

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

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Abstract

Availability and utilization of instructional resources play an important role in the attainment of educational goals, objectives and learners' performance. In this study, the researcher argues that many learners are still not proficient in early literacy skills despite going through pre-school education. 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 the influence of display of instructional resources on children's performance in literacy. 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 that there was a positive correlation between display of instructional resources and learners' achievement in writing skills ($r = .646$; $p = .000$) and reading skills ($r = .780$; $p = .000$). 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

Universally, education is considered to be an important human right as recognized and enshrined in the United Nations Conventions on the Rights of the Child (UNCRC, 1990). A consensus was also reached at the World Conference in Jomtien on leaving no child behind with regard to receiving formal education 29 years ago and another in Dakar that teaching materials make a lot of difference in the lives of young learners for the purpose of enhancing pupil's learning and performance in literacy skills. In addition, Omaiyo (2013), suggested that good teaching and learning materials stimulate ideas and demand the active response from learners.

Sylva & Siraj (2003), point out that in the developing countries a lot of challenges of poor performance in elementary and high school are the result of poor preparation and structure in their foundation years in pre-school. Inadequate supplies of books and other instructional materials are not designed to encourage reading; poorly trained teachers, inappropriate curricula and poor school conditions have been recognized as the factors enhancing poor achievements in reading and writing skills.

Pre-school education as a concept is very broad and goes outside just the provision of education to pupils. It also incorporates the delivery of social, health and psychological desires of a learner in total (UNESCO, 2004). Osakwe (2006), stated that, it includes the all-round development of an individual's physical, social, moral, intellectual and mental state and as stated, "Education is a development of the whole man", that is, it ensures the advancement or changes of an individual in all aspects (Mohanty & Mohanty, 2001). Pre-school education is a programme which provides children with a motivating play environment that encourages language, social, emotional, physical and intellectual growth and development. It is a programme which stimulates interaction with the environment, active involvement in activities carried out in groups and stresses on providing first-hand experience to learners which enhances creativity and problem solving ways that enhance acquisition of skills related to the process of learning.

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.

Pre-schools also 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 (Karen, 1996). According to a South African Pedagogical white paper (1995), education is, foremost, a tool for the advancement of the acquisition of high quality skills and knowledge regardless of the demographics (age, race, creed, religion, etc.) of the learners. Kenya recognized the importance of pre-schools to the success of the learning experience in the long term especially as enshrined in the Sustainable Development Goals (SDGs) pillar to achieve 100% literacy through the Education for All (EFA) initiative (Republic of Kenya, 2006a).

Heward (2000) argued that varying the types and methods of knowledge and skills delivery proved especially effective in encouraging the curiosity of child learners because of the inquisitiveness it elicits. Chances for learning are improved if relevant and adequate teaching and learning resources are clearly organized and available to children (Levis, 1991). This is because instructional resources constitute alternative ways or channels of communication through which a teacher can use to convey more vividly information to the learners.

Statement of the Problem

In spite of how instrumental pre-school education is in the overall success of learning outcomes, very little has been done to uphold this United Nations Educational, Scientific and Cultural Organization (2006). In Kenya, the system of education is evolving steadily though it is faced with various challenges. The pre-school curriculum has been faced by many challenges that is lack of instructional resources, the high enrolment of learners in classrooms which is seen in public pre-schools in Kanduyi Sub-County, which has made the teachers be overworked and in turn little attention given to learners' leading to a decline in early literacy skills performance. All these have led to serious challenges which have affected the attainment of pre-school education goals as outlined by Education For All (EFA), (2015), the Sustainable Development Goals (SDGs), (2016) and the Kenya's Vision 2030.

Several researchers have looked into the relationships between instructional materials and the academic performance of learners by focusing on primary and secondary schools as their primary source of data. Sebastiano, (2017), investigated the factors affecting the teaching of English in public primary schools in Bungoma sub-county, where he found out that most of the schools do not have the required materials to be used in the classrooms during the instruction process. These findings inspired the researcher to look for similar associations in pre-schools by conducting empirical research. The

information gathered through the exercise indicated that schools suffered from an insufficient supply of fundamental resources due to lack of sufficient funds from the government, very little of which is allocated to pre-schools.

