

INFLUENCE OF AVAILABILITY OF INSTRUCTIONAL RESOURCES ON CHILDREN'S PERFORMANCE ON EARLY LITERACY IN PUBLIC PRE-SCHOOLS IN KANDUYI SUB-COUNTY, KENYA

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Abstract

The factors associated with the teaching and learning of early literacy skills may have been addressed but influence of instructional resources continues to be a concern. This study focused on how availability of instructional resources influences children's performance in early literacy in public pre-schools in Kanduyi Sub-County, Kenya. The study was framed on the constructivism theory propounded by Jean Piaget in 1896-1980. The study adopted a descriptive survey design and targeted 90 public pre-schools comprising of 5460 pre-school learners and 180 pre-school teachers. A simple random sampling technique was used in selecting the pre-schools and the sample size for teachers and learners for the study was arrived at using Krejcie and Morgan (1970) formula. Through these methods, 27 pre-schools, 359 learners and 123 pre-school teachers were selected for the study. Data was collected using questionnaires and a literacy skill test administered to the learners. Questionnaires were administered to pre-school teachers to seek information on pre-school teachers' training skills and use of instructional resources. Content validity of the instruments was determined by employing the expertise of my supervisors and lecturers in the Department of Education while reliability was determined through split-half technique. Data was analyzed using descriptive and inferential statistics such as means, percentages, frequencies and Pearson Correlation analysis. The findings were presented in tables, pie charts and bar graphs. The study found out that concrete materials, were used by majority of the pre-school teachers in the study area. However, audio and audio-visual resources were lacking in all the schools in the study area hindering the acquisition of writing and reading skills. The study concluded that instructional resources play a significant role in imparting of reading and writing skills to the pre-school learners. The study recommended that there is need for provision of audio and audio-visual materials to pre-schools since these materials are known to positively affect the acquisition of writing and reading skills among pre-school learners. It also recommends that the government of Kenya through the Ministry of Education ensure that pre-schools acquire instructional resources equitably distributed in the various pre-schools across the country to facilitate timely implementation of the curriculum especially in reading and writing skills for good educational foundation of the learners.

Keywords: *display, literacy, resources, skills*

Background to the Study

Wangechi (2012), says that Pre-school Education forms the basis on which children form their future learning habits and, therefore, plays an important role in the development of young learners. As such, the principles of pre-school endeavor to create an atmosphere that fosters learning by encouraging the exploration of the curiosity that is innate and raw in children because at this period “critical windows of opportunity” are open that is the time when learners form positive associations with structured learning processes allowing them to acquire new skills more effortlessly. Therefore, teachers need to utilize this period maximally in order to develop the child holistically (National ECD Policy Framework, 2006).

The rationale behind this is that a sound educational foundation is instrumental in determining learners’ future perceptions on all the elements that make up the learning process and increases the gains they derive from it. The fundamental features of quality pre-school instruction are more holistic and include the organization and management of all aspects of the learners’ physical environment, the social and emotional aspects of their development integrated into the curriculum materials that guide their education and its monitoring and evaluation (Omaiyo, 2013). Klibanoff, Levine, Huttenlocher, Vasilyeva & Hedges, (2006), emphasizes that early intervention programs have a constructive effect on learner’s literacy skills acquisition. In addition, learners who are registered in pre-schools with adequate teaching and learning materials and well-trained teaching staff have a comparative advantage of attaining higher reading and writing skills.

Similarly, Kibe (2011), noted that although there is an increase in the development of new teaching tools and methods, many teachers were still unable to use these new techniques especially in increasing the ability and capacity of their learners to read and comprehend. The information on pedagogy in Kenya, however, is still relatively underdeveloped because of the lack of sufficient research in the sector particularly in the preschool sector. Therefore, there is an urgent need to establish the effect with a view of striving and emphasizing on the need to use instructional resources in teaching literacy skills. Recognizing the significance of the early learner’s experiences for future learning outcomes successes, several studies and education practitioners have attempted to discover how to increase the children’s enthusiasm during their foundation years by designing captivating materials and methods of delivery. While friendly strategies and equipment are the suitable option for overall learning experience success, they are demanding and resource intensive which reduces the speed of their development significantly (Sylva & Siraj, 2003).

