

Influence of Teacher Supervision on Quality Early Childhood Development and Education in Nyamira-North Sub-County, Nyamira County, Kenya

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ABSTRACT

The purpose of the study was to establish the influence of teacher supervision on the quality of early childhood development and education. The study adopted a descriptive survey design. The study targeted 97 ECDE Centres. A simple random sampling technique and a purposive sampling technique were used to select the respondents. Data was collected using a questionnaire and interview guide. The reliability of the instruments was estimated at 0.83 by the use of Cronbach's Alpha Correlation Coefficient. The hypothesis was tested at alpha $\alpha = 0.05$ using Chi-square model and simple linear regression. Qualitative data analysis from the interviews was categorized according to the themes based on the research hypothesis. Descriptive such as mean, standard deviation, percentages and frequencies was also used. The findings of the study revealed that the decentralized teacher supervision function has a significant influence on the quality of ECDE in Nyamira South Subcounty of Nyamira County, Kenya with chi square value $\chi^2 = 42.655$ and $P < 0.00$ with 11.4% variation. The study recommended that decentralized government should ensure regular supervision of ECDE teaching and learning to improve the transition and participation rate and competence achievement among ECDE learners.

Key Words: Supervision, Decentralization, Quality, Early Childhood Development and Education, Competence, Transition rate.

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INTRODUCTION

Children under the age of eight are catered by Early Childhood Development and Education (ECDE), which is known internationally for its crucial intervention in the life of children. ECDE promotes the overall developmental milestones of a child which include: physical needs, cognitive, linguistic, social and emotional needs aimed at building a strong underpinning of the lifelong learning and well-being of all children's development. The teaching and learning experiences at the first level of schooling for children are central to growth and development and prepare children for higher levels of education which is the realization of one's potential in life. The provision of high-quality ECDE promotes a vital factor aimed at every learner to thrive in learning.

According to the Oxford Advanced Learner's Dictionary, quality is defined as the ideal nature of a thing when it is linked to something of the same nature; how decent or

indecent a thing may be or its fitness for use. According to Woodhead and Blatchford (2009), quality ECDE refers to the extent of the ideal that is seen in the various programs intended to enable children's growth, development and learning experiences. Moreover, quality may be perceived as the well-being of the programs in achieving the stated goals. Quality education provided in early childhood will support the success for further development and learning. According to the report by World Bank (2006), children receiving quality standards of ECDE are more likely to succeed in subsequent academic years. From this observation, it was clear that questions about quality ECDE and decentralization arise when reasonably thinking about the future education of Kenyan citizens.

Early childhood is clearly described by UNESCO (2015) as a time between birth and age eight, a remarkable period when the brain develops most rapidly and

represents the true beginning of formal education for all children. The quality of care and education that a child receives at this crucial age determines to a great extent the level of his or her physical and cognitive development in the future. The importance of early years is perceived as the cornerstone of a person's life which was highlighted at The World Conference of Education for All (EFA), conducted in Jomtien Thailand in March 1990. EFA goal number one demands that the County Governments be assigned the sole responsibility to expand and boost in-depth preschool education programs which are considered important for the realization of Basic Education goals. Additionally, all children should acquire a decent flinch in life, according to the 2002 World Fit for Children Conference, which advocated for quality nurture, care, and self-environment. The Kenyan government adopted the EFA goals in the constitution of Kenya which was promulgated in 2010 that decentralized management of early childhood development and education and bestowed upon the county government the supervision role. The curriculum support officers from the county governments of Kenya are supposed to regularly supervise teachers and offer guidance and motivation required for quality teaching and learning. Decentralization of ECDE has been practiced in many countries like Ethiopia, South Africa and Zimbabwe.

In Zimbabwe for instance, decentralization of ECDE was unsatisfactorily integrated as reported by Gutuza and Tshabalala (2015) where they observed that supervision of ECDE is ineffectively conducted by primary school heads which contributed to low-quality ECDE services. Further Gutuza and Tshabalala (2015) recommended that the physical facilities be assessed, and teachers be guided on lesson's performance and delivery. There should be plans for a program of supervision of teaching and learning process for ECDE classrooms. The supervision of ECDE teachers in Kenya is decentralized and the County government coordinates supervision functions in order to provide quality care and education. Similarly, in Kenya, a study carried out by Kiilu (2018) on the role of county governments in the implementation of early childhood development education in Machakos County recommended that supervision should be implemented and carried out regularly in accordance with the established policy guidelines to ensure implementation of quality ECDE. The researcher explored the status of decentralized function of teacher supervision on quality Early Childhood Development and Education in Nyamira – North Sub County, Kenya.