Literature Review

Froebel, (1782 – 1982), alleged that children are born equal and eager to learn but what sets learners apart is the environments in which they develop because of the importance it plays in creating experiences and knowledge. It has been shown that learning environment is a vital and powerful teaching instrument. This is because, if the environment is set up with children in mind such that it is attractive and stimulating enough to inspire exploration and curiosity, children end up learning and understanding more. The environment should also be set for choices i.e. should be organized to foster exploration into learning materials and it should communicate to learners what is expected of them which in turn independence and excitement of learning is what should be conveyed. This also protects the child from learning bad habits or evil tendencies. Studies have shown that the arrangement of space greatly affects teachers' behavior as well as learners'.

In centres with well-planned space, teachers are more friendly, sensitive and warm to children and thus learning of literacy skills will be highly promoted while those in poorly planned space teachers are often more insensitive to their learners and thus learning of literacy skills will be highly affected. Tomlinson, (2003) added that, condition will support or deflect the learners' journey for affirmation, commitment, control reason and test in the educational programs for example the learning condition incorporates the physical format of the classroom, the manner in which the teacher utilizes space, environmental components and sensitivities including lighting just as the general environment of the classroom. In relation to this study, it is essential for teachers to provide very stimulating and well-planned classrooms to enable the children to explore and learn more about literacy skills.

Karen (1996), pointed out that if a classroom has been carefully planned and equipped, you could come upon a scene whereby children are participating in different activities. This is supported by Prayoonwong & Nimnuan (2010), who stated that understanding the way learners learn as well as their performance is by looking at the learning environment. This is because the atmosphere is inviting, a scene of concentration is present with minimal behavior problems. The physical space, whether several rooms or one large one, must be arranged so that similar functions can be carried out. It is supported by Chan (1996), who said that, conducive learning surroundings are those that do not place any restrictions or fears in learners allowing them to concentrate on class work and allows for logical thinking. When planning how to use space for a child care program, one should think of principles like; does the plan meet program goals? Will the needs of all children be served? Will the teacher's needs be met? and does the plan encourage parental involvement? The size of the classroom space dictates how many children the program can serve and this was supported by Vukelich & Christie, (2004) who said that, "teachers who want learners to behave like readers and writers must create a classroom environment that coaxes them into being readers and writers".

This was also emphasized by Namalwa (2009), who stated that the creation of a conducive environment, she trusted on the use of materials in helping children learn which makes learning real and enjoyable for learners. Also, a rich environment with relevant teaching and learning resources offers rich experiences and knowledge which assists the child to get on the world and change it to suit his or her experiences and understanding (Onsongo, 2011). Therefore, it is very vital that people who plan child care facilities should pay attention to the classroom size for instance learning centres should entice children to participate because they are key components to ensuring success of learners. It should enable children see exactly where to return toys and instructional resources after use. Books displayed openly at eye level create interest and also when learning centres are marked, children understand the limits of play and they should be arranged so that children have a degree of privacy when needed. It is necessary that when arranging space, one should consider the direction of movement the children take as they go from one part of the classroom to another which will help limit congestion from the time children enter until they leave the pre-school centre.

O'hara (2000), explained that the use of display of materials helps to generate an attractive learning environment that arouses the interest and imagination of learners, setting standards and passing information to parents and other visitors about learners' experiences and work. A good display of instructional materials can enable learners to talk, think, ask questions and work well and at the same time it offers a means of praising, recognizing and encouraging them in reading and writing activities. Maria Montessori, (1870 – 1952), argued that the mind of children under the age of six was filled with an inquisitiveness mind to mystery and magic that allows them to understand literacy techniques faster and experience knowledge creation more vividly. This is because it inspires learners to find out about their general surroundings through investigation. They are given the opportunity to move around, control and contact. It is also worth noting that if it is attractive and well maintained, children are more likely to care for their environment. This is because, according to Chan (1996), by showing a positive and negative attitude as an indirect impact, learners react to large and poor learning environments. With the presentation a positive attitude of children towards the learning environment, learners learn with high motivational level and thus exhibit good performance while learners with a poor environment for learning will lead to the demotivation towards learning thus poor performance. This means that early years settings that work hard to put up displays and show an obvious pride in the way the environment looks are more likely to foster the idea of valuing and caring for an environment thus development of literacy skills. The process of learning how to read and write involves preparing an inviting and stimulating learning environment because learning is an active process

whereby children gain knowledge and develop new skills and thus the environment that teachers provide must encourage children to independently experiment, explore and manipulate because interaction with materials is an important vehicle. It is necessary for teachers to provide hands-on experiences to enable children use the displayed resources in the classroom.

