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Influence of Infrastructure Development on Growth of Early Childhood Development Centres in Bondo Sub-County, Kenya

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Abstract: ***Kenya has set a national goal of attaining Universal Primary Education (UPE) and Education for All (EFA) by 2015. Failure to invest in Early Childhood Development can result in developmental delays , disability hence inhibiting the optimal development and performance of children. The purpose of this study was to examine the influence of infrastructure development on the growth of Early Childhood Development centers. This study adopted descriptive survey research design. The targeted population included the 440 teachers and 230 administrators in the Early Childhood Development Centres in Bondo, and Sub-county Early Childhood Education officers. The sample size was determined as 248. Data obtained was cleaned, verified and analyzed through descriptive and inferential statistics: frequencies, percentages, cross tabulations, chi-square and correlations. The findings showed a significant positive relationship between stakeholder's attitude towards Infrastructure development and growth of early childhood development centres (N=244,C.L.=95%,r=0.120*, p>0.05). Nonetheless, there was an insignificant and positive relationship between policy and school management role on infrastructure development and growth of early childhood education centres (N=244,C.L.=95%,r=0.067, p>0.05) and (N=244,C.L.=95%,r= 0.040,p>0.05) respectively. Association between resource allocation and infrastructure development and growth of early childhood development centers was weak negative (N=244,C.L.=95%,r= -0.031,p>0.05).There is need to nourish positive parental attitudes, sensitize stakeholders on the policy guidelines on Early Childhood Development Education , encourage active parental participation in school initiatives , build capacity of the school board of management on effective management practices and resource mobilization.***

Keywords: Early Childhood Development, Education, infrastructure development

1. Background to the Study

Early Childhood Education (ECE) is referred to as the Education acquired in the early stages of childhood. According to the National Association for the Education of Young Children (NAEYC, 2007), ECE spans the human life from birth to eight years of age. Although ECE does not have to occur in absence of the parent or primary caregiver, this term is often used to describe pre-school or childcare programs. The Jomtien Declaration emphasizes that "learning begins at birth''.In the UK, Early Childhood Development programmes have the potential to benefit individuals as well as society. Bernard Van Leer Foundation (2004) observed that educationists and scientists world-wide drew attention to the importance and the advantages of pre-school programmes for the holistic development of the child. In Latin America and southern and eastern Asia, all of the countries reporting data showed an increase in enrollments, with the exception of Afghanistan. In the Caribbean, all but one country (Grenada) showed increases (or remained steady at more than 100 percent). Cook Islands in the Pacific showed a decrease, but all other countries in the region increased their enrollments. Enrollments in the Pacific Islands vary from 15 percent in Fiji to 73 percent in Papua New Guinea and 100 percent in Tuvalu (Early Childhood Education Encyclopeadia.com).

In Latin America, Ecuador reported coverage of 14 percent for children up to age five, contrasting with 98 percent for Cuba. In the Caribbean, Belize reported 26 percent of its children three to five years of age were enrolled, contrasted with 100 percent for the Bahamas and Jamaica. In the Middle East and North Africa, Yemen reported 1 percent, and Bahrain 36 percent, of children ages three to five were enrolled. In central Asia and Eastern Europe, Afghanistan reported 0 percent enrolled, Tajikistan reported 4 percent of children ages one to six were enrolled, and Russia reported an enrollment of 54 percent.

Kenya set a national goal of attaining Universal Primary Education (UPE) and Education for All (EFA) by 2015. In 1987, there were 12,192 preschools with an enrolment of 662,045 children. It was projected that 3.6 million children would require pre-school education by the year 2000 (Godia, 2002). This implies that these ECE centres were actually being seen as educational institutions. The constitution of Kenya 2010 mandated the County Governments with the responsibility of Early Childhood Development (ECD) and Child Care. The Government of Kenya (GoK) has further committed to free and compulsory Basic Education by including Pre-primary education as part of Free Primary Education (Education Act 2013). The introduction of Free Primary Education (FPE) in 2003 resulted to over a million extra children enrolled representing 18 % increase in primary school enrolment. However, 65% of children in Kenya, especially those from poor households do not access quality pre-school program. The capacity of these children to learn is diminished due to the lack of age- appropriate care and psychosocial stimulation.

