministry of Education. Results showed that 77(27.4%) strongly disagreed, 60(21.4%) disagreed, 69(24.6%) were neutral, 63(22.4%) agreed and 12(4.2%) strongly agreed. In overall, 137(48.8%) disagreed while 75(26.6%) agreed. The line item had a mean score of

2.95 and standard deviation of 1.159 compared to composite mean of 2.27 and standard deviation of 1.258 which was lower meaning the opinions converged. A standard deviation of 1.227 was below the composite of 1.258 suggesting that opinions from this statement were convergent. The implication is that many schools might have enough classrooms but the number of leaners per class might be very high for any teacher to manage it well hence low concentration of learners and finally low performance in literacy and numeracy skills. The learning environment is seriously compromised when learners are congested for example a teacher handling 100 pupils in a class, a report from the Nairobi County director's office.

The seventh statement that number of the classrooms available was adequate for all learners. The results were that 80(28.5%) strongly disagreed, 77 (27.4%) disagreed, 40(14.2%) were neutral, 63(22.4%) agreed and 21(7.5%) strongly agreed. In overall, 157(55.9%) disagreed and 84(29.9%) agreed. This statement had a lower mean score of 2.53 and standard deviation of 1.312 implying that the number of classrooms were not adequate. This is true since most of public primary schools are still underdeveloped to support the overwhelming numbers of enrollment and hence this could have adverse effects on the implementation the program. A standard deviation for this item was recorded as 1.312 against 2.72 which indicated that the opinions were highly inconsistent.

On the eighth statement, that resources allocated to for teaching are adequate for both the learners and the teachers. The findings revealed that 87(31.8%) strongly disagreed, 42(15.0%) disagreed, 67(23.9%) were neutral, 60(21.4%) agreed and 25(8.6%) strongly agreed. In general, 157(55.9%) disagreed and 84(29.9%) agreed. A mean score of 2.61 suggested that resource allocation for teachers and pupils were still inadequate. However, the PTA could come up with resource mobilization strategies that would help schools rise against this kind of challenge to ensure learning is well supported and does not hinder access by all learners. Obtained was a standard deviation of 1.345 which was higher than the composite 1.258 meaning that opinions diverged.

The ninth statement I believe our schools has supportive leadership. In this respect, 61(21.7%) strongly disagreed, 104 (37.0%) disagreed, 53(18.9%) were neutral, 18(6.4%) agreed and

45(16.0%) strongly agreed. Generally, 165(58.7%) were in disagreement while 71(22.4%) were in agreement. A lower mean score of 2.58 implied that the leadership in schools was not supportive. Lack of supportive leadership is likely to lead to lack of morale among the teaching staff and eventually that would cascade to poor delivery of the program hence poor results. Poor leadership or lack leaders all altogether would be addressed through short courses in management and leadership and through regular conversation among the stakeholders. The line item had a mean score of 2.58 and standard deviation of 1.332, which was lower than the composite mean of 2.72 and standard deviation of 1.258, thus, opinions did not converge meaning it influences performance of literacy and numeracy educational programme negatively. The implication here is that proper leadership must be exercised in all the institutions so as to manage any challenges experienced while teaching process is taking place.

Tenth statement that our schools administration frequently observed the teachers teaching in the classroom. Opinions received showed that 65(23.1%) strongly disagreed, 100 (35.6%) disagreed, 43(15.3%) were neutral, 30(10.7%) agreed and 43(15.3%) strongly agreed. Opinions were further summed as; 165(58.7%) in disagreement and 73(30.6%) in agreement. The line item had recorded a lower mean score of 2.59 and a standard deviation of 1.357 compared to the composite mean of 2.72. The statement recorded a lower mean score of 2.59 and standard deviation of 1.357 compared to a composite mean of 2.27 and standard deviation of 1.258 implying that teachers were not frequently observed while teaching in the classrooms. As part of assessment and effective way to oversee implementation of the programme, there is need to have teachers observed to ensure the curriculum is carried out accordingly. This did not happen simply because there is shortage of field officers from the ministry and delocalization of most experienced teachers were transferred to other counties hence making supervision in Nairobi County a problem.

On the eleventh statements there was common planning time, peer observation and focused cross-grade meetings in schools to improve the performance of the program. The results recorded showed that 50(17.8%) strongly disagreed, 110 (39.1%) disagreed, 43(15.3%) remained neutral, 28(10.0%) agreed and 50(17.8%) strongly agreed. The general output was that 165(58.7%) were in disagreement while 73(30.6%) were in agreement. Generated was 2.71 mean score against the

composite of 2.72 which implied that common planning and aspects of peer observation were missing. Thus, peer observation should be encouraged for it is easy and not reprimanding. A higher standard deviation of 1.355 clearly demonstrated that opinions did not converge. Common planning and observation should be encouraged in order to achieve the required desired results in literacy and numeracy skills.

On the twelfth statement that the school leaders motivate both teachers and learners for the success of the programme. Analysis revealed that 52(18.5%) strongly disagreed, 110 (39.1%) disagreed, 41(14.6%) were neutral while 30(10.7%) agreed and 48(17.1%) strongly agreed. Thus, 162(57.6%) were in disagreement and 78(25.3%) in agreement. The line item had a lower mean score of 2.69 and standard deviation of 1.353 which meant that school leaders were not motivating both teachers and learners. This could therefore further imply success of the literacy and numeracy programme cannot be easily achieved if the working environment is not motivating. A standard deviation of 1.353 implied that opinions failed to converge. The composite mean was 2.72 and standard deviation of 1.258 which was higher than want was gotten from the line item.

The thirteenth statement that the school culture and ethical leadership play some role in facilitating school improvements and if it allows teachers, parents and also learners in trusting the school environment. Analysis revealed 60(21.4%) strongly disagreed, 110 (39.1%) disagreed, 41(14.6%) remained neutral, 30(10.7%) agreed and 48(17.1%) strongly agreed. In general, 162(57.6%) disagreed and 78(25.3%) agreed. The line item had a mean scored of 2.44 against 2.72 implying that the environment in which learning took place was not appreciated by teachers, parents and even learners. This could particularly adversely affect attitudes of the learners and impact performance of the program. There is therefore need to put in place the right school culture that would propagate good performance among the learners and teachers by rewarding the performers. A lower standard deviation of 1.188 against 1.258 the composite mean implied that majority of the opinions were more converging. There is need for all stakeholders take part in ensuring that the school environment is conducive for the learners.

Therefore, there is need to put in place the right school culture that would propagate good performance among the learners and teachers by rewarding the performers

> *"Implementing change to any organization or institution has been a challenge.one of the curriculum support officer from Embakasi, said that school leaders were not ready for the workshops and the training since they are not going to teach in any of the concerned classes. Some of them could not even see the sense of sending and paying for their teachers to attend the workshops until they are forced to by the CSO'S and other senior officers in the ministry of education.*

Results of the interviews with RTI officers indicated that school environment has strong positive relationship between PM&E process and performance of L&N educational programme. The results of the interviews were consistent with the quantitative data and key responses obtained from the RTI officers were:

> *Teachers' professional development, teacher support and coaching, structured teacher lesson plans added to text books, revised textbooks ratio of 1:1 and revised literacy and numeracy textbooks had statically significant positive impact on learners' outcome. The advice given to the policy makers is to analyze the ingredients for literacy and numeracy which will lead to more effective designed and implementing interventions to improve learning outcome which are generally low performed in lower grades. (RTI, 2018)*

4.13.1 Inferential Analysis of Moderating Influence of School Environment on the Relationship between Participatory Monitoring and Evaluation Process, and Performance of Literacy and Numeracy Educational Programme

The inferential analysis was performed by use of correlation and regression to show the relationship, strength and direction of independent and dependent variables. It was based on the seventh objective moderating influence of school environment on the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in Nairobi County, Kenya. The indicators for school environment were school infrastructure, teacher-pupil ratio and school leadership. Performance of literacy and

numeracy indicators were: Reading skills, Simple arithmetic calculations skills, Letter recognition, beneficiary Satisfaction, proficiency skills in listening of literacy and numeracy skills, proficiency skills in speaking of literacy and numeracy skills, proficiency skills and writing, Timely Acquisition of literacy and numeracy skills, transition rate improved and class average performance improved

4.13.2 Correlational Analysis for School Environment and Performance of Literacy and Numeracy Educational Programme

The relationship between school environment and performance of literacy and numeracy educational programme was determined by Pearson Correlation coefficient. Table 4.43 shows the results.