The purpose of the study was to establish the Influence of Teacher Supervision on Quality Early Childhood Development and Education in Nyamira-North Sub-County, Nyamira County, Kenya.

Research Objective

To determine the influence of teacher supervision on quality Early Childhood Development and Education in

public Centres in Nyamira-North Sub-County, Nyamira County.

Research Hypothesis

The hypothesis was tested at $\alpha = 0.05$ significant level.

H₀1: There is no statistically significant influence of teacher supervision on quality Early Childhood Development and Education in public Centres in Nyamira-North Sub-County, Nyamira County.

The decision for rejecting or accepting the null hypothesis was based on the reference to a p-value computed from Chi-square analysis. Null hypothesis was to be rejected if p-value was less than $\alpha = 0.05$ level of significance; and accept null hypothesis if p-value equals or greater than $\alpha = 0.05$.

LITERATURE REVIEW

Teacher supervision refers to regular and ongoing activity of monitoring the teaching and learning to make sure the intended aims, goals and objectives of the curriculum are met (KIE, 1995). Before the promulgation of Kenyan constitution 2010, the ECDE teacher supervision was tasked to National Center for Early Childhood Education at national level and District Center for Early Childhood Education at the district level. The constitution of Kenya 2010 required that ECDE teacher supervision be decentralized to the County government. The curriculum support officers from the county government were charged with the responsibility of monitoring the processes of teaching and learning, offering guidance and motivation required for quality teaching and learning of ECDE learners. With sufficient oversight from education officials, quality is ensured and it is anticipated that children will grow up physically healthy as cited by Cherotich (2018). Teacher supervision process has been found to be an essential ingredient for quality ECDE. Scholars across the globe have studied issues concerning teacher supervision at ECDE level with mixed findings.

In England for example, a study was conducted by Anita (2019) on opportunities for development and the supervision strategy utilized in early childhood education. The article looked at how supervision practices have changed across a range of early childhood education and care (ECEC) programs that are available. ECEC supervision was made a legal requirement starting in 2012 in England. The study used a mixed-methods research approach that included a questionnaire ($n = 38$) and three subsequent telephone interviews to identify key themes regarding who is utilizing supervision, the frequency of use, the goals, difficulties, and enablers of supervision. It emphasizes the tendency for the managerial function of teacher supervision to predominate the protection of children and the potential for supervision to serve as a space for reflection and as support for staff, including managers

and other employees. The study used a small sample size which was opportunistic sample. The current study sought to investigate decentralized function of teacher supervision on quality ECDE in Kenya and used a representative sample size and mainly targeting the current status.

Similarly, an investigation was conducted on the practices and challenges of Early Childhood Care and Education in Addis Ababa by Assefa (2014), which adopted descriptive survey design emphasizing on quantitative approach as compared to qualitative approach. Assefa (2014) collected data from 11 kindergartens using a variety of methods. A population sample included 11 principals, 77 teachers, 44 parents/guardians, and two pre-primary education experts. Questionnaires, Focus Group Discussions, interviews, and observations were used as data collection tools. The information collected through interviews and focus group discussions was transcribed, analyzed, and triangulated with quantitative data. The findings of the study reported that limited support system of teacher supervision was the barrier of the kindergartens that may affect the quality of education in ECDE. A collaborative study was necessary in Kenya to support or refute the claim in Nyamira County of Kenya. Relatedly, a study conducted by Ngode (2014) established the effects of supervisory activities on the implementation of early childhood education curriculum in public pre-school in Langata District, Kenya. The research focused on 8 public preschools. All primary school head teachers and preschool teachers in the sampled schools were considered as the respondent, along with representatives from all four district divisions, Quality Assurance and Standards Officers (QASO), and three District Center for Early Childhood Education (DICECE) officers. Descriptive survey design was considered to examine the level of engagement in supervision by the primary school head teachers, preschool teachers, QASOs and DICECE officers. Questionnaires were used to collect data from QASOs, DICECE officers, primary school head teachers and preschool teachers. The study concluded that the teacher supervision for curriculum implementation was unsatisfactorily done which compromised the quality of education in ECDE. The current study sought to determine the influence of decentralized supervision on the provision of quality ECDE.

