

Website: www.jriiejournal.com

ISSN 2520-7504 (Online) Vol.8, Iss.2, 2024 (pp. 149 – 161)

# Parental Role in Providing Learning Materials for Numeracy Acquisition among Pre-Primary II Learners in Suba Sub-County, Kenya

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Abstract: Education is an important adventure in the progress of human life and there are numerous elements attached to its effective achievement, one being the availability and use of learning materials. This paper analyzes role of parents in providing learning materials for numeracy acquisition among Pre-Primary II Learners in Suba Sub-County, Kenya. A pilot study was done in Mbita sub-County to establish validity and reliability of the research tools. The study used Descriptive Survey research design and two sampling techniques to select participants: purposive and simple random sampling. The study was guided by two theories: Cognitive Load Theory by John Sweller, and Social Interaction Theory by Lev Vygotsky. Target population for the study was 199, which comprised Early Year Education coordinator, Early Year Education zonal supervisors, head teachers and pre-primary II learners' parents. A sample size of 63 respondents was selected; 52 participated with response rate of 82.5%. Questionnaires and Interview Schedule were used to collect data. Discourse analysis and Statistical Package for Social Sciences (SPSS) were used to analyze qualitative and quantitative data respectively. The study established that learning materials influenced acquisition of numeracy skills, despite less involvement of parents. The study further revealed that there was inadequate learning materials in most pre-primary centres. The study recommends that parents should be involved by the school administration to provide learning materials. Parents should be encouraged to provide learning materials. A further study needs to be conducted on "effects of education level of pre-school learners' parents on provision of learning materials."

Keywords: Learning, Materials, Numeracy, Acquisition, Pre-primary, Learners, Parental.

#### How to cite this work (APA):

Mikidas, E. O., Bitok, E. & Syonthi, J. (2024). Parental role in providing learning materials for numeracy acquisition among Pre-Primary II learners in Suba Sub-County, Kenya. *Journal of Research Innovation and Implications in Education*, 8(2), 149 – 161. <u>https://doi.org/10.59765/prywb4295</u>.

# **1. Introduction**

World Bank (2011) report asserts that education is important in all societies of human habitation, from basic to postgraduate level and that, as individual's level of education rises, their earning power also increases. Murdoch (2018) further enhances this by pointing out that learning is best when there are ways in place to reinforce what is learnt. This can be done by repetition, body movement, notes and etcetera. But ideally, learners should be in a position to remember, integrate and apply what they learn. This can be effectively done through incorporation of learning materials, among other strategies, by involving key stakeholders such as parents.

Nations around the world are becoming aware of the importance of early childhood education. This is because mastery of literacy skills from early age is associated with successful academic career of the learner (Fila, 2014). In any given country, education is the key to national

development and pre-primary stage should be the bedrock upon which other education levels build (Assefa, 2014). The success of any learning outcomes in any country is based on different approaches, one of which is the use of learning materials.

The government of Guyana has put much emphasis on the use of learning materials (Ministry of Education, Guyana, 2016). Such emphasis has been due to the role played by using instructional resources in the learning process. The government strongly recommends that use of learning materials should regularly be encouraged during lessons. Teaching aids engage students' other senses since there are no limits in what teaching aids can be utilized when supplementing a lesson. Much of the teaching and learning resources used in Guyana are: graphs, charts, flashcards and audio-visual resources.

In South Africa, parents are brought on board to discuss ways of helping learners. Teachers involve most parents in consultation meeting in order to learn about the progress of their children. As much as most early years' centres are located in the rural area, nevertheless, most parents endeavour to participate whenever they are invited. Only fewer parents reported that they could not easily attend these meetings because they were working far. These are clear indicators that the need to involve parents in the education of their children at an early stage was crucial and imperative (Malete, 2013).

In Ethiopia, public pre-schools classrooms are crowded and there were no interest corners with learning materials. There were no adequate text books in private pre-primary schools whereas the kindergartens had sufficient learning equipment in the classrooms. These learning materials aided the learners to acquire knowledge regarding their culture and the world at large. There were inadequate outdoor materials in public kindergartens (Yibeltal & Tessega, 2020). This shows that there is a dire need to incorporate learning materials during lessons.

In Kenya, the findings of Wanjohi (2018) revealed that use of learning materials encouraged manipulation as learners gain access to knowledge, skills and attitudes. The foregoing source further points out that inadequacy of materials hinders teachers in the organization of lessons and dissemination of knowledge to the learners. Acute shortage of learning resources slows the process of learning and deprives the learner of what was set to be learnt and impedes acquisition of skills and knowledge (Ibid).

A study by Abuom (2020) in Homa Bay, Kenya found that most parents were not seriously involved in the education of their children at the early stage due to ignorance. The study further revealed that, there were also inadequate learning materials. These include inadequate exercise books, markings and playing materials. Such challenges and existing situation occasioned the need to conduct the study from which this paper has been drawn. The study investigated the parental role in the provision of learning materials (LMs) for acquisition of numeracy skills among pre-primary II learners in Suba sub-County.

