

CHALLENGES FACING IN THE IMPLEMENTATION OF EARLY CHILDHOOD DEVELOPMENT EDUCATION IN KERICHO COUNTRY, KENYA

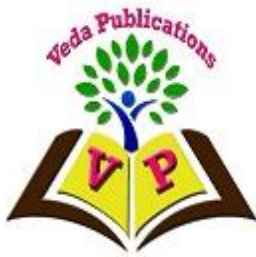
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ABSTRACT



Childhood education is crucial in the life of a child because it lays the foundation of intellectual and physical development. The government policies and research theories emphasizes plenty of instructional resources that are well sourced, managed, selected and used for the purpose of quality ECDE Curriculum implementation. The purpose of this study was geared towards the analysis of availability of the instructional resources and challenges facing ECDE centers in Kenya. The research was based on the theory of curriculum innovations. The study adopted a descriptive survey design and was carried out in Kericho Country. Simple random and stratified sampling techniques were used to select respondents who comprised of a target population of 84 head teachers and 180 pre-school teachers to get the sample size of 25 head teachers and 54 pre-school teachers from the selected ECDE centers. Data was collected using questionnaires, observation checklists and an interview schedule. The instruments for data collection were piloted to validate the tools and determine their reliability. Data was analyzed using descriptive statistics, this included frequencies and percentages. Data was presented in the form of graphs, charts, and tables. The study provides useful information for the education policy makers to produce relevant learning resources and course books for the ECDE teachers. The Government of Kenya (GoK) can use the findings to consider funding the pre-school education and improve teacher preparedness and attitudes towards the use of instructional resources. Teachers can use the findings to adjust and improve their teaching methodologies in the use of instructional resources.

Keywords: *Childhood education, Curriculum, ECDE Centers, Kenya*

INTRODUCTION

Several psychologists have argued and proved that school days are supposed to be the happiest moments to the learners. Truly, a child who misses education is a child lost. Montessori (1870-1952) has argued that children learn well through a variety of materials and toys. These materials evoked sustained interest and attention to young children. Further still, the leading child psychologist Piaget called the period which Montessori training usually begins as the “Pre-operational” period. Here, the child is able to manipulate, transform and perform other mental operations only when it manipulates the object concretely. Montessori (1952) further argued that holistic development in children is fostered through the use of manipulating learning materials, playing and training exercises. According to her, children at the age of 6 and below possess “absorbent minds”, with very active senses which equip them with skills to learn more quickly and easily than any other subsequent period in their lives.

The Early childhood learning is an important system not only in Kenya, but also in other countries of the world (Young, 2012). According to the International Encyclopedia of Education (1985) it is referred to as a variety of types of provisions for young children designed to support and stimulate their intellectual development. A child receives a good start in life through the promotion of quality care, nurturing and safe environment (Froebel, 1963). According to many scholars and psychologists, aspects of ECDE learning curriculum which acutely require instructional materials include the cognitive, affective and psychomotor domains. A study carried out in Botswana (1993-1995) found out that children who had been in pre-schools under well prepared teachers in terms of training were mostly still in school and the dropout figures were lower. The results were also obtained in other countries like Israel, Ireland, Colombia, Jamaica, Trinidad and even Kenya (Bernard Van Leer Foundations, 2002). There is therefore need to carry out research in the analysis of teacher preparedness, attitude and use of instructional resources in the implementation of ECDE curriculum in Kenya.

Therefore, young children learn well by interacting with the real materials in their learning environment. The ECDE learning becomes operational through the use of a variety of well selected, relevant learning resources, practical skills and abilities are well taught by the help of resources. Truly, too much teacher talk is boring and ruinous to the pupils. From

the NACECE Report (2006), learners require a child friendly environment where a teacher sets the learning corners full of resources as per the theme or activity content. Materials are changed or renewed from time to time as children explore and learn freely in indoor and outdoor activities.