Kenya government came up with the Session Paper No. 1 of the Ministry of Education (2005) which acknowledged the attainment of EFA by 2015 as a major goal commitment in line with the right to education for all Kenyans. This is in line with the government's commitment to international declaration protocols and conventions arrived at in World Conference of EFA at Jomtien; Thailand (1990), the follow

up in Dakar, Senegal (2000) and by the Millennium Development Goals (MDGS). The same government set up the National Centre for Early Childhood Education ([NACECE],1984) and District Centre for Early Childhood Education ([DICECE], 1985) to co-ordinate the ECD programme activities including the service delivery quality but these efforts are yet to bare fruits especially in rural areas. In January 2003, the Government of Kenya introduced Free Primary Education (FPE) to provide opportunities to all Kenyan children eligible for primary schooling to access education. This greatly affected the enrolment of children in early childhood centres as many children were withdrawn from these centres to wait for the right age to join standard one. This is because in Early Childhood Centers, parents were supposed to pay levies to cater for instructional materials, meals and snacks for their children as well as pay teachers which was not the case in primary schools. The withdrawal of children from ECD centers which translated to non-participation by parents in the development of their infrastructure has left many public institutions in poor state. Those parents who feel that their children must attend the ECD programmes have no option but to look for alternative institutions. Some of these early childhood centers are just but tiny rooms located in shopping centres or in people's homes where the environment is not conducive for effective child care ,teaching and learning. Moreover, due to their nature, such centers are only able to hold a small number of children and so can't fully address the issue of enrolment. The concern is whether these centres conform to the naturally set standards of pre-school education UNESCO (2005).

Over a period of 5 years, the ECDE sub-sector witnessed significant growth with ECDE Centers having increased from 29,455 in 2003 to 37,263 in 2007. The total enrolment rose from 1,538,069 in 2003 to 1,691,093 in 2007. The Gross Enrolment Rate (GER) in Pre-schools increased to 59.3 in 2007 from 56.8 in 2003. In 2011 GER in ECDE increased to 65.6%from 60.9% in 2010 (NESP,2014).Whereas the growth in enrolment is a welcome development, there is concern over the GER in ECDE, at 65.6% when compared to that of primary school level which stood at 115% in 2011 from 109.8% in 2010 (NESP, 2014) However, in some parts of Kenya, the issue of Early Childhood Development Centres has remained a long term topic of concern in that by the introduction of FPE seemed to negate the gains made in ECD as many parents in some Sub-counties withdrew their children from ECD to primary. The government seems not to have taken a prior consideration in ensuring effecting growth in terms of infrastructure development, teacher recruitment and selection, clear policies and access of the very centres. It is therefore important to examine the influence of infrastructure development on early childhood education in Bondo Sub-county.

2. Statement of Problem

Early Childhood Development and Education interventions are significant to the social and economic development of a country as they provide children with a fairer and better start in life KESSP (2005). Failure to invest in Early Childhood Development can result in developmental delays and disability as well as inhibiting the optimal development and performance of children throughout their lives. Siaya County of which Bondo sub-county is part of has a total of 894 ECDE centers with an enrolment of 64,952. Homa bay County has 991 ECDE centers with an enrolment of 118,563 children. Kisumu on the other hand has 968 ECDE centers with an enrolment of 70,596, (EMIS, 2014).

The Government of Kenya's (GoK) commitment to free and compulsory basic Education by including Pre-primary education as part of Free Primary Education has seen an influx of children into the ECDE centers (Education Act 2013) yet this same children lack the necessary infrastructure in order to attain better Early childhood education. Despite these achievements made, access to ECDE services remains low in Kenya with 65% of the children aged 3-6 years not accessing ECDE services (NESSP 2013). The most important aspects are the infrastructure and the availability and accessibility to learning materials. The county governments are still setting up structures and still face the challenge of having adequate technical and operational capacity as reported by Nyachae (2014). Apart from those sponsored by Non-Governmental Organizations for instance the UNICEF model ECD centers in Kisumu , Homabay and Siaya counties most Early Childhood Education centres have inadequate and inappropriate infrastructure. While some centres have no furniture at all, many more do not have enough for the number of enrolled pupils. Often times, the furniture does not match the physical size and stature of children. This furniture that is ill- adapted to the physical size of children is uncomfortable and can cause postural discomfort and pain. Some centre's have benches that are fixed too far from the table the children use. Typically, children bend over the writing table and this strains the child's arm when writing. This eventually affects handwriting development in children. Infrastructure therefore one of the vital components of a comprehensive ECDE system. Previous studies done in this area cannot be generalized into the current study since they differ in terms of their geographical scope, theme and methodology. The gap raises the need to conduct a study to examine the influence of infrastructure development on Early Childhood Education.

3. Purpose of the study

The purpose of this study was to examine the influence of infrastructure development on the growth of Early Childhood Centers in Bondo Sub-county.

Research Questions

The following research questions were used to guide the study:

1) To what extent does stakeholder's attitude towards infrastructure development influence the growth of Early Childhood Development centers in Bondo Sub-county?
2) How does policy on infrastructure development influence growth of Early Childhood Development in Bondo Sub-county?
3) To what level does financial allocation on infrastructure development influence growth of Early Childhood Development centers in Bondo Sub-county?

4) How does management of infrastructure development influence growth of Early Childhood Development centers in Bondo Sub-county?

