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# Influence of Infrastructure Development Policies on Provision of Quality Teaching And Learning of Early Childhood Education in Mbita Sub-County Homabay County, Kenya

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# Abstract Original Research Article

Pursuant to the Government of Kenya's policy framework on education, training and research a comprehensive policy framework has been developed to ensure that quality services are delivered efficiently and effectively at all times in ECD centres in Kenya. The purpose of this study was to determine the influence of infrastructure development policies on provision of quality teaching and learning of early childhood education in Mbita Sub-County Homabay County, Kenya. The study adopted organizational learning theory. Descriptive survey research design was employed. The sample size for this study was 27 head teachers, 54 ECD teachers, 6 Zone ECD Supervisors. The study used simple random sampling and purposive sampling technique. The tools used in this study were questionnaires and interview schedules. Quantitative data was analyzed using descriptive statistics while qualitative data was analyzed according to emerging themes. The analyzed data was presented using tables. The study findings showed that 79.49% (mean=3.97 and Std Dev=1.093) of the respondents accepted that the county has policies guiding classroom structuring which has enhanced teaching and learning. In conclusion, school infrastructures like toilets, play grounds, classrooms, and libraries are constructed according to the ministry of education standards. Toilets, pit latrines are located far from the classrooms to avoid air pollution and provide good learning environment. The study recommends that the ministry of education at the county level should facilitate construction of libraries in the primary schools so as to improve and enhance teaching and learning of children beginning from the preprimary to senior classes. In addition, the facilitation will boost learning and power of implementing and enacting the policies set for improving learning and teaching of

**Keywords:** Infrastructure development policies, quality teaching, quality learning, early childhood education, ministry of education.

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## Introduction

Early Childhood Development Education (ECDE) globally and Kenya in particular has been recognized as a crucial programme that lays a foundation for a child's holistic and integrated education that meets the cognitive, social, moral, spiritual, emotional, physical and developmental needs (Aniter, Sang & Ng'eno, 2017). Early childhood education vital for the future of any nation by serving as a foundation upon which all other educational levels rest thereby nurturing children with skills, attitudes and competences necessary for individual and national development. Early childhood care and education in recent times has been formalized by most countries thereby allowing private and public investment in helping children to optimize their potentials to augment

care from family with systematic social, physical, cognitive, and emotional child development (Akuku, 2015).

Recent years have seen a global endeavour to prioritize early childhood care and education as a foundation for later learning and development as evidenced by Global Guidelines for Early Childhood Education and Care in the 21st Century. Such efforts are a response to a variety of complex social and economic trends. These forces include but are not limited to, societal changes due to industrial revolution, the increased number of women with young children entering the labour force with the two parents working, a rise in the number of single parents, the dysfunctional traditional system of child care and extended family

support systems (Black, Walker, Fernald, Andersen, DiGirolamo, Lu & Devercelli, 2017).

The Kenya government on the other hand adopted a policy on Early Childhood Development (ECD) in 2006. The policy outlines a comprehensive framework that encompasses policies for early childhood services and programs for children from conception to age eight years. Also, it outlines an ECD policy system and provides a frame of reference in the provision of services for infants and children. Additionally, it provides a basis to strengthen, develop, and review policies related to health and nutrition, education, water and sanitation, and social services. According to 2006 policy document, the Republic of Kenva sector policies are central in providing standards and guidelines for ensuring provision of quality services for all children in their earliest years. This evaluative study outlines salient components in education that are engrained in the ECD policy framework (Richter, Daelmans, Lombardi, Heymann, Boo, Behrman & Bhutta, 2017).

## STATEMENT OF PROBLEM

Pursuant to the Government of Kenya's policy framework on education, training and research a comprehensive policy framework has been developed to ensure that quality services are delivered efficiently and effectively at all times in ECD centres in Kenva (Republic of Kenya, 2000). However, concerns have been raised by key stakeholders regarding the implementation of the ECDE programmes within the sub-county. Currently the sub-county still lacks an elaborate framework that can make ECDE work well under their management. The counties have faced challenges in implementing the devolution mandate in implementing policies for the employment of ECD teachers; infrastructure development, payment structures; that meets the National ECDE service standard guidelines. Early childhood is a crucial stage of life in terms of a child's physical, intellectual, emotional and social development. Growth of mental and physical abilities progress at an astounding rate and a very high proportion of learning take place from birth to age six. It is a time when children need high quality personal care and learning experiences. Some of the positive outcomes of good-quality ECDE are more academic success later on; higher scores on tests of thinking ability and language development; child enjoys more secure attachments to other individuals: the child adjusts better at school; and, the child has less behaviour problems in class one (Ponitz, McClelland, Matthews and Morrison, 2009). This study therefore, aimed at assessing the influence of infrastructure development policies on provision of quality teaching and learning of early childhood education in Mbita Sub-County Homabay County, Kenya.