This can only be effective when teachers are well trained and prepared in the selection and use of appropriate variety of instructional resources (Ongus, 2003). 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. If instructional resources are acquired and effectively utilized by well prepared teachers, pupils will be ready to smoothly move from the pre-school stage to the primary school level without difficulties.

The belief that early learning begets later learning and success, just like early failure begets later failure, has been validated in both economic and educational research (K.I.E., 2002). During ECDE learning, children 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 (Adeyanju, 2003). This is supported by Kariuki (2002) who argues that teaching should fire the enthusiasm of the child, motivating it to desire to learn and be active. He further emphasizes this by arguing that to learn a thing in life through doing is much more developing, cultivating and strengthening than to learn it merely through the verbal communication of ideas. ECDE requires a variety of instructional resources and highly trained and motivated teachers to prepare the tender children for class one.

Latest developments have seen a global endeavor to prioritize early childhood care and education as a foundation for later learning and development, as evidenced by the Global Guidelines for Early Childhood Education and Care in the 21st Century (Association for Childhood Education International/World Organization for Early Childhood, 1999). Such efforts are a response to a variety of complex social issues and economic trends. These forces, which are referred to here as "complex family stressors," include, but are not limited to, societal changes due to industrialization, the increased number of women with young

children entering the labor force, families with two working parents, a rise in the number of single parents, and the demise of traditional systems of child care and extended family support systems (Cheruiyot & Kosgei, 2008).

1.2 STATEMENT OF THE PROBLEM

Early Childhood Development Education policies stress the use of plenty of relevant instructional resources to develop the totality of the child (NACECE, 2006). Learning has been ineffective in most ECDE centers with children having difficulties in mastering reading, manipulative, numeric and interpersonal skills despite the several studies on instructional resources (Cheruiyot and Kosgei, 2008).

Cave and Mulloy, (2010) emphasized the importance of teacher preparedness in terms of professional records preparation, academic and professional training levels of the pre-school teachers for effective ECDE implementation. Concerns have been raised over the state of the ECDE programmes with regard to the negative teacher attitudes towards ECDE learning, specifically in the selection and use of instructional resources due to low remuneration, lack of time and demotivation (DICECE, 2013). If the situation is left to continue, the child's holistic development cannot be guaranteed in the 21st Century and beyond. Hence this study sought to investigate on teacher preparedness in the implementation of early childhood development education in Kericho County.

PURPOSE OF THE STUDY

The purpose of this study was to evaluate teacher qualification and challenges facing the implementation of early childhood development education in Kericho Municipality, Kericho County.

OBJECTIVES OF THE STUDY

The specific objectives of this study were:-

- i) To examine the teacher qualification and its influence on the use of instructional resources in ECDE centers in Kericho County.
- ii) To investigate the challenges facing teachers in the selection and use of instructional resources in ECDE centers in Kericho County.

RESEARCH QUESTIONS

The study sought to answer the following research questions:-

- i) How does the teacher's qualification influence the use of instructional resources in ECDE centers in Kericho County?
- ii) What are the challenges facing teachers in the selection and use of instructional resources in ECDE centers in Kericho County.

SIGNIFICANCE OF THE STUDY

The research provides useful information for the Kenya Institute of Education (KIE) and Ministry of Education (MOE) to produce relevant instructional materials and course books for the pre-school education in Kenya.

The Quality Assurance and Standards Officers (QASOs) can use the study findings to mount country-wide workshops and in-service courses for the DICECE trainers of the ECDE teachers on their teaching methodologies and new emerging issues in the curriculum as they train the teachers to acquire the skills and knowledge to effectively select and use the instructional resources.

The Government can use the study to consider funding and equipping the ECDE centers with adequate instructional resources for effective teaching and learning. The GoK through the Teachers Service Commission (TSC) can use the findings to employ the ECDE trained teachers to boost their morale in curriculum implementation.

The findings can inspire the managers and sponsors of private ECDE centers in the country to broaden their scope in instructional resource acquisition to equip their pre-school centers with appropriate and relevant resources for the effective curriculum implementation.