Table 4.43
Correlation matrix for school environment and performance Numeracy and Literacy Educational Programme

Variable		Performance	School environment
Performance	Pearson Correlation	1	0.690**
	Sig. (2-tailed)		0.000
	n	281	281
School environment	Pearson Correlation	0.690**	1
	Sig. (2-tailed)	0.000	
	n	281	281

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

The results of Table 4.43 indicates that school environment positively moderates the relationship between performance of literacy and numeracy educational programme and participatory monitoring and evaluation process, ($r=0.690$, $p<0.05$).

4.13.3 Regression Analysis for moderating influence of School Environment on the Relationship between Participatory Monitoring and Evaluation Process, and Performance of Literacy and Numeracy Educational Programme

The following hypothesis was tested using multiple regression to satisfy the seventh objective requirements

4.13.4 Test of Hypothesis 7

H_0 There is no significant moderating influence of school environment on the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programs in public primary schools in Nairobi County, Kenya.

H_a school environment significantly moderates the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya

The null hypothesis was tested using the regression equation below:

$$Y=\beta_0+\beta_1X_I+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_{6+}\beta_0X_1M+\beta_8X_2M+\beta_9X_3M+\beta_{10}X_4M+\beta_{11}X_5M$$

Y= Performance of literacy and numeracy educational programme

$\beta_{O=}$ constant term

$\beta_{1,=}$stakeholders engagement

$\beta_{2,=}$stakeholders capacity building

$\beta_{3=}$ data collection

$\beta 4_=$ data management

$\beta_{5=}$ implementing change

M=School environment

£= error term

The results are presented in Table 4.44 and 4.45.

Hypothesis seven was tested using multiple regression model. In this operation, influence of combined participatory monitoring and evaluation process (stakeholder engagement, stakeholder capacity building, data collection, data management and implementing change) on performance of literacy and numeracy educational programme was tested in step one, after which moderating variable (school environment) was introduced in step two. Moderations assumed to take place if the influence of the interaction between independent and moderating variables is significant. As put by Baron and Kenny (1986) a moderator is any qualitative and quantitative variable which affects the strength and direction of the relationship between independent and dependent variable.

Step 1: influence of combined participatory monitoring and evaluation process on performance of literacy and numeracy educational programme

In this step, participatory monitoring and evaluation process was regressed on performance of literacy and numeracy educational programme. The results are presented in Table 4.44

Step 2: influence of combined participatory monitoring and evaluation process on performance of literacy and numeracy educational programme

In step two the influence of moderator (school environment) was introduced on the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme. The results are presented on Table 4.44

Table 4.44
Model Summary for Moderating Influence of School Environment on the Relationship between Participatory M&E Process and Performance of Literacy and Numeracy Educational Programme

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.754a	0.568	0.561	0.57027	0.568	72.453	5	275	0.000
2	0.868b	0.755	0.745	0.43481	0.186	34.005	6	269	0.000

Model: {F (5,275) =71.400, p=000<0.05}

a. Predictors: (Constant), Implementing Change, Stakeholder engagement, Stakeholders capacity building, Data collection, Data management

b. Predictors: (Constant), Implementing Change, Stakeholder engagement, Stakeholders capacity building, Data collection, Data management, School environment.

c) dependent variable: performance of literacy and numeracy educational programme

The Table 4.44, the results shows that in step one, the combined participatory M&E process (Adjusted R Square 0.561) explained 56.1% of performance of literacy and numeracy educational programme. This implies that school environment significantly influences the relationship between participatory Monitoring and Evaluation process and performance of literacy and numeracy educational programme. In step two, the adjusted R squared 0.745 explained 74.5% whereby the remaining 25.5% is influenced by other factors which are not explained in this model. Therefore, since step 2 has the highest adjusted R, this implies that

school environment can only moderate the relationship between participatory Monitoring and Evaluation process and of performance of literacy and numeracy educational programme up to 74.5% while the other factors are catered with the remaining percentage.

Table 4.45
ANOVA Model Summary for Moderating Influence of School Environment on the Relationship between Participatory M&E Process and Performance of Literacy and Numeracy Educational Programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117.812	5	23.562	72.453	0.000[b]
	Residual	89.433	275	0.325		
	Total	**207.245**	**280**			
2	Regression	156.387	11	14.217	75.197	0.000[c]
	Residual	50.858	269	0.189		
	Total	**207.245**	**280**			

a. Dependent Variable: Performance
b. Predictors: (Constant), Implementing Change, Stakeholder engagement, Stakeholders capacity building, Data collection, Data management
c. Predictors: (Constant), Implementing Change, Stakeholder engagement, Stakeholders capacity building, Data collection, Data management, School environment

From Table 4.45, it is evident that, in step one (1), the F value was statistically significant with ($F = 72.453$, $P=0.000<0.05$. In step two (2), the $F = 75.197$, $P=0.000<0.05$) indicating that the model was fit. The Anova Table was used in the study for establishing the models significance or the model goodness of fit. In both steps the results showed that the calculated F were 75.197 and 72.453 significantly implying that the model was significant.

Table 4.46
Model Coefficients for Moderating Influence of School Environment on the Relationship between Participatory M&E Process and Performance of Literacy and Numeracy Educational Programme

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.154	0.034		-4.447	0.000
	Stakeholder engagement	0.215	0.050	0.238	4.326	0.000
	Stakeholders capacity building	0.212	0.049	0.174	4.367	0.000
	Data collection	0.175	0.051	0.198	3.368	0.001
	Data management	0.127	0.053	0.179	2.526	0.019
	Implementing Change	0.123	0.049	0.099	2.540	0.012
2	(Constant)	-0.309	0.031		-10.108	0.000
	Stakeholder engagement	0.171	0.038	0.238	4.452	0.000
	Stakeholders capacity building	0.126	0.039	0.174	3.245	0.001
	Data collection	0.144	0.040	0.198	3.619	0.000
	Data management	0.136	0.041	0.179	3.299	0.001
	Implementing Change	0.076	0.038	0.099	2.006	0.046
	School environment	0.281	0.029	0.375	9.725	0.000

a. Dependent Variable: Performance of literacy and numeracy educational programme.

Using the statistical findings presented in Table 4.45, the regression model in step one can be substituted as follows:

$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+ e$

$\mathbf{Y=-0.154+0.238X_1+0.174X_2+0.198X_3+0.179X_4+0.099X_5 + e}$

Where y= Performance of literacy and numeracy educational programme

X_1= Stakeholder engagement

X_2= Capacity building

X_3= Data collection

X_4= Data management

X_5= Implementing change

In step 2, the influence of moderating variable (school environment) was introduced on the relationship between participatory M&E process and performance of literacy and numeracy educational program.