### RESEARCH OBJECTIVE

 To determine how devolved government policies on infrastructure development influence provision of quality teaching and learning of early childhood education in Mbita sub-county Homabay County, Kenya

# **RESEARCH QUESTIONS**

(i) To what extent do government policies on infrastructure development influence quality teaching and learning of early childhood education in Mbita sub-county Homabay County, Kenya?

### THEORETICAL REVIEW

This study was based on the organizational learning theory. The theory was developed by Argyris and Schon (1996), the organizational learning theory is based on the premise that organizations need to create an environment that would enhance the acquisition of knowledge which would foster better processes in either product manufacturing or service delivery. Birasnav, Chaudhary and Scillitoe (2019), proponents of organizational learning theory also advance that the theory is based on the premise that organizations can always learn new things and acquire capabilities that would enhance their performance. In the same vein, Kalling (2007) another proponent of organizational learning theory notes that learning for modern organizations has become a necessity as it leads to improved processes and the introduction of new and better services. In adopting this theory, this study contends that for effective implementation of ECDE function, there need to create a climate that would enhance institutional learning for all its human resources. This theory relates to study variable learning and adoption which advances that devolved governments ought to create learning environments either from their peers nationally or internationally through benchmarking, a process that would lead to better implementation of devolution.

## LITERATURE REVIEW

According Jaluo (2015), the fourth schedule of the constitution places pre-primary education and child care facilities under the county governments. These roles are further specified by Section 26 of the Basic Education Act, 2012 which states that: The roles of the County Government will include the provision of funds required for the development of the necessary infrastructure for institutions of basic education and training used for conducting pre-primary education, childcare facilities, home craft centres and village polytechnics.

According to Sahin, Tantekin-Erden and Akar (2017), the physical environment comprises the school building, the outdoor area, objects, furniture and materials in the classroom which should be child-sized. This included desks, sinks, tables, chairs and shelves.

Similarly, all equipment and apparatus in ECDE should be of a suitable size and weight for children, and should be moveable. Furniture can be kept to a minimum, and arranged in such a way that there is plenty of open spaces for free movement, exploration and spontaneous activity both indoor and outdoor.

Nyachieo (2015) findings revealed that the benchmark of a quality ECDE programme is based on the ECDE input and process and adequate management of human resource, outdoor play equipment, learning materials, stable staff, including trained teachers, support staff and head of institutions; a programme that encompass provision of adequate nutrition, health services and holistic curriculum and classroom dynamics.

As per Kang'ethe, (2015) in a study on the assessment of the Early Childhood Development Policy Implementation in Kenya, in Ruiru District using mixed method approach and interviews, questionnaires and observations as the main tools. The findings indicate that the ECD policy has achieved gains including teacher employment and enhanced quality education standards. Comparatively, learning outcomes indicate that teacher student ratio impact education outcomes significantly. Results indicate that government should consider prioritization of teacher employment and training them on ECD policy standards. Parents and communities should take part in the improvement of ECD class infrastructure especially in rural areas where ECD is mainly provided in public facilities.

The child and the environment are in a unique relationship, because the environment shapes the child

and according to Montessori philosophy "Adults admire their environment, but the child absorbs it. It becomes part of his soul" therefore ECDE infrastructure and environment need to consider completely favorable environment for the child's optimal development such as; striking a freedom and structure in balance, consider beauty enhancement in the classroom and in materials, order and routine, Nature were access of the out-door activity are encouraged and reality in that the classrooms should be full of learning materials (New, 2018).

Devolution has given the counties responsibility over pre-primary education vocational education has encouraged development of these two levels of education which were previously neglected by central government (Jaluo, 2015). Specifically, there have been notable infrastructural and human resource developments since the county governments took over with both counties undertaking construction of Early Childhood Development and Education (ECDE) centers and Polytechnics. For instance, in Kajiado County a total of 296 ECDE classrooms have been constructed across the county (Birishi, 2016).