4. Literature Review

Stakeholder's attitude towards infrastructure development and the growth of ECD centers

Ojwang (2015) conducted a study on the factors influencing infrastructure development in public primary schools in Kathonzweni Division, Makueni County, Kenya. He established that attitude affects the extent to which stakeholders are involved in the infrastructural development. Most of the stakeholders such as parents have a negative attitude towards involvement in infrastructure development. They are of the idea that it is the role of the government to facilitate development and not them hence this has hindered them from being directly involved in the development process. One of the PTA members for instance reported that: 'Some stakeholders have a negative attitude towards infrastructure development. Some of the members in the school tend to hold that infrastructure development is a responsibility of the government. As such, they do not contribute any resources or labor towards the development process.''Another PTA member further reported that "Some of the stakeholders have a negative attitude towards infrastructure development. They say that primary education is free hence they do not want to give money for buildings." Micheni (2007) in his study on the role of religious school sponsors in management of public secondary schools in South Imenti District revealed that church sponsors were not contented with the role assigned to them in the Education Act hence a somehow negative attitude. They demanded for a greater role in areas such as financial management, infrastructural development and autonomy in appointment of support staff.

A study carried out by Roy (2008) to examine the attitude towards school infrastructure of students in primary schools found that attitude determined the extent to which members were motivated to use infrastructure as well as maintain it. Another study carried out by Gallagher, Ferreira and Convery (2005) on the public attitude towards solid waste landfill infrastructure showed that there was a correlation between attitude and the development of the infrastructure. Ojwang further notes "The attitude of the stakeholders affects their involvement in infrastructural development differently. Positive attitude towards infrastructural development rises when there is full involvement of the members in the infrastructure development process."

Policy and growth of ECD centre's

Policies that guide all the activities and programmes associated with the development of early childhood development Centers plays a key role on the performance of these Centers. Mostly, early childhood development Centers are driven by the personnel requirements of the various service providers; personnel requirements are determined by their funding and regulatory structures (Kagan, 1994). As a result, preparation programs for those working with young children are as disparate as the services themselves. The ECD policy of 2006 policy framework ensures provision of quality services and for harnessing resources and other support for young children. In addition, this policy Framework guides the Government in its commitment of resources to programmes for young children. The Basic Education Act 2013 has strengthened ECD by including pre-school in basic education.

Ojwang (2015) did a study on the factors influencing infrastructure development in public primary schools in Kathonzweni Division, Makueni County, Kenya. He established that Majority of the head teachers (88.9%) indicated that the policies put in place by the government encouraged training of head teachers' involvement in infrastructural management and development. Majority of the head teachers (85.2%) indicated that they were aware of the policies put in place by the government on infrastructure development in public schools. Majority of the head teachers (85.2%) indicated that they were aware of the policies put in place by the government on infrastructure development in public schools. A few of them (14.8%) indicated that they were not aware. In terms of resource mobilization plans, majority of the head teachers (74.1%) indicated that the school has a resource mobilization plan and policies which aid infrastructure development policies.

Financial allocation and growth of ECD centers

Towards the end of 1990s, a study was carried out by the Working Group of Early Childhood Development (WGECD) of the Association for the Development of Education in Africa (ADEA) (Tokington, 2001), and the conclusion was that there were many ECD projects and programs in Africa but were uncoordinated, underfunded and many were of low quality and that the majority of them depend on the support of NGOs, national and international organizations for their existence. There was little financial commitment by governments to development of ECDs and provision and financing were left to the civil society (Tokington, 2001).Even though comprehensive early childhood development programs are designed to improve the cognitive and social-emotional functioning of preschool children which, in turn, influences readiness to learn in the school setting, low family income and community poverty lead to racial and ethnic achievement gaps.

Ojwang (2015) conducted a study on the factors influencing infrastructure development in public primary schools in Kathonzweni Division, Makueni County, Kenya. He established that major sources of funds for school furniture and infrastructure include parents' contributions (66.7%). Parents' contributions (66.7%) are the major sources funds used in facilitating the development of kitchen facilities in schools. An overwhelming majority of the head teachers (93%) indicated that the funds provided for infrastructure development were not adequate. This study also revealed that PTA, BoM members and AEO, DQASO and DEO reported that the key sources of funds for infrastructure development in primary schools include parents, CDF funds, government allocations and MoEST but this was still inadequate.

Management of infrastructure development and growth of ECD centers.

Findings from a study on the influence of school management committees on provision of teaching/learning resources in public primary schools Kisii South District,

Kenya (Mogute 2013) showed that the SMCs met regularly to discuss matters touching on teaching and learning resources and 60% of the members of the SMCs regularly attended the meetings. The SMCs members were also involved in the allocation of teaching and learning resources. The SMCs regularly inspected school facilities so as to ensure that all components of the facility are in good working condition. They were actively involved in the budgeting for the schools maintenance. They were also involved in the mobilization of funds for their schools and in the budgeting of the school funds as recommended.