Statement of the Problem

According to Karen (1996), pre-schools are set up for the main purpose of providing educational services to children as families use them to give children extra stimulation and experience prior to formal education. These pre-schools were with the aim of enhancing standards of instruction and performance in early literacy skills. Wangechi (2012), noted that pre-school forms the basis on which learners form their future learning habits and therefore, plays a vital role in the development of young learners especially in reading and writing skills. Further, she argues that instructional resources provide a normal setting for the instruction of early literacy skills. This shows that the methods adopted in the Teaching Learning Process (TLP) of early literacy skills should utilize instructional resources for the achievement of objectives in reading and writing skills.

The use of instructional resources enables children to naturally explore their immediate environment to acquire new knowledge and skills and this reason why teachers should adopt the known to unknown approach of teaching early literacy skills. In addition the acquisition of early literacy skills at the pre-school level is not only meant for academic purposes but rather children learn fundamental skills that are crucial and form the foundation for further learning and indeed the rest of their life, that is, education is a significant region of sound practice, a place where people learn how to be as well as how to labour, (Seddon, 1997).

Literature Review

Instructional resources are both human and non-human materials which teachers use in teaching and learning situation to make his or her lesson more comprehensive and achieve its objectives, (Chikwelu, 2007). It is also seen as something that conveys data between a source and a receiver, (Albangbe, 2008). She added that they are the delivery mechanism for the learning objectives and evaluation tools for teaching process. Instructional resources are also available means and assets which contain desired information for the learner, (Pre-school Handbook, 2008). According to Adekeye, (2008), instructional resources are made up of four major categories such as Visual aids which require the use of sense of sight like charts, pictures, flashcards; Audio –Visual aids which produce sound and pictures like television, video cassettes; Audio aids which produces sound like radio, tape recorders and Concrete materials which can be manipulated like, letter and word cut-outs, picture cut-outs, books, models etc. that assist in the successful delivery of lessons. A wide range of resources are utilized so as to enhance learning, ignite the curiosity that is innate in learners and create an atmosphere that engages all the senses of a learner, therefore, immersing them fully in the instructional activities of their structured instruction environments (classrooms) and the instructional resources also make a difference in the learners achievement across various pre-schools, (Gakunga, 2004).

As indicated by Abdelrahim, (2008), the accessibility of instructional assets relies upon capacity and use habits. The nature of training and preparation on investment given to pre-school children relies upon the accessibility and

sufficiency of instructional assets for classroom learning. Pre-school instruction should go for outfitting learners with helpful abilities and to enhance their insight and capacities in their execution in literacy skills (National Policy of Education, 2004).

Nikky (2010) cited that the teaching and learning process depends on the various types of equipment available in the classroom that are essential in the teaching learning process (TLP). Margaret & Anne, (2007), supported providing learners with incentives and tools for categorizing, sorting and grouping items using different concepts such as length, colour, texture, shape or use, aids learners to symbolize and utilize differed imitation and increase their mental capabilities. Kisirikoi, (2008), also stressed on the use of concrete materials and learning by doing which motivates children’s learning, that is a learner will be more encouraged if he/she is involved in any activity that is carried out by the teacher. In relation to this study, this means that through the use of various materials it enables the learners to be able to read details in objects and give their difference.

Olahimola, (1996), expressed that assorted subjects at various dimensions in the training framework demonstrate that instructional resources used by the teachers serve to concretize theoretical ideas and thoughts. This implies, at all dimensions of training, instructional materials are critical in the achievement of the ideal objectives and destinations. It is accordingly, extremely vital for the learners in the pre-schools to utilize different sorts of instructional resources while learning on how to read and write. The use of teaching and learning materials during the instruction process encompasses not only the sense of hearing but the sense of sight and touch, looking at the educational practices, the Chinese proverb concludes that; I hear-I overlook, I see-I recall that, I do-I comprehend (Eneh, 2004). This saying additionally underscores that learners’ should take an active part during reading and writing activities in the classroom. Kindler, (1993), added that individuals generally recall; 10% what they read, 20% what they hear, 30 % what they see and hear, 70 % what they state and 90% what they state as they accomplish something. In connection to this investigation, learners should be given various materials for them to do exercises on the grounds that in pre-schools the technique that is mostly utilized is child-centred whereby children do most of the activities where the teacher is there to give resources and to encourage the teaching and learning process while participating in the perusing and composing exercises in the pre-schools.

Aguokogbuo, (2000), clarified that instructional materials could be ordered into; Visual materials, for example, pictures, graphs, building, outlines, real objects (realia), books, papers; Audio materials like copying tape, radio, instructor's voices and Audio-visual materials like television, video recording and films. In connection to this investigation, learners’ ought to be furnished with materials to improve the sense like sight, hearing, taste, smell and contact for them to participate in reading and writing skills.