## **CONCEPTUAL FRAMEWORK**

A conceptual framework is a diagram that depicts the relationship between the variables under a study (Kelley & Knowles, 2016). Figure 1 represents the conceptual framework for this study; it illustrates the relationship between the dependent and independent variables.

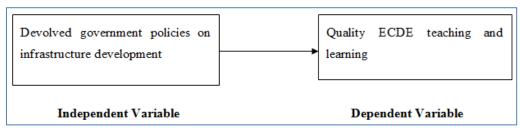


Fig-1: Conceptual Framework

#### RESEARCH METHODOLOGY

The study was carried out in Mbita Sub-County found in Homabay County, Kenya. The area was chosen for research since concerns have been raised by key stakeholders regarding the implementation of the ECDE programmes within the sub-county. Currently the sub-county still lacks an elaborate framework that can make ECDE work well under their management.

The study employed a descriptive survey research design. The study used this design to collect information from a large group of ECDE teachers, and head teachers. This design was used because of its

ability to provide the researcher with appropriate techniques for systematic collection of extensive data from a large group of respondents through interviews and administration of questionnaires (Mwinyipembe & Orodho, 2014).

The study targeted a population of 111 participants comprising of; 35 primary schools, 35 head teachers, 70 ECDE teachers employed by the county government, 6 Zone ECD supervisor drawn from Homabay County.

The study used Krejcie and Morgan (1970) formula to get a sample size of 87 respondents. In this

study simple random sampling and purposive sampling was adopted. Simple random sampling was appropriate for the study as it is cost effective and efficient in administration. The study used purposive sampling method to collect data from Zone ECD Supervisors.

The study used questionnaires and interview schedule to collect data. After the data was collected quantitative data was entered into the computer for descriptive analysis using the Statistical Package for Social Sciences (SPSS) version 24.0 software. Quantitative analysis entailed the use of descriptive statistics such percentages and frequency distribution tables. Qualitative analysis involved identifying major themes emerging from the data collected and relating them to the research objectives. Thematic analysis emphasizes pinpoints, examines, and records the themes within the collected data. Themes and patterns across data which sets a basis that is important to the descriptions of a phenomenon that is associated to specific research questions. Qualitative data was

presented by use of themes denoted by narrations and tabulations on responses in verbal form.

The researcher sought permission from the respondents just before embarking on data collections. This was achieved through informed consent to participants. The researcher also kept the information given with confidentiality of which the respondents did not feel threatened. The results of the study were provided to relevant authorities and to the interested participants.

#### **RESULTS**

## **Infrastructure Development**

The study sought to determine the extent to which devolved government policies on infrastructure development has influenced teaching and learning Mbita sub-County Homabay County, Kenya. The study therefore determined the respondents' level of agreement on a five-point Likert scale. The Likert scale used ranged from strongly disagree (1) to strongly agree (5). The study findings are presented in table 1.

**Table-1: Infrastructure development** 

		SD	D	N	A	SA	Total	Mean	Std.
									Dev
The county has policies guiding classroom	F	1	9	14	21	33	78	3.97	1.093
structuring which has enhanced teaching and	%	1.3	11.5	17.9	26.9	42.3	100.0	79.49	
learning.									
The county has policies on Toilets/latrines	F	14	1	11	14	38	78	3.78	1.509
which has enhanced teaching and learning.	%	17.9	1.3	14.1	17.9	48.7	100.0	75.64	
The county has policies on Library which has	F	11	10	13	6	38	78	3.64	1.529
enhanced teaching and learning.	%	14.1	12.8	16.7	7.7	48.7	100.0	72.82	
The county has policies on Kitchen which has	F	15	3	11	14	35	78	3.65	1.544
enhanced teaching and learning.	%	19.2	3.8	14.1	17.9	44.9	100.0	73.08	

Table 1 shows the study findings on the influence of devolved government policies on infrastructure development in teaching and learning at Mbita sub-County Homabay County. It is evidenced that 69.2% respondents agreed, 17.9% were neutral and 12.8% of the respondents disagreed with the statement that the county has policies guiding classroom structuring which has enhanced teaching and learning. The study found that at 79.49% (mean=3.97 and Std Dev=1.093) respondents accepted that the county has policies guiding classroom structuring which has enhanced teaching and learning. Devolved governments through the ministry of education have prepared policies and standards needed to befit the classroom structures which enhances leaning. The challenge to policies is poor implementation by the schools.

