

Teacher Preparedness and Use of Instructional Resources in Implementing Early Childhood Development Education Curriculum in Bungoma County, Kenya

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Abstract

Original Research Article

This paper reports finding of a study that sought to analyze the teacher preparedness on the selection and use of the instructional resources in ECDE centers in Bungoma County in Kenya. The study sought to establish the attitude of teachers and its influence on the selection and use of instructional resources in ECDE, assess the influence of availability and use of instructional materials on the teaching and learning in ECDE, find out the relationship between teacher training and use of instructional resources in ECDE and ascertain the challenges facing teachers in the selection and use of instructional resources in ECDE in Bungoma Central District. The research was based on Piaget's theory of cognitive development. The study adopted the descriptive survey design and involved use of purposive, stratified and simple random sampling techniques to select a sample size of 81 respondents from the target population of educational officers, head teachers and teachers of the selected ECDE centers. Data was collected using questionnaire, observation and interview schedules. Data was analyzed using descriptive statistics including frequencies and percentages and the chi-square which was used to determine the relationship between the variables. The findings of the study showed that there exist significant relationships between teacher attitude, training, availability and use of instructional resources in early childhood education. There are also challenges associated with the attitude towards the use of instructional resources, instructional methods used, availability and use of instructional materials in ECDE. The study is envisaged to provide useful information for the education policy makers to produce relevant learning resources and course books for the ECDE teachers. Teachers Service Commission (TSC) and County governments may consider employing the pre-school teachers on permanent terms to increase the quality of services.

Key words: Teacher preparedness, attitude, instructional resources.

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INTRODUCTION

Early Childhood Development Education plays a key role because it marks the start of the endless education process of mankind. Its goal is the holistic development of the child through the delivery of integrated services, skills and knowledge to enable the child to be conscious of itself and the world around. The administration of the ECDE learning in Kenya like other countries are in partnership with the Local Authorities, churches, women organization and private volunteers [1]. This has caused variations in the acquisition and equipping of the ECDE centers with instructional resources and effective curriculum implementation. Dr. Maria Montessori [2] argued that children learn well through a variety of materials and toys. These materials evoke sustained interest and attention in young children [3]. Montessori further argued that holistic development in children is fostered using manipulating learning materials, playing and training exercises. Therefore, young children learn well

by interacting with the real materials in their learning environment. From NACECE Report [4], learners require a child friendly environment where a teacher sets the learning corners full of resources as per the theme or activity content.

The main purpose of ECDE learning in Kenya is mainly to help the child to acquire language and communication skills, manipulative and numeric skills in concept handling, reading and writing skills. The child should also acquire positive attitudes towards education; grow physiologically, morally, spiritually and emotionally. The child is expected to learn to respond positively to the natural calls and acquire interpersonal skills [5]. If instructional resources are acquired and effectively utilized by well-prepared teachers, pupils will be ready to smoothly move from the pre-school level to the primary school level without any difficulties. During ECDE learning, children do enjoy non-serious play

directed activities and it is the duty of the pre-school teacher to turn these non-serious selves into serious actors. This can only be achieved through the use of relevant instructional resources because psychologists have proved that optimum learning takes a multi-sensory approach [6]. ECDE Education requires a variety of Instructional resources and highly trained and motivated teachers to prepare the tender children for class one. Indeed, from the study carried out in Botswana [4] it was found out that children who had been in pre-schools under well prepared teachers in terms of training were stayed in school and the dropout figures were lower. Similar results were also obtained in other countries like Israel, Ireland, Colombia, Jamaica, Trinidad and even Kenya [2].

Pre-school teachers deal with the most critical and sensitive period of children's lifetime and therefore require quality training programs in terms of selecting high quality, relevant and motivating resources to use. The teacher is expected to develop not only the physical and cognitive skills of children, but also the social-emotional skills [4]. Although pre-school teachers are expected to prepare children for standard one entry, most of them seem to lack professional competency especially in the selection and use of the instructional resources.

