

Factors influencing the Selection of Instructional Resources in Teaching Pre-Schools in Kenya

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Abstract

The purpose of this study was to investigate the factors influencing the selection of instructional resources used in public pre-schools in Eldoret town. The study sought to identify teacher attributes and head teacher-attributes that influenced the selection of instructional resources in pre-schools. This study was a descriptive survey and was guided by Bruner's Constructivist Theory, which emphasizes that learning is an active process in which learners construct new ideas based upon their current knowledge. Stratified sampling was used to categorize centres into 5 zones; proportionate random sampling was used to select 20 Pre-schools from a total of 40 pre-schools. The research tools used to collect data were questionnaire, observation and interview schedule. , it was established that teachers' teaching experience, duration of the training, age of the teacher, teaching methods, and teachers' mastery of content, motivation of the teachers, teachers' level of education, teacher's attitude and competence influence the selection of instructional resources. On the other hand head teacher motivation, the capacity to procure funds to buy instructional resources, the capacity to mobilize resources for the purchase of instructional resources, the capacity of head teachers' knowledge about the instructional material and the attitude towards the instructional resources greatly influence the selection of instructional resources.

Key words: instructional resources, teacher, head teacher, selection and attributes

Introduction

Early Childhood Development Education (ECDE) is beneficial to children's cognitive, social, emotional and physical development. ECDE programs are designed to foster general well-being and enhance school readiness, so that these children might gain the full benefit of their school experiences and be more successful in life generally. Akanbi (1988) claimed that whenever they taught with some of the learning aids, their learners get more stimulated because the learning aids help them (learners) to become more attentive. In addition, learners' positive attitude generate more interest for the lesson they are taught. As a result, learners participate better in class activity. The success of any education enterprise is determined by the teachers (Kivuva, 1996). Therefore teachers at the pre-school stage ought to be well prepared and equipped with skills and knowledge to bring up the children for a worthwhile future. The case for pre-school is that if properly handled and the recommended learning approaches applied and resources provided, it can provide a carefully planned environment in which all children irrespective of the circumstances of their homes, can be encouraged to extend their sensory-motor, conceptual, social and communicative abilities to full exploitation. Teachers play a critical role in children's lives and development such as comforting the young, taking care of their hygiene needs, role playing, supervising their play and teaching them facts. Howes and Ritchie (1998) agree with this by saying that the teachers' factors

such as professional status are related to teaching behaviours and their interactions with the children. It is against this background that the researcher investigated the factors influencing the selection of resources used in teaching public pre-schools in Eldoret town.

Purpose of the Study

The purpose of the study was to investigate factors influencing the selection of instructional resources used in pre-schools in Eldoret town.

Objectives

The study was guided by the following objectives

1. What are the teacher-attributes that influence the selection of instructional resources in pre-schools?
2. What are the head teacher-attributes that influence the selection of instructional resources in pre-schools?

Theoretical Framework

This study was guided by a theory on learning developed by Bruner (1961). Bruner's constructivist theory asserts that learning is an active process in which learners construct new ideas based upon their current knowledge (Wertsch, 1997). Instruction can be made more efficient by providing a careful sequencing of materials to allow learners to build upon what they already know and go beyond the information they have been given to discover the key principles by themselves. Bruner's constructivist theory is based upon the study of cognition. Cognitive structures are used to provide meaning and organization to experiences and allow the individual to go beyond the information given. According to Bruner, the instructor should try and encourage learners to construct hypotheses, make decisions, and discover principles by themselves (Wertsch, 1997). The instructor's task is to translate information to be learned into a format appropriate to the learner's current state of understanding and organize it in a spiral manner so that the learner continually builds upon what they have already learned.

Formalization of the theory of constructivism is generally attributed to Jean Piaget, who articulated mechanisms by which knowledge is internalized by learners. He suggested that through processes of accommodation and assimilation, individuals construct new knowledge from their experiences. When individuals assimilate, they incorporate the new experience into an already existing framework without changing that framework. Social constructivism encourages the learner to arrive at his or her version of the truth, influenced by his or her background, culture or embedded worldview. Young children develop their thinking abilities by interacting with other children, adults and the physical world. From the social constructivist viewpoint, it is thus important to take into account the background and culture of the learner throughout the learning process, as this background also helps to shape the knowledge and truth that the learner creates, discovers and attains in the learning process (Wertsch, 1997). This should also be considered when selecting the instructional resources to be used in teaching and learning in pre-schools.