The findings can enhance parents' commitment in the provision of ECDE relevant to their children through provision of quality and adequate instructional materials through cost sharing and improvisation to enable the children extract knowledge through discovery.

THEORETICAL FRAMEWORK OF THE STUDY

This study was based on the theory of implementation of curriculum innovations advanced by Scott et. al (2009). They argue that the degree to which a curriculum is implemented is a function of the extent to which conditions are present during the process of implementation. These conditions are: the attitude of the implementers, recipients as well as other stakeholders of the new curriculum; the support provided by the management staff; the availability of facilities and equipment; the degree to which members of the school organization are clear and aware about the scope and content of the curriculum; the extent to which members of the school organization possess the capabilities and competencies needed to carry out the process of curriculum implementation; existing organizational arrangement and the willingness to expend the time and effort for the implementation of the curriculum.

According to Scotts (2009) for implementation to take place, there are certain conditions which should be fulfilled for sustainable curriculum change namely:-

The results of this study are significant to the education stakeholders, school administrators and the government in guiding them to formulate policies that may enhance efficient utilization of instructional resources in ECDE centers.

CONCEPTUAL FRAMEWORK

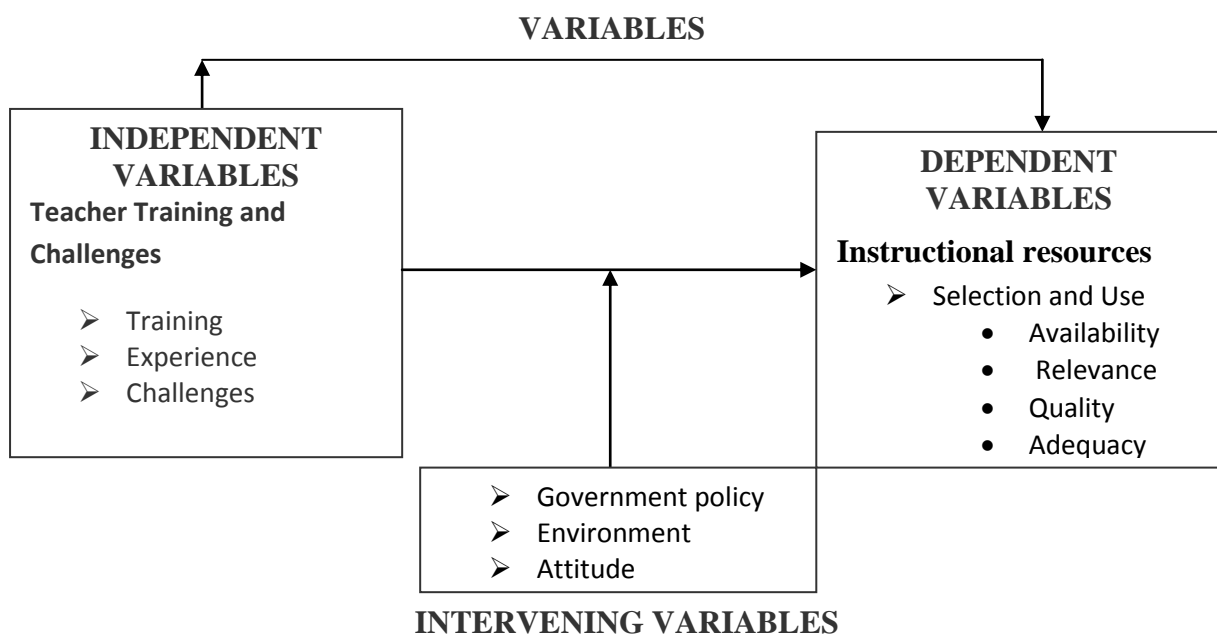


Figure 1: Relationship between Teacher qualification and challenges in the selection and use of Instructional Resources

This study adopted the Conceptual Framework shown in Figure 1, showing the interactions between the variables: teacher qualification and challenges in the use of instructional resources in the ECD Education curriculum implementation. The inputs are the independent variables: teacher qualification in terms of training, experience and competence. It also entails the mastery and delivery of the content, selection and use of appropriate instructional resources, class organization and control. Competent teachers do plan, acquire, use and maintain the learning resources. The dependent variables were the instructional resources utilization in terms of availability, relevance, adequacy, quality and the suitability to the learners.