# **1.1 Statement of the Problem**

Learning outcomes can majorly be measured by the level of achievement by the learner on what has been taught. Major methods used in teaching and learning among Early Years Education (EYE) learners are demonstration and manipulation of concrete materials. However, such learning activities cannot be effective to warrant the desired learning outcomes if the learning materials are inadequate. This is because the learner should be able to individually manipulate real learning materials, or share within a smaller group. Manipulating learning materials arouse curiosity in the learners and gives strong urge on the need to acquire attitudes, skills and knowledge. Inadequate availability of learning materials impedes learning process among pre-primary II learners to a greater extent.

Access to learning materials has been difficult in the entire education sector for quite a while in Kenya. Following devolution implementation, changes have been witnessed in the education sector such as Early Years Education (EYE) being devolved. Although the devolution nature of governance in the county has enhanced provision of learning materials in EYE centres, there is still not enough to suffice learners. This, in turn, has caused disparity in funding EYE in the counties across the nation. Once there is such fiscal disparity, it is clear that provision of learning materials suffers inadequacies, a situation which is prevalent in many EYE centres in Suba sub-County, Kenya.

Few studies that had been done on learning materials scarcely address parental role in providing learning materials to pre-primary II learners. For instance, in Kiambu, Wanjiru (2014) established that government funding was not enough as parents were still required to provide learning materials to their children. Okongo, Ngao, Rop and Nyongesa (2015) addressed the role of learning materials in inclusive education in Nyamira North sub-County. Were (2014) in Rachuonyo South established that there was dire need to use learning materials, which was also in line with the establishment of Onyango (2015). A study by Abuom (2020) established that Early Years Education was faced with the challenge of inadequate learning materials in Homa Bay County which encompasses Suba sub-County.

# **1.2 Theoretical Framework**

The study from which the paper is crafted was guided by two theories: Cognitive Load Theory (CLT) by John Sweller (Heick, 2017) and Social Interaction Theory (SIT) by Vygotsky. CLT holds that because short-term memory is limited, instructional design can be used to reduce working memory load. The CLT considers that learners undergo different stages in learning, particularly in terms of age. CLT argues that in the process of learning, the teacher may engage the learner with overwhelming information and workload. In this case, when instructional materials are not utilized during the learning process, there would be more workload than what the learner can be able to accommodate considering the age (Sweller, 2005).

Social Interaction Theory (SIT) was also used to supplement Cognitive Load Theory (CLT). Use of SIT helped the study to understand the dynamics of social interaction during the learning process. Vygotsky first stated that people learn through interaction and communication with others. SIT argues that social environment plays a vital role in the learning process. SIT suggests that learning takes place as learners interact with their peers, teachers and other experts. In order to create a desirable learning environment, Vygotsky (1962) holds that teacher should always endeavor to create a learning environment. The set environment should stimulate and maximize the learner's ability to interact with one another through discussions, collaboration, and feedback.

Use of SIT was occasioned by its major tenets. For instance, it enables learners to work together on a given task as learners develop across the curriculum. The other tenet of SIT is that teachers choose meaningful and challenging tasks for learners to work on. Lastly, instructors promote Socratic dialogue that encourages deeper learning. Socratic dialogue involves the approach of questioning and answering. In enhancing the arguments of SIT, Vygotsky argues in favour of language as the main tool in the learning process. This promotes thinking, develops reasoning and supports activities such as reading, writing and numeracy (Vygotsky, 1978). As a result, instructional strategies that promote literacy plays key role in the construction of knowledge during the learning process.

# 2. Literature Review

The role of parents in the education of their children is a key determinant of their total functioning as well as the future successes. They are always one step forward and think about the coming stage of their child (Jaiswal, 2017). When parents show and take a personal interest in the education of their children, the child gets a stronger

message that education is important to success in life (Jackson, 2010). Within this understanding, Malete (2013) adds voice that teachers and parents should regard themselves as partners in the education of the child.

Koch (2018) conducted a study in USA and found that parents were not, as required, involved in the education of their children at an early stage. The study revealed that for the parents to actively participate in the education of their children there was need to induct them on their roles. Workshops proved to be the most effective method used in educating parents on their roles in participating in the education of their children. Through such, parents were given information about early literacy practices.

The findings of a study by Tadi (2018) in New Zealand, and established that, in most cases, pre-primary school teachers talked to the fathers to monitor the progress of their children. The study revealed that teachers involved fathers by inviting them to attend events at pre-primary centres. Most parents affirmed that they had been asked by the teachers to provide help in aid of the learners. The centres had also designed activities which were targeted at informing fathers on the need to increase their involvement with the learning of their children.