As learning institutions, pre-schools consist of teachers, head teachers and children who interrelate with each other with the common goal of improving the cognitive, social, intellectual and physical abilities of the child. Learning tasks should be planned with these principles in mind, and then learning will mean development for a child. The planning process includes the selection of instructional resources used in the teaching and learning process. Therefore this study investigated

internal factors that influence the selection of instructional materials used in public pre-schools within Eldoret town in order to enhance both cognitive and behavioural frameworks of the learners.

Early Childhood Profile in Kenya

The Ministry of Education assumed responsibility for coordinating early childhood development in 1980. Before 1980 pre-primary education, which caters for children between one and six years of age, was exclusively the responsibility of local communities and nongovernmental organizations such as churches, voluntary organizations, local authorities, and individual investors. In 1980, there were only six pre-school training centres. The government assumed responsibility for pre-school education in 1980 and has since streamlined the program. The government now has undertaken the training of pre-school teachers, the preparation and development of the curriculum, and the preparation and distribution of teaching materials. The development of pre-school units and the cost of teachers' services have, on the other hand, continued to be met by the communities and other nongovernmental agencies.

Early childhood education in Kenya did not get attention until the late 1980s. The government did not focus on early childhood education prior to this time because, after independence in 1963, the main priorities were to create a uniquely Kenyan ideology, politics, and constitution. Since the economy was still rural-based, childhood education did not become an immediate necessity until the industrialization of the country increased. As industries developed in the urban areas and more Kenyans started to work away from home, the demand for early childhood education increased.

To enhance the development of pre-school education, the government, in collaboration with the Van Leer Foundation, established the National Centre for Early Childhood Education, based at the Kenya Institute of Education (KIE). The Centre's main responsibility is to train the instructors of pre-school teachers, who are then posted to District Centre for Early Childhood Education (DICECE). The pre-primary education program has grown tremendously over the past 20 or so years. The number of children attending pre-primary in 1990 was in the order of 800,000, while the number of pre-school teachers was about 20,000 (kenyaweb.com 2001).

The MOEST and the Bernard van Leer Foundation carried out the experimental Pre-school Education Project from 1972 to 1982. The main objective was to improve the quality of early childhood services by developing pedagogical and training guidelines and programmes. The interest in quality generated by the project threw the spotlight on the importance of the education sector in ECD and led to Presidential Circular No. 1 of 1980, which mandated that the MOEST would be responsible for pre-school education for 3 -5 -year-olds. After the 1990 Jomtien Declaration of Education for All, which states that learning begins at birth, the MOEST embraced under-3-year-olds within the purview of pre-school education through the 1989-93 Development Plan. Through this important step, the entire early childhood age group from birth to 5 years was placed under the auspices of the education sector (GOK, 2005).

Compared to other countries at similar levels of economic development, Kenya has made considerable achievements in ECD provision. As highlighted earlier, the country's GER in pre-primary education marked a remarkable 40% in 2001, which was higher than the median of sub-Saharan African (5.8%) and developing (35%) countries. Kenya is now adopting an expanded vision of ECD, which concerns a holistic development of the cognitive, social, emotional and physical aspects of young children from birth. Policy in this sub-sector has evolved over the last

decades and important aspects are articulated in the Sessional Paper No. 6 of 1988 and National Development Plans (1989/93, 1994/96). Highlights of the policy include: the principle of partnership between parents, communities, NGOs, donors and government; recognition of the need to provide integrated services that meet the social, emotional, cognitive, health, nutrition and care needs of children; and the importance of empowering families and communities to meet the needs of children.

The early childhood Education in Kenya can be classified as Nursery School, Pre-Unit Class, Kindergarten, Day Nursery, Playgroup, Madrassa, and the Home-Based Care Centre. Kindergartens are mostly limited to the cities and fee-paying. The predominant demand comes from well-educated and the more wealthy families. Some of the kindergartens operate according to the Montessori teaching method (Swafiya, 1997). The present study dealt only on the pre-schools at public primary schools in order to establish the factors that control the selection of instructional resources in the pre-schools in Eldoret Municipality.