Additionally, supervision enhances quality instructional process as reported by Akumu (2013) as cited in Owala et al. (2016), a study on effect of classroom supervision and the quality of instruction among primary school teachers in Rangwe Division, Homabay sub county. Stratified sampling techniques were utilized to determine the sample size of 180 teachers from public primary schools used and a correlational research design. Questionnaires were considered as data collection tools and raw data was then analyzed using descriptive and inferential statistics. According to the study's findings, effective and efficient teaching affects teacher

performance which has a significant correlation with supervision. They recommended the strengthening of the subcounty inspectorate body and adequate funding for routine school inspections. Regular school visits will encourage teachers to attend class more frequently and early in order to avoid diverting their attention from looking for greener pastures. It would be insufficient to generalize that county governments provide adequate supervision of ECDE.

Teacher supervision has not been adequately handled as reported by a study on the influence of prospects and challenges facing the devolved system of government in the provision of Early Childhood Development Education in Bomet Central Sub-County, Kenya (Cherotich, 2018). Descriptive survey research design was employed and both quantitative and qualitative methodologies were adopted. The sample size was 65 early childhood development education teachers and 52 head teachers. Observation checklists and questionnaires were used to collect the main data. According to the study by Cherotich (2018), County Government representatives lacked the necessary equipment for inspection and assessment of ECDE services and this state has led to a high level of Early Childhood Development Education teachers' demotivation and turnover. The current study sought to establish the link between the decentralized functions and quality ECDE in the counties presumably feeling that earlier studies remedied the challenges.

Similarly, inadequate supervision may be as a result of improper preparation of supervisors which compromises quality education as reported by a study on effectiveness of instructional supervision by quality assurance officers on the quality of education in secondary schools in Nairobi and Machakos counties, Kenya (Gitonga, 2019). The study considered an ex post facto survey design and both qualitative and quantitative methods were employed. The two counties where the study was conducted were chosen using purposive sampling, while the schools were chosen using stratified and simple random sampling. The study's main finding was that the effectiveness of QASOs in teachers' instructional supervision was insufficient. The study found in particular that teachers believed QASOs had only partial technical and conceptual competencies, that they did not adequately prepare to conduct supervision on instructional process in schools and spent the majority of the time inspecting professional records prepared by teachers. The supervisors did not satisfactorily improve instructional teachers' pedagogy and competencies in utilizing instructional resources. The supervisors had not led to the best possible use of instructional materials. It is stimulating to establish whether the county structures of supervision of ECDE supersede the QASO systems of supervision.

Teacher supervision is an important element to guide ECDE teachers during instructional process as pointed out in a study on factors affecting the supervision of Early Childhood Education curriculum in schools by Kogo (2018). The research was conducted in the Nandi Hills

Table 1: Supervision of ECDE Teachers and Quality ECDE.

Statements	Teachers			Headteachers		
	N	Mean	Std. Dev	N	Mean	Std. Dev
There is regular supervision by curriculum support officer that enable teachers to correct errors that has promoted quality ECDE.	147	2.95	1.05	49	2.69	1.12
county government approach lead to teachers' motivation that has enhances learners smooth transition rate to improve quality ECDE.	147	2.69	1.01	49	2.61	1.04
The County government approach on supervision has helped teachers to attend to duty regularly to promote quality ECDE.	147	3.31	1.01	49	2.80	1.08
Curriculum support office holders provide guidelines on quality education ECDE.	147	3.94	0.86	49	3.86	1.27
Curriculum support officers highlight areas of improvement which has impact on quality ECDE.	147	3.80	0.95	49	3.44	1.24
Curriculum support officers observe teachers in classrooms which has improved quality ECDE	147	3.37	1.14	49	2.80	1.15
Curriculum support officers checks professional documents which has greatly improved quality ECDE	147	4.01	0.92	49	3.41	1.34
Mean		3.43			3.08	