The revelation of a study by Fagbeminiyi (2011) in Nigeria which revealed that lack of education of the parents negatively interferes with their involvement in the education of their children. Those who are illiterate did not just allow their children to go to school to experience early years' education. They also engaged in outdated practices such as "if the child's hand does not touch the other side of the ear", then she/he cannot start schooling since the child is seen as young and not yet mature enough to commence schooling.

Belay (2017), while conducting a study in Ethiopia found out that most parents were not deeply concerned with education of their children during early years in Ethiopia. The findings indicated that most parents lacked enough information about how to raise and support the learning of their children in school. Most parents leave for work and businesses very early in the morning and come back late when the children are already asleep. For this reason, they lack ample time to be with their children. This shows an extreme lack of attention to the learning progress of their children.

In regard the findings of a study done in South Africa, laxity of parents in the provision of learning materials. Out of the 30 parents interviewed, 17 were not contributing learning materials to their children. What they mostly contributed were toys used for learning. Most parents who were not contributing were residing in the rural areas whereas those who contributed were living in the urban areas. This shows that economic constraints and poverty impedes quality provision of learning materials hence low quality of learning outcomes (Malete, 2013).

Ikunyua (2012), in a study conducted in Kenya, established that good communication ensured that children were well connected with the school teachers and parents. Again, the study found that, when parents actively communicate the teachers, level of interaction of their children increases in school. Communication between the parents and the school enabled the school administration to easily relate. Such situation of interaction greatly brought understanding when it comes to supporting the pre-primary children in providing learning materials for the learners.

# 3. Methodology

### **3.1 Research Design**

Research design refers to the structure of research that gives guidelines towards achieving the desired objectives (Kombo & Tromp, 2011). Research design also provides a complete guideline for data collection, selecting approach for research, designing sampling plan and the related questionnaires as well as structure and technique to obtain answers to examine inquiries (Kothari, 2014; Kumar, 2011). Descriptive survey research design and mixed approach method was used in this study. This involved qualitative and quantitative methods. The researcher asked questions as well as observing the behaviour of the respondents during the interview process. The study from which this paper is generated was done in Suba sub-County of Homa Bay County, Kenya.

# **3.2 Target Population and Sample Size**

The study targeted a total population of 199 which comprised head teachers, EYE sub-County Coordinator, EYE zonal supervisors and parents. The study sampled 63 respondents and the summary is shown in Table 1.

#### **Table 1: Target Population and Sample Size**

Category	Sampled	Response	Percentage (%)
Head Teachers	97	29	30
EYE Zonal Supervisors	4	4	100
EYE Sub County Coordinator	1	1	100
Pre-primary II learners' parents	97	29	30
Total	199	63	31.6

#### Source: Author (2021)

# **3.3 Sampling Procedures**

The study employed purposive sampling to select EYE sub-County co-ordinator and zonal supervisors since they had more specific information compared to a larger population like that of teachers. Head teachers and Preprimary II learners' parents were selected using 30% procedure and simple random sampling (Orodho, 2009).

### **3.4 Pilot Study**

Before carrying out the actual study, a pilot study was done in Mbita sub-County. The researcher administered questionnaire to 10 respondents. These were not part of the sample size and as well not within the study area population. The purpose of the pilot study was to assess and evaluate the relevance and effectiveness of the data collection instrument designed for the study. The primary objective of this approach was also to check the clarity of the content of the data collection tools. The questionnaires were distributed to the 10 respondents as follows: three head teachers, three EYE teachers, two lead teachers, one zonal inspector and one sub-County supervisor. Relying on the feedback obtained from the pilot study, guidance from the supervisors was sought. This resulted into some adjustments in the data collection tools. In a nutshell, the main purpose of conducting a pilot study was to ensure validity and reliability of the data collection instruments.

# 3.5 Validity and Reliability

As has been mentioned earlier, validity was ascertained by conducting a pilot study. Validity of the instrument was tested by doing a pre-test. Later, sections that were found to contain ambiguity in the framing of questions were corrected. Questions that appeared to be having similar responses and overlapping were merged to reduce unnecessary repetitions. This was done by consulting the concerned experts in the field such as supervisors. Eventually, this enabled the researcher to come up with a suitable tool for data collection. A research instrument is considered reliable for the study if it produces consistent results upon replication (Kombo & Tromp, 2011). During the same period in which validity was tested, the first test for reliability was also conducted. Reliability was measured by using a test-retest approach. This means that the data collection instruments were administered again after a time interval of two weeks and referred to as "test-retest" approach. The obtained results were compared with the initial ones to check the level of consistency by using Pearson Product-Moment Correlation formula. The results were gauged and ascertained that the instruments were qualified for use in the study.