The Education Sector Strategic Plan and Implementation Matrices 2003-07 (hereafter denoted as ESSP), Kenya's key education policy implementation document, states the following objectives for Pre-schools: (1) enhance access and participation in Pre-school, notably raising the (Gross Enrolment Rate)GER to 70% by 2007; (2) improve the quality of Pre-school services at all levels by 2007; (3) implement Pre-school alternative complementary approaches (like home-based and employer-provided care, programmes for pastoralist and Islamic communities) by 2005; and (4) enhance ECD management and service delivery. These objectives are aligned with those contained in the country's Education for All (EFA) plan. In Kenya, discussions on the quality of both pre-school and primary school education have led to an awareness of the importance of providing for the transition between the two. In line with this, suggestions are made about ways to improve existing structures which provide support to children entering primary school and, perhaps more importantly, to create new structures which can bridge the gaps between pre-school and primary school (Swafiya, 1997).

Anon (2003) Posit that with the introduction of FPE, government funding for ECD within the MOEST, which had grown to 0.80% of the total government expenditure in the financial year 2001-2002, was more than halved during funds allocation in 2002-2003 although it recovered in 2003-2004. ECD is also losing the facilities to make room for primary school classes; and ECD teachers, unpaid, are leaving their jobs. Thus, the impact is felt not only in monetary terms but also in terms of losses in physical and human resources. Worse still, parents do not understand why primary education should be free and not ECD; they have therefore begun resisting paying ECD fees, choking off a vital source of funding. However, as agreed in the 1996 Memorandum of Understanding on the World Bank project the Government must keep spending for ECD at least 1% of overall education spending. This is imperative, if for no other reason than to justify the huge investment in ECD that was already made through the project. For example, a large number of ECD teachers were trained as part of the project. If the ECD workforce continues to shrink – whether as a result of FPE or other factors – there is a danger that the investment in their training will yield a minimal long-term return, as trained teachers will seek alternative employment opportunities (GOK, 2004).

From the above discussion it is clear that there is need to create new structures to bridge the gaps between pre-school and primary school. One of the ways is to come up with appropriate

instructional resources to enable the learners to develop cognitive, social, physical and intellectual skills required for further studies. This is the basis for the current study, to establish the factors influencing the selection of instructional resources used in teaching in pre-schools.

Materials and Methods

This study used Descriptive Survey research design. The current study was carried out in Eldoret town of Uasin Gishu County, Kenya. The study targeted all the Pre-school teachers, head teachers and TAC tutors in the area. All the head teachers of the selected schools and all the five TAC tutors participated in the study. Therefore the researcher had a total of eighty five (85). This study used questionnaires, interview schedules and observation schedules in data collection. The data was organized, presented, analyzed and interpreted using descriptive statistics. Descriptive statistics which were used included frequencies, percentages, tables, means and standard deviation. The coded data was fed into an SPSS computer programme version 17 and frequency tables, means and standard deviation were established as outputs.

Results

Teacher Attributes

The study sought to establish the teacher attributes that influence the selection of instructional resources. A Likert scale was used whereby SA, A, N, D and SD were awarded 5, 4, 3, 2 and 1 points respectively. Statistical responses for the respective teacher attributes are given in Table 4.5, in terms of the mean(\bar{X}) and standard deviation (SD) for the 60 respondent teachers. The scale mean point of 2.5 and below was considered as 'Disagree' while a mean point of more than 2.5 was considered as 'Agree' and there was no respondent who was neutral.

Table 1 Teacher Attributes

Attributes	N_x	\bar{X}	SD
Teaching experience of the teacher	60	4.4	0.9
Duration of the training	60	3.6	1.15
The age of the teacher	60	3.6	1.3
Teaching methods	60	4.5	0.65
Mastery of content	60	4.8	0.60

Key: N_x = number of teacher respondents

\bar{X} = scale mean points

SD = standard deviation

The results shown in Table 1 indicate that all the sixty respondent teachers agreed with the attributes administered. The Likert scale mean points above 4 were scored in attributes of mastery of content ($\bar{X}=4.8$, $SD=0.60$), teaching methods($\bar{X}=4.5$, $SD=0.65$) and teaching experience($\bar{X}=4.4$, $SD=0.90$). This implies that the strong need for use of instructional resources is related with the capacity building adequacy of the teacher. Therefore ECDE teachers must be equipped with the above attributes while administering the selection of the instructional resources. Teacher attributes on duration of training($\bar{X}=3.6$, $SD=1.15$) and the age of the teacher($\bar{X}=3.6$, $SD=1.3$) similarly was agreed by all the sixty respondent teachers as supportive factors that must be considered during selection of instructional materials. Results also indicated that majority of the respondent teachers

were holders of certificate level of training 43 (71.7%) and they may not be fully equipped with the knowledge on selection of instructional resources because of their limited training.