METHODOLOGY

This study utilized a mixed methods methodology where qualitative and quantitative methods were used and adopted a descriptive survey research design. Questionnaires, interviews and observations were used as methods for data collection. The population of the study was 264 subjects (Mugenda, 2008). The target population consisted of 84 ECD centers in Kericho Municipality Zone of which 30 were public and 54 were private with 180 pre-school teachers (DICECE Kericho, 2013). The study targeted all the head teachers and pre-school teachers at the ECDE centers in the Zone.

SAMPLE SIZE AND SAMPLING PROCEDURES

The sample size consisted of the following respondents: 25 head teachers and 54 pre-school teachers in Kericho Municipality Zone that is 30% of the target population. Samples were picked from the ECDE centers using stratified and simple random sampling techniques. This was chosen to delimit the research and gather sufficient data within the cost and time restraints.

Data from questionnaires was analyzed in frequencies, means and percentages using the Statistical Package for Social Science (SPSS). Qualitative data from the questionnaires was analyzed in themes and categories identifying similarities and differences that emerged. The SPSS was used to generate frequency distribution tables. A descriptive statistical method was used and adopted to calculate the percentages and means. The researcher drew conclusions concerning teacher preparedness, attitude in the use of instruction resources in teaching and learning in ECDE centers, basing on the research objectives.

QUALIFICATION AND USE OF INSTRUCTIONAL RESOURCES

The first objective of this study was to examine the teacher qualification and its influence on the selection and use of instructional resources in ECDE centers. Respondents were asked to react through several statements: Use of instructional resources, years taught in current station, academic level, professional level training level, and the years one had taught as an ECDE teacher. This was an attempt to answer the third research question, “How does the teacher qualification influence the use of instructional resources in ECDE centers?” The responses are summarized on table 1 below.

Table 1: A table showing Qualification and Use of Instructional Resources

Years taught in current station	Agree		Undecided		Total	
	F	%	F	%	F	%
4 years and below	42	53.2	3	3.8	45	57.0
5-10years	25	31.7	0	0	25	31.6
Above 10 years	8	10.1	1	1.3	9	11.4
	Total				79	100
Academic level	F	%	F	%	F	%
Form 4	65	82.3	4	5.1	69	87.3
‘A’ level	10	12.7	0	0	10	12.7
	Total				79	100
Professional level	F	%	F	%	F	%
Not respondent	8	2.6	1	1.3	3	3.8
Certificate	43	54.4	1	1.3	44	55.7
Diploma	29	36.7	2	2.5	31	39.2
B.Ed	1	1.3	0	0	1	1.3
	Total				79	100
Training level	F	%	F	%	F	%
In training	5	6.3	0	0	5	6.3
Trained	70	88.6	4	5.1	74	93.7
	Total				79	100
Teaching experience	F	%	F	%	F	%
4 years and below	10	12.7	0	0	10	12.7
5-10years	33	41.8	3	3.8	36	45.6
Above 10 years	32	40.5	1	1.3	33	41.8
	Total				79	100

A majority 42 (53.2%) of teachers who were in a new station and 25 (31.7%) of those who had stayed longer 5-10 years made use of instructional resources. Those who had stayed for more than 10 years, only 8 (10.1%) indicated that they used instructional resources. Transfers are good to get new ideas on the use of IR (Ashioya, 2012).

This shows that the longer one stays in a station the less he/she values the use of instructional resources in teaching and learning. Further this could be due to complacency crippling in as one stays in one station for long also no new challenges are faced (Ambogo, 2012).