Division of the Nandi East Sub County. Descriptive survey design was adopted. The sample size was comprised of 32 teachers, 32 head teachers, and 20 field officers. Questionnaires and interview schedule were employed as the major data collection research tools. According to Kogo (2018), all ECDE centers had professional records of work, schemes of work, progress records and academic attendance records. It was found that ECDE teachers did not have lesson plans during lesson delivery. Although these professional documents were available, a majority lacked depth and detail about the documents. The records of work had comments such as 'done' or 'covered'. In other cases, the comments columns were ticked. The lesson notes had not been endorsed by the head teachers and lacked an outline. It was evident that the teachers prepared the professional document for the sake of supervision needs and not as a tool for ensuring quality.

Research Design

The study adopted a descriptive survey research design to determine the influence of decentralized supervision functions of County government on the quality of ECDE.

Population and sample

The study population consisted of 97 headteachers of public ECDE Centres, 292 ECDE teachers in entire ECDE Centres in Nyamira-North sub-county and one Sub County Director ECDE making a total of 390, according to Nyamira North Sub-County office, Kenya 2021. The ECDE Centres selected were 50% of 97 which comprised of 49 centers. The researcher adopted a simple random sampling technique to select the ECDE Centres. Three ECDE teachers were selected from the 49 centers to form a sample size of 147. The

headteachers from the Centres were purposively selected to form a sample size of 49 respondents. The Sub County Director of ECDE was a respondent of the study. Purposive sampling of headteachers targeted the respondents who had useful information for the study as discerned by the researcher. The respondents were voluntarily requested to participate in the study. Adequate time was allowed for the respondents before questionnaires were collected for analysis. Appropriate appointment time was sought from the sub county director to refrain from constraining her official duties.

Data Analysis

The researcher double-checked the data collected to ensure that the questionnaires were correctly filled. The items were analyzed with the help of Statistical Package for the Social Sciences (SPSS) software version 26.0. Inferential statistics used to test the hypothesis was Chi Square Model and Simple Linear Regression Model. Descriptive statistics were presented using the mean and standard deviations. Qualitative data was collected using an interview schedule and reported using verbatim descriptions.

RESULTS AND DISCUSSION

The study sought to establish the influence of decentralized teacher supervision on quality Early Childhood Development and Education in public Centres in Nyamira-North Sub-County, Nyamira County. Descriptive statistics were used to analyze the opinion of the teachers and the Headteachers. The study established the opinion of ECDE teachers and that of the headteachers on whether the decentralized teacher supervision by county governments influences the quality of ECDE. The responses are shown in Table 1.

Table 2: Chi-Square Tests.

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.655 ^a	6	.000
Likelihood Ratio	48.241	6	.000
Linear-by-Linear Association	10.797	1	.001
N of Valid Cases	147		

Table 1 above shows that, ECDE teachers and the headteachers were undecided that there is regular supervision by the curriculum support officer that enables teachers to correct errors that have promoted quality ECDE (Mean=2.95, Mean = 2.69 respectively). The respondents were undecided on whether the county government approach led to teachers' motivation that has enhances learners' smooth transition rate to improve quality ECDE (Mean=2.69, Mean = 2.61 respectively). The respondents were also undecided on whether the County government approach to supervision has helped teachers to attend to duty regularly to promote quality ECDE (Mean=3.31, Mean = 2.80 respectively). The respondents agreed that the curriculum support office holders provide guidelines on quality education ECDE (Mean=3.94, Mean = 3.86 respectively). The respondents agreed that the curriculum support officers highlight areas of improvement that have an impact on quality ECDE (Mean=3.80, Mean = 3.44 respectively). However, the respondents were undecided on whether the curriculum support officers observed teachers in classrooms as they supervised teachers and whether it improved quality ECDE (Mean=3.37, Mean = 2.80 respectively). The respondents agreed that the curriculum support officers check professional documents which has greatly improved the quality of ECDE (Mean=4.01, Mean = 3.41 respectively). The overall concept of the teacher on supervision revealed a mean score of 3.43 for the teachers' responses and 3.08 for the head teachers' responses implying that the teachers agree whereas the Headteachers were undecided.