A study by Andaroga (1997), recommended that pre-schools should be a prepared setting where learners' learning desires are comparative including the learning of literacy skills. This shows that the instructional resources need to be easily within reach so as to enable their learning. In relation to the study, it means that all instructional resources should be at a place or corner where the children can access, manipulate and use them in the different activities that enhance reading and writing skills. Teachers also should use the immediate environment to get or develop materials the learners are to use to enhance the literacy skills in the various activities during the learning process.

Furthermore, Puri and Abraham, (2004), stressed that pre-school classrooms should be colorful, interesting to learners so that they feel excited concerning their coming to pre-school centre. The organization of the learning environment means the organization of the total environment of the child which depends to some extent on the particular individual situation where children receive care and education because some situations will be well resourced, whereas others will be chronically resourced and in difficult physical circumstances. As a teacher one will know that having a child-friendly classroom looks incredible as well as enables your students to learn and have a good time. Presentations can make a rich situation that is both pleasant and inviting for example presentations can be brilliant and bright and charming in any case. In the event that the instructional materials are shown effectively, they can effectively impact children's learning of literacy skills because these environments produce positive states of emotions which are expected to facilitate learning and development (Ken, 2006). Classroom displays can improve the aesthetics of a room, therefore, enhance the optics of the learners' who use it and must always be a part of the planning process in any education endeavor as put by Geoff P. (2004), because learning is what happens when one's sense interact with his environment generating different feelings and experiences.

Gallagher (1993) mentions that there are several terms of classroom communication identified as realia, diagrams, charts, amateur, radio and fieldwork archives. The beginning learners' world is filled with wonder for instance far and wide, there are rather new things to be discovered and every discovery translates to new questions. This is in accordance to what Reggio Emilia, (1993), denotes as one hundred languages "to share their wonder and questions with us". A good surrounding that augments the development of literacy skills offers learners the freedom to be inquisitive and expressive, therefore, opening their minds up to understanding and exploring more things and newer experiences. Regardless of whether it is at school, home, or within a community, things, for example, the libraries or play spaces supports emergent literacy skills and are full of possibilities for imagining and chances for pretend play which gives learner's not just an abundance of verbally expressed and composed words yet in addition numerous chances to appreciate reading, writing, singing and storytelling activities.

In conclusion, it is very vital to note that the visual impact of the classroom condition is noteworthy when one walks into any room. What is shown on notice sheets and on the mass of classroom educates an extraordinary arrangement regarding the discovery that is happening in the classroom condition regarding the teaching and learning of early literacy skills. They offer a background marked by the learners' work considering a wellspring of data for learners', instructors, overseers and guardians on learners' achievements in early literacy skills. These displays need to pass on to learners that their work is esteemed while empowering them to widen their own thoughts as they see crafted by their friends. Presentations of children's' work should highlight no doubt on the classroom condition and be changed consistently. Additionally, an efficient classroom empowers children to get to materials they need without asking the teacher, use them and return them on their own and the individual children can concentrate on materials that interest them. This makes them feel free and effective, welcomes investigation unlike in a disarranged classroom or condition, where materials are crammed in one place (Gichuba, Opatsa & Nguchu, 2013).

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.

Results

The study set out to evaluate the influence of displaying educational resources on early literacy performance of children in Kanduyi Sub-County's public pre-schools. Teachers were asked to indicate the time that they presented instructional materials to achieve this goal. Their responses have been tabled and the results of the information analyzed are presented in Figure 1.