A study by Namunyu (2012), on the role of school management committees in school improvement in primary schools in Busia district established that SMCs had taken upon themselves to construct and renovate classrooms, provide desk, fence school compound and even hire volunteer teachers in an effort to supplement government effort of enhancing teaching and learning resources. According to Maureen (2009) weak governance structures by the SMC characterized by low capacity to plan, allocate and execute budgets, weak internal controls, poor management and supervision of funds, absence of external accountability (including audits), and distorted incentives considerably increase the opportunity for mismanagement and corruption. They also affect the funding received by education providers, and thereby the delivery of teaching and learning resources.

5. Methodology of the Study

This study used a descriptive survey research design. This method provides a suitable instrument for collecting a large amount of data on similar data items over a short period of time. The targeted population in this study included:1 sub-county Education Officer, 440 ECDE teachers, 230 Head teachers and 3 DICECE officers giving a total of 674. This study employed Krejcie and Morgan (1970) formula to determine the sample size The sample size for the study was obtained as 248 respondents; this was proportionately distributed as follows: 1 Sub-county Education Officer,1 DICECE officers,161 ECDE teachers, 85 Head teachers/Administrators

This study employed a simple random sampling technique to select the ECDE teachers ECDE administrators. On the other hand, the DICECE Officers and Sub county Education officers were arrived through purposive sampling procedure. The data collection instruments used in this study included questionnaires and interview guide. A pilot study was done where collection instruments were tested to ascertain whether they can be able to collect data that answers the study objectives. The researcher employed convenient sampling technique at Winam division of Kisumu county and its environs, a total of 10 respondents were reached.

The researcher and other independent experts in the area of the study at the university validated the instruments through assessing the extent to which they answer the research questions. Their suggestions on the improvement of the instruments were considered. The researcher determined the reliability of the instruments through split-half technique, which required only one testing session bearing in mind the aspect of time. The Cronbach's reliability coefficient was calculated and an average of 0.82 established across all the Likert scale questions, the data collection instruments were therefore considered reliable. Both descriptive and inferential techniques were used to analyze the quantitative data, this was aided by Statistical Package for Social Sciences (SPSS). Qualitative data was analyzed using content analysis. Ethical considerations were observed during the survey: no harm to respondents, anonymity, confidentiality and beneficence.

6. Findings of the study

This study recorded and overall of 100.0% return rate which was considered very good for analysis, interpretation and generalization.

Respondent Bio-data

Table 1: Bio-data of the respondents

Characteristics	Categories	Percentage/Proportion
Respondents gender	Male	130(52.8%)
	Female	116(47.2%)
Respondents age	20-29	30(12.2%)
	30-39	71(28.9%)
	40-49	84(34.6%)
	50-60	55(22.4%)
	Above 60	5(2.0%)
Respondents level of education	0-Level	96(39.8%)
	A-Level	13(5.3%)
	Diploma	56(22.8%)
	Bachelors degree	20(8.2%)
	Masters degree	4(1.6%)
	Other Professional Qualification	57(23.4%)

Majority of the respondents were males at 130(52.8%) while the minority of the respondents was females at 116(47.2%). Majority of the respondents were of age bracket 40-49 at 84(34.6%).The least number of respondents were of age bracket 60-above at 5(2.0%).

Majority of the respondents had an O-Level qualification at 96(39.8%) with a few having a master's degree qualification at 4(1.6%).

Likert scale statements were developed to assess the views of the respondents on infrastructure development and growth of early childhood development centres in Bondo Sub-county, Kenya. This was done on a 5 Likert scale where, 1 - Strongly agree 2-Agree 3-Undecided 4 –Disagree 5-Strongly disagree.

Stakeholder's Attitude towards Infrastructure Development and Growth of Early Childhood Development centers

Table 2: Opinions on Stakeholder's Attitude towards Infrastructure Development

Responses	Agree	Neutral	Disagree	Mean	SD
The office of the president has a positive attitude towards infrastructure development in this area	112(45.5%)	45(18.3%)	89(36.1%)	2.91	1.173
The county government has a positive attitude towards infrastructure development in this area	180(73.2%)	20(8.1%)	46(22.8%	2.31	1.003
The ministry of education has a positive attitude towards infrastructure development in this area	135(54.9%)	30(12.2%)	81(32.9%)	2.75	1.160
The parents in this school have a positive attitude towards infrastructure development in the school	181(73.6%)	16(6.5%)	49(20%)	2.31	1.070
The NGOs/CBOs around this school have a positive attitude towards infrastructure development in the area	193(78.4%)	27(11%)	26(14.2%)	2.19	.812
The faith Based organization/Churches in this area 6have a positive attitude towards infrastructure development in the area	177(71.9%)	17(6.9%)	52(21.1%)	2.39	.999
The community around the school has a positive attitude towards infrastructure development in this area	192(78.1%)	11(4.5%)	43(17.5%)	2.24	.958
Mean of Means				2.44	