The results in the Table 4.46 demonstrate that upon introduction of the moderating variable (school environment) in the second model (2), the value of adjusted R^2 increased by 0.745. This implies that participatory M&E process and school environment (together) explain 74.5% of performance of literacy and numeracy educational program. The F-value was still statistically significant whereby the critical value obtained was 1.831 less than the F-value of 75.197 {F (11,269) = 1.831 <75.197, p=0.000<0.05}.

Y=Using the statistical findings in step two (Table 4.46), the following regression equation was obtained:

$Y=\beta_0+\beta_1X_I+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+\beta_7M+\beta_8{}_M\ (X_1.X_2.X_3.X_4X_5)$ **+ e**

$Y=-0.309+0.238X_1+0.174X_2+0.198X_3+0.179X_4+0.099X_5+0.375X_6$ + e

Where y= Performance of literacy and numeracy educational programme

X_1= Stakeholder engagement

X_2= Capacity building

X_3= Data collection

X_4= Data management

X_5= Implementing change

X_6= School environment

From the moderating model equation analysis all variables are below 5% level of significant. P-value of 0.05 are significant, which means that school environment has significant moderating relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme. Accordingly we reject the null hypothesis (H_0), which stated influence of school environment does not significantly moderate the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme. Therefore the conclusion is that the strength of relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme depends on school environment. So then we use the alternate hypothesis (Ha) to state: school environment significantly moderate the relationship between participatory monitoring and evaluation process and performance of literacy and numeracy educational programme.

The current study found out that even if school environment favors the implementation of literacy and numeracy programme on specific issues like supplying of learning and teaching materials, development of teacher professionalism and allocation of learning materials ratio of 1.1 still learning of literacy and numeracy skills performance is still low. The study findings reverberate the findings of Piper and Zuilkowski, (2017) on how teachers' education on three years of postsecondary education can support in developing critical teacher skill. The study revealed that in achieving consistent improvement in literacy and numeracy assessment on reading should be administered regularly to enhance quality of education in the Country.

Further findings of the study, as shown in Table 4.46, the beta (β) coefficients, in step two (2), were as follows: stakeholder engagement, 0.238; stakeholder capacity building, 0.174; data collection, 0.198; data management, 0.179; implementing change, 0.099 and school environment, 0.375. These values indicate that a unit increase in performance of literacy and numeracy educational programme corresponded to 23.8% increase in stakeholder engagement 17.4% increase in stakeholder capacity building; 19.8% increase in data collection 17.9% increase in data management; 9.9% increase in implementing change and 37.5% increase in school environment.

It can, therefore, be concluded that school environment significantly moderates the relationship between participatory M&E process and performance of literacy and numeracy educational programme. Accordingly, we reject the null hypothesis, which stated that the strength of relationship between participatory M&E process and performance of literacy and numeracy educational programme does not depend on school environment, then we accept the alternative hypothesis (Ha). We conclude that the strength of relationship between participatory M&E process and performance of literacy and numeracy educational programme depends on school environment.

The study found out that even if many stakeholders believe that conducive school environment contributes a lot in learner's performance there are many other factors which contribute to their success in learning. School learning materials and infrastructures alone cannot be a measure of giving excellent results even though they are inadequate to so many schools meaning this is a

weak observation and the government needs to take corrective measures as echoed by the findings of the study were compared to prior empirical investigations earlier discussed. A study by Nthenge (2014) determined that the strength of relationship between participatory M&E process and performance of literacy and numeracy educational program depends on school environment. Others such as Oyuga (2011); Parnwell (2015); Morgan (2015) also arrived at similar conclusions. Hypothesis 7 was supported by data, hence the strength of relationship between participatory M&E process and performance of literacy and numeracy educational program depends on school environment. Considering the foregoing previous studies, the study has adduced empirical evidence in support of their findings.

Table 4.47
Summary of Results of Test of Hypothesis

Objective	Hypothesis	Regression model	Results	Decision as results of empirical evidence
0bjective 1. To establish the extent to which stakeholder engagement influence performance of literacy and numeracy educational program in public primary schools in Nairobi County	**1.H_0**:There is no significant relationship between Stakeholders engagement and performance of literacy and numeracy educational program in public primary schools in Nairobi County	Linear regression model $Y = \beta_0 + \beta_1 X_1 + \varepsilon$	{R=0.480,R^2= 0.479,B=497, t=16,091, F(257,949, P=0.000<0.05}	Null hypothesis was rejected and the alternate hypothesis accepted.
Objective 2 To determine how stakeholder capacity for monitoring and evaluation influence performance of literacy and numeracy educational program in public primary schools in Nairobi County	**2.H_0**:There is no relationship between Stakeholders capacity building and Performance of literacy and numeracy educational programme in public primary schools in Nairobi County	Linear regression model $Y = \beta_0 + \beta_2 X_2 + \varepsilon$	**{**R=0.675,R^2= 0.456,B=490, t=15,280, F(233,466, P=0.000<0.05	Null hypothesis was rejected and the alternate hypothesis accepted.
Objective 3 To examine how data collection influence performance of literacy and numeracy educational program in public primary schools in Nairobi County	**3.H_0**:There is no relationship between Data collection and performance of literacy and numeracy educational programme in public	Linear regression model $Y = \beta_0 + \beta_3 X_3 + \varepsilon$	R=0.660,R^2= 0.434,B=479, t=14,689, F(215,779, P=0.000<0.05	Null hypothesis was rejected and the alternate hypothesis accepted.

	primary schools in Nairobi County			
Objective 4 To determine the extent to which data management influence performance of literacy and numeracy educational program in public primary schools in Nairobi County	**4.H_0**:There is no relationship between data management and performance of literacy and numeracy educational programme in public primary schools in Nairobi County	Linear regression model $Y = \beta_0 + \beta_4 X_4 + \varepsilon$	R=0.536,R^2= 0.228,B=408, t=10,616, F(112,695, P=0.000<0.05	Null hypothesis was rejected and the alternate hypothesis accepted.
Objective 5 To assess how implementing change influence performance of literacy and numeracy educational program in public primary schools in Nairobi County	**5.H_0**:There is no relationship between implementing and influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County	Linear regression model $Y = \beta_0 + \beta_5 X_5 + \varepsilon$	R=0.581,R^2= 0.337,B=445, t=11,917, F(142,010, P=0.000<0.05	Null hypothesis was rejected and the alternate hypothesis accepted.
Objective 6 To establish how combined participatory monitoring and evaluation process influence performance of literacy and numeracy educational program in public primary schools in Nairobi County	**6.H_0**: There is no relationship between Combined participatory monitoring and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County	$Y=\beta_0+\beta_1 X_I+\beta_2 X_2+\beta_3 X_3+\beta_4 X_4+\beta_5 X_5+\varepsilon;$	R=0.754,R^2= 0.568,B=238, B=0.174,B=0.198, B=0.179,B=0.099, t=-4.477,t=4.326, =4.367, t=3.368,t=2.526, t=2.540, F(72,453, All the p-values for predicator variable were less than 0.05 P=0.000<0.05	Null hypothesis was rejected and the alternate hypothesis accepted.
To assess how the moderating influence of school environment on the relationship between participatory monitoring and evaluation process and	**7.H_0** There is no significant moderating influence of school environment on the relationship between participatory monitoring	$Y=\beta_0+\beta_1 X_I+\beta_2 X_2+\beta_3 X_3+\beta_4 X_4+\beta_5 X_5+\beta_6 X_{6+}\beta_0 X_1 M+\beta_8 X_2 M+$	Step1: R=0.754,adjusted R^2=0.561 F(72.453, P=0.000<0.05	Null hypothesis was rejected and the alternate hypothesis accepted.

performance of literacy and numeracy educational program in public primary schools in Nairobi County	and evaluation process and performance of literacy and numeracy educational programme in public primary schools in Nairobi County	$\beta_9 X_3 M + \beta_{10} X_4 M + \beta_{11} X_5 M$	therefore statistically significant Step2: R=0.755,adjusted R^2=0.745 F(34,005, P=0.000<0.05 therefore statistically significant	

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the findings, conclusions, recommendations contribution of body of knowledge, and suggestions for further research.