Research Methodology

The study was framed on the constructivism theory propounded by Jean Piaget in 1896-1980. The study adopted a descriptive survey design and targeted 90 public pre-schools comprising of 5460 pre-school learners and 180 pre-school teachers. A simple random sampling technique was used in selecting the pre-schools and the sample size for teachers and learners for the study was arrived at using Krejcie and Morgan (1970) formula. Through these methods, 27 pre-schools, 359 learners and 123 pre-school teachers were selected for the study. Data was collected using questionnaires and a literacy skill test administered to the learners. Questionnaires were administered to pre-school teachers to seek information on pre-school teachers’ training skills and use of instructional resources. Content validity of the instruments was determined by employing the expertise of my supervisors and lecturers in the Department of Education while reliability was determined through split-half technique. Data was analyzed using descriptive and inferential statistics such as means, percentages, frequencies and Pearson Correlation analysis. The findings were presented in tables, pie charts and bar graphs. The study found out that concrete materials, were used by majority of the pre-school teachers in the study area. However, audio and audio-visual resources were lacking in all the schools in the study area hindering the acquisition of writing and reading skills.

Results

Pre-school teachers were asked to suggest the kinds of educational materials they used to teach early literacy in order to achieve this aim. The results in Table 1 are as follows.

Table 1: Materials used in Teaching Literacy Skills in Pre-Schools

Materials	Frequency	Percentages
Concrete materials	80	72.7
Audio-Visual Materials	4	3.6
Visual Materials	26	23.6
Total	110	100.0

Source: Field Data (2022)

Table 1 indicates that 80 (72.7%) pre-school teachers reported using concrete materials to teach pre-school literacy skills, 26 (23.6%) teachers reported using visual materials to teach early literacy skills, and 4 (3.6%) pre-school teachers

used audio-visual materials to teach early literacy skills. From the findings, it can be shown that the majority (72.7%) of Kanduyi Sub County pre-school teachers used concrete materials for early literacy teaching. According to Adekeye (2008), instructional resources are composed of four major categories such as visual aids, audio-visual aids, auditory aids, and printed materials that assist in the delivery of lessons successfully. A wide range of tools are used to improve training, generate more interest, and create a situation where the learners can participate fully in the classroom. Space and use patterns depend on the availability of instructional tools. Education quality depends on the availability and adequacy of teaching resources for learning in the classroom. Nikky (2010), pointed out that the process of teaching and learning depends upon the different types of equipment available in the classroom.

Nikky, (2010), further noted that in the Teaching Learning Process (TLP), real, speech, visual and audio-visual aids are of great importance. A statement supported by Margaret & Anne, (2007), who noted that providing learning materials to help learners acquire early learning skills in literacy. In the same way, Isola (2010) referred to teaching and learning tools as artifacts or devices that help the instructor make the learner's lesson much simpler. In support of these views, Agina (2005) defines instructional materials as tangible or physical artifacts that provide the sensory organs with sound, visual, or both during pre-school lecture and writing skills. In contrast, according to Montessori (1998), the use of tangible teaching and learning materials helps to develop the five senses of children. It reduces the teacher's monotony by using only one learning product. The stimulation of the five senses therefore motivates learners to exploit the materials in their leaning environment so that they can gain listening learning and writing skills.

In this research the use of concrete materials as reported by majority (72.7%) of the teachers enables learners to acquire early literacy skills as noted by Karaka (2009), who pointed out that concrete materials improve understanding of basic concepts irrespective of how the educator prepares, the child should learn. The teacher's function is to promote learning through the use of tools for teaching / learning. Even, if they do not allow the child to understand, all that the teacher teaches may not be of any value.

It was shown by the teachers that learners manipulated various learning resources which engaged learners actively in participating in different activities and tasks which triggered learners to interact among themselves and the teachers providing opportunity for asking teachers questions to explain various concepts in reading and writing skills.

Frequency of Learners’ Interaction with Instructional Resources

Further, pre-school teachers were requested to specify in the questionnaire the frequency at which learners interacted with instructional resources in their schools. The results of the analyzed information are presented in Table 2.

