

Influence of Early Childhood Development and Education Teachers' Professional Qualifications on Learner Competencies in an Integrated Public Primary School System in Embu County, Kenya

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Abstract: - Early Childhood Development and Education (ECDE) play a crucial role in setting direction of the children physically, socially, emotionally and cognitively for school life. It lays crucial resilient foundation for children in their life. The programme gives a chance for the child to develop competencies necessary for transition to Grade 1. Teacher professional qualification among many others is a single reliable variable that determines the child's acquired competencies. At this stage children identify and depend on those close to them virtually on everything. The purpose of this study was to establish the influence of ECDE teachers' professional qualifications on children learning in early childhood development centres integrated in public primary schools in Embu County, Kenya. A total of 381 centres in public primary schools in Embu County were targeted. Stratified random sampling was used to select the schools for the study from the five sub-Counties. The main tools for data collection were a questionnaire, document analysis and observation schedule to yield both qualitative and quantitative data. Descriptive research was used to analyse data with the aid of the computer soft ware package SPSS. The study found that ECDE teachers' professional qualifications had an effect on learners in early childhood development and education learning. Based on the results, the study recommends that teachers handling ECDE classes should be equipped with relevant competencies and skills for handling learners preparing to transit from ECDE classes to grade one encouraging growth of the child holistically. The relevant departments within the Ministry of Education and the county government of Embu should monitor ECDE centers and ECDE teachers' training colleges on how they instruct them on how to handle children's growth especially in the competencies required in the society they live in. This would ensure smooth transition of pupils from ECDE classes to other grades and complete the purpose of mainstreaming of ECDE learning in primary schools.

Keywords: ECDE Learning, ECDE Teacher Professional Qualifications

I. INTRODUCTION

According to the World Bank (2010), Early Childhood Development (ECD) refers to the physical, cognitive, linguistic, and socio-emotional development of a child from the prenatal stage up to age eight. Part of the setting in which this development occurs is the school where children are taught necessary competencies to empower them with life

skills. Therefore activities ranging between childcare to education are handled within the stage. The ministry of education in Kenya encourages mainstreaming of Early Childhood Development and Education (ECDE) at public primary schools to promote a healthy mind and body of the targeted child as it interacts and socializes with children of older ages. Early childhood Development and Education is therefore a programmatic service that broadly combines education and care in one seamless experience (Republic of Kenya, 2015).

Early Childhood Development and Education (ECDE) teacher professional qualifications reflect the type of knowledge and skills that ECDE teacher graduates have acquired in formal schooling. It also indicates how much specialized and practical training they have added since their initial pre-service or in-service training. It further shows the type of professional development and education they have taken up in their career development during many years of the teaching exercise. The spirit is quality of teaching staff facilitate better learning outcomes (OECD, 2015).

In a study on the early childhood care and education in Kenya, Mbugua (2012) found that there were no properly organized in-service training programmes for untrained teachers. Gatumu and Kathuri (2017) in their study found that ECDE teachers have not been fully trained on competency programmes. However, it is only a teacher with competency skills and strategies on effective teaching that can add value to the process of learning at the early years of learning. Early Childhood Development and Education teachers should be exposed to continuous professional development through in-service training for those untrained practicing ECDE teachers and on new approaches to those who are already trained (Fives, 2003).

Integration of ECDE system in primary schools is faced with various challenges. There are generally inadequate trained teachers on competencies required by the children at this stage, inadequate instructional materials and high teacher-pupil ratio among others. These are variables that affect internal efficiency in an educational system. The variables

will impact on the children's access, equity and quality of education acquired (Republic of Kenya, 2005).

The Annual Report by the Ministry of Education, Science, Technology and ICT for the period 2013-2014 of Embu County Government showed that a majority of the schools lacked necessary teaching-learning materials for quality learning at ECDE centres integrated in primary schools. The report further indicated that a number of ECD teachers in Embu are employed using result slips. The other challenge in the report is on varied qualifications. Some of the teachers possess the District Education Centre for Early Childhood Education (DICECE) certificates others were trained on Montessori system the two approaches are quite different in methodology and competency areas. There was no evidence of training in the Life Skills Programme among the ECDE teachers. The variations in the training will easily compromise the type of competencies and skills teachers imparted to the learners. This concern formed a basis of this study.

Purpose of the study

This study sought to establish the influence of ECDE teachers' professional qualifications on learners' competencies in an integrated public primary school education system in Embu County

Objectives of the study

To realize the purpose of the study two objectives were formulated to guide the study;

- a. to establish the influence of ECDE teachers' professional qualifications on learners in grade one in integrated public primary schools in Embu County
- b. to examine how the ECDE teachers' professional training influence the content delivery in ECDE class.

Research questions

The following research questions were used to address the objectives

- i. How do teachers' professional qualifications influence the learners' competency in grade one in integrated public primary schools in Embu county?
- ii. To what extent do teachers' professional qualifications influence the content delivery to learners in ECDE class?