5.2 Summary of Findings

This section presents summary of findings based on the following thematic areas as per the objectives themes; hypothesis were tested using linear regression model to determine the relationships of each independent variable.

5.2.1 Stakeholder Engagement and Performance of Literacy and Numeracy Educational Programme

The first objective of the study was to establish the extent to which stakeholder engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County. The corresponding hypothesis was stated. Stakeholder engagement was estimated using four indicators namely; identification of stakeholders, stakeholder's level of involvement, developing of project objectives whereby developing Monitoring and evaluation plans was inclusive as the fourth indicator. The study revealed that for each indicator, had several statements which were extracted from the variable and then statically tested where it was found that, there was a positive influence on the performance of L&N educational programme. So the foregoing null hypothesis was tested and the findings were determined: R=0.693, R^2=0.480, β= 0.497,t=16,091, F(257,949), p=0.000<0.05.

Each variable had several statements derived from the objectives and results were analyzed, frequencies, percentages, means and standard deviations were computed. The overall composite mean were computed and comparisons were made according to the line items.

The composite mean score for stakeholder engagement was 3.59, while the standard deviation was 1.102. This means that stakeholder engagement moderately statically influenced performance of literacy and numeracy educational programme.

The null hypothesis stated that there is no significant influence of stakeholder engagement for M&E on performance of literacy and numeracy educational programme. The null hypothesis was tested and the following results found: (R^2 = 0.480, β= 0.497, t=16.061, p=0.000<0.05). The null hypothesis was thus rejected it was concluded that stakeholder engagement has a strong positive statistic significant relationship on performance of L&N educational programme. It was established that stakeholder engagement explained 48% of performance of L&N educational programme.

5.2.2 Stakeholder Capacity and Performance of Literacy and Numeracy Educational Programme

The second objective of the study was to determine the influence of stakeholder capacity building and performance of literacy and numeracy educational program. The corresponding null hypothesis was that there is no significant influence of stakeholder capacity building and performance of literacy and numeracy educational program. The null hypothesis was tested and the following results found: (R=0.675, R^2 = 0.456, β= 0.490, t=15.280, p=0.000<0.05).

The null hypothesis was thus rejected and was concluded that stakeholder capacity building has a strong positive statistic significant relationship on performance of L&N educational programme. The composite mean score for stakeholder capacity building was 3.77, while the standard deviation was 1.033. This means that stakeholder capacity building has a moderate positive relationship on performance of literacy and numeracy educational programme. It was established that stakeholder capacity building explained 46% of performance of literacy and numeracy educational programme.

5.2.3 Data Collection and Performance of Literacy and Numeracy Educational Programme

The third objective of the study was to determine the influence of data collection and performance of literacy and numeracy educational programme. The corresponding null hypothesis was that there is no significant influence of data collection for Monitoring and evaluation on performance of literacy and numeracy educational programme. The null hypothesis was tested and the following results found: (R=0.660, R^2 = 0.436, β= -0.137, t=14,689, p=0.000<0.05).

The null hypothesis was thus rejected and results were data collection has moderate positive statistic significant relationship on performance of literacy and numeracy educational programme. The composite mean score for data collection n was 3.69, while the standard deviation was 1.015. This means that data collection has a positive moderate relationship with performance of literacy and numeracy educational programme. The results shows that data collection explained 44% of performance of literacy and numeracy educational programme. The percentage clearly explains a moderate relationship which actually cannot point much on the performance of literacy and numeracy educational programme.

5.2.4 Data Management and Performance of Literacy and Numeracy Educational Programme

The fourth objective of the study was to determine the influence of data management and performance of literacy and numeracy educational programme. The corresponding null hypothesis was that there is no significant influence of data management and performance of literacy and numeracy educational programme. The null hypothesis was tested and the following results found: ($R=0.536$, $R^2 = 0.028$, $\beta=0.408$, $t=10.616$, $p=0.000<0.05$).

The null hypothesis was thus rejected and it was concluded that there was weak statistic significant relationship on performance of literacy and numeracy educational programme. The composite mean score for data management was 3.62, while the standard deviation was 1.098. This means that data management had a very weak relationship on performance of literacy and numeracy educational programme. The results shows that data management explained 29% on performance of literacy and numeracy educational programme. The percentage clearly explains that data management has weak relationship on performance of literacy and numeracy educational programme.

5.2.5 Implementing Change and Performance of Literacy and Numeracy Educational Programme

The fifth objective of the study was to determine the influence of implementing and on performance of literacy and numeracy educational programme. The corresponding null hypothesis was that there is no significant influence of implementing change for Monitoring and

evaluation on performance of literacy and numeracy educational programme. The null hypothesis was tested and the following results found: ($R=0.581$, $R^2 = 0.337$, $\beta=0.445$ $t=11.917$, $p=0.000<0.05$).

The null hypothesis was thus rejected. The findings concluded that implementing change has a weak statistical significant relationship on performance of literacy and numeracy educational programme. The composite mean score for implementing change was 3.74, while the standard deviation was 1.198. This means that implementing change has a weak relationship on performance of literacy and numeracy educational programme. The results shows that implementing change explained 38% on performance of literacy and numeracy educational programme. The percentage clearly explains that implementing change has moderate relationship on performance of literacy and numeracy educational programme.

5.2.6 Combined Participatory Monitoring and Evaluation Process, and Performance of Literacy and Numeracy Educational Programme

The sixth objective of the study was to determine the influence of combined participatory Monitoring and evaluation process on performance of literacy and numeracy educational programme. The corresponding null hypothesis was that there is no significant influence of combined participatory Monitoring and evaluation process on performance of literacy and numeracy educational programme. The null hypothesis was tested and the following results found: the overall results in the model were: $R=0.754$, ($R^2 = 0.568$, adjusted $R^2= 0.561$, $F=72.453$, $p=0.000<0.05$). The null hypothesis was thus rejected. Results from model coefficient Table indicated that all the p-values for predicator variables {stakeholder engagement ($p=0.000<0.05$), stakeholder capacity building ($p=0.000<0.05$), data collection ($p=0.000<0.05$), data management ($p=0.000<0.05$) and implementing change ($p=0.000<0.05$)} were less than 0.05. The null hypothesis was rejected based on the results and conclusion was combined participatory Monitoring and evaluation process significantly influenced performance of literacy and numeracy educational programme. It was shown clearly that combined participatory Monitoring and evaluation process explained 57% of performance of literacy and numeracy educational programme.