The findings revealed the indecisive position of teachers and headteachers because of the overlapping roles of headteachers and county governments on supervision of ECDE teachers. The government should make the policy on teacher supervision clear and probably vest this responsibility to the headteachers. This may allow the headteacher adequate mandate of ECDE teacher's supervision since they are more available and ready to handle the emerging issues. Otherwise, the supervision of ECDE teachers by the county government should be intensified. The findings concur with Assefa (2014) conclusions that a limited support system for supervision hinders the quality of ECDE in schools.

The findings of the study agreed with the findings by Cherotich (2018) who established that the County Government representatives lacked the necessary equipment for inspection and assessment of ECDE

services and this state has led to a high level of Early Childhood Development Education teachers' demotivation and turnover. This implies that the county government officeholder needs to improve their approach to supervision in order to motivate ECDE teachers to continue promoting quality ECDE.

The researcher further used chi-square analysis to determine whether there is sufficient evidence against the null hypothesis. The mean score values obtained for the questions seeking the quality of ECDE and supervision of ECDE teachers were recoded into categorical variable and the cross-tabulation computed to estimate the association. The results obtained are presented in Table 2.

Table 2 shows the chi-square statistics used to examine the association between the recoded categorical variables; quality of ECDE and the supervision of ECDE teachers by the county government of Nyamira County. There is a significant association at 5% significance level between the variables of quality ECDE and the supervision of ECDE teachers by the county government by the teachers' respondents ($\chi^2 = 42.655$, $df = 6$, $p = 0.00$). Hence the null hypothesis that stated that; there is no statistically significant influence of decentralized teacher supervision on quality Early Childhood Development and Education in public Centres in Nyamira-North Sub-County, Nyamira county was rejected in favour of the alternative hypothesis that there is statistical significant influence of decentralized teacher supervision on quality Early Childhood Development and Education in public centers in Nyamira-North Sub-County, Nyamira County.

To further verify the descriptive statistics, the teacher's responses were subjected to simple linear regression. This was useful to test the second hypothesis of the study which stated that "there is no statistically significant influence of Supervision on quality ECDE in Nyamira - North sub county, Nyamira County, Kenya". The hypothesis was tested using simple linear regression model and tested at a 0.05 significance level. The Model Summary is illustrated in Table 3.

From Table 3, R was obtained as 0.337 in the model table indicating that there is a high level of correlation between the two variables. R square is the coefficient of determination of the proportion of variance in the dependent variable that can be explained by the independent variable of decentralized function of supervision which is 0.114. This implies that 11.4% of variation of quality ECDE is explained by the

Table 3: Model Summary.

Model	R	R-square	Adjusted R-Square	Std error of the estimate
1	0.337 ^a	0.114	0.094	0.92097

Predictor (constant). Decentralized Function of Supervision of ECDE teachers.

Table 4: Estimates Model of Coefficients.

Model	Unstandardized Coefficients		Standardized Coefficients	
	B	Std. Error	Beta	T Sig.
(Constant)	2.859	0.376		7.5950.000
1Supervision of ECDE teachers	0.335	0.139	0.337	2.4030.020

Dependent Variable: Quality ECDE.

decentralized function of supervision. The Estimated Model Coefficient from the model is illustrated in Table 4.

From table 4, the coefficient can be predicted using the equation below:

$$Y = a + bx$$

Where:

Y = Quality ECDE

X = Decentralized Function of Supervision

2.859 = is the constant

0.335 = unstandardized coefficient B

$$Y = 2.859 + 0.335X$$

This shows how much the quality of ECDE varies with supervision. In this case, the unstandardized coefficient B for supervision is 0.335. This implies that an increase in one unit of decentralized function of supervision leads a to 0.335 increase in the quality ECDE. This similarly means a 10% increase in decentralized function of supervision leads to 3.35% increase in quality ECDE. The p-value was 0.02 which is less than 0.05 while the t-value was 2.403 greater than 2.00. Since the p-value is < 0.05 and t is > 2.00, the null hypothesis that stated that there is no statistical significant influence of decentralized teacher supervision on quality Early Childhood Development and Education in public Centres in Nyamira-North Sub-County, Nyamira County was rejected at 95% level of confidence ($\alpha=0.05$). The researcher concluded that there was a statistically significant influence of the decentralized function of supervision on quality ECDE in the Nyamira-North sub-county, Nyamira County, Kenya.