Majority of the respondents said that they were undecided on whether the office of the president has a positive attitude towards infrastructure development in this area(Mean=2.91).Most of the respondents agreed that the county government has a positive attitude towards infrastructure development in this area(Mean=2.31).Majority of the respondents were undecided on whether the Ministry of Education has a positive attitude towards infrastructure development in this area(Mean=2.75).The preponderance of the respondents to agreed that the parents in this school have a positive towards infrastructure development in the school(Mean=2.35).It was common among the respondents to agree that the NGOs and CBOs around the school have a positive attitude towards infrastructure development in the area(Mean=2.19).The bulk of the respondents agreed that the faith based organization /Churches in the area have a positive attitude towards infrastructure development in the area(Mean=2.31).It was widely held that the community around the school has a positive attitude towards infrastructure development in the area(Mean=2.24).

The findings were line with the Republic of Kenya(2010) that the fourth schedule of the constitution places pre-primary education and child care facilities under the county governments. The 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. The finding contradicts that of Ojwang (2015), he noted that most of the stakeholders such as parents had a negative attitude towards involvement in infrastructure development. They are of the idea that it is the role of the government to facilitate development and not them hindered them from being directly involved in the development process.The findings converge with those of Namuyu (2007) who established that the school project donors included parents, NGOs and CBO the government through the Ministry of Education and Community Development Funds (CDF), the projects undertaken by SMC included classroom construction, latrine construction, classroom renovation, desk provision, hiring of teachers, education tour for pupils, drilling boreholes, feeding programme, tree planting, fencing of school compounds, water tank construction and purchase of instruction materials. However a the findings of this study diverges with those of Mucheni (2007) which revealed that the church sponsors were not contented with the role assigned to them in the Education Act hence a somehow negative attitude. They demanded for a greater role in areas such as financial management, infrastructural development and autonomy in appointment of support staff. There was uncertainty whether the office of the president and the ministry of education's have a positive attitude towards infrastructural development of the ECD centers could be a result of low awareness levels among the respondents, according to UNESCO (2005) ECD is under the responsibility of the Ministry of Education Science and Technology (MOEST). Currently ECD is under the county governments.

Asked to explain the extent to which stakeholders' attitude towards infrastructure development influenced the growth of Early Childhood Development centers, the Bondo sub-county DICECE Officer said that the stakeholder attitudes towards infrastructure development have influenced the growth of ECD centers in Bondo to a large extent. The DICECE officer said that the stakeholders have had a positive attitude towards and this has seen them contribute significantly to ECD infrastructural development leading to growth of ECD centres. This diverges with Ojwang (2015) that most of the stakeholders such as parents had a negative attitude towards involvement in infrastructure development. In the study, Ojwang reports that AEO, the DQASO officer said that: "The attitude of the stakeholders affects their involvement in infrastructural development differently. Positive attitude towards infrastructural development rises when there is full involvement of the members in the infrastructure development process."

Correlation between stakeholder's attitude towards Infrastructure development and Growth of ECD Centers

Table 3: Correlation between stakeholder's attitude towards Infrastructure development and Growth of ECD

		ECD Centers' Growth	Stakeholder attitude on infrastructure dev.
ECD Centres' Growth	Pearson Correlation	1	.120*
	Sig. (2-tailed)		.028
	n	246	246

Stakeholder attitude on infrastructure dev.	Pearson Correlation	.120*	1
	Sig. (2-tailed)	.028	
	n	246	246
*. Correlation is significant at the 0.05 level (2-tailed).			

The study reveals that there was a significant weak positive relationship between stakeholder's attitude towards Infrastructure development and Growth of Early Childhood Development Centers (N=246,C.L.=95%,r=0.120*, p>0.05).This means that positive attitude among stakeholders on infrastructure development would positively affect the growth of ECD centers in Bondo Sub-County. The relationship was found to be significant meaning that stakeholder attitude on infrastructure development was critical in explaining the variations in the growth of ECD centers in Bondo Sub-County. This finding is in line with those of Ojwang (2015) who noted that attitude affects the extent to which stakeholders are involved in the infrastructural development. A study was carried out by Roy (2008) to examine the attitude towards school infrastructure of students in primary schools. The study found that attitude determined the extent to which members were motivated to use infrastructure as well as maintain it. Another study carried out by Gallagher, Ferreira and Convery (2005) on the public attitude towards solid waste landfill infrastructure showed that there was a correlation between attitude and the development of the infrastructure.