On the academic level of the respondents, majority 65 (82.3%) of those with form four academic level agreed that they used IR, while 4 (5.1%) were undecided. Those with 'A' level, only 10 (12.7%) responded positively. It can be deduced that the academic level of education enhanced the use of IR as was observed by Ema et al (2004).

On professionally trained teachers, those with certificate 43 (54.4%) agreed that they used IR and only 1 (1.3%) respectively were undecided. The diploma and B.Ed holders 29 (39.7%) and 1 (1.13%) agreed to using IR, while 2 (2.5%) and none were undecided respectively. The findings are in agreement with findings of Aguolu (2002) who argued that IR may be available but the user may not be willing to lay hands on them. Five (6.3%) for those in training agreed that they used IR compared to 70 (88.6%) of the trained who confirmed the use of IR. This revealed that Centers with trained teachers had much greater impact on learners than untrained ones.

Ten (12.7%) of those with 4 years and below teaching experience said they used IR, while those with 5-10years experience, 33 (41.8%) agreed and only 3 (3.8%) were undecided. Teachers with more than 10 years teaching experience, 32 (40.5%) agreed using and 1 (1.3%) was undecided. Transfers are good and should be encouraged to get new ideas on the use of IR (Ashioya, 2012).

CHALLENGES FACING TEACHERS IN THE SELECTION AND USE OF INSTRUCTIONAL RESOURCES

The second objective of this study was to investigate the challenges facing teachers in the selection and use of instructional resources in ECDE centers. The respondents were asked to respond to several items. They included; centre lacks instructional resources, shortage of

trained DICECE trainers, lack of skills in preparing and use of instructional resources, centers lacks equipped library, poor remuneration and lack of terms of service, instructional resources are adequate at the center, it is easier to present lessons using instructional resources, centre is young and not developed and learners are more than facilities. All these was in an endeavor to answer the fourth research question “What are the challenges facing teachers in the selection and use of instructional resources in ECDE centers?” The responses are tabulated on Table 2.

Table 2. Challenges Facing Teachers in the Selection and Use of Instructional Resources

Item	Agree		Undecided		Disagree		Total	
	F	%	F	%	F	%	F	%
Centre lacks IR	49	62.0	7	8.9	23	29.1	79	100
Shortage of trained DICECE trainers	67	84.8	3	3.8	9	11.4	79	100
Lack of skills in preparing and use of IR	17	21.5	7	8.9	55	69.6	79	100
Center lacks equipped library	63	79.7	1	1.3	15	19.0	79	100
Poor remuneration and lack of terms of services	60	75.9	5	6.3	14	17.7	79	100
IR are adequate at the center	47	59.5	7	8.9	25	31.6	79	100
It is easier to present lessons using IR	58	73.4	4	5.1	17	21.5	79	100
Centre is young and not developed	52	65.8	8	10.1	19	24.0	79	100
Learners are more than facilities	65	82.2	0	0	14	17.7	79	100

Out of 79 respondents, few 23 (29.1%) were satisfied that they had IR, but 49 (62%) stated that they lacked IR. It was noticed that those with sufficient IR were all in private ECDE centers. Public ECDE centers have to change by acquiring IR so as to be able to make learners acquire the expected skills as they transit to primary schools (Creswell, 2005).

Within the study area, there was only one public DICECE institute, this caused a shortage of trainers as shown by a majority 67 (84.8%) of respondents. Those who could afford to pay for training in a private DICECE institute were 9 (11.4%).

Teachers who said they lacked skills in preparing and using IR were 55 (69.6%), while those who stated that they had sufficient skills were 17 (21.5%). Lack of skills definitely impacted negatively on the teaching/learning process. This can be improved by stepping up the training programme and having frequent refresher courses (NACECE, 2006). The study showed that 63 (79.7%) respondents indicated that libraries were poorly equipped, while 15 (19%) were satisfied with the stocking of libraries.