Table 2: Frequency of Learners’ Interaction with Instructional Resources

Frequency of Interaction	Frequency	Percentages
Rarely	79	71.8
Often	27	24.5
Very often	4	3.6
Total	110	100.0

Source: Field Data (2022)

Table 2 shows that 79(71.8%) pre-school teachers reported that their learners rarely interacted with instructional materials, 27(24.5%) teachers reported that learners often interacted with instructional resources while 4(3.6%) teachers reported that their learners very often interacted with instructional materials. It emerged from the responses that pre-school teachers ' majority (71.8 percent) indicated that students in their schools seldom interacted with educational materials. Quadri *et. al.* (2003). The usefulness of teaching materials is based on ideas that learning is more likely to take place in a class where various teaching resources are actively used in teaching process. This implies that the acquisition of reading and writing skills by preschool learners is influenced by the frequency of use of instructional materials.

Source of Instructional Resources

In addition, pre-school teachers were asked to explain that their pre-schools were receiving instructional resources to clarify the availability of instructional resources for pre-school children to use in teaching early literacy skills. Table 3 presents the results of the analyzed data.

Table 3: Source of Instructional Resources

Source of Instructional Resources	Frequency	Percent
Improvisation	94	85.5
Purchase	9	8.2
Parents	7	6.4
Total	110	100.0

Source: Field Data (2022)

Table 3 shows that 94(85.5%) pre-school teachers pointed out that they were using improvised instructional materials and 9(8.2%) teachers reported that they were using procured instructional resources while 7(6.4%) teachers reported that they were using instructional resources from the parents. The study findings suggested that majority 94(85.5%) of the pre-school teachers in Kanduyi Sub-County were using improvised instructional materials, that is, concrete and visual materials to teach pre-school learners. This is consistent with the arguments of Onyango, (2014) who suggested that pre-school teachers need to utilize concrete, visual, audio-visual and audio instructional resources which are easily found within their locality. In this study, improvisation allows teachers to use instructional materials which are not available in their schools that is, the teachers are able to use the natural resources within their environment to develop instructional materials to be used both in and outside the classroom during teaching and learning of reading and writing skills

Availability of Instructional Resources

Additionally, the study participants were asked to specify whether the instructional resources in their pre-schools were available or not. The results of the analyzed information were presented in Figure 1.

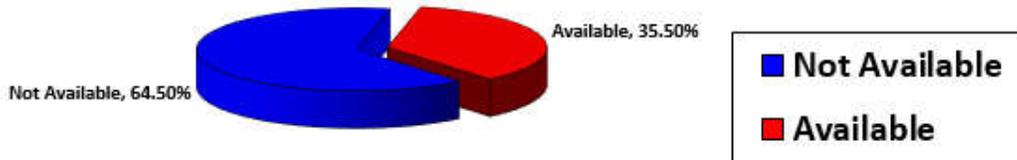


Figure 1: Availability of Instructional Resources in Pre-schools

Source: Field Data (2022)

Figure 1 shows that 71 (64.5 percent) teachers acknowledged that teaching resources were not available in their schools, while 39 (35.5 percent) teachers reported that teaching resources were available in their schools. As the responses demonstrate, it can be argued that there are insufficient educational services in most pre-schools in the study area. Therefore, it likely hinders the learning of reading and writing skills by the learners. Nevertheless, many pre-school teachers in their schools have invented various educational materials to allow them to be effective during early literacy teaching and learning. As reported by Abayomi & Olukayode (2006), teaching materials in pre-school centers are important in education because learning is best achieved through exploration, discovery and interaction with internal and external environments. In addition, it has been shown that pre-schools lack sufficient instructional materials to impede the teaching process. Similarly, studies conducted by Ogunleye (2002) & Obioha (2006) confirm that insufficient materials are available for teaching science and even the few available are not in good condition. It points out that pre-school teachers need to improvise educational resources based on early literacy for reliability in pre-school learner instruction.

Observation conducted in the classrooms pointed out that majority of the pre-schools had concrete and visual materials which are not enough for use by the learners during the acquisition of reading and writing skills. This was due to the high teacher-learner ratio that the researcher observed in class when teaching and learning process was in progress. The researcher also found out that none of the pre-schools had either audio or audio-visual materials. This points to the fact that most of the pre-schools are faced with financial difficulties since most of the learning resources are provided by the parents or improvised by the school teachers. This therefore points out that there is need for pre-schools to acquire audio and audio-visual learning resources so as to enable learners to efficiently acquire early literacy skills.

Conclusion

The study found out that concrete materials were majorly used by majority of the pre-school teachers in the study area. However, the study further concluded that audio and audio-visual resources were lacking in all the pre-schools in the study area hindering the acquisition of writing and reading skills.

Recommendations

The Ministry of Education through the County education officers should provide audio and audio-visual materials to pre-schools since they are known to positively influence the acquisition of writing and reading skills among pre-school learners.

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