Policy on Infrastructure Development and Growth of Early Childhood Development Centers

Table 4: Opinions on Policy on Infrastructure Development

Responses	High Extent	Average Extent	Low Extent	Mean	SD
The ECD policy 2006 calls for a collaboration of parents, government, NGOs, etc in supporting the ECD sector to support learning, to what extent do you observe these stakeholders collaborating?	70(28.4%)	119(48.4%)	57(23.2%)	2.94	.959
The constitution of Kenya calls for free and compulsory, to what extent has the government developed infrastructure to support the ECD education?	39(15.9%)	90(36.6%)	117(47.6%)	3.39	.944
The basic education act calls for coordination of all relevant agencies to ensure that all the barriers to the right to quality basic education are removed, to what extent are barriers to ECD education removed in this area?	66(26.8%)	113(45.9%)	67(27.2%)	3.07	.906
The second medium term Plan calls for the establishment of ECDE resource centers in each of the 47 counties, to what extent are ECDE resource centers established in this area?	45(18.3%)	96(39%)	105(42.7%)	3.40	.963
The national Education Support Plan NESP establishes the DICECE for purposes of in servicing teachers, to what extent is the DICECE support this school?	64(26%)	132(53.7%)	50(20.3%)	3.00	.892
To what extent do your school policy on teaching and learning support infrastructure development?	101(41%)	121(49.2%)	24(9.7%)	2.55	.914
Mean of Means				3.06	

The best proportion of the respondents rated the collaboration of the parents, government, NGOs in supporting the ECD sector to support learning at an average extent(Mean=2.94).It was popular among the respondents to rate to an average extent the development of the infrastructure by the government to support the ECD education as stipulated in the Kenyan constitution(Mean=3.39).A greater proportion of the respondents said that the barriers to ECD education according to the basic education act had been eliminated to average extent(Mean=3.07).Majority of the respondents said that ECD centers have been established in the 47 Counties according to the medium term plan to an average extent(Mean=3.40).It was popular among the respondents to say that DICECE support their schools which is established by the National Education Support Plan has been to an average extent(Mean=3.00).Majority of the respondents noted that the school policy on teaching and learning has supported infrastructure development to a average extent(Mean=2.55).

These findings converge with those of Ojwang (2015) where majority of the head teachers (88.9%) indicated that the policies put in place by the government encouraged training of head teachers' involvement in infrastructural management and development 85.2% of the head teachers also indicated that they were aware of the policies put in place by the government on infrastructure development in public schools, they mentioned that the policies were helpful. Kagan's (2004) also asserted that policies that guide all the activities and programmes associated with the development of early childhood development Centres plays a key role on the performance of these Centre's. Asked to comment briefly on how policy on infrastructure development does influence growth of ECD centers, the sub-county DICECE Coordinator said that the policy guideline is there but that it does not specifically address infrastructural development. In explaining the ECD policy context at the county level, the DICECE Officer noted that ECD has been devolved to the counties. Consequently there has been construction and establishment of ten new ECDE centers through funding. The finding is supported by that of Ojwang (2015) that in terms of resource mobilization plans, majority of the head teachers (74.1%) indicated that the school has a resource mobilization plan and policies which aid infrastructure development policies Majority of the head teachers (81.5%) were positive by agreeing that the available policies encouraged the involvement of teachers in mobilizing resources for infrastructure development.

Relationship between policy on infrastructure development and growth of ECD centers

Table 5: Relationship between policy on infrastructure development and growth of ECD centers

		ECD Centers' Growth	Policy On Infrastructures Dev
ECD Centers' Growth	Pearson Correlation	1	.067
	Sig. (2-tailed)		.223
	n	246	246
Policy on Infrastructures Dev	Pearson Correlation	.067	1
	Sig. (2-tailed)	.223	
	n	246	246

It was established that there was an insignificant, very weak positive relationship between policy on infrastructure development and growth of ECD centers (N=246, C.L.=95%,r=0.067, p>0.05).This meant that improvement in policy making and its implementation would positively affect the growth of ECD centers in Bondo Sub-county. The relationship was found to be insignificant meaning that policy on infrastructure development was not critical in explaining the variations in the growth of ECD centers in Bondo Sub-county.

Financial Allocation on Infrastructure Development and Growth of ECD centers

Table 6: Opinions on financial allocation on infrastructure development

Responses	*Adequate*	*Average*	*Inadequate*	*Mean*	*SD*
How would you rate the Ministry of education allocation of funds for infrastructure development	18(7.3%)	48(19.5)%	180(73.2%)	4.01	.945
How would you rate the county government allocation of funds for infrastructure	41(16.6%)	71(28.9%)	134(54.5%)	3.53	1.021
How would you rate the amount of funds the school management sets aside for infrastructure development	14(5.7%)	19(19.9%)	183(74.4%)	4.00	.860
How would you rate the amount of funds the school receives from sponsors to support infrastructure development	21(8.5%)	43(17.5%)	182(74%)	3.92	.951
How would you rate the amount of money paid by parents as school fees	21(8.5%)	69(28%)	156(63.5%)	3.76	.920
Mean of Means				3.84	

Majority of the respondents rated the financial allocation for infrastructure development by the Ministry of Education, the Siaya County Government and the School management as inadequate (Mean=4.01, 3.53 and 4.00) respectively. The amount of funds the school received from sponsors to support infrastructure development was also deemed inadequate by most of the respondents (Mean=3.92).Majority of the respondents rated the amount of money paid by parents as school fees as average/neither adequate nor inadequate (Mean=3.76).