Respondents gave their view with the statement that the county has policies on toilets/latrines which has enhanced teaching and learning. The study found that 66.6% respondents agreed, 19.2% of the respondents disagreed and 14.1% were neutral with the statement. The study found that 75.64% (mean=3.78)

and Std Dev=1.509) of the respondents accepted that the county has policies on toilets/latrines which has enhanced teaching and learning. School infrastructures like toilets, play grounds, classrooms, and libraries are constructed according to the ministry of education standards. Toilets, pit latrines are always located far from the classrooms to avoid air pollution and provide good learning environment. Play grounds are fitted with little equipment's in most schools. It is therefore demanding the county government to invest more in sports and talents of the children who love athletics.

Also 56.4% respondents agreed, 26.9% of the respondents disagreed and 16.7% were neutral with the statement that the county has policies on library which has enhanced teaching and learning. The study found that 72.82% (mean=3.64 and Std Dev=1.529) of respondents accepted that the county has policies on library which has enhanced teaching and learning. Few schools in the region have libraries constructed to suit learning despite the fact that most of the schools in the region have converted a single classroom to be library. In other schools, the teachers use their shelves to keep

books for the classes and this means that they do not have a library which is the case to most public schools.

Further respondents were asked to give their opinion with the statement that the county has policies guiding construction of kitchen which has enhanced teaching and learning. Further, 62.8% respondents agreed, 23.0% of the respondents disagreed and 14.1% were neutral with the statement. The study found that at 73.08% (mean=3.65 and Std Dev=1.544) respondents accepted that the county has policies on kitchen construction which has enhanced teaching and learning. Few schools have constructed descent kitchen to facilitate easy cooking process within the school compounds. Majority of the schools lacks kitchen structures because children do not have school feeding programs. Primary schools with the kitchens prepare meals for their early learners and therefore learning process is enhanced since children can have breakfast in school and continue with midmorning classes.

The study findings from the interviews revealed that the infrastructure development in Mbita Sub-county has increased over the last 8 years after devolution. More schools have been constructed and renovation of poorly constructed schools has been done with the purpose and aim of ensuring better provision of early childhood education. Despite the fact that construction of infrastructure has not meet the desired standards more children have got an access to education because roads have been improved as well the schools are not so far from residential areas. One of the interviewees mentioned that.

'Primary schools are showing a good progress by adopting policies according to the ministry of education requirements on constructions of new facilities that help in improve learning of the children within the county. New ECDE centers have been constructed and more are yet to be added to facilitate good learning environment. Play grounds still wanting, libraries do not exist, kitchen exist in some schools and latrines are constructed in the right place. The ministry of education at the county level rolled out the policies that each school should adopt when setting up new infrastructures.'

The findings are supported by Jaluo (2015), who discussed that the fourth schedule of the constitution places pre-primary education and child care facilities under the county governments. These roles are further specified by Section 26 of the Basic Education Act, 2012 which states that: The roles of the County Government include the provision of funds required for the development of the necessary infrastructure for institutions of basic education and training used for conducting pre-primary education, childcare facilities, home craft centres and village polytechnics

### **CONCLUSION OF THE STUDY**

In conclusion to the objective on infrastructure development in Mbita Sub-county there has increased development of school infrastructure for over the last 8 years after devolution. More schools have been constructed and renovation of poorly constructed schools has been done with the purpose and aim of ensuring better provision of early childhood education. Also, the devolved governments through the ministry of education have prepared policies and standards needed to befit the classroom structures which enhances leaning. Further school infrastructures like toilets, play grounds, classrooms, and libraries are constructed according to the ministry of education standards. Toilets, pit latrines are located far from the classrooms to avoid air pollution and provide good learning environment. Play grounds are fitted with little equipment's in most schools.

## RECOMMENDATIONS OF THE STUDY

The ministry of education at the county level should facilitate construction of libraries in the primary schools so as to improve and enhance teaching and learning of children beginning from the preprimary to senior classes. In addition, the facilitation will boost learning and power of implementing and enacting the policies set for improving learning and teaching of learners.

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