II. METHODOLOGY

The study adopted cross-sectional survey research design to assess the influence of ECDE teachers' professional qualification on learner competencies in early childhood development and education in integrated public primary schools in Embu County, Kenya. The study targeted all the 381 ECDE teachers in the integrated public primary schools in Embu County.

Simple proportionate random sampling was used to select schools for the study from the five sub counties namely

Mbeere North, Embu West, Embu East, Mbeere South and Embu North. Ten percent of the schools from each sub county were considered for the study. In total 10 schools in Mbeere North, 4 schools in Embu West, 7 schools in Embu East, 14 schools in Mbeere South and 4 Schools in Embu North were sampled for the study. From each school sampled a further simple random sampling was used to select ECDE teachers and the lower primary school teachers. A total of 40 ECDE teachers and 40 lower primary school teachers and 40 head teachers were sampled and participated in the study.

This study used questionnaires to get information from head teachers, lower primary teachers and ECD teachers on teacher professional qualification and influence it has on learner competencies in their respective schools. The document analysis was done to get more information on the teachers' qualification levels and influence it has on learner competency. The researcher examined school records and other documents that were relevant, such as admission records, pupils class attendance registers, staff attendance register, inventories, personnel records, store ledgers, examination records, log book, and end of the year completion register. The researcher used observation schedule so as to collaborate the responses from the different categories of the respondents. with a view to obtain information on teacher qualification level and the influence it has on learner competency in readiness to be promoted from pre-primary to primary in the sampled schools. descriptive research methods were used to analyse and present data collected from the field.

III. FINDINGS OF THE STUDY

i. Demographic characteristics of the respondents

Data on age, gender, academic qualification and teaching experience of the ECDE teachers was sought. This aimed at establishing whether opinion of the ECDE teachers across all ages, gender, academic qualification and years of teaching experience were representative and their opinions reliable. A majority of the ECDE teachers who participated in the survey were males (62%) leaving only 38 percent female. This shows that the majority of the ECDE teachers in integrated primary schools in Embu county are male unlike the belief that ECDE teachers are usually female.

In regard to age, ECDE teachers across all age groups from 20 to 60 participated in the study. It was established that a majority of them (90%) are between 30-40 years of age leaving out only 10 percent from other age groups. This age group is considered mature with hands on experience on matters pertaining to child care. A majority of the members in this age bracket have their own children.

On academic qualifications, the results showed that ECDE teachers with diploma and university degrees formed the bulk of them at 57 percent while those with certificates were 43 percent. This shows that there is varied level of competency among the ECDE teachers. This finding concurs with that by Gatumu and Kathuri (2017) who in their study found out that ECDE teachers have different qualifications though working

to the same course of imparting same competencies to the young children.

ii. *Findings on the research questions*

The first reach question of the study sought to find out on how the teachers' professional qualifications influenced the learners' competency in grade one in integrated public primary schools in Embu county?

It was prudent to inquire from the ECDE teachers the competencies imparted to the learners as they qualified to enter grade one. Respondents were asked to indicate the level of performance of the learners in various competencies in mathematics and languages either English or Kiswahili. The finding on this item is reported in table 1.

Table 1a: learners' competency in Counting numbers mathematical operations

Competency	ECDE teachers		Lower primary teachers	
	Freq.	%	Freq.	%
Count numbers up to 100	40	100	38	95
Add two digit numbers to 100	40	100	38	95
Subtract two digit numbers to 100	36	87.5	30	75
Multiply two digit numbers upto 100	28	70	22	55

Table 1a reveals that the learners qualifying to grade one were rated differently by the ECDE teachers and the lower primary school teachers. The two teachers seem to agree that the learners exhibited acquisition of competencies in counting and mathematical calculations to the same level except two lower primary school teachers who found them not able to count up to 100 and add two digit numbers competently. The other mathematical operations especially multiplication seem to have been a challenge. Thirty percent and 45 percent of the ECDE and lower primary school teachers found the learners transiting to grade one not being competent.

The two schools who rated the learners as not able to count and add two digit numbers were identified and a trace done to establish the catchment area of their grade one learners. The teachers (ECDE) in those schools had 40 years of teaching experience but lacked training in ECDE. They had no professional certificate.

Table 1b: Level of learners' competency in recognition of geometrical shapes

Competency	Shapes	ECDE teachers		Lower primary teachers	
		Freq.	%	Freq.	%
Recognize shapes	Triangle	40	100	38	95
	Square	35	87.5	30	75
	Circle	40	100	38	95
	Rectangle	35	87.5	28	70

Draw shapes	Triangle	35	87.5	30	75
	Square	25	62.5	20	50
	Circle	40	100	38	87.5
	Rectangle	25	62.5	21	52.5

When it come competencies in recognition of geometrical shape table 1b shows that only 70 percent of respondents in all categories were comfortable that learners would recognize and draw the shapes correctly. This finding is correlated with finding on the qualification of the ECDE teachers. The findings on academic qualification indicated that 53 percent of the ECDE teachers had diploma and above which is not very much varied from the 70 percent minimum response level in this category. The high academic qualifications influenced the skill competency acquisition by the learners. This concurs with results of the Effective Provision of Pre-school Education (EPPE) study from England . The report on Early Childhood Education and Care (ECEC 2019) indicated that a higher level of education is associated with higher pedagogic quality by ECDE teachers. The finding also to confirm the finding by Howes, James & Ritchie (2003) who found out that that ECDE teachers with bachelor's degrees were the most effective practitioners when it came to classroom management as measured within classrooms through stimulation, responsiveness and engagement of the children in learning activities.