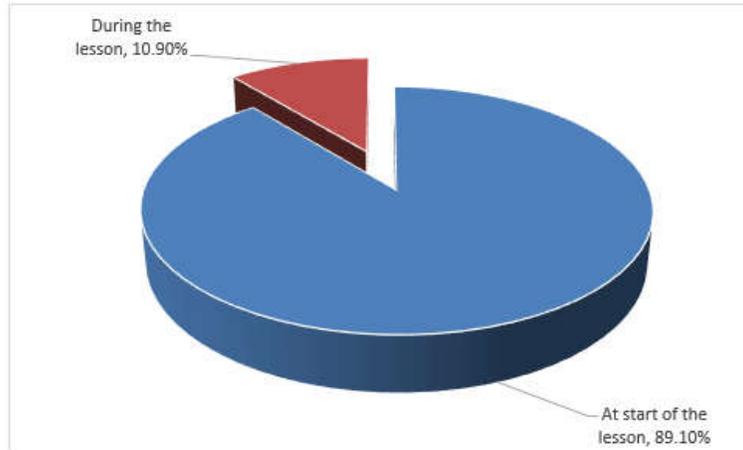


Figure 1: Display of Instructional Resources

Figure 1 points out that 98(89.1%) teachers displayed instructional resources at the start of a lesson while 12(10.9%) teachers displayed instructional materials during the lesson. The outcomes showed that majority 98(89.1%) of the pre-school teachers in Kanduyi Sub-County displayed their instructional materials at the start of every lesson. The results also shows that few teachers 12(10.9%) displayed instructional resources during the lesson while none of the teachers displayed the instructional materials at the end of the lesson. Display of instructional materials should be done at the start of the lesson in order to direct the learners on how to use them in acquisition of concepts during the teaching and learning process. For instance when a teacher is explaining to learners on how to join vowels with consonants to develop syllables in preparation of adding another consonant to form three letter words when they are learning how to read. This should be well illustrated through a developed and displayed chart with the syllables on it. This shows that learners are able to refer to the displayed materials during the teaching and learning process and therefore, was in a better position to acquire reading and writing skills. The display of instructional materials at the start of the teaching and learning process focuses learner’s attention and interest on the lesson that is towards the concepts being delivered by the teacher. It further convinces learners that they will benefit from the reading and writing skills that are being taught. After the lesson, the teacher will have achieved the lesson objectives.

Correlation Coefficient between Display of Instructional Resources on Children’s Performance in Early Literacy

Pearson Correlation analysis was used to find the effect of Display of instructional resources on Learners’ performance in early literacy. The results are presented in Table 1.

Table 1: Relationship between Display of Instructional Resources and Children’s Performance in Early Literacy

Display of Instructional Resources	Early Literacy Skills	
	Writing	Reading
	$r = .646^{**}$	$r = .780^{**}$
	$p = .000$	$p = .000$

Table 2 points out that there was a positive correlation between display of instructional resources and learners’ achievement in writing skills ($r = .646$; $p = .000$) and reading skills ($r = .780$; $p = .000$). This implies that displaying instructional resources in classrooms improves learners’ performance in reading and writing skills. This means that the displayed instructional materials allow the learners to have a high concentration level and participation in activities during the teaching and learning process in the classroom. This is consistent with the works of Abaya (2017), who noted that pointing out letters and words allows learners to comprehend that sentences comprise of distinct words. Furthermore, noticing the letters allows learners to become acquainted with their shapes. Therefore, having knowledge on the letters of the alphabet is considered to be a crucial component in getting learners to be acquainted with reading readiness. As they also get acquainted to reading readiness later on they will have an easy time in writing because they are already aware of the shapes of letters of the alphabet.

Conclusion

This study concludes that there was a positive correlation between display of instructional resources and learners’ achievement in writing skills ($r = .646$; $p = .000$) and reading skills ($r = .780$; $p = .000$). This implies that displaying instructional resources in classrooms influences learners’ writing and reading skills. Thus the noticing the alphabetical

letters that are displayed will enhance learners to be familiar with their shapes. Knowing the letters of the alphabet is an important element in preparing children to read.

Recommendations

- i. Teachers need to display instructional resources in classrooms since they positively influence learners' reading and writing skills.
- ii. The study further recommended that the County Governments through the education officers should provide pre-schools with instructional materials. This is due to the fact that availability of instructional resources influences positively the acquisition of reading and writing skills among pre-school learners.