The government policies and research theories emphasize plenty of instructional resources that are well sourced, managed, selected and used for quality ECDE Curriculum implementation. Although the Government has tried to improve ECDE programs in Kenya, the Pre-School education still faces many challenges in the provision of quality services. Early Childhood Education policies stress the use of plenty of relevant instructional resources to develop the totality of the child [5]. Most inspection reports have proved that most teachers teach without using relevant instructional materials [7], being an evidence of deteriorating quality education. The situation in the learning centers do not reflect well sourced, adequate and well utilized instructional resources. It is against this backdrop that the study reported in this paper sought to ascertain the teacher preparedness in the selection and use of instructional resources in the implementation of Early Childhood Development Education in Bungoma County, Kenya.

Purpose and Objectives of the Study

The study sought to analyze the teacher preparedness on the selection and use of instructional resources in the implementation of Early Childhood Development Education in Kenya. Specifically, it sought to:

- Establish the attitude of teachers and its influence on the selection and use of instructional materials in ECDE.
- Assess the availability and use of instructional materials in ECDE.

- Find out the relationship between teacher training and use of instructional materials in ECDE.
- Investigate the challenges facing teachers in selection and use of instructional materials in ECDE.

METHODOLOGY

The study adopted a descriptive survey research design. This study was carried out in ECDE centres in Bungoma Central district, in Bungoma County. The study targeted all the head teachers, assistant teachers and education officers from Chwele and Mukuyuni divisions in Bungoma Central District. Simple, purposive and proportionate stratified random sampling techniques were used to select 81 respondents comprising of 15 ECDE centers' head teachers, 60 teachers and 6 education officers from the study area. Data was collected using questionnaires, interview schedule and observation checklist. The instruments were validated using expert help from specialists and their reliability determined from the pilot test data. The test-re-test method was used, and the results analyzed using Pearson Product Moment Correlation Coefficient. The results obtained for the classroom observation schedule indicated a reliability coefficient of 0.69, while that of the teachers' questionnaire was 0.74. These values were deemed appropriate for collecting data as proposed by Kerlinger [8] who observes that a positive correlation of coefficient greater than 0.50 is deemed reliable. Data collected was analyzed using descriptive statistics including frequencies and percentages and the chi-square inferential statistics were employed to determine the relationships between the variables.

RESULTS

Teacher's attitude and use of Instructional Resources in ECDE

The findings show that most of the teachers 48 (80%) indicated that the use of instructional resources makes them to communicate and teach effectively. This is because instructional materials enhance communication, understanding of concepts and enables teachers to provide for differential abilities of learners in terms of attentiveness, interests and motivation. Most 56 (93%) of the teachers noted that they enjoy teaching children using instructional resources as this allows the children to interact freely with the materials and participate as they learn.

The use instructional resources encourage & motivate pupils to learn, as noted by a majority 56 (93%) of the teachers. This can be attributed to collaborative nature of learning as children share what they learn and their curiosity to learn is enhanced. The findings indicate that 48 (80%) most of the teachers noted that the time allocated for teaching is sufficient for use of instructional resources. It was noted by 42 (73%) most of the teachers that instructional materials

cater for individual differences as children interact with the materials freely and learn at their own pace. the use of instructional materials improves teaching at ECDE as noted by 56 (93%) most of the teachers. This is achieved through providing hands on experiences for the learners, motivating and creating rich learning situations for children.

Interview with the head teachers and educational officers also revealed that teachers perceived as useful, the contribution of instructional resources in ECDE curriculum implementation. They

asserted that the instructional resources when used improve teaching, make learning interesting, enhance retention of learnt concepts, enhance creativity in learners, promote collaborative learning, provide the children with hands on experiences They acknowledged that teachers make and enjoy using the instructional resources and thus needed to be supported fully. To find out whether there is any significant relationship between attitude and selection and use of instructional resources in ECDE, chi-square tests were performed, and the results are as indicated in table 1.

Table-1: Chi- Square Tests on Attitude and use of Instructional Resources

Test Statistics	
Attitude and use of instructional Resources	
Chi-Square	20.533 ^a
df	15
Asymp. Sig.	.001

Results in table 1 show that the chi-square value 20.533^a and its associated significance level 0.001 are indicative of existence of a relationship between the variable at 0.05 level of significance. This indicates that there is a positive relationship between attitude and teacher's use of instructional resources in ECDE.

Availability and Use of Instructional Materials in ECDE

The study sought to establish the influence of availability and use of instructional materials in the teaching and learning in ECDE centres. The results are as indicated in table 2.

Table-2: Availability and Utilization of Instructional Resources in ECDE centres

Resources	Availability		Utilized		Rarely Utilized		Never Utilized	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Charts	60	100%	60	100%	0	0	0	0
Pictures	60	100%	52	87%	8	13%	0	0
Posters	60	100%	32	53%	16	27%	12	20%
Photographs	60	100%	36	60%	16	27%	8	13%
Textbooks	60	100%	56	93%	4	7%	0	0
Models	39	87%	36	80%	6	13%	3	7%
Toys	27	60%	33	73%	9	20%	3	7%
Outdoor play resources	39	87%	36	80%	6	13%	3	7%

The findings show that all the sampled teachers noted availability of text books materials, charts, pictures and photographs in all the ECDE centres. The other materials including models, toys and outdoor play resources are available in some centers as indicated by 39 (87%), 27 (60%) and 39 (87%) of the teachers respectively. Sufficiency of the chalkboard was noted by a majority of the respondents and this could be attributed to its flexibility in use and it being cheap and thus affordable in most of the ECDE centres.

Results in table 2, show that 60(100%) and 52 (87%) of the sampled teachers used charts pictures respectively in instruction. The use of posters in instruction was noted by 32 (53%), 16 (27%) rarely utilized posters in instruction as 12 (20%) of the teachers never used posters in teaching. Utilization of textbooks for instruction was noted by 56 (93%) teachers as 4 (7%) rarely used textbooks in instruction. The underutilization of textbooks in some ECDE

centers could be attributed to scarcity or inadequacy of these resources in some centres. 42(80%) of the teachers used models in instruction, 8 (13%) rarely utilized models as 4 (7%) indicated that they never utilized these resources for instruction. 44 (73%) of the teachers utilized toys for instruction, 12 (20%) rarely utilized these tools, as 4 (7%) of the teachers never used toys in instruction in ECDE centres. 42(80%) of the teachers utilized outdoor play resources, 8 (13%) rarely utilized outdoor play resources as 4(7%) never utilized outdoor play resources at all.

There is thus need to lay emphasis on the making availability of these instructional resources for use by ECDE teachers because as indicated in the findings, most of the instructional resources though available, are not adequate and are rarely or never utilized in the ECDE centres.

Teacher's Training and Utilization of Instructional Resources

The study sought to establish the relationship between level of training of ECDE teachers and

selection and use of instruction resources. The results are as indicated in table 3.

Table-3: Teacher's Training and Use of Instructional Resources

Trained	Resource Utilization					
	Utilized		Rarely Utilized		Never Utilized	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Charts	48	80%	8	13%	0	0
Pictures	48	80%	8	13%	0	0
Posters	32	53%	16	27%	8	13%
Photographs	36	60%	16	27%	4	7%
Textbooks	52	87%	4	7%	0	0
Models	48	80%	8	13%	0	0
Toys	44	73%	12	20%	0	0
Outdoor-play resources	44	73%	8	13%	4	7%

The results show that the use of charts, pictures and models for instruction in ECDE is common as indicated by a majority 48 (80%) of the teachers. However, 8 (13%) of the sampled teachers rarely used these resources in instruction. The use of posters for instruction was noted by 32 (53%) of the sampled teachers as 16 (27%) and 8 (13%) of the teachers indicated that they rarely or never utilize posters in instruction. These results confirm the need for teachers training in the use resources like posters in instruction. The use of photographs in instruction was noted by 36 (60%) of the teachers as 16 (27%) and 4 (7%) rarely or never utilized this resource. This is because of the necessary skills required for utilization of photographs and in most cases, they are expensive to acquire. A majority 52 (87%) of the teachers utilized textbooks in instruction which is attributed to ease of

use for preparation and presentation of content and the availability of textbooks in most ECDE centres. However, rare utilization of text books as indicated by 4 (7%) of the teachers was attributed to the unavailability or inadequacy of text books in their ECDE centres. The utilization of models and toys was noted by most 48 (80%) and 44 (73%) of the teachers respectively. A majority 44 (73%) of the teachers utilize out-door play resources in ECDE centres. This shows that all the teachers acknowledge the role of models and toys and play in instruction in early childhood education.

There was need to find out whether there is a significant relationship between training and use of instructional resources in teaching at ECDE level. Chi-Square tests were performed, and the results are as indicated in table 4.

Table-4: Chi- Square Tests on Training and use of Instructional Resources

Level of Training and use of Instructional Resources	
Chi-Square	35.200 ^a
df	13
Asymp. Sig.	.001

Findings in table 4 show that the large 35.200^a Chi-Square value and its associated significance level 0.01 is indicative of existence of a relationship between the level of training and the selection and use of instructional resources in ECDE.

Challenges in Selection and Use of Instructional Resources in ECDE

The study findings show that 44 (73%) of the teachers indicated that the ECDE centres lacked the necessary instructional resources and attributed it lack or insufficient funds. There was also lack of well trained teachers in most ECDE centres. A majority 44 (73%), of the teachers indicated that the shortage of well-trained DICECE Trainers has resulted into poor induction and training of ECDE teachers which was noted as a factor that influences the selection and use of

instructional resources. It was noted by most of the teachers 48 (80%) that most ECDE centers lack well equipped libraries. This implies the lack of essential materials like class textbooks and other reference materials for effective instruction. A majority, 56 (84%) of the teachers noted that poor remuneration/payment and lack of terms of service for ECDE teachers was a challenge. 28 (47%) and 24 (40%) of the teachers noted that the teaching and learning was affected by the inadequate resources and facilities in the ECDE centres. A majority 44 (73%) of the teachers noted that large classes and lack of motivation were challenges facing instruction in ECDE centres. On whether there is an outdated curriculum in ECDE centres, most of the teachers refuted the claim.

Discussion of the Findings Teacher Attitudes and Use of Instructional Materials

The study sought to establish the teachers' attitudes and its influence on the use of instructional resources in teaching and learning in ECDE centres, the results confirm the relationship of the variables. The findings show that the attitude of teachers towards the instructional materials affects their interests, pride, preference in the instructional resources, and allocation of time for the preparation and use of instructional materials in teaching, catering for individual learner differences and generally enhancing the achievement of objectives of teaching and learning.

The study conforms to findings of other studies such as those of Ferron [9], Masinjila [10] and Kafu [11]. Ferron [9] states that if implementation of an innovation must succeed in classroom procedures the feelings of teachers and students should be taken care of. Masinjila [10], noted that positive attitude towards a subject lead to successful implementation. As Kafu [11] pointed out in his analysis of instructional media in elementary schools, the general feeling among teachers is that teaching materials and equipment are aids only used when a situation warrants them. Such an attitude results in limited use of the available instructional resources. These studies confirmed the relationship between attitude and implementation of curriculum innovations.

Availability and Use of Instructional Materials

On whether the availability and use of instructional materials influences the teaching and learning in ECDE, the results were in affirmative. The use of instructional resources in ECDE was reported by most teachers as useful in enhancing learning. However, most ECDE centres were reported to lack the necessary instructional resources. Lack of innovativeness was noted as a factor that contributed to the unavailability and lack of use of instructional resources in the ECDE centres.

The results indicated that the availability of instructional materials to a large extent determined their use in classroom teaching and was influenced by the teacher's instructional approaches. This is through the actual use in classroom and giving children opportunities to interact with the instructional materials. The findings of this study agree with studies of Ogoma [12] who in her research on resources for teaching social studies noted that most teachers were not eager to use the available instructional resources or even produce them. Other studies which conform to these findings are those of Oshungbohun's [3], Komen [13] among others which ascertained the availability and use of instructional materials.

The research findings indicate the utilization of instructional resources in ECDE centres though in some

instances, underutilization was noted. This could be attributed to the unavailability or insufficiency of these instructional resources in most of the (ECDE) Early Childhood and Education Centres. Kotchar [14] points out that instructional materials are significant and therefore the need for teachers to explore a wide variety of instructional materials to find the most suitable so as to broaden the acquisition of concepts and arouse interest of the learners. Instructional materials also make teaching easy, efficient, enhance collaborative learning, and stimulate student's interest, creativity and enthusiasm. The basis of instructional media is supported since they facilitate learning and thus as pointed by Kafu [11] and 1990, teachers need to employ a variety of instructional media so as to improve the learning outcomes.

This therefore calls on the need to emphasize teacher's innovativeness in the development, acquisition and use of instructional materials in teaching at ECDE. The results indicate that in most ECDE centres, little emphasis is placed on the acquisition and use of instructional materials in the teaching and learning. This shows that there is lack of innovativeness on the part of teachers about development and use of instructional materials. It can therefore be safely concluded that the availability of instructional materials has a significant influence on the teacher's use of instructional materials. These findings also conform to studies of Gould – Marks [15], Okopala [16] which laid emphasis on the challenges associated with the availability and use of instructional materials.

The teachers indicated that instructional resources promote learning through providing hands on experiences to learners, motivating learners, individualizing learning, enhancing collaborative learning and making it easier for the teacher to present content to the learners. It is worth noting that learning is made easy and enjoyable when all human senses are involved. Psychologists also propose inclusion of all senses in the teaching and learning situations which is enhanced using instructional resources by teachers [17]. The findings of this study agree with other studies which emphasize the role of instructional materials in ECDE. Worth noting among them are Wittich and Schuller [18], Dale [19], Kim and Kellough [20], Romiszowski [21], Wendt [22], Walkin [23] and Hills [24].

Teacher Training and Use of Instructional Resources in ECDE

There was need to find out the influence of training on the teacher's selection and use of instructional resources in early childhood development and education. When asked how they perceive the effectiveness of the ECDE teacher training course under the DICECE Trainers was effective, a majority, 9(60%) and 6 (40%) of the head teachers noted that it is very effective respectively. Thus, as indicated in the

findings, the teacher training course under DICECE Trainers is considered effective. It is through this course that the ECDE teachers are equipped with the necessary skills for teaching using appropriate instructional methods and selection and use of instructional resources. Asked whether teachers have been effectively prepared to teach, make, select and use instructional resources, 15 (100%) all the head teachers of the ECDE centres that participated in the study agreed. This finding indicates that there is adequate preparation of the ECDE teachers in teaching, making, selecting and use of instructional resources. This is a contributory factor to effective instruction in early childhood development and education centres.

The results indicated that teachers rarely use the most appropriate instructional methods and materials in teaching in ECDE centres due to lack of knowledge and skills needed for effective use of instructional resources. The study has revealed that teacher training is invaluable in building confidence in teachers in the selection and use of instructional resources. The training of teachers determines their appropriate selection and use of instructional resources. These views are corroborated by other educational media specialists like Gerlach and Ely [25], Briggs and Gagne [7] and Ngaroga [26]. As for Gerlach and Ely [25] and Kafu [11] they say that very little can be done if instructional resources are not incorporated in teaching.

As established in this study, in most of the ECDE centres, the teachers lacked proper training in selection and use of instructional materials. This was attributed to lack of college training for most of the teachers. Most of the teachers in the areas hold certificates in child-education from vocational middle schools and vocational high schools. A considerable number of those who hold college certificates are non-child education majors. The study established that teachers have very limited, if any, formal training related to the selection and use of instructional resources in early childhood development and education.

There is need for proper training of teachers in the selection and use of instructional resources to create a conducive environment for learning. These study findings corroborate the findings in other studies as those of Obanya [6]. Gross *et al.* [27] pointed out that the teachers' competence has a direct influence on the way the innovations are implemented in schools and colleges. As indicated in the findings, teacher's selection of appropriate instruction resource plays a key role in motivating children to learn. The teachers also recognize the need to appropriately select and vary instructional resources to ensure meaningful learning and attainment of the objectives. There is therefore need for adequate training of ECDE teachers in the selection

and use of instructional resources if the objectives of ECDE are to be attained.

Challenges Facing Teaching and Learning in ECDE

The results confirm existence of challenges in the teaching and learning in ECDE which range from lack of instructional resources, inadequate resources and facilities, shortage of well trained teachers, poor motivation among teachers in ECDE centres, poor remuneration/payment and lack of terms of service for ECDE teachers and generally lack of managerial and professional support to teachers. Managerial and professional support was noted to influence teacher's commitment to their work, the provision of instructional resources and motivation of teachers.

Findings show that most of the ECDE centres had a challenge on the availability and use of instructional resources. It points out that most of the instructional resources which require funds were unavailable or minimal as the ECDE centres could not avail them for use. Well-equipped libraries were lacking, in most centres, poor remuneration/payment and lack of terms of service, the shortage of well-trained DICECE Trainers, were also noted as a challenge to use of instructional resources. This was noted to have resulted into poor induction and training of ECDE teachers, which is prudent to professional teacher development [28, 12, 23].

The study found out that most teachers are not supported by their ECDE centres to attend seminars and workshops for refresher courses on enhancement of teaching and learning. Most teachers also indicated that there was inadequate support in the acquisition and purchasing of instructional materials, no recruitment of ECDE teachers, limited or lack of incentives for the teachers, provision of funds for seminars and workshops, and rewarding of teachers. There is therefore need for the managerial support both materially and financially to boost the morale of teachers by giving them incentives through field trips, organizing for role play and motivation.

CONCLUSION

Teacher preparedness in the selection and use of instructional resources lies on the attitude of teachers towards curriculum innovations, teacher training, availability and use of instructional resources.

Attitude is an important factor in the process of implementation of a curriculum because a positive attitude towards a subject contributes to successful implementation of that subject. The teacher's attitude towards innovations such as instructional resources in ECDE contributes on the teacher's willingness to use these resources in teaching children and ensuring that learning is interesting and that learners are motivated to learn at their own pace. Instructional resources are so important in enhancing dissemination of information

that the claimer for its incorporation in teaching/learning situations come up in professional discussions. Common knowledge has it that children will always want to experiment through a process of simulations and other activities like playing in the mud and molding using mud.

The availability and use of instructional resources in ECDE enhances children's learning and development. There is thus need for teachers to improvise and use available instructional resources for teaching in ECDE. Teachers should enhance learner participation in learning activities by using individualized instruction approaches, varying methodology with emphasis on indoor and outdoor play activities and going beyond presentation of facts to act as role models for children. Instructional resources were noted as important inputs for teaching and learning in ECDE. Therefore, there is need for teachers to select and adequately use appropriate instructional resources and facilities. More emphasis is placed on the need for the ECDE teachers to balance the acquisition of knowledge and development of children.

Thus, it can be concluded that the lack of adequate training of teachers results to limited use of various and appropriate instructional resources. This is a factor which poses a challenge to teaching and learning in most ECDE centres in Bungoma County and in most other counties in Kenya.

The challenges facing instruction in ECDE range from lack of managerial and professional support in terms of in-service courses, seminars and workshops for ECDE teachers; overloaded syllabus; inadequate teaching and learning resources; poor remuneration and lack of terms of service for teachers, shortage of trained teachers and the negative influence of the perception of the importance of ECDE.

Therefore, it can be concluded that level of teacher's commitment to their work is dictated by the way they are governed by the head teachers. This is usually through financial and material support for the necessary resources for teaching and learning in ECDE, sponsorship to attend seminars and workshops, promotions, and provision of rewards/incentives for the better performing teachers. The results indicated lack of managerial support and this was noted as the contributory factor to the inadequacy or unavailability of instructional resources and a negative perception of the teaching at this level.

RECOMMENDATIONS

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

- There is need for provision of incentives to ECDE teachers through remunerations, opportunities for in-service training, and sponsorship to attend seminars and workshops on instruction.

- There is need for emphasis on acquisition and use of instructional resources in ECDE.
- There is need to consider factors such as ease of use, availability, knowledge of use, lesson objectives and quality for selection and use of instructional materials.
- There is need for training of ECDE teachers to enhance their knowledge and skills in the selection and use of instructional resources.
- The ECDE teacher is called upon to consider the relevance of the content, usability, appropriateness in choice, selection and use of instructional resources.
- There is need for managerial and professional support beyond provision of funds, motivating teachers, recruitment of more ECDE teachers and purchasing of teaching and learning resources.

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