5.2.7 School Environment, Participatory Monitoring and Evaluation Process, and performance of Literacy and Numeracy Educational Programme Performance of Literacy and Numeracy Educational Programme

The seventh objective of the study was to determine the moderating influence of school environment on the relationship between participatory Monitoring and evaluation process and performance of literacy and numeracy educational programme. The corresponding null hypothesis was that there is no significant moderation influence of school environment on the relationship between participatory Monitoring and evaluation process and performance of literacy and numeracy educational programme. The null hypothesis was tested and the following results found: upon introduction of the moderating variable (school environment) to the model in step two, the value of adjusted R^2 increased by 0.184 (from 0.561 to 0.745). This implies that participatory Monitoring and evaluation process and school environment (together) explain 74.5% of performance of literacy and numeracy educational programme. The F-value was still statistically significant {F (1,269) = 42.503, p=0.000<0.05}. The composite mean score for school environment was 2.72, while the standard deviation was 1.258. This implies that the overall opinion of the respondents on school environment was adverse. Therefore it affected the relationship between participatory monitoring and performance of literacy and numeracy programme. This signifies the need and the importance to streamline various aspects of school environment to ensure maximum performance in the performance literacy and numeracy programme.

5.3 Conclusions

This section presents the conclusions made in regard to the study objectives and hypotheses. The first objective of the study was to determine the influence of stakeholder engagement on performance of literacy and numeracy educational program. The study determined that majority of the respondents agreed that stakeholder engagement was prevalent in the literacy and numeracy educational program. It was also determined that stakeholder engagement significantly influenced performance of literacy and numeracy educational programme.

The second objective of the study was to determine the influence of stakeholder capacity building on performance of literacy and numeracy educational program. The study determined that

majority of the respondents agreed that stakeholder capacity building was prevalent in the literacy and numeracy educational program. It was also determined that stakeholder capacity building significantly influenced performance of literacy and numeracy educational programme.

The third objective of the study was to determine the influence of data collection on performance of literacy and numeracy educational program. The study determined that majority of the respondents agreed that data collection was prevalent in the literacy and numeracy educational program. It was also determined that data collection significantly influenced performance of literacy and numeracy educational programme.

The fourth objective of the study was to determine the influence of data management on performance of literacy and numeracy educational program. The study determined that majority of the respondents agreed that data management was prevalent in the literacy and numeracy educational program. It was also determined that data management significantly influenced performance of literacy and numeracy educational programme.

The fifth objective of the study was to determine the influence of implementing change on performance of literacy and numeracy educational program. The study determined that majority of the respondents agreed that implementing change was prevalent in the literacy and numeracy educational programme. It was also determined that implementing change significantly influenced performance of literacy and numeracy educational programme.

The sixth objective of the study was to determine the influence of combined participatory Monitoring and evaluation process on performance of literacy and numeracy educational program. The study established that combined participatory Monitoring and evaluation process significantly influenced performance of literacy and numeracy educational programme.

The seventh objective of the study was to determine the moderating influence of school environment on the relationship between participatory Monitoring and evaluation process and performance of literacy and numeracy educational programme. Majority of the respondents disagreed on all the three parameters of school environment, hence the conclusion that the school

environment was generally adverse. The study also determined that the relationship between participatory Monitoring and evaluation process and performance of literacy and numeracy educational programme depends on the school environment. The summary of the study findings of the hypothesis testing are as depicted in Table 5.1.

5.4 Contribution of the Study to the Body of Knowledge

Table 5.1: Summary of contribution to the body of knowledge

Objective	Contribution to knowledge
1.To establish the extent to which stakeholders engagement influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	The current study has determined that stakeholders' engagement can only be realized if national and county government work as a team in education sector. This was found missing and it is a serious problem causing the low performance of literacy and numeracy educational programme.
2. To determine how stakeholders capacity building influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	This study found out that very little support was given to training of teachers for refresher courses after completion of their initial trainings in college. This was a major problem of learning process.
3. To examine how data management influence performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	There is correlation and coordination of data collection. A serious gap was identified in this section.
4. To assess the moderating influence of school environment on the relationship between participatory performance of literacy and numeracy educational programme in public primary schools in Nairobi County, Kenya	This study found out that school environment had may factors which were influencing the performance of L&N educational programme.Learning of literacy and numeracy skills was wholly dependent on teachers competent which was limited and learning / teaching materials.

5.5 Recommendations

This section comprises recommendations of the study based on the findings. The recommendations are in light of policy and practice.

5.5.1 Recommendations for Policy makers

The recommendations for policy are as follows:

1. It was established that participatory Monitoring and Evaluation process significantly influences performance of literacy and numeracy educational programme. This implies that more policies governing the implementation of the programme by the schools and other implementing partners should consider mainstreaming participatory M&E process in order to achieve better performance results.
2. It was revealed in the study that school environment significantly influences the relationship between PM&E process and specifically performance of literacy and numeracy educational programme in the country. This means that not only should policies governing the implementation of the programme by the schools and other implementing partners be reviewed, but they should also enhance the school environment to yield better performance.
3. The study demonstrated that each of the individual variables examined had significant influence on performance of literacy and numeracy educational programme. This implies that the variables ought to be given policy attention as a strategy to enhance the success of such programme in Nairobi County. Resource allocation in the Monitoring and evaluation programme and projects should, therefore, be guided by the findings of this study.

5.5.2 Recommendations for Practice

The recommendations for practice are as follows:

1. The schools, RTI, CSOs, and all other players in the literacy and numeracy educational programme in public primary schools in Nairobi County should review their Monitoring and evaluation practices based on the study findings. They should more so integrate participatory Monitoring and evaluation in the programme. The study revealed that school environment significantly influences the relationship between PM&E process and

performance of literacy and numeracy educational programme. This means that the relevant regulatory bodies and other institutions charged with project oversight responsibilities such as the Ministry of Education should commit significant time and resources to the participatory Monitoring and evaluation process.

2. The study recommends that stakeholder capacity building in these programme is an issue hence needs frequent organizations so that they can help the teachers who have little knowledge of M&E skills for example data collection, data coding, analysis and management in the data bases to be properly acquitted with the challenging skills.
3. The study recommends ministry of education should develop professional learning communities focusing on either individual, small groups or large groups of teachers in reviewing and interpreting data for the purpose of improving student's achievements.
4. Leaders must be trained on management skills and be prepared to give guidance in the process of data investigation and induct new teachers into a data-based decision-making culture by linking them to already learned and experienced teachers in the field in using data collected so has to enhance learners achievement.

5.6 Suggestions for Further Research

Suggestions for further research are as follows:

1. The current study focused on literacy and numeracy programme in public primary schools. Other researchers can focus in private schools.
2. The current study focused on Nairobi County, Kenya. Other researchers may consider focusing on the examining the same phenomenon in other counties; especially the rural counties.
3. The current study used cross sectional survey design. Longitudinal surveys are often more powerful in determination of cause-effect relationships, therefore other researchers may consider examining the same phenomenon using longitudinal survey design.

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APPENDICES

Appendix I: Questionnaire for Head-Teachers and lower Primary School Teachers

Instructions: Please tick in the relevant boxes and fill in blank spaces of the questionnaire as honestly as possible. Do not write your name on the questionnaire in order to keep confidentiality.