These findings support those of Ojwang (2015) who established that PTA, BoM members and AEO, DQASO and DEO reported that the key sources of funds for infrastructure development in primary schools include parents, CDF funds, government allocations and MoEST but this was still inadequate. The findings of the study is also supported by those of Ojwang (2015) he noted that major sources of funds for school furniture and infrastructure include parents' contributions (66.7%). Parents' contributions (66.7%) are the major sources funds used in facilitating the development of kitchen facilities in schools. An overwhelming majority of the head teachers (93%) indicated that the funds provided for infrastructure development were not adequate. This findings also converge with the findings of Tokington (2001) that there was little financial commitment by governments to development of ECDs and provision and financing were left to the civil society. The findings of the study converges with those of Tokington (2001) who noted that there were many ECD projects and programs in Africa but were uncoordinated, underfunded and many were of low quality and that the majority of them depend on the support of NGOs, national and international organizations for their existence. Given that the funding by donor NGO was also rated as inadequate, the infrastructural developments could be seriously underdeveloped.

Asked about how allocation on infrastructure development influences growth of ECD centers in Bondo Sub-county the Bondo sub-county DICECE Officer said that financial allocation has a positive influence on infrastructural developments on condition that the funds are managed well. This converges with the findings of Ojwang (2015) who established that majority of the head teachers 17 (63%) were in agreement that the availability of funds did influence infrastructure development in their respective schools to some extent. This was further supported by a third of them 9 (33%) who indicated that it did influence to a greater extent. DICECE Officer expressed concern over the unabated trend of misappropriation of funds meant for ECD centre construction which have left a number of structures incomplete. He said corruption has been a deterrent to the growth of ECD in the sub-county. He further said "*the fund allocations have been inadequate and so most of the ECD infrastructures are in bad state while expansion is very minimal*. "This is supported by the assertions of Elcher (1989) that primary school physical infrastructure funding has been a challenging undertaking especially due to scarcity of resources and capacity constraints. The Bondo sub-county DICECE officer suggested that to avert these challenges, all ECDE centers need allocation for infrastructure development according to their unique financial needs. The DICECE officer r suggested that the allocation should be channeled through the Ministry of Education, science & technology and not through the Member of Constituency Assemblies. DICECE Officer further supported the opinion by saying that the funds need to be disbursed directly to schools from MoEST without being channeled to the county government because it has lot of bureaucratic processes besides breeding corruption.

Relationship between financial allocation on infrastructure development and growth of ECD centers

Table 7: Relationship between financial allocation on infrastructure development and growth of ECD centers

		ECD Centers' Growth	Financial Allocation on Infrastructure Dev.
ECD Centers' Growth	Pearson Correlation	1	-.031
	Sig. (2-tailed)		.570
	N	246	246
Financial Allocation on Infrastructures Dev.	Pearson Correlation	-.031	1
	Sig. (2-tailed)	.570	
	N	246	246

The study revealed that the there was an insignificant weak negative relationship between resource allocation on infrastructure development and growth of ECD centers (N=246,C.L.=95%,r= -0.031,p>0.05).This meant that increase in financial allocation would negatively affect the growth of ECD centers in Bondo. These findings converge with those of Ojwang (2015), who established that availability of funds did influence infrastructure development in their respective schools to some extent.

Management of Infrastructure Development and Growth of ECD

Table 8: Views of respondents on infrastructure development

Characteristics	Categories	Percentage/ Proportion
Presence of management body at the ECD centre	Yes	222(90.24%)
	No	24(9.76%)
Management oversight on infrastructure development of the ECD centre	Yes	214(87.0%)
	No	32(13%)
Effectiveness of oversight role of management on infrastructural development in ECD centers	Very effective	26(10.6%)
	Effective	80(32.5%)
	Average	89(36.2%)
	Ineffective	26(10.6%)
	Very ineffective	25(10.2%)
Frequency of school management meeting on infrastructure development in the ECD centers	Once a year	30(12.20%)
	Once a term	165(67.07%)
	Once a month	36(14.63%)
	Every week	8(3.25%)
	Never	7(2.85%)

Majority of the respondents at 220(90.16%) mentioned that they had a management body while. 213(87.30%). respondents said that they have a management body that oversees infrastructure development of the ECD centre .Most of the respondents rated the oversight role of the management in infrastructure development as average at 88(36.07%). Two thirds of the respondents said that the school management met once a term to discuss infrastructure development in the school at 164(67.21%).