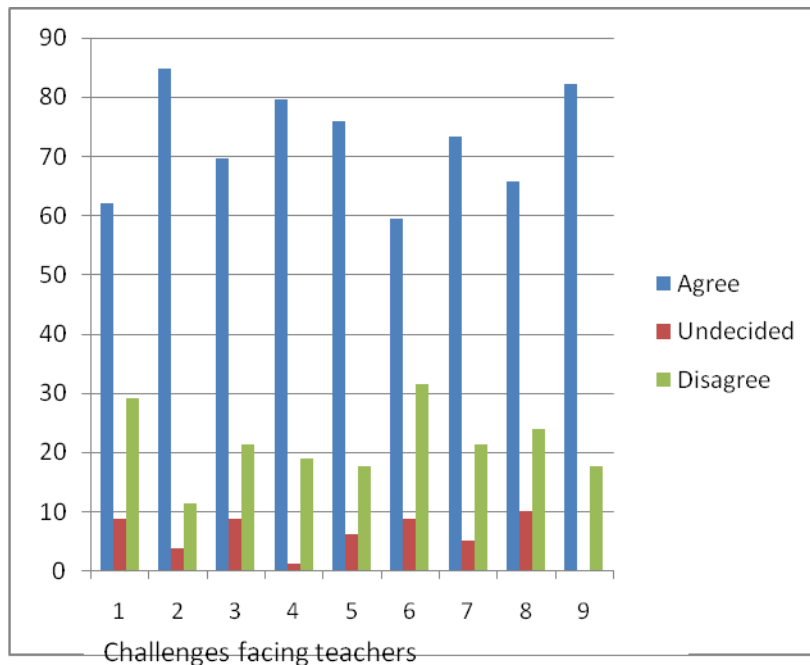
It was indicated that remuneration was poor and that scheme of service was lacking as presented by 60 (75.9%) of the teachers. Those who were contented were only 14 (17.7%). Since the bulk was dissatisfied, their service delivery was negatively impacted as observed by (Zaslow, 2005).

Slightly more than half of the respondents, 47 (59.5%) said that IR were adequate while about a third, that's 25 (36.6%) said the IR were inadequate. This is a critical requirement in early childhood development as was observed by Anyanwu (2003) that children learn and retain information better by doing and using their senses.

With the availability of IR, 58 (73.4%) teachers found that teaching and learning was made easier. This showed that majority of ECDE teachers preferred using IR, a few were not sure of the impact of IR on the teaching and learning as shown by 4 (5.1%) respondents.

Many of the ECDE centers were young as was indicated by 52 (65.8%) respondents. Those which were older and developed were depicted by 19 (24.0%) respondents.

A majority 65 (82.2%) teachers said that the centers had more learners than materials and had to make do with the few IR, only 14 (17.7%) had either enough or more facilities at the centre.

**KEY**

1. Centre lacks IR
2. Shortage of trained DICECE trainers
3. Lack of skills in preparing and use of IR
4. Center lacks equipped library
5. Poor remuneration and lack of terms of services
6. IR are adequate at the center
7. It is easier to present lessons using IR
8. Centre is young and

Fig. 2. Challenges Facing Teachers in the Selection and Use of Instructional Resources**Table 3. A Table showing Challenges faced by ECDE Teachers**

Challenges	F	%
No motivation due to insufficient salary	55	69.9
Lack of effective management	13	16.5
Inadequate parental support	3	3.8
Some materials are expensive	8	10.1
Total	79	100

The teachers cited remuneration as number one motivating factor which affected strongly performance of teachers in preparedness and use of IR; this was cited by 55 (69.6%) respondents. Other challenges they faced included ineffective management of the centers, indicated by 13 (16.5%), inadequate parental support by 3 (3.8%) and high cost of some IR by 8 (10.1%).

Overall state of ECDE centers were ranked as fair as shown by 38 (48.1%) respondents, but those who wanted conditions improved and IR purchased were 41 (51.9%). It was a positive concern by ECDE teachers that there was hope for improvement (Njoroge and Bennars, 2004).