### **3.6 Data Collection Procedures**

Data collection procedures were approached in three steps. In the first step, the researcher made a pre-visit to the sampled schools in order to acquaint oneself with the respondents. During this period the researcher arranged with them when to meet and recorded this on the diary the agreed dates and time. This helped the researcher to keenly follow when to interview them. Secondly, the researcher shared the agreed dates and time with the Research Assistants (RAs). Lastly, the researcher embarked on person-to-person interview with the sampled participants. Semi-structured questionnaires and Interview Schedule (IS) were used in the collection of data, and English language was used in the collection of data. The respondents were asked questions according to the themes of the stated objectives. Thematic collection of information assisted the researcher in the sorting and organizing data during analysis.

### **3.7 Data Analysis**

The collected data was organized, sorted, grouped and analyzed. To enable logical conclusion, discourse analysis was used in the analysis of qualitative data (Bhatia, 2018). This gave in-depth understanding of the response given by the participants. Statistical Package for Social Sciences (SPSS) version 23 and Microsoft Excel 2007 were used to analyze quantitative data. The findings were presented by pie charts, tables of frequency and bar graphs.

# 3.8 Ethical Considerations

Ethics refers to behavioral standards that differentiate between acceptable and unacceptable actions (Rensik, 2015). Collection of data requires that certain regulations should be followed. This involves ethical concerns, which are vital for effective accomplishment of any given study. The researcher therefore got authorization letter from Kisii University which enabled the National Commission for Science, Technology and Innovation (NACOSTI) to grant the research permit. The other authorization letter was obtained from the County government of Homa Bay. The participants gave their informed consent before being interviewed. The researcher also assured the respondents of privacy that the information provided would not be disclosed to anyone. The respondents were also assured confidentiality (that unauthorized persons would not access the information given). Lastly, the respondents remained anonymous since their identities remained unknown as the data collection instruments were only assigned numbers.

# 4. Results and Discussion

### **4.1 Response Rate**

The researcher sampled 63 participants for the study. However, 52 respondents participated in the study. A detailed summary of response rate is shown in Table 2.

Category	Sampled	Response	Percentage (%)
Head Teachers	29	24	82.8
EYE Zonal Supervisors	4	4	100
EYE Sub County Coordinator	1	1	100
Parents	29	23	79.3
Total	63	52	82.5
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**Table 2: Response Rate of the Participants** 

#### Source: Author (2021)

From the above table, out of 29 sampled head teachers, 24 returned completed data collection instruments. All the 4 sampled Zonal Supervisors and the 1 Sub-County EYE Co-

coordinator returned complete Interview Schedule (IS) feedback. The researcher also investigated the ages of these respondents as shown in Table 3.

Response	Frequency	Percentage (%)	
18- 25 years	0	0	
26-35 years	8	27.6	
36-45 years	12	41.4	
46-55 years	4	13.8	
Above 55 years	5	17.2	

Total

Source: Author (2021)

29



Fig. 1: Age of Head teachers, Coordinator, Supervisors and Parents

Considering Fig.1 above, most of the respondents were between ages 36 and 45 years (41%) followed by those who were between ages 26 and 35 years (28%). Those who are 55 years and above registered (17%) while those who were between ages 18-25 years were (14%). Duration of teaching experience has been shown on Fig. 2 below.

100



Fig. 2: Duration of Teaching Experience of Head teachers, Coordinator and Supervisors

Majority of respondents were Diploma holders 15 (51.7%). Certificate holders 8 (27.6%) and Bachelor's degree 6 (20.7%). Those who had attained a post-graduate Master's

and Doctorate levels were non-existent since this registered 0% as illustrated in Fig.3.



Fig. 3: Professional Qualifications of Head teachers, Coordinator and Supervisors

From the above, the amalgamated percentage shows that majority (79.3%) of respondents were Diploma and certificate holders. On gender distribution sampled, out of

the 63 respondents, 20 (31%) were female while 43 (69%) were male as shown in Fig. 4.



Fig. 4: Gender of Head Teachers, Coordinator, Supervisors and Parents

#### 4.2 Parental Role in Providing Learning Materials

The researcher analyzed the role of parents in providing learning materials in the acquisition of numeracy skills among pre-primary II learners. Since parents are among key stakeholders in pre-primary school, the need to ask them on their role in the provision of LMs for their children was an imperative concern for the researcher. The researcher interviewed 23 parents using a questionnaire designed in Likert Scale format of the range 1-5. The level of agreement was recorded as 5-Strongly Agree (SA); 4-Agree (A); 3-Undecided (U); 2-Disagree (D); 1-Strongly Disagree (SD). The frequency of responses to the provided statements are recorded numerically in the rows against each statement. There were four statements that the participants were required to respond to, and whose summary is provided in table 4.