Section A: Personal information

1) What is your gender?

i) Male ( )

ii) Female ( )

2) Category of key stakeholders in implementing the programme

i. Head Teachers ( )

ii. Lower Primary Teachers ( )

iii. CSO'S Workers ( )

iv. RTI Workers ( )

3) What is your age bracket?

i) 30 years and below ( )

ii) 31 years - 35 years ( )

iii) 36 years - 40 years ( )

iv) 41 years - 45 years ( )

v) 46 years - 50 years ( )

vi) 51 years - 55 years ( )

vii) 56 years and above ( )

4) What is your highest academic qualification?

i) Certificate ( )

ii) Diploma ( )

iii) Degree ( )

iv) Masters ( )

v) Others; please specify_____

5) Duration of work

i) 3 years and below ( )

ii 4 to 7 years ( )

iii 8 to 11 years ( )

iv 12 to 15 years ( )

v 16 years and above ( )

Section B: Performance of literacy and numeracy educational programme

Please **tick (√)** to indicate your level of agreement with the following statements regarding performance of literacy and numeracy educational program. You are required to give your opinion on the level of disagreement or disagreement with the statement in the table below using a likert scale of 1-5 Where SD=**strongly disagree; D=disagree; N=neutral; A=agree; SA=strongly agree.**

SN	Statements	SD	D	N	A	SA
1	There is improvement in reading learning skills of the pupils due to the operation of this programme					
2	There is improvement in simple arithmetic calculations skills of the pupils due to the operation of this programme					
3	Learners improved in recognition of alphabetical letters due to the operation of this programme					
4	Program beneficiaries are satisfied with the benefits					
5	Listening skill was enhanced through the operation of the programme					
6	Speaking, enhanced through the operation of the programme					
7	Writing skill was enhanced through the operation of the programme					
8	Transition rate has increased through the operation of the programme					
9	the class average performance has improved					
10	Acquisition of literacy and numeracy within times was experienced while undertaking the programme					

Section C: Stakeholders engagement

Please **tick (√)** to indicate your level of agreement with the following statements on identification and engagement of stakeholders. Where: **SD=strongly disagree; D=disagree; N=neutral; A=agree; SA=strongly agree.**

SN	Statements (stakeholder engagement)	SD	D	N	A	SA
1	Stakeholders are carefully identified and listed					
2	Based on gender parity stakeholders were carefully selected					
3	Needs assessments was conducted to involve the views and areas of interest of key stakeholders					
	Stakeholder level of involvement					
4	Stakeholders were involved in the development of curriculum development					
5	The government officials from the MOEST were involved in supervising teachers					
6	RTI international officers participated in funding and training the stakeholders in involved in the programme					
	Developing of project objectives					
7	All stakeholders participated in setting objectives which are SMART					
8	The objectives set were SMART					
	Developing M&E Plans					
9	M&E plans were developed by all the stakeholders in the program					
10	We involved all the stakeholders in literacy and numeracy programme					

In your opinion, how has engagement of stakeholders' impacted performance of literacy and numeracy educational program? *(Kindly explain)*…….....

Section D: Stakeholders' capacity building

Please **tick (√)** to indicate your level of agreement with the following statements regarding stakeholders' capacity building. Where: **SD=strongly disagree; D=disagree; N=neutral; A=agree; SA=strongly agree.**

SN	Statements (Stakeholders' capacity building)	SD	D	N	A	SA
1	There are plans indicating when M&E workshops and seminars will be done					
2	Adequate M&E workshops are conducted to inform exchange of best practices for knowledge					
3	Workshops have led to exchange of best practices for knowledge management					
	Planning for M&E seminars					
4	Adequate M&E seminars are conducted to inform exchange of best practices for knowledge					
5	Seminars have led to exchange of best practices for knowledge management					
	Aligning training gaps identified					
6	Feedback from the workshops and seminars helped us to identify haps in the literacy and numeracy educational programme					
7	The feedback from the workshops and seminars were well identified					
8	The process of identifying gaps was done in a participatory manner form M&E					
	M&E knowledge and skills					
9	Acquisition of M&E knowledge and skills was well developed					
10	Stakeholders M&E knowledge and skills was enhanced by trainings that were undertaken					
11	Technical experts undertaking M&E trainings led to proper practices of knowledge and skills					
12	M&E activities were well achieved through trainings and setting of objectives was realized					

In your opinion, how has stakeholders' capacity building for M&E impacted performance of literacy and numeracy educational program? *(Kindly explain)*…….

Section E: Data collection

Please **tick (√)** to indicate your level of agreement with the following statements regarding data collection. Where: **SD=strongly disagree; D=disagree; N=neutral; A=agree; SA=strongly agree.**

SN	Statements (Data collection)	SD	D	N	A	SA
1	M& E data collection instruments were appropriate for the designed work					
2	There was available M&E data collection tool					
3	The M&E data collection methods used suited the information required					
	M&E data collection and collation of information					
4	M&E data collected was defined and stored in the data base					
5	M&E data collation information was coded in the systems and filled for future use.					
6	The M&E data collected was verified and analyzed**.**					
	Sources of M&E information					
7	The sources of M&E information collected were reliable and trust worthy					
8	Data collected for M&E was from the right respondents					
	Schedules of M&E activities					
9	Proper coordination for M&E activates was well planned					
10	Schedules existed that displayed how M&E activates were carried out					
11	Assigning of M&E responsibilities were properly fulfilled by those assigned to carry out the task.					

In your opinion, how has data collection for M&E impacted performance of literacy and numeracy educational program? *(Kindly explain)*…….....

Section F: Data management

Please **tick (√)** to indicate your level of agreement with the following statements regarding data analysis and management. Where: **SD=strongly disagree; D=disagree; N=neutral; A=agree; SA=strongly agree**

SN	Statements (Data management)	SD	D	N	A	SA
1	Data analysis methods used were relevant and reliable.					
2	The process of identifying specific data analysis methods used was appropriate					
3	Methods of specifying data analysis process was strictly followed					
	Identifying staff for data management					
4	Responsibility matrix which depicted staff responsible for data management existed					
5	Staff responsible for data management were experts and knowledgeable					
6	The staff knowledge and skills for M&E led to proper data management information					
	Data analysis and interpretation					
7	Data interpretation was based on the information analyzed					
8	M&E data had been established to screen and store relevant information for quick retrieval and feedback to all the stakeholders					
9	The plan for data analysis and interpretation was clear and to the point					
10	Stakeholders were actively involved in data analysis and interpretation					
11	Analysis and interpretation of M&E data was properly utilized and stored in the data bases					
	M&E report writing					
12	After data collection, analysis and interpretation, M&E report writing was done					
13	M&E report was useful in improving the M&E activities and decision making					
14	Stakeholders were actively involved in the utilization of M&E results					

15	M&E reports helped in making concrete and decisive decisions					
16	M&E were written and shared to all stakeholders for dissemination purposes					

In your opinion, how has data management for M&E impacted performance of literacy and numeracy educational program? *(Kindly explain)*…….....

Section G: Implementing change

Please **tick (√)** to indicate your level of agreement with the following statements regarding learning and implementing change. Where: **SD=strongly disagree; D=disagree; N=neutral; A=agree; SA=strongly agree.**

SN	Statements (Implementing change)	SD	D	N	A	SA
1	All stakeholders counter checked the number of TARGERINE transmitted reports for correction and reliability					
2	TARGERINE tool facilitated for accurate and adequate information for the program					
3	TARGERINE tool helped improve the implementation of the project activities such as collection of data during class observation					
4	The information collected improved the process of involving the stakeholders in transmitting reliable reports					
5	Stakeholders reviewed data collected and made changes to the identified gaps in the reports					
	Number of transmitted reports					
5	Data collected from the TARGERINE report was reviewed and analyzed					
6	The number of transmitted report lead to improved results and the quality of project intervention in literacy and numeracy educational lessons					
7	Shared transmitted reports led to identifying areas with large number of participants and with less participants					
8	Transmitted report improved the allocation of resources for example the areas which needed more personnel's for supervising literacy and numeracy programme					

	Utilization of M&E results					
9	M&E results were used to improve the utilization of the projects activities such as class observation and allocation of resources to facilitates the programme					
10	The M&E results obtained from the programme excises were disseminated for utilization by all the stakeholders in order to better the results of L&N educational programme					
11	M&E results improved the quality of programme intervention such as literacy and numeracy					
12	M&E results improved the use of financial and resource allocation					
13	M&E results improved the designs and performance of literacy and numeracy educational programme					
	Project intervention					
14	The intended participants for the intervention were carefully identified and possible settings to each participants in the program was done					
15	M&E activities for intervention were developed and materials gathered appropriately					
16	M&E resources for intervention were clearly specified and located					
17	Progress for intervention activities were well monitored and evaluated for the success of the programme					

In your opinion, how has implementing change for M&E impacted performance of literacy and numeracy educational program? *(Kindly explain)*…….....