The findings were also supported by Akumu (2013) who established that there was a significant correlation between supervision and effective and efficient teaching which transforms teacher performance. Further, the study recommended that there is a need to call for the strengthening of sub-county inspectorate by sufficiently assigning money to conduct regular inspections in schools.

Thematic Analysis of Qualitative Data

The researcher sought to know the view of the sub-

county director on the performance of supervision in the sub-county influenced quality ECDE which may be indicated by high participation rate, high transition rate, and competences achievement.

Excerpt 1

The researcher sought to know how ECDE teacher supervision in the Sub-County influences the quality of ECDE indicated by participation rate, transition rate and competences achievement. The Sub County Director had reported the following;

Supervision is supposed to be conducted twice per term according to the policy guideline. Supervision is done once per term in some schools or a year or never in a few schools. This is because of inadequate supervisory staff since the county has recruited one officer who is supposed to visit all the schools in the sub-county. This has been a challenge because of the limited financial resources to employ supervisory staff in the sub-county. This challenge has imposed a concern on teachers' preparation of professional documents, demotivation to work and lack of adequate information which may lead to low participation, low attendance rate and low achievement of competencies necessary at the pre-primary level.

From the study findings, the study is in agreement with Kiilu (2018), study on the role of county government in preschool implementation in Machakos county. The study concluded that there was a strong correlation between teacher supervision and the implementation of Early Childhood Development Education. Further, the study found that the respondents strongly approved that Early Childhood Development Education teachers were not satisfied with the county government's approach to teacher supervision.

Conclusion

The study concluded that there was an influence of decentralized teacher supervision on the quality of ECDE. This could be attributed to teacher supervision carried out on all ECDE Centres in the Sub County according to the policies outlined by the County government on decentralized ECDE management.

However, it's worthy of note that the supervision is inadequately done due to constraints of the number of supervisors per sub-county and adequate training on the required teacher supervisory skills.

Recommendations

The recommendation was made based on the study findings and conclusions that the Nyamira county government should consider passing bills in the county assembly to ensure that ECDE teachers are regularly supervised and make the policy on supervision clear and probably vest this responsibility on the headteachers.

REFERENCES

- Anita S (2019). Opportunities for development: the practice of supervision in early years' provision in England. *International Journal of Early Years Education*, 27(1): 52-67.
- Assefa EG (2014). Practices and Challenges of Early Childhood Care and Education in Addis Ababa, Avada sub-county Government Kindergartens. MA Thesis in Special Needs Education, Addis Ababa University.
- Cherotich C (2018). Prospects and Challenges facing the Devolved System of Government in the Provision of Early Childhood Development Education in Bomet Central sub-county, Kenya. M.Ed thesis submitted to Moi University.
- EFA Global Monitoring Report (2007). Strong Foundation: Early Childhood Care and Education.
- Gutuza RF, Tshabalala T (2015). The Impact of the School Heads in Supervision of Early Childhood Development Centres in Mutare Urban District Schools. *Global Journal of Advanced Research*, 2(7): 1133-1140.
- Gitonga SM (2019). Effectiveness of Instructional Supervision by Quality Assurance Officers on Quality of Education in Secondary Schools in Nairobi and Machakos Counties, Kenya. A thesis submitted to Kenyatta University.
- Kiilu MB (2018). Role of County Government in Implementing pre-primary School Education in Machakos County, Kenya. M.Ed project report submitted to Kenyatta University.
- Kogo JL (2018). Factors Affecting Supervision of Early Childhood Education Curriculum in Schools. *International Journal of Recent Research in Social Sciences and Humanities*, 5(3):1-5.
- Ngode LA (2014). Impact of Supervision on the Implementation of Early Childhood Education Curriculum in Selected Public Pre-Schools in Lang'ata District, Nairobi County, Kenya. A Research project submitted to the University of Nairobi, Kenya.
- Owala ZM, Odongo B, Raburu AP (2016). Motivational factors influencing teachers' job performance in preschool centres in Kenya. *International Journal of Innovative Research and Development*, 5: 121-132.
- UNESCO (2015). EFA Global Monitoring Report 2015: Education For All 2000-2015: Achievements and Challenges.
- Woodhead M, Blatchford SI (2009). Early childhood in focus: effective Early Childhood programmes. London: Open University.