Statement	SA	Α	U	D	SD	Ν	Mean	Std Dev
Parents provide learning	3	1	8	9	0	23	4.00	1.187
materials								
Parents prepare LMs for children	7	2	9	4	1	23	4.317	0.746
at home								
Parents and materials	7	2	9	4	1	23	4.317	0.746
development day								
Parents purchase LMs	1	10	5	7	0	23	4.31	0.275
Valid	23							

4: Parental Role in Providing Learning Materials: Frequency of Responses

Source: Author (2021)

Considering the table presented above, it is clear that many parents do not provide LMs to their children as much as they are among key stakeholders in pre-primary education. Majority of the respondents 9(39.1%) disagreed with the statement that "parents provide LMs for their children," 3(13.0%) strongly agreed while 1(4%) agreed. Parents were also asked to respond to the statement, "Parents prepare LMs for their children at home." 7(30.4%) respondents strongly agreed, 2(8.7 %) agreed, 4(17.4%) disagreed, 1(4%) strongly disagreed while 9(39.1%) were undecided. Considering the responses that were generated, it is clear that parents somehow engaged in preparing LMs for their children at home. This might also be a reliable indicator that should the teachers take the initiative to sensitize and involve them, they were bound to respond. The respondents were asked to respond to the statement, "Parents actively participate in the material development day." Majority of respondents 7(30.4%) strongly agreed, 2(8.7 %) agreed, 4(17.4%) disagreed and 1(4%) strongly disagreed. This shows that parents to some extent actively participate in the material development day.

Lastly, the participants were asked to respond to the statement, "Parents purchase LMs to supplement the ones in school." The findings of the study indicated that majority of respondents 10(43.5%) agreed, 1(4%), strongly agreed while 7(30.4%) disagreed. This is indicates that parents were positive in purchasing LMs to supplement those in school. Discussions relating to these findings are presented in the subsequent sub-sections, 4.2.1, 4.2.2 and 4.2.3.

#### **4.2.1 Provision of Learning Materials**

The researcher analyzed the role of parents in providing learning materials in the acquisition of numeracy skills among pre-primary II learners. A total of 23 parents were interviewed. The findings indicated that many parents do not provide Learning Materials (LMs) to their children. Majority of the respondents 9(39.1%) disagreed with the statement that "parents provide LMs for their children." 3(13.0%) respondents strongly agreed with the statement while 1(4%) respondent agreed with the statement. Parents were asked to respond to the statement, "Parents are adequately involved by teachers to provide LMs." Majority 13(56.5%) of them disagreed with the statement. 2(8.7%)respondents strongly agreed while 7(30.4%) agreed with the statement. This implies that teachers did not involve the parents about LMs for their children to the required extent. The findings of the current study concur with earlier findings of Belay (2017) in Ethiopia that there was a strong parental involvement in provision of learning materials, which in turn, enhanced performance of the pre-school learners. Again, the findings of the current study are in agreement with earlier findings of Kasina (2016) and Njoroge (2019) in Kenya that parents were willing to support their pre-school children by providing learning materials. However, text books were still inadequate.

#### **4.2.2 Preparation of Learning Materials**

Parents were also asked to respond to the statement, "Parents prepare LMs for their children at home." 7(30.4%) respondents strongly agreed and 2(8.7%) agreed whereas 4(17.4%) respondents disagreed and 1(4%)strongly disagreed. 9(39.1%) were undecided. Considering the responses that were generated, it is clear that parents somehow engaged in preparing LMs for their children at home. This might also be an indicator that should the teachers take the initiative to sensitize and involve them, they were bound to respond. This is true because the parents were also asked to respond to the statement, "Parents are well sensitized by teachers to provide LMs." In response to this, majority of respondents to the tune of 8(34.8%) disagreed and 1(4%) strongly disagreed. 1(4%) respondent strongly agreed and 5(21.7%) respondents agreed. Comparing the agreed category of responses with the disagreed category, it is evident that many parents are not adequately sensitized by the teachers to provide LMs for their children. The findings of the current study is in agreement with earlier findings established by Frimpong (2021) in Ghana.

# 4.2.3 Parents' Involvement in Material Development

The respondents were asked to give their responses on the statement, "Parents actively participate in the material development day." Majority of respondents 7(30.4%) strongly agreed and 2 (8.7%) respondents agreed to the statement. 4(17.4%) disagreed and 1(4%) strongly disagreed to the statement. This shows that parents to some extent actively participate in the material development day. This could be attributed to the fact that they were already involved in helping in preparing LMs for their children at home. Again, this is an indication that parents were willing to get involved in providing LMs for their children.

The findings of the current study is consistent with earlier findings of Fagbeminiyi (2011) in Nigeria that education level encouraged parental participation in the development of learning materials for their pre-school children. Again, the findings of the current study is consistent with earlier revelation of Marangu (2015) in Kenya that, when parents actively get involved in the learning experiences of their children, there was great improvement in the performance of the learners.