Section H: School environment

Please **tick (√)** to indicate your level of agreement with the following statements regarding school environment. Where: **SD=strongly disagree; D=disagree; N=neutral; A=agree; SA=strongly agree**

SN	Statements(School environment)	SD	D	N	A	SA
1	We have enough infrastructure to support the program					
2	We are supplied with enough stationaries such as pencils, exercise books, text books rubbers and sharpeners to facilities our teaching in class					
3	We have enough playgrounds in our schools to support the programme					
4	The security in schools is adequate to facilitate smooth learning					
5	We have enough classrooms, toilets, furniture, water supply, storerooms, paths, fences and proper ventilation to support literacy and numeracy educational programme					
	Teacher-pupil ratio					
6	The teacher-pupil ratio in our schools is as recommended by the Ministry of Education					
7	The size of the classroom is adequate for both learners and the teacher					
8	The resources allocated for teaching are adequate both for the learners and the teacher					
	School leadership					
9	I believe our school has supportive leadership					
10	Our schools administrative frequently observe teachers teaching in the classrooms					
11	There is common planning time, peer observation and focused cross-grade meetings in schools to improve the programme					
12	The school leaders motivate both teachers and learners for the success of the projects					
13	School culture and ethical leaderships facilities school improvements and allows teachers, parents and learners to trust the school environment					

THANK YOU FOR PARTICIPATING

Appendix II: Interview Guide for CSO'S and RTI International Officers

Instructions

The aim of the interview guide is to gather information on the influence of participatory monitoring and evaluation process, school environment and performance of literacy and numeracy educational programme intervened by RTI International in conjunction with the ministry of education science and technology. The knowledge obtained will only be used for academic purposes and the results from the study are expected to make a major contribution to improving the efficiency of the educational programme. You were chosen to be interviewed because you are involved in implementing the intervention programme and also working in county of Nairobi. There are no incorrect answers but differences of opinion. Please let us share your opinions. The comments must remain confidential and there will be no names attached to any remarks made during the discussions.

As per the study objectives, the emphasis will be on key thematic areas:

Section A: Demographic information

1) Gender (observe on gender and record) Male /Female
2) What is your professional qualification?
3) What is your age bracket?)
   30 years and below
   ii) 31 years - 35 years
   iii) 36 years - 40 years
   iv) 41 years - 45 years
   v) 46 years - 50 years
   vi) 51 years - 55 years
   vii) 56 years and above
4) How long have you worked in the county?

SECTION B: information on specific variables of study

1. **Theme 1: Performance of literacy and numeracy educational programme**
   (i) How would you rate the Performance of literacy and numeracy educational programme pubic primary schools in Nairobi County, Kenya?

(ii) Is there any improvement of literacy and numeracy learning skills since the intervention programme was started in pubic primary schools in Nairobi County, Kenya?

(iii) Generally what is your opinion on performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

2. **Theme 2: stakeholder engagement**

(i) How were the stakeholder engaged involved in performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(ii) To what extent were the stakeholders involved in developing M&E plans of educational programme in pubic primary schools in Nairobi County, Kenya?

(iii) To what extent were the stakeholders involved in developing project objectives of educational programme in pubic primary schools in Nairobi County, Kenya?

3. **Theme 3: stakeholder capacity building**

(i) Does planning for monitoring and evaluation workshops influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(ii) Does planning for monitoring and evaluation seminars influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(iii) How were gaps identified during trainings helped in decision making for influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

4. **Theme 4: Data collection**

(i) How did data collection instrument influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(ii) How did data collection and collation of information influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(iii) To what extent does schedules for monitoring and evaluation activities influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

5. **Theme 5: Data management**

(i) How does identifying specific data analysis methods influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(ii) How does identifying staff for data management influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(iii) To what extent does data analysis and interpretation influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(iv) To what extent does monitoring and evaluation reporting influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

6. **Theme 6: Implementing change**

(i) How was data reviewed and the influence it had on performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(ii) To what extent does number of transmitted reports influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(iii) To what extent does utilization of monitoring and evaluation results influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(iv) How was does project intervention influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

7. **Theme 7: School environment**

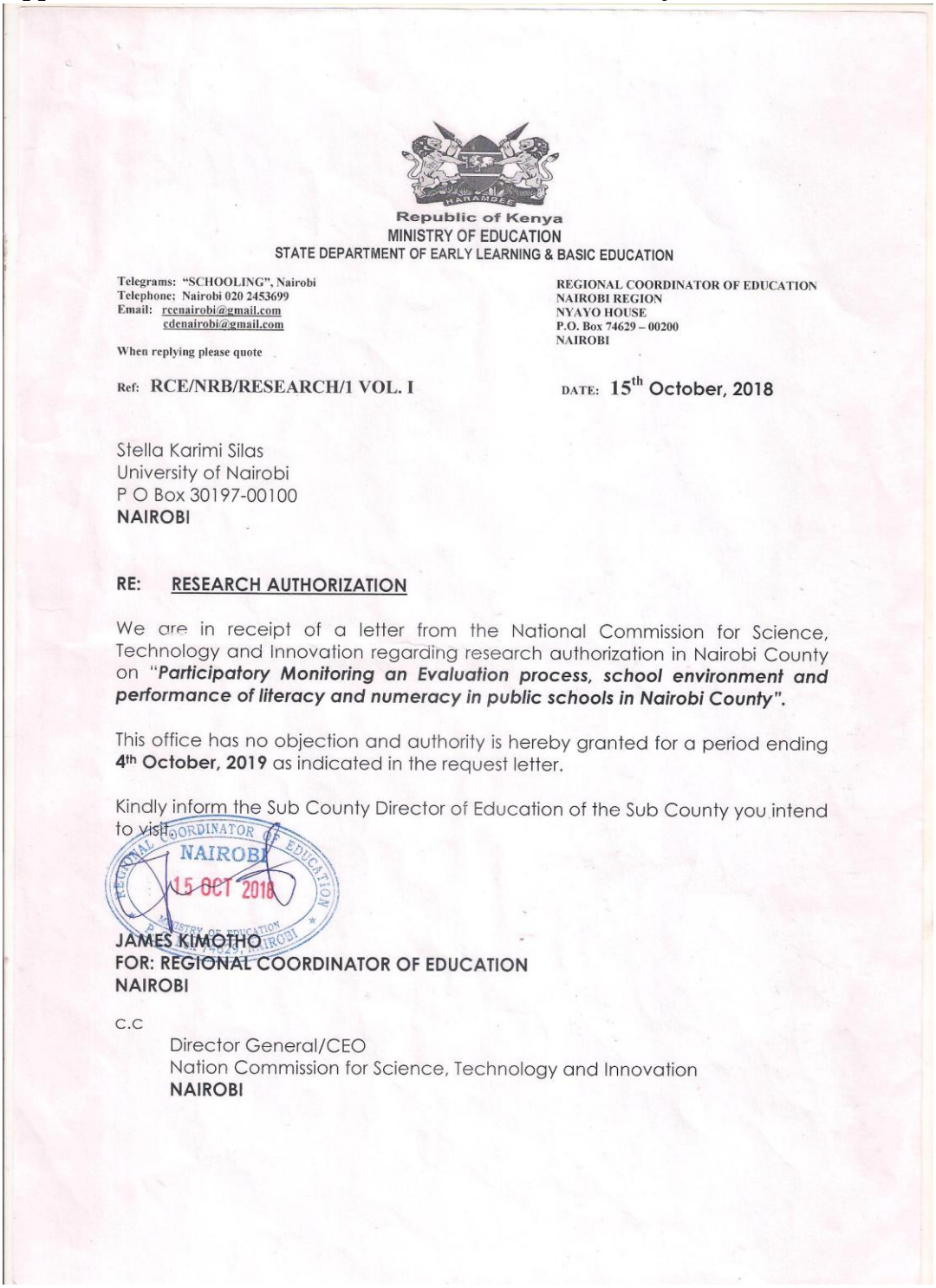
(i) How was does school infrastructure the influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(ii) To what extent does teacher –pupil ratio performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