References

- [1]. Abaya, M.H (2017). *Influence of Instructional Materials on Pre-school Children's Learning Achievement in Number work in Matungu Division, Kakamega County*. Unpublished thesis, University of Nairobi, Kenya.
- [2]. Chan, T.C. (1996). *Environmental Impact on Student Learning*. Valdosta State Coll., GA. School of education.
- [3]. Gallagher, T. (1993). *Educating Exceptional children*. USA. Houghton
- [4]. Geoff P. (2004). *Teaching Today (A Practical Guide)* Nelson Thornes.
- [5]. Gichuba C., Opatsa R. & Nguchu R. (2013). *General Methods of Teaching Young Children and Material Development*. Diploma ECDE; KIE
- [6]. Heward, W. C. (2000). *Exceptional Children; An Introduction to Special Education*. Columbia.
- [7]. Karen, S. (1996). *The Child care professional*. McGraw Hill. New York.
- [8]. Ken, A., Graetz (2006). *The Psychology of Learning; Learning Spaces*, ed. Diana G. Oblinger (Boulder, Colo.: EDUCAUSE, 2006), e-book, available at <http://www.educause.edu/learningspaces>
- [9]. Krejcie, V. & Morgan W. (1970). Determining sample size for Research Activities. *Educational and Psychological Measurement*. State: publisher
- [10]. Levis, A. (1991). *Primary Special Need and the National Curriculum*. New York. Routledge
- [11]. Mohanty, J (2001). *Educational Technology*, Publish by Rajouri garden New Delhi
- [12]. Montessori, M. (1998): *Discovery of Child Development*. Oxford Series London.
- [13]. National ECD Policy Framework (2006)
- [14]. O'Hara M. (2000). *Teaching 3-8 meeting the standards for initial teaching and induction*. London: Continuum.
- [15]. Omaiyo, J. (2013). *Effect of Instructional Resources on Children's Number Work performance in pre-schools in Isbania zone, Migori County*. Unpublished thesis University of Nairobi, Nairobi, Kenya.
- [16]. Onsongo, J. K. (2011): *Promoting Gender Equity in Selected public Universities in Kenya*. Organisation for Social Science Research in Eastern and Southern Africa (OSSREA) Addis Ababa, Ethiopia.
- [17]. Osakwe R.N.(2006). *Understanding Teaching Profession*. Benin city: Osasu Printing Press.
- [18]. Piaget, J. (1983). "Piguet's Theory". In *Mussen P.H. (Ed). Hnadbook of Child Psychology (4th Ed) Kessen, W. (Ed) History, Theory & Methods*: 103-128. New York: John Wileu and Sons.
- [19]. Prayoonwong, T., & Nimnuan, C. (2010). Dental Students' Perception of Learning Environment. *South-East Asian Journal of Medical Education*.
- [20]. Puri, M., & Abraham, G. (2004). *Inclusive Education*. Sage Publication Ltd. Mohan Co-operation Industrial Area.
- [21]. Republic of Kenya. (2006a). *National Early Childhood Policy Framework*. Government Printer.
- [22]. Sebastiano, A. O. (2017). *Factors Influencing Implementation of English curriculum in Public Primary schools in Bungoma South Sub-County, Bungoma County, Kenya*. (M Ed unpublished thesis)
- [23]. Sylva, P., & Siraj, B.(2003). *Supporting Identity, Discovery and Language in Early Years*. UK. Open University Press
- [24]. Tomlinson, C. A. (2003). *Fulfilling the Promise of the Differentiated Classroom: Strategies & tools for responsive teaching*. Alexandria VA: Association for Supervision & Curriculum Development.
- [25]. UNESCO (2006). *Cross-National Compilation of National ECCE Profile*. Geneva, UNESCO International Bureau of Education.
- [26]. UNESCO. (2004). *Early Childhood Policy Review Mission*. UNESCO, Nairobi.
- [27]. United Nations Convention on Rights of the Child Report (1990). *Committee on the Rights of the Child*. Nairobi, Kenya. Author.
- [28]. Vukelich, C. & Christie, J. (2004). *Building a Foundation for Pre-school Literacy: Effective Instruction for children's reading & writing development*. Newark, DE: International Reading Association
- [29]. Wangechi, J. W. (2012). Effects of Non-Financial Incentives on Employees' Performance. Case study of Pretty Horts Limited Nairobi. Unpublished M. Ed Thesis. University of Nairobi