TEACHER QUALIFICATION AND ITS INFLUENCE ON THE USE OF INSTRUCTIONAL RESOURCES IN ECDE

In the study, the findings showed that teachers stayed in one station for maximum of 4 years then moved to another station which affected the use and the experience in the use of IR because it takes time for one to adjust to a new ECDE centre and the use of IR. Stability of teachers in centers is necessary so as to have effective monitoring on the use of IR and equipping ECDE centers. However, academic and professional qualification had little influence on the teachers on how they successfully used instructional technologies in teaching and learning process. The teachers generally supported the use of instructional resources in teaching but varied on how often they used instructional resources. This situation may be due to level of education attained, in other words, it is a consequence of dealing with IR in early childhood education. In one of the studies (Berry, Tout and Zaslow, 2006), it is elaborated that higher levels of teacher education were generally linked with higher classroom quality in elementary and higher levels.

CHALLENGES FACING TEACHERS IN THE SELECTION AND USE OF INSTRUCTIONAL RESOURCES IN ECDE

Based on the findings of the study, there were various challenges that teachers faced in selection and use of IR in ECDE centers.

Some of the centers lack IR, this concurs with the findings of Isola (2010) and UNESCO (2008) which detailed that teaching/learning materials such as textbooks, teaching aids and stationary affect academic performance of the learners. Mutai (2006) also asserted

that learning is strengthened when there are enough reference materials such as textbooks, stationary and teaching aids. Schools endowed with more resources performed better than schools that are less endowed. Most of the ECDE centers in the Kericho Municipality Zone lacked libraries and had poorly equipped classrooms. As stated by Musau (2004), lack of library facilities was one of the most serious problems standing in the way of achieving high education standards in learning institutions whereas Ayoo (2002) carried out a study on the effects of school physical facilities on academic performance and established that availability of facilities had a direct link with the performance of learners in examination.

Poor remuneration and absence of scheme of service for ECDE teachers has negatively impacted on the retention of qualified manpower. Learners were more than the facilities available and this was also found to be a great challenge in the study as stated by Musau (2004), that some schools lacked enough classrooms, desks and chairs leading to overcrowding such conditions frustrated learners during the teaching learning process.

CONCLUSIONS

- i) The findings of the study revealed that the knowledge and skills of the pre-school teachers made them to be more competent in using the relevant IR. The teacher qualification did have influence in the use of IR in ECDE centers.
- ii) Basing on the findings of the study, there were various challenges facing ECDE teacher on the selection and use of IR namely:- lack of library facilities, poor equipped classrooms, poor remuneration and absence of scheme of service.

RECOMMENDATIONS

Based on the findings from this study, the following are recommended:

- i) There is need for the government and other stakeholders to stress on the importance of high academic grades and professional qualifications for those intending to train as ECDE teachers as this would lead to better teacher preparedness, attitude and use of IR in the ECDE curriculum implementation.
- ii) The government and all the stakeholders are required to provide adequate and standardized ECDE infrastructure specifically the libraries and conducive classrooms for their absence impact negatively on the growth. development and learning process of children.