This finding converges with those of Keith (2001) that the BOM has oversight in infrastructural development besides, administration, staffing, communication, financial allocations and instrumental programs. Majority of the respondents rated the oversight role of the management in infrastructure development as average, this according to Ojwang (2015) means that most of the BOMs in Bondo were professional, in his study majority, 93 percent of the teachers respondents indicated that BOMs who were professional were more effective than those who were non-professional. This finding converge with that of Mogute (2013) where the board of management met regularly to discuss matters touching on teaching and learning resources and 60% of the members of the SMCs regularly attended the meetings.

Relationship between school management role on infrastructure development and growth of ECD centers

The researcher used Pearson Correlation analysis to establish the magnitude and direction of the relationship between school management role on infrastructure development and growth of ECD; the results were as shown in Table 4.16

Table 9: Relationship between school management role on infrastructure development and growth of ECD centers centre's

		ECD Centers' Growth	Management Role
ECD Centers' Growth	Pearson Correlation	1	.040
	Sig. (2-tailed)		.466
	n	246	246
Management Role	Pearson Correlation	.040	1
	Sig. (2-tailed)	.466	
	n	246	246

The study revealed that there is an insignificant weak positive relationship between school management role on infrastructure development and growth of ECD centers (n=246,C.L.=0.05,r=0.040,p>0.05). This meant that enhancing management practices on infrastructure development would lead to an improvement in the growth of ECD centers in Bondo Sub-county. The relationship was insignificant meaning that the role of the school management on infrastructure development is not critical in explaining changes in the growth of ECD centers in Bondo Sub-county.

The Bondo sub-county DICECE Coordinator mentioned that school management plays an integral role in ensuring the growth of ECD centers in the area. He further explained that "*the management of ECD has been informally entrusted to the School Board of Managements who have not been discharged their roles effectively to improve infrastructure*." This finding converges with that of Namunyu (2012) that the school management committees had taken upon themselves to construct and renovate classrooms, provide desk, fence school compound and even hire volunteer teachers in an effort to supplement government effort of enhancing teaching and learning resources. "*There is no clear policy on who manages infrastructure in ECD . This has negatively affected the growth of ECD centers since some of the funds meant for the ECD centres are diverted or is misappropriated*" said the DICECE officer. This finding converges with that of Maureen (2009) weak governance structures by the SMC characterized by low capacity to plan, allocate and execute budgets, weak internal controls, poor management and supervision of funds, absence of external accountability (including audits), and distorted incentives considerably increase the opportunity for mismanagement and corruption.

7. Conclusions

County government, parents NGOs and CBOs, faith based organization /Churches and community around the school had a positive attitude towards infrastructure development in the area. It is also deduced that positive attitude among stakeholders on infrastructure development would positively affect the growth of ECD centers in Bondo Sub-County.

The researcher infers that the policies on infrastructure are in place and are supportive of the ECD growth in Bondo Sub-county. Nonetheless there is still a gap in the implementation of those policies for the realization of optimal growth of ECD centers in the Sub-county. The researcher also infers that an improvement in policy making and its implementation would positively affect the growth of ECD centers in Bondo Sub-county.

The researcher concludes that financial allocations for infrastructural development by the financiers have been inadequate and the few funds getting to the schools have been seemingly mismanaged. This has been a hindrance to the growth of ECD centers in Bondo Sub-county.

The researcher supposes that majority of the centers had management bodies which were largely effective in overseeing infrastructural development of ECD centers in Bondo Sub-county, their role has however been restrained by inadequate finances. The researcher also supposes that enhancing management practices on infrastructure development would lead to an improvement in the growth of ECD centers in Bondo Sub-county.

8. Recommendations

1) The county governments ought to bring together education stakeholders and have their positive attitudes consolidated and actualized in practice by putting in place measures to enhance infrastructural growth of Early Childhood Centers in Bondo Sub-county.
2) The Ministry of Education and the county governments have a duty to sensitize education stakeholders on the policy guidelines on ECD and encourage their active participation in policy implementation for better growth outcomes of ECD centers in Bondo Sub-county.
3) Parents and relevant stakeholders to advocate for increased financial allocations for infrastructural development of ECD centers in Bondo Sub-county since the current allocation is inadequate. Meanwhile the government and schools need to put controls in place to ensure prudent and effective use of finances allocated for infrastructural development of ECD centers including putting transparency and accountability mechanisms in place.
4) The national and county governments in partnership with development partners should build the capacity of the school boards of management on effective management practices and resource mobilization strategies for ECD infrastructural development.

9. Areas for Further Research

The study established that the county government is increasingly playing a significant role in the growth of ECD centers in Bondo Sub-County in terms of stakeholder participation, policies, financial allocation and ECD management. With the current gobvernmnment structure in Kenya, where management of ECD is devolved to the counties, it is therefore important to investigate the influence of devolution of ECD management on the growth of Early Childhood Education in Bondo Sub-county.

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