Teachers were asked an open-ended question on the other factors that influence the selection of instructional resources. Majority of the teachers stated that motivation of the teacher, teachers' level of education, teacher's attitude and competence determines the type of instructional resources to be used in schools. This may be attributed to the fact that motivated teachers tend to be innovative, the level of education of the teacher exposes to the knowledge of the availability of various instructional resources and teachers' attitude and competence motivates them to attempt the use of various instructional resources. The results indicated that all the five attributes administered had a mean of more than 3 points and therefore strongly influenced the selection of instructional resources. The above results concurs with Agun's (1986) finding that experienced and trained teachers use instructional materials sufficiently.

It was also found that motivation of the teachers, teachers' level of education, teacher's attitude and competence influence the selection of instructional resources used in pre-schools.

Head teacher Attributes

The study sought to identify the head teacher related factors that influence the selection of instructional resources as the administrator for ECDE. Four factors were considered for head teacher attributes and were investigated by rating into a ranking scale of 1 to 4. The factor ranked number 1 is the most influential and awarded 4 points, while that ranked number 4 is the least and awarded 1 point. Statistical analysis of the respondent teachers and the accrued points for each factor was carried out and given in Table 2. A mean of 2 and below implies that the factor had less influence, while a mean of more than 2 implied an influential factor

Table 2 Analysis of teachers' responses on head teacher attributes

Statement	N_x	\bar{X}	SD
Head teachers conduct in-service courses	60	2.7	0.93
Head teacher motivation	60	3.2	1.00
Capacity of head teacher to procure funds to buy instructional resources	60	3.7	0.50
Capacity of head teacher to mobilize resources for the purchase of instructional resources	60	3.2	0.92

Key: N_x = number of teacher respondents

\bar{X} = scale mean points

SD = standard deviation

The results in Table 2 indicates that respondent teachers agreed with the administered factors on head teacher attributes and all scored a mean of more than 2 points out of the maximum 4 points. Of the four attributes, three scored a mean of more than 3 points and include; capacity of head teacher to procure funds to buy instructional resources($X=3.7$, $SD=0.50$), capacity of head teacher to mobilize resources for the purchase of instructional resources($X=3.2$, $SD=0.92$) and head teacher motivation($X=3.2$, $SD=1.00$). The above results imply the respondents are dependent on the head teacher in facilitating the procurement of the instructional resources for their use in class. The fourth and least rated attribute was on head teacher conducting in-service courses($X=2.7$, $SD=0.93$) which

indicated that minimal effort was spent on further trainings. All the respondent pre-school head teachers never trained in ECDE and lacked necessary knowledge and importance of instructional resources. An open-ended question required the respondents to state other head teachers' factors that influence the selection of instructional resources. The teachers stated that knowledge about the instructional materials and the attitudes of the head teachers towards the instructional resources greatly influence the selection of instructional resources. This is so because it enhances head teacher's awareness of the available instructional resources and the motivation to avail them. All the four factors administered had a mean score of more than 2, and three of the factors had a mean score of more than 3. It was also reported that the capacity of head teachers' knowledge about the instructional material and the attitude of the head teacher towards the instructional resources greatly influence the selection of instructional resources. The above results strongly assert that head teachers play crucial roles in the selection of instructional resources as an administrator. The head teacher therefore must build sufficient capacity and undergo all the relevant training in ECDE in order to be able to competently make relevant decisions while selecting and procuring instructional resources.

Conclusions and Recommendations

The results revealed that teachers play a key role in deciding the type of materials to be procured. This observation was found to be significantly related with the teacher attributes on level of education, mastery of content and institutional motivation. Varied levels of the teacher attributes greatly affected the presentation of the subject content in public pre-schools. The study found that public pre-schools are administered from the primary school management and that head teachers have not been trained to handle early childhood education. The findings indicated that majority of the head teachers were not able to give priorities to the most important instructional resources appropriate for use by young learners. Such ignorance led to poor selection of instructional resources coupled with parent's failure to remit the operational funds necessary for the procurement of the materials and payment of the pre-school teachers. There is need for use of environmental visits and guest speakers in teaching and learning different concepts in schools should be embraced. The government should extend the period of training the pre-school teachers and ensure that their curriculum is intensive and relevant to the learners in pre-schools. Pre-school teachers should be given incentives like scholarships, good staff houses and above all, reasonable remuneration. Head teachers should attend in-service courses on the selection and use of instructional resources. Teachers should also be encouraged to attend as many seminars and workshops.

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