REFERENCES

1. Adenyanju, T.L. (2003). *Teachers Perception of the Effects and Use of Learning Aids in Teaching*. Journal articles
2. Aguolu, C.C., & Aguolu, I.E. (2002). *Libraries and information management in Nigeria*. Maiduguri: Ed-Linform Services.
3. Ambogo M.M. (2012): *The relationship between Availability of Teaching/Learning Resources and Performance in Sec. School Science Subjects in Eldoret Municipality, Kenya*.
4. Ashioya B.W. (2012): *Factors Affecting Utilization of Sec. School Libraries in Vihiga District, Western Province of Kenya*. Unpublished Thesis: Kenyatta University, Kenya
5. Anyanwu, J.M. (2003). *The Effectiveness of Instructional Materials in Social Studies in Selected Schools in Owen educational Zone*. Imo State (B. Ed.) Research Project Unpublished
6. Bennars, G.A. (2003): *Theory and Practice in Education*. Nairobi: East Africa Publishers Ltd
7. Bernard Van leer Foundations, (2002). *Following footsteps; ECD Tracer Studies Early Childhood Matter, No. 100*, Netherlands
8. Berl, P.S. (2005). *The Early Childhood Leaders Magazine Since 1978*, N.A. (162), 6-10
9. Cave, A. & Mulloy, M. (2010). *A Qualitative Examination of Teacher Perceptive National Forum of Education Administration & Supervision Journal*, 27 (4) Retrieved Dec. 2014
10. Cheruiyot, K. & Kosgei, N. (2008) *Child Growth & development (Conception–3 years)* Nairobi: Enterprise Publishers
11. Ema, E. & Ajayi, D.T. (2004). *Educational Technology: Methods, Materials and Madness*. Melbourne: Jos. University Press Ltd.
12. Kombo, D & Tromp D. (2006). *Proposal and Thesis Writing 2nd reprint*. Nairobi: Don Bosco Printing Press
13. Froebel, F. (1963). *On the Education of Man*. NewYork: Appleton and Co.
14. Kariuki, M.W. (2002). *Perception of Teachers on the Impact of Early Childhood Education Programme*. Njoro: Egerton University
15. K.I.E. (2002). *Early Childhood Care and Education and Education in Kenya*. A report of an Evaluation of UNICEF
16. Lynch, Robert G. (2007). *Enriching Children, Enriching the Nation: Public Investments in High Quality Pre-Kindergarten* Washington. D. C.: Economic Policy Institute
17. Lyons (2012) *Workers of Tomorrow, Education in progress*, Ministry of Education and Scientific Research. Port Fortis. Fiji.
18. Isola, O.M. (2010) *Effects of Standardized and Improvised Instructional Materials Students' Academic Achievements in Secondary School Physics*. M. Ed Thesis, University of Ibadan, Ibadan.
19. MOE, (2006). *Early Childhood Development Policy, Framework*. Nairobi: Government Printers.
20. Montessori, Maria. 1952. *The Secret of Childhood* (1940). London: Sangam.
21. Montessori, Maria. 1995. *The Absorbent Mind* (1949). New York: Holt.
22. Mugenda, A.G. (2008). *Social Science Research Theory and Principles. Applied and Training Services*. Nairobi
23. Musau, S.M. (2004). "Factors Influencing Pupils Performance in K.C.P.E in Central Division, Machakos District" Unpublished M.Ed Thesis. University of Nairobi.
24. Mutai, B. K. (2006). *How to write quality research proposed: a complete and simplified recipe*. New York: Talley Publications.

25. NACECE, (2006). *Guidelines for Early Childhood Development in Kenya*. Nairobi: K.I.E
 26. Ololube, N.P. (2006). *Teachers Instructional Material Utilization Competencies in Secondary Schools in Sub-Saharan Africa*: from www.google.com/search
 27. Ongus, V. (2003). *The Availability and Use of Learning Resources*. A Case Study of Nandi, Uasin Gishu & Transzoia Districts. Eldoret: Moi University
 28. Orodho and Kombo. (2005). *Research Methods*. Nairobi: Masola Publishers
 29. Scotts, G. & Fullan, M. (2009). *Turnaround Leadership for Higher Education*. San. Francisco: Jossey – Bass Publishing press.
 30. Whaley, K. L. (2005), Programs for Infants and Toddlers, In J.L. Roopnarine & J. E, Johnson (Eds.), *Approaches to Early Childhood Education*, (4th ed. pp. 44-61), Upper Saddle River, NJ: Pearson Prentice Hall
 31. Young, M.E. (2012) *Early Childhood Development*, Washington D.C., World Bank
 32. Zaslow, M. Ed. & Martinez – Beck, 1st Ed. (2005). *Critical Issues in Early Childhood Professional Development*. Australia: Brookers Publishers Company.
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