(iii) To what extent to which school leadership influence performance of literacy and numeracy educational programme in pubic primary schools in Nairobi County, Kenya?

Thank you for taking the time to respond.

Appendix III: Research Authorization from the Ministry Of Education



Republic of Kenya
MINISTRY OF EDUCATION
STATE DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone: Nairobi 020 2453699
Email: rcenairobi@gmail.com
cdenairobi@gmail.com

When replying please quote

REGIONAL COORDINATOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref: RCE/NRB/RESEARCH/1 VOL. I

DATE: 15th October, 2018

Stella Karimi Silas
University of Nairobi
P O Box 30197-00100
NAIROBI

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on "***Participatory Monitoring an Evaluation process, school environment and performance of literacy and numeracy in public schools in Nairobi County".***

This office has no objection and authority is hereby granted for a period ending **4th October, 2019** as indicated in the request letter.

Kindly inform the Sub County Director of Education of the Sub County you intend to visit.

REGIONAL COORDINATOR OF EDUCATION NAIROBI 15 OCT 2018 MINISTRY OF EDUCATION P.O. Box 74629 NAIROBI

JAMES KIMOTHO
FOR: REGIONAL COORDINATOR OF EDUCATION
NAIROBI

C.C
Director General/CEO
Nation Commission for Science, Technology and Innovation
NAIROBI

Appendix IV: Research Authorization from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

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

Ref: No. **NACOSTI/P/18/43047/25744**

Date: **23rd October, 2018**

Stella Karimi Silas
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Participatory Monitoring and Evaluation process, school environment and performance of literacy and numeracy in public primary schools in Nairobi County"*** I am pleased to inform you that you have been authorized to undertake research in **Kiambu and Nairobi Counties** for the period ending **4th October, 2019.**

You are advised to report to **the County Commissioners and the County Directors of Education, Kiambu and Nairobi Counties** before embarking on the research project.

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

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

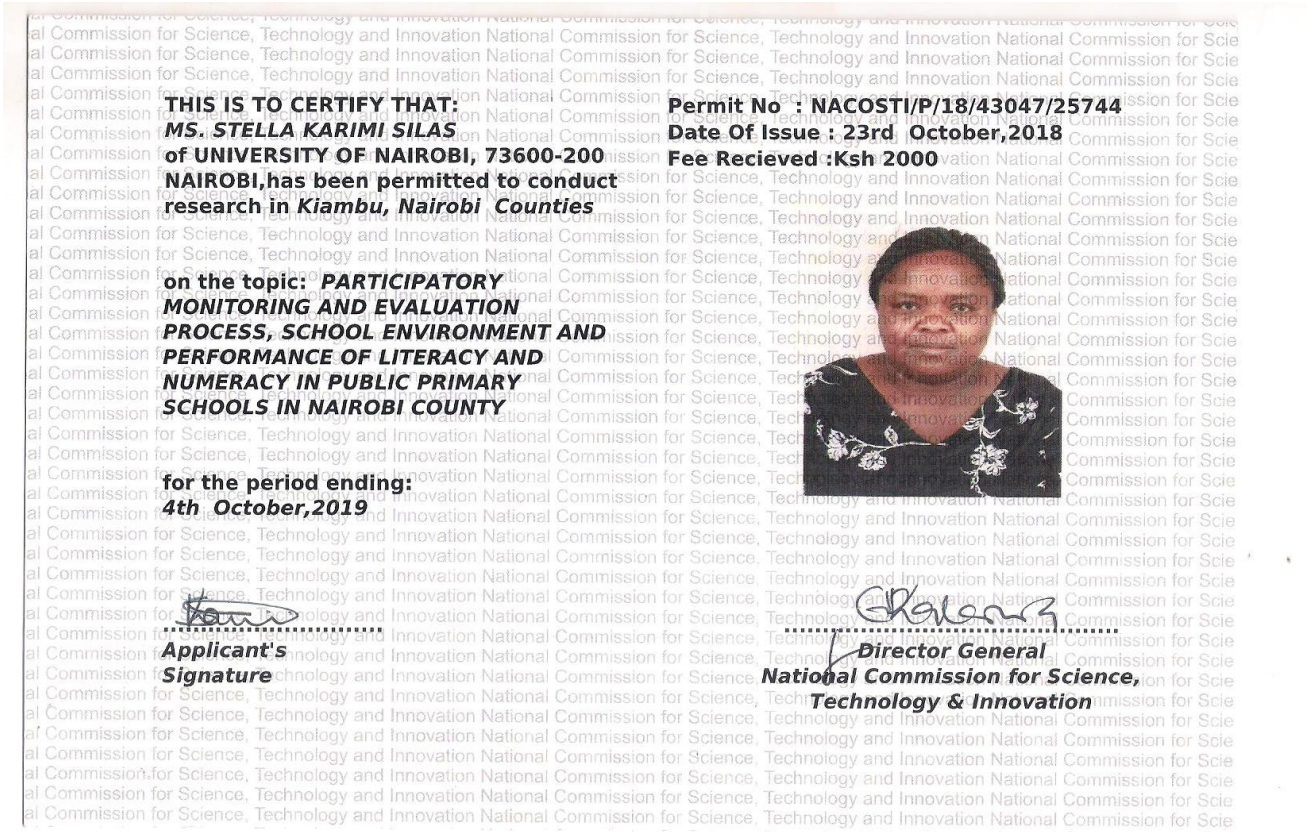
Copy to:

The County Commissioner
Kiambu County.

The County Director of Education
Kiambu County.

National Commission for Science, Technology and Innovation is ISO9001:2008 Certified

Appendix V: Research Permit



THIS IS TO CERTIFY THAT:
MS. STELLA KARIMI SILAS
of UNIVERSITY OF NAIROBI, 73600-200
NAIROBI,has been permitted to conduct
research in *Kiambu, Nairobi Counties*

Permit No : NACOSTI/P/18/43047/25744
Date Of Issue : 23rd October,2018
Fee Recieved :Ksh 2000

on the topic: *PARTICIPATORY MONITORING AND EVALUATION PROCESS, SCHOOL ENVIRONMENT AND PERFORMANCE OF LITERACY AND NUMERACY IN PUBLIC PRIMARY SCHOOLS IN NAIROBI COUNTY*

for the period ending:
4th October,2019

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation