



Original Article

Instructional Materials' Effect on Learners' Literacy Among Public Pre-Primary II in Webuye West Sub-County, Kenya

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Unavailability of instructional materials inhibits the acquisition of literacy competencies among learners at pre-primary level. This study sought to find out how the availability of instructional materials influences learners' literacy among Pre-Primary II learners in public primary schools in Webuye West Sub-County. Descriptive survey research design that adopted mixed methods approach was used. A population of 3,216 respondents that comprised 55 headteachers and their deputies, 109 pre-primary II teachers and 2,997 pre-primary II learners was engaged in the study. From these, a sample of 86 pre-primary II teachers and 341 pre-primary II learners were randomly drawn while 48 head teachers and 48 deputies were sampled using purposive sampling technique. The researcher collected data using questionnaires from deputy headteachers and pre-primary II teachers, interview guide from headteachers and observation schedule from pre-primary II learners. The questionnaires were piloted using test re-test method and a reliable Cronbach correlation alpha index of 0.79 computed. The instruments were adequately validated. Quantitative data was analysed and presented on tables while qualitative data was analysed thematically as guided by the research objectives. The study found out that schools in the study area did not provide adequate and appropriate instructional materials that would equip learners with literacy skills. It further found out that inadequacy of instructional materials affected the acquisition of literacy skills in pre-school learners. The study recommends that the National and County government should provide adequate teaching and learning materials to enhance the acquisition of literacy skills among pre-primary II learners in public primary schools in Webuye West Sub-County. It also recommends that a similar study is carried out in other areas and consider using a larger population and include

more variables such as the role of the teacher in influencing learners' acquisition of literacy skills in pre-primary II level.

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INTRODUCTION

Availability of adequate instructional materials influences the acquisition of literacy skills among learners at pre-primary schools. Observations made by Twoli, Maundu, Muindi, Kiio and Kithinji (2007) and Hallack (2015) established that when teaching-learning aids like audio-visual aids are used, the learning process is enhanced. The foregoing sources further established that there was a marked difference between children who are taught by the use of such teaching-learning aids and the ones taught otherwise. Twoli *et al.* (2007) categorically point out that learning becomes more interesting when pupils play with objects as well as watching others play with the same. It is also necessary that a child is provided with an environment that enables him or her to play freely such as in a good playing ground and spacious classrooms (Montessori, 2013; Fuller, 2015). In his study, Kamau (2012) observed that pre-school children were engaged in play and learning owing to the availed materials such as reading, writing, drawing and colouring, completing puzzles, building blocks, pretend plays and others. He added that cases where play and learning materials were not provided, the learners were not very active. Kamau (2012) further found that the majority of

parents lacked awareness of the provision of learning and play materials which their children needed.

Eshiwani (2013) and Bryant and Anderson (1993) put emphasis on the importance of instructional resources in ECDE centres. They both assert that the availability of academic resources such as books, charts, models and play materials influences the academic performance of the pre-school children. This call for the use of teaching and learning materials in pre-schools more often than in the upper classes to enhance the achievement of literacy competence among the learners. In implementing the curriculum, the availability of resource materials is of central importance for the achievement of literacy competence among pre-school learners. According to Agosiobo (2007), teaching-learning resources offer stimulus variation to the learners and this enables them to concentrate throughout the whole process in learning. Eshiwani (2013) and the Republic of Kenya (2016) argue that the availability of learning resources affects the superiority of learning in the learner, and as such, curriculum implementation cannot be separated from pupils' academic achievement in school. According to Fuller (2016), the availability of quality instructional materials encourages child-centred learning and this enables the learners to

embrace the discovery method of acquiring knowledge and skills by oneself.

Mwoma (2017) points out that print materials for reading in pre-primary will expose learners to the extent that they can learn how to read faster. The availability of textbooks and storybooks was important in enhancing reading among children and that the methodology used by teachers to impart reading skills should be improved. This requires therefore that more learning materials to train the children on how to read and acquire other literacy skills should be provided. According to Asikhia (2010), instructional materials determine the learning outcomes. Asikhia's study agrees with the findings of psychologists who report that human senses account for varying degrees of learning. They estimate that the taste sense accounts for 1%, the sense of touch 1.5%, that of smell 3.5% whereas the sense of sight accounts for 83%. Psychologists further assert that human beings retain 20% of what is heard and 50% of what is seen. This is enough evidence therefore to justify the use of visual teaching aids in teaching-learning. However, the reviewed studies have failed to highlight the major causes of the inadequacy of reading materials and how this discrepancy affects the achievement of literacy competence in pre-school grades, the ECDE. The study, therefore, seeks to find out how the availability of instructional materials influences literacy acquisition of pre-primary II in the study area.

Statement of the Problem

Failure to acquire literacy skills in good time or haphazardly building of a weak foundation for pre-primary learners generally leads to low performance. Additionally, the unstable base in the acquisition of literacy skills during pre-school level gives teachers a hard time handling the same learners in the subsequent grades. According to Bigelow and Tarone (2004), the acquisition of literacy skills remains relatively low in Kenya and Webuye West Sub County whose performance at Kenya Certificate of Primary Education examinations has been relatively poor. A study by Githinji (2017) established that the education level, training of pre-primary teachers and their qualification had an impact on the way children socialize and their cognitive achievement in the

class. It is noteworthy, however, that scholars have failed to show how instructional materials enhances the acquisition of literacy skills among pre-school learners. Whereas much has been researched on pre-primary units, little has been done to investigate how school instructional materials influence the acquisition of literacy skills among pre-primary II learners in ECDE learners. Therefore, there was need for more research on the usage of resources (e.g. charts, abacus, beads, etc.) and their impact on school academic performance. This study specifically sought to establish the extent to which instructional materials influenced the acquisition of literacy skills among public pre-primary (PP II) learners in Webuye West Sub-County.

MATERIALS AND METHODS

This study adopted a survey research design. According to Kothari (2004), survey research design is appropriate as it enables the researcher to access a large sample that gives a reasonable number of respondents from a large population. The study employed mixed methods because a combination of both qualitative and quantitative data was necessary to strengthen inferences (Clabo, 2010) and triangulate findings (Tomno, 2014). It allows enhanced assessment of the overlapping distinct facets of the phenomenon under study (Green & Shwarz, 2017). This approach was deemed appropriate as it gave elaborate information on how schools' physical factors influence literacy among pre-primary II learners in Webuye West Sub-County. The study targeted a population of 55 headteachers and their deputies, 107 pre-primary II teachers and 2,997 pre-primary II learners from 55 public pre-primary schools in the study area. The research sample was derived using Krejcie and Morgan's sample size determination table (Krejcie & Morgan, 1970) and comprised 48 headteachers, 48 deputies, 86 pre-primary II teachers and 341 pre-primary II learners. Stratified sampling technique was used to obtain the pre-primary centres because the study area was heterogeneous and required sub-groups from four administrative wards. The researcher finally employed the simple random sampling technique to select pre-primary II teachers and learners in every stratum so that all individuals had the same opportunity to be part of the sample (Kothari & Garg, 2014). The headteachers and their

deputies were selected using purposive sampling technique.

Five Likert scale questionnaires were used to collect quantitative data by the researcher from the deputy headteachers and pre-primary II teachers and were collected immediately to avoid the contamination of data. Headteachers were interviewed using unstructured interview guide while observation guide was used to collect the required data from pre-primary II learners so as to measure the level of literacy skills acquisition among pre-primary II learners. Learners were observed as they handled reading, writing and arithmetic (number work) during their instructional process to assess the capability of the learners within their usual relaxed learning set up. The instruments were well validated using expert judgment while the questionnaires' reliability was established by piloting the tools using the test re-test method. The pilot data was computed and a reliable Cronbach coefficient Alpha of 0.79 was obtained. The data was reviewed to identify errors and omissions in responses to the tools and to obtain usable and useful information (Kothari & Garg, 2014). The quantitative data obtained from the questionnaire was analysed and presented in a table. To ease analysis and reporting, responses elicited from the five-point Likert Scale questionnaire were condensed such that Strongly Disagreed (SD) and Disagreed (D) have been reported as Disagreed while Strongly Agreed and Agreed (A) are reported as Agreed. The qualitative data drawn from respondents using interviews and

observation were analysed thematically alongside quantitative data to achieve the research objective.

FINDINGS AND DISCUSSIONS

This study sought to establish the influence of instructional materials on learners' literacy in public pre-primary II in Webuye West Sub-County. From *Table 1*, a majority, 106 (79%), of the respondents disagreed that instructional materials were adequate in promoting learners' literacy. 11 (8%) agreed that plasticines for modelling were provided, while a majority 123 (92%) generally disagreed. 1 (1%) agreed and 133 (99%) disagreed that indoor and outdoor items were available to learners in Public Pre-primary schools. 117 (87%) and 17 (13%) of the respondents disagreed and agreed respectively that Text and exercise books in their schools were enough. Lastly, 4 (3%) of the respondents agreed, while 130 (97%) disagreed that their schools provided crayons, pen and pencils for use by PP II learners during instruction. Overall, these findings revealed that there was the inadequate provision of instructional materials for use in the instructional process in the study area among Pre-Primary II learners. This is a contrast to the findings by Twoli *et al.* (2007) and Hallack (2015) who established that when resources such as teaching-learning aids like audio-visual aids are used, the learning process is enhanced. Teaching-learning resources offer stimulus variations to learners enabling them to concentrate throughout the learning process (Agosiobo, 2007).

Table 1: Influence of Instructional materials on Learners' Literacy in public Pre-primary II

Descriptions	SD/D		U	A/SA	
	No	%	%	No	%
There are enough wall maps and charts.	106	79	0	28	21
Plasticine for modelling is provided to learners.	123	92	0	11	8
Indoor and outdoor play items are available.	133	99	0	1	1
There are enough text and exercise books.	117	87	0	17	13
The school provides crayons, pens and pencils.	130	97	0	4	3

SD = Strongly disagree; D = Disagree; U = Undecided; A = Agree; SA = strongly agree

The findings from the interview collaborated with qualitative findings from headteachers. During the interviews, one headteacher (HT1) reported that charts and plasticine are not adequately provided by the school and are therefore improvised by teachers.

Some instructional materials like books are provided for by parents and a few from the county government. When prompted further, the headteachers generally observed that because the government does not fully support pre-schools,

they use free primary education funds to provide them with instructional materials, especially books. Another headteacher (HT2) was interviewed and asserted that if learners are exposed to learning materials, they would be able to acquire literacy skill. The headteachers further added that if learners have enough materials, they would be able to practice the three skills such as Reading, Writing and Arithmetic faster. Majority of the headteachers said that with instructional materials, Pre-primary II teachers would enjoy instruction and reduce absenteeism as they create interest and motivation amongst their learners. These findings further collaborate with Eshiwani (2013) and Bryant and Anderson (1993) findings that put emphasis on the importance of instructional resources in ECDE centres. They both assert that the availability of academic resources such as books, charts, models and play materials influences the academic performance of the pre-school children. This calls for the need to use instructional materials in pre-schools more often than in the upper classes for the achievement of literacy competence among the learners. Mwoma (2017) reported that centres having print materials for reading in pre-primary will enable learners to acquire reading skill faster.

The findings drawn from the observation schedules revealed that literacy skills acquisition on reading, phonemics awareness, sound recognition and reading words like 'cut', 'cat' and 'cow'; writing letters of the alphabet, number recognition like 1, 2, 3, 4, among others and arithmetic showed that majority of pre-primary learners had not acquired the necessary skills. This could perhaps have been as a result of the inadequacy of instructional materials. In his study, Fuller (2016) established that the availability of quality instructional materials encourages child-centred learning and enables learners to embrace the discovery method of acquiring knowledge and skills by themselves.

CONCLUSION

The study found out that instructional materials ranging from wall maps and charts, plasticine for modelling, indoor and outdoor play items, text and exercise books and provision of crayons, pens and pencils were availed, however, they were inadequate. Consequently, the study found out that inadequacy of instructional materials in pre-

primary school centres affected the acquisition of literacy skills, that is reading, writing, and arithmetic skills to a great extent among pre-school II learners.

RECOMMENDATION FOR PRACTICE

The study recommends that County governments should provide adequate and appropriate teaching and learning materials to enhance the acquisition of literacy skills among pre-primary learners. The study also recommends that Counties should prioritize and allocate adequate funds to buy scholastic materials (textbooks, chalk and reference books) for learning. It also recommends that the management of pre-primary centres reverts to the National Government so that provision of instructional materials is done by the Ministry of Education alongside primary and secondary schools. This way, uniformity in the supply of teaching and learning materials will be achieved in all pre-primary centres and improve learning outcomes in the form of acquired literacy skills.

RECOMMENDATION FOR FURTHER RESEARCH

This study recommends that

1. A similar study is carried out in other Sub-Counties while considering engaging a larger population and more variables.
2. A study is carried out to establish the influence of the acquisition of literacy skills at pre-primary schools on learning outcomes at lower primary (Grades 1-3).

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