Table 1c: Reading levels among learners

Competency	Task	ECDE teachers		Lower primary teachers	
		Freq.	%	Freq.	%
Read fluently	Letters of the alphabet	40	100	40	100
	2 letter word	35	87.5	30	75
	3 letter word	30	75	25	62.5
Read fluently	2 letter sentence	30	75	25	62.5
	3 letter sentence	30	75	20	50

Table 1c gives the findings on how the ECDE teachers and the lower primary school teachers rated the learners on the reading competency. A hundred percent of the learners were able to read the letters of the alphabet fluently. However when it come to two and three letter words even the ECDE teachers themselves accepted that some could not read fluently. On average 60 percent of the teachers rated the learners as not being able to read two and three letter words fluently. The finding again resembles that in table 1b.

Table 1d: Writing skill competency among learners

Competency	Task	ECDE teachers		Lower primary teachers	
		Freq.	%	Freq.	%
Write	Alphabet	38	95	33	82.5
	2 letter word	30	75	26	65
	3 letter word	30	75	20	50
	2 word sentence	30	75	24	60
	3 word sentence	30	75	20	50

Writing was another skill competency expected of the ECDE learners as they entered grade one. Table 1d indicates that the learners exhibited varied levels of competencies in writing. On average again 60 percent of the respondents were comfortable with the level writing by the learners. However the three letter sentences proved hard to many as only 75 percent and 50 percent of the ECDE and the lower primary school teachers rated them as competent. The finding is similarly likened to the one in table 1b, teachers' professional qualifications influenced the writing competency among the learners.

The second research question looked at the extent to which ECDE teachers' professional training influenced their delivery of content to learners in integrated public primary schools.

To determine this, the ECD teachers were asked to indicate whether their professional qualification enables them to teach well in class.

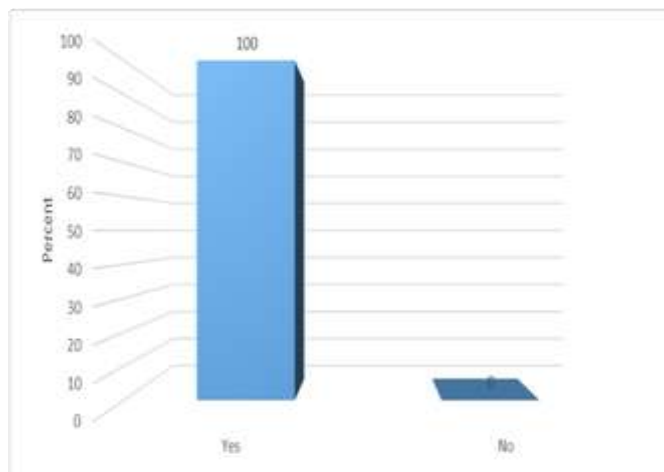


Figure 1: Whether ECDE teacher professional training enables delivery in class

From the responses, all the ECD teachers (100%) indicated that their professional training enables them to teach and deliver content to learners in ECD classes.

It was found necessary to gather more information on this response. It was obvious however none of the ECD teachers would down grade their own qualifications on what they do.

The researchers therefore sought to ascertain the reasons as to why teachers felt they are competent enough to handle ECD classes. The teachers were asked to select appropriately from three choices; having enough knowledge and experience, standard ones being able to read the content of class one well and familiarity with children.

Table 2: Reasons for ECD teachers feeling adequate to handle ECD classes

Statement	Frequency	Percent
I have enough knowledge and experience to handle grade one	35	87.5
My children when they enter grade one they are able to read the content of class one well	38	95
My children when they enter grade one they are familiar with the subjects being taught	30	75

Table 2 shows that the majority of teachers 95 percent felt that when their children enter grade one, they are able to read and understand the content well. All in all 75 percent and above teachers felt they have the necessary competency and qualifications in content delivery to their learners. This could be attributed to their professional qualifications. This further concurs with Bean-Mellinger (2018) who observed that trained ECD teachers deliver well to learners in class.

IV. CONCLUSIONS

From the study findings it is conclude that ECDE teachers' professional qualifications are very important and determine the quality of competencies acquired by learners in early childhood development and education.

VI. RECOMMENDATIONS

Although most ECDE teachers in Embu County are qualified to handle ECDE learning, the Ministry of Education, and Embu County government need to set mechanisms for monitoring training ECDE colleges to ensure that uniform approach to ECDE is maintained.

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- [12] that did not have an official ministry of education seal and two teachers had referrals from Kenya National Examination Centre for Early Childhood Development Education (KNECECDE) examinations. This was an indication of inadequacy of trained teachers in the County.