#### **4.2.4 Purchase of Learning Materials**

The participants were asked to respond to the statement, "Parents purchase LMs to supplement the ones in school." The findings of the study indicated that majority of respondents 10 (43.5%) agreed to the statement and 1(4%)of the respondents strongly agreed to the statement. 7 (30.4%) respondents disagreed to the statement. This is an indication that in general, parents were positive in purchasing LMs to supplement those in school. Among the open-ended questions asked in the questionnaire sought to compare level of involvement of educated and uneducated parents in the provision of learning materials for their children. The findings indicated that educated parents were more concerned in the provision of LMs to their preprimary children. The findings of the current study is also consistent with earlier findings of Muthanje, et al (2020) in Embu, Kenya.

# 4.3 Availability of Learning Materials

To ascertain the extent of availability of Learning Materials (LMs) in Early Years Education (EYE) centres, 29 respondents, which comprised the head teachers, the coordinator and the zonal supervisors were interviewed. The findings revealed that, in many pre-primary school centres, there were inadequate learning materials. When different elements were asked, majority (69.2%) of respondents recorded on "available and inadequate." This was followed by "available and adequate" which attracted (16.7%) and "not available" at 14.1%. This indicates that learning materials were available, yet they were greatly inadequate. The findings are presented in Tables 5, 6 and 7. The extent of availability of pencils, ropes, balls, counters and seesaw are shown in Table 5.

Table 5: Availability of Learning Materials				
Resources	Available &	Available &	Not available	
	Adequate	Inadequate		
Pencils	27	2	0	
Ropes	17	8	4	
Balls	0	24	5	
Counters	19	10	0	
Seesaw	3	23	3	
Total	66	67	12	
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Source: Author (2021)

Considering the table, learning materials such as pencils, balls, counters seesaws and ropes were "available but inadequate" in most EYE centres, with the highest response rate of 67(46.2%). 66(45.5%) responded on the category of "available and adequate," 12(8.3%) responded that learning materials were 'not available." Much of LMs that were found to be available and adequate were pencils

27(93.1%) while those who agreed that LMs were available but inadequate were 2(6.9%). This was followed by counters which attracted 19(65.5%) responses. Majority of the respondents 24(82.8%) admitted that balls were available but inadequate. This was closely followed by a seesaw which registered 23(79.3%) of the respondents.

The findings of the study show that pencils were largely available in most pre-primary centres. This could be attributed to the fact that it is one of the main materials used in the pre-school especially from scribbling. Again, pencils perhaps could easily be afforded by most parents. The extent of availability of other LMs such as pictures, swings, felt pens, wall charts, toys and crayons are presented in Table 6.

Available &	Available &	Not available
Adequate	Inadequate	
5	4	0
5	23	1
0	20	9
0	24	5
0	18	11
0	26	3
10	115	29
-	Available & Adequate 5 5 0 0 0 0 0 10	Available &         Available &           Adequate         Inadequate           5         4           5         23           0         20           0         24           0         18           0         26           10         115

 Table 6: Extent of Availability of Learning Materials

Source: Author (2021)

From the above findings, majority of respondents agreed that swings and pictures were in equal ratio of availability and adequacy 5(17.2%) while majority 24(82.8%) admitted that crayons were available but not adequate 26(89.7%) followed by wall charts 24(82.8%) and swings. Majority 11(37.9%) responded that toys were not available followed by felt pens 9(31.0%) and wall charts 3(10.3%). The findings of the current study is supported by earlier findings of Simiyu and Wanjala (2020) in Bungoma, Kenya that, charts were inadequate in some centres. Generally, the majority of respondents 115(74.7%) admitted that LMs were available but inadequate. This was

followed by those who admitted that LMs were not available 29(18.8%) while those who responded on the availability, but adequacy registered 10(6.5%) respondents. Learning materials that are necessary for acquisition of numeracy were indeed inadequate and their provision should be a priority. However, the majority of teachers did not effectively use the available LMs due to pressure of work occasioned by teacher-shortage. The findings on the extent of availability of other types of LMs like photographs, text books, coloured chalks, water colours and scribbling books are presented in Table 7.

Table 7: Extent of Availability of Learning Materials				
Resources	Available & Available & Not avai		Not available	
	Adequate	Inadequate		
Photographs	0	18	11	
Text books	0	29	0	
Colored chalks	0	28	1	
Water colours	0	21	8	
Scribbling books	0	26	3	
Total	0	122	23	



Considering the table above, all the respondents (0) denied that LMs were "available and adequate." Majority 122(84.1%) admitted that LMs were "available and inadequate" while 23(15.9%) asserted, "Not available." This indicates that although learning materials were there but not adequate. 18(62.1%) respondents admitted that photographs were available but inadequate while 11(37.9%) respondents agreed that photographs were not available. Nobody admitted that photographs were available and adequate.

From the findings, it is clear that there is a need to provide more photographs in pre-schools centres since it can effectively arouse the curiosity of learners. Therefore, unavailability of photographs shows that learning was mundane and non-interactive. The findings of the current study is in agreement with earlier findings of Simiyu and Wanjala (2020) in Bungoma, Kenya. The findings of the study revealed that the charts and photographs were insufficient. More LMs should be provided in EYE centres so that acquisition of literacy and numeracy skills can be effectively enhanced and hastened.

On text books, all respondents admitted that these were available 29(100%) but inadequate. This was followed by coloured chalks with 28(96.6%) with 1(3.4%) responding within the same category of "available but inadequate." 26(89.7%) participants responded that scribbling books

were available but inadequate with only 3(10.3%) admitting that the same LMs were not available. 21(72.4%) respondents admitted that water colours were available but inadequate while 8(27.6%) asserted that water colours were not available. The findings of the current study is consistent with the earlier findings of Tety (2016) in Tanzania. The study revealed that there were inadequate textbooks in schools.

## **5.** Conclusion and Recommendations

### **5.1 Conclusion**

The study concludes that many parents were willing to provide LMs to their pre-primary children. The parents also, to some extent, prepared learning materials (LM) for their children at home. Parents were willing to provide LMs, as most of them were also involved in the material development day. As much as schools provided LMs, majority of parents were positive in purchasing LMs to supplement those in school. Education level of parents influenced the extent of their involvement in the provision of LMs. Educated parents as well, were more concerned in the provision of LMs to their pre-primary children compared to the uneducated ones.

Pencils, balls, counters seesaws, and hopes and ropes, were "available but inadequate" in most EYE centres. Locally available learning materials (LMs) were available in large numbers in most pre-school centres. Many of LMs that were "available and adequate" in large numbers were pencils, counters, balls and seesaws. Swings and pictures were few and found to be in equal ratio of "availability and adequacy." Crayons and wall charts were found to be available but highly inadequate. The study concludes that many of the LMs that needed to be purchased were inadequate in most pre-school centres. However, the available LMs were not effectively used due to teachershortage. Photographs were found to be inadequate.

# **5.2 Recommendations**

Based on the findings of the study, the following recommendations are made:

- 1. The study recommends that parents should be involved by the school administration and sensitized on their roles in the provision LMs to their children. This would also demystify their belief that the school provides all the LMs for the children.
- 2. The study recommends that parents who have exhibited exemplary role in provision of LMs to their children should be, identified, recognized

and given incentives to encourage further participation in providing LMs.

# **5.3 Suggestion for further Research**

The paper analyzed parental role in providing learning materials for numeracy acquisition among pre-primary II Learners in Suba Sub-County, Kenya. The study found that educated parents were more involved in the provision of learning materials compared to those that were not educated. Nevertheless, the need to provide learning materials for learners should be a combined effort to both categories of parents. The researcher, therefore, suggests that a study be conducted to assess the effects of education level of pre-school learners' parents on provision of learning materials.

# References

- Abuom, P.O. (2020). Comparative study of implementation of Early Childhood Development of Education in Homa Bay, Kisumu, Migori and Siaya Counties in Kenya. Unpublished Master's Thesis, Kisii University, Kenya.
- Assefa, E. (2014). Practices and challenges of Early Childhood Care and Education in Addis Ababa, Arada sub-City Government Kindergartens. Unpublished Master's Thesis, Special Needs Education, Addis Ababa University, Ethiopia.
- Belay, T.T. (2017). The role of parents' involvement in education of their pre-school children and its relationship with academic performance and development of good manners of their children: the case of selected pre-schools of Kirkos Sub-City, of Addis Ababa. Unpublished Master's Thesis, Addis Ababa University, Ethiopia.
- Bhatia, M, (2018, September 5). Your Guide to Qualitative and Quantitative Data Analysis Methods. Retrieved from https://humanresoftdata.atlant.
- Fagbeminiyi, F.F. (2011). The role of parents in Early Childhood Education: A case study of Ikeja, Lagos State, Nigeria." *Global Journal of Human Social Science*, 11(2), version 10, March 2011.
- Fila, E. (2014). Learning literacy skills in Early Childhood. Retrieved from

https://www.learning-literacy-skills-in-early-childhood.

- Frimpong, O. S. (2021). The role of teaching and learning materials and interaction as a tool to quality early childhood education in Agona East District of Central Region of Ghana. *African Educational Research Journal*, 9(1), pp. 168-178., March, 2021.
- Heick, T. (2017, September 15). What is cognitive load theory? A definition for teachers. Retrieved from https://www.teacherthought.com>learning.
- Ikunyua, A.G. (2012). Impact of parental involvement in Early Childhood Education in children's socialization in Tigania North Division, Tigania East District Preschools. Unpublished Master's Research Project, University of Nairobi, Kenya.
- Jaiswal, S. K. (2017). Role of parental involvement and some strategies that promote parental involvement. *Journal of International Academic Research for Multidisciplinary*, 5(2), March 2017.
- Kasina, K. R. (2016). Parental characteristics influencing the enrolment of Pre-school children in Mwingi Zone, Mwingi Sub-County, Kitui County, Kenya. Unpublished Masters Project, University of Nairobi, Kenya.
- Koch, L. A. (2018). Parent Involvement in Early Childhood Education and its Impact on the Development of Early Language and Literacy Skills: An Exploration of One Head Start Program's Parent Involvement Model. Unpublished Ph.D. Dissertation, Drexel University, USA.
- Kombo, D. & Tromp, L. A. (2011). *Thesis and Thesis Writing: An Introduction*. Paulines Publications Africa.
- Kothari, C.R. (2014). Research Methodology: Methods and Techniques, 3<sup>rd</sup> Edition. Pitman Publishers.
- Kumar, R. (2011). *Research and Methodology: A step-bystep for beginners*. Sage Publishers.
- Malete, M.E.P. (2013). Stakeholder participation in Early Childhood Development in Polokwane Circuit, Limpopo Province." Turfloop Graduate School of Leadership, South Africa.
- Marangu, S. K. (2015). Parental involvement and literacy

of Pre- schoolers in Langata Division. Unpublished Master's Thesis, University of Nairobi, Kenya.

- Ministry of Education, Guyana (2016). Why are teaching. aids important? Retrieved from https://education.gov.gy>teachers>item.
- Murdoch, J. (2018, February 11). What is the importance of instructional materials in teaching? Retrieved from https://www.quora.com>What-is-theimportance-of-instructionalteaching.
- Muthanje, A.K., Khatete, I., & Riechi, A. (2020). Instructional materials provision on learners' participation in early childhood development and education in public primary schools in Embu County, Kenya. *African Educational Research Journal*, 8(2), pp. 248-257. June 2020.
- Njoroge, N. S. (2019). Effects of teaching and learning resources in lower primary school children in the Eastern Zone of Nakuru Municipality, Kenya. *Saudi Journal of Humanities and Social Sciences*. ISSN 2415-6248 (Online).
- Okongo, B.R., Ngao, G. Rop, N. & Nyongesa, W. (2015). Effect of availability of teaching and learning resources on the implementation of inclusive education in Pre-school centres in Nyamira North sub-County, Nyamira County, Kenya. *Journal of Education and Practice*, 6(35), 2015.
- Onyango, G.A. (2015). School factors influencing implementation of Early Childhood Development and Education in curriculum in Kisumu Central sub-County, Kenya. Unpublished Master of Education Thesis, University of Nairobi, Kenya.

Orodho, J. A. (2009). Research Methodology. Masola.

- Rensik, D. B. (2015, December 1). What is ethics in research & why is it important? Retrieved from https://www.niehs.nih.gov/research/resources/bi oethics/whatis/
- Simiyu, C.P., & Wanjala, M. S. (2020). Instructional resources availability and use in Early Childhood Education and Development centres in Bungoma County, Kenya. *European Journal of Education Studies. Volume 7*, Issue 4, 2020.

Sweller, J. (2005). Implication of cognitive load theory for

multimedia learning (Ed.). Cambridge University Press.

- Tadi, P.S. (2018). Fathers' participation in Early Childhood Education in New Zealand.Unpublished Ph. D. Dissertation, University of Canterbury.
- Tety, J. L. (2016). Role of instructional materials in academic performance in community secondary schools in Rombo District, Tanzania. Unpublished Master in Education, Open University of Tanzania, Tanzania.
- Vygotsky, L.S. (1978). *Mind in Society: The development* of higher psychological processes. Harvard University Press.
- Wanjiru, N.W. (2014). Parental involvement and its influence in learning process: A case study of Kambui Primary School for the Deaf, Kiambu County, Kenya. Master's Thesis, The Catholic University of Eastern Africa, Kenya.
- Wanjohi, M. A. (2018). Challenges facing teaching and learning of Science and Mathematics.Retrieved from https://www.schoolsnetkenya.com>.
- Were, P.O. (2014). Effects of teaching and learning resources on pre-school learners' transition to Class One: A case study of Rachuonyo South sub-County, Kenya. *Journal of Education and Practice, Vol. 5*, No. 34, 2014.
- World Bank (2011). Transforming Education in Sri Lanka: From Cut Stones to Polished Jewels. (World Bank Colombo Office, Sri Lanka. Human Development Unit, South Asia Region).
- Yibeltal, J. & Tessega, M. (2020). The implementation of Early Childhood Care and Education (ECCE) in Bahir Dar City administration: A comparative study between private and public pre-primary schools. Social Sciences & Humanities Open. Volume 2, Issue 1, 2020, 100013.