



**CHILD-CENTRED METHODS USED
IN TEACHING AND LEARNING OF PSYCHOMOTOR AND
CREATIVE ACTIVITIES IN PUBLIC PRE-PRIMARY
CENTRES IN WEST POKOT COUNTY, KENYA**

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Abstract:

This study investigates how child centered methods are used in teaching and learning of psychomotor and creative activities in public pre-primary centers in West Pokot County, Kenya. The competency based curriculum being implemented in Kenya pre-primary school demands that psychomotor and creative arts be taught to foster the development of pre-primary children cognitive abilities. This is because they trigger child's imagination which stimulates and expands their cognitive capacities. Therefore, the study used a mixed methodology research approach. The study used descriptive survey design. The target population comprised of teachers and head teachers drawn from 417 ECDE Centres in West Pokot County. This study used a questionnaire for teachers, interview guide for head teachers and observation checklist (to collect information classroom teaching and learning) to collect data. Quantitative data collected was analysed using descriptive statistical techniques which were frequencies, mean and standard deviation. Inferential analysis of Karl Pearson Correlation coefficient was used to test hypothesis. Quantitative data was analysed with help of SPSS. Qualitative data from open ended questions and interviews was transcribed coded in themes and reported in verbatim. The study found out that pre-primary children were moderately involved in psychomotor and creative activities of singing, plays, dramatization, drawing, painting, sculpturing and singing. These activities are simulated reality in children mental capacities. This is underscored by Dewey who indicated that continuous usage of these activities enable pre-primary children to learn new things beyond what they previously known. Computed correlation statistics showed that there existed a positive degree of association which was significant ($p < 0.01$). The paper concludes that teachers' incessant utilisation of child-centred teaching methods affected the teaching and learning of psychomotor and creative activities in public ECDE centres in West Pokot County. In recommendations, there is need for pre-primary teachers to widen their scope

in the teaching of psychomotor and creative activities by incorporating more of child-centred activities.

Keywords: psychomotor, creative, activities, teaching, child centered and methods

1. Introduction

Quality of Early Childhood Development Education (ECDE) is important, and child-centered approaches education can improve this teaching and learning in Early Childhood Education (ECD) (Chatzipanteli, Grammatikopoulos & Gregoriadis, 2013). ECDE is the foundation of all learning in any life of a child (Buyuktaskapu, 2011). The United Nations through Sustainable Development Goals (SDGs) identified ECDE as a key educational goal (United Nations, 2015). ECDE has the potential to benefit learners as well as society (Crumly, 2014). In Kenya, the Basic Education Act, (2013) and Sessional Paper No. 14 of 2012 on reforming education and training sectors in Kenya acknowledge holistic needs of young children should be maximised to ensure the realisation of their full potential (Republic of Kenya [RoK], 2012, 2013). This holistic development can be accomplished when child centered methods are applied in teaching of psychomotor and creative activities at pre-primary level. KICD (2017) framework for implementation of competency based curriculum indicates that psychomotor and creative activities at pre-primary level enable learners to develop both fine and gross motor skills which are necessary for the control and co-ordination of different parts of the body. These activities enhance exploration and development of personal talents and skills as well as appreciation of their cultural heritage. Schools and society must develop ECDE learners to become happy, well-adjusted citizens, rather than learners who can just pass a test and get through school (Eslami, 2010). Pre-primary schools need to ensure that learners can think skilfully, creatively, and outside the box (RoK, 2012). The artistry activities are a significant part of ensuring that every pupil can achieve his or her potential and contribute fully to our society (Irish National Teachers' Organisation, 2009). According to UNESCO (2015), the encouragement of creativity to learners from early age is one of the guarantees of growth in a healthy environment of mutual respect and self-esteem which are important components for building a culture of peace. Eslami (2010) indicated that creativity in children is a state of mind in which all pupil intelligences are working together. In another view, it is also the capacity to solve problems and fashion products and to raise new questions (Irish National Teachers' Organisation, 2009).

Creativity in the classroom is about how a teacher captivates learners and inspires them to gain discovering to new things (Wanjiku, 2014). Those teachers who practise the art of developing creativity to their learners are usually focused on creating a classroom culture that blossom on creativity (Wangui, 2011). The teachers build a collection of tactics designed to ignite new ideas and bring out a spirit of creativity in learners and they adapt and create ideas for their own curriculum needs. What is needed is teaching that is innovative (Obuchere et al, 2014; Nguku, 2015). Learners need to experience the

unpredictable and the uncertain. Learners need lessons that produce surprises. Fisher (2002) argued that creative learners require creative teachers who in most instances provide both order and adventure and those teachers are willing to do unforeseen and take risks. Creativity is the act of turning new and imaginative ideas into reality.

In Finland, one of the countries recognised globally for providing quality education to ECDE learners, the teaching approach is moving from teacher-orientated to child-centred learning, where learners are treated as active participants in the process of learning and can realise their own ideas while achieving curriculum goals (Ronkko & Aerila, 2015). Teachers need also to have capability to control and direct the pupil's process of holistic craft making and be able to offer creative solutions to support reflection and problem solving (Starko, 2010). Another child-centred strategy being regularly used in teaching of creative activities is experiential learning (Li, 2013). This is a sense making process which involves active engagement between the inner world of the child and outside world environment. Beard and Wilson (2006) informed that during experiential learning, the insights acquired through the conscious/unconscious internalisation of personal/observed experiences usually builds upon the subject's past experience and knowledge. This method enables learners through an active sense making process, to engage with inner world and outside environment. Hyyonena et al. (2014) indicated that in order to assist children learn from experience, a combination of: sculpting, role-play, activities and drama, arts and crafts, stories and similes is required. The methods encourage learners to express thoughts and ideas on their own experiences. Activity based approaches using storytelling, art among others can be perceived as simulated reality (Crumly, 2014). The degree to which the classroom learning environment is real, natural or simulated affects the learning capability of a child (Beard & Wilson, 2006). These techniques are tools invented to promote understanding during pupil cognitive development. The review of the above scholarly arguments indicates that child centered methods are recommended to teach psychomotor and creative activities at pre-primary level. Therefore, this paper looked at the child centered methods used to teach psychomotor and creative activities in public pre-primary centers in West Pokot County, Kenya.

2. Statement of the Problem

The ultimate competence of learners is expected to be realized through the use of child-centred learning methodologies by teachers. According to Metto and Makewa (2014), teachers' utilisation of child-centred approaches improved learner's cognitive development. investigations conducted by UNESCO (2014) report shows that most of learners in Northern Kenya counties such as West Pokot have poor skills in reading, writing, counting and speaking. This affects transition of learners from ECDE to primary school level as they do not possess adequate competency to help them adjust to the new curriculum demands. Report also shows that there has been a decrease in children competencies in psychomotor and creative skills which could be rooted back to the kind

of instruction they received right from early childhood. A research by Nyangeri (2014) found out that most ECDE teachers in Kenya apply the less effective teacher-centred methods of teaching in classrooms. This paper therefore looks at the degree to which pre-primary teachers apply learner centered methods in teaching psychomotor and creative activities in public pre-primary centres in West Pokot County, Kenya.

2.1 Objective of the Paper

To assess the utilisation of child-centred methods in teaching and learning of psychomotor and creative activities in public ECDE Centres in West Pokot County.

2.2 Research Hypotheses

H₀₁: There is no significant relationship between utilisation of child-centred approaches in the teaching and learning of psychomotor and creative activities in ECDE in West Pokot County, Kenya.

3. Literature Review

3.1 Dewey and Child Centered Learning

Madlela (2014) believed that the only way a child would develop to its potential was in a social setting. Dewey believed that the school should be a microcosm of its community and that education is living, not just a preparation for life (Dewey, 1990). Dewey viewed life as a process of continuous renewal, a series of on-going experiments. Morrison et al. (2010) view of child-centred education embraced the idea that education should be both problem-based and fun; unless a given experience leads out into a field of previously unfamiliar no problems arise, while problems are the stimulus to thinking. Dewey believed that the experiences of each learner must come from within each individual learner (Nasibi, 2005). Dewey was saying that each experience should leave each student motivated and that the solving of each problem must lead to new, related questions about the topic (Morrison, et al, 2010). Another idea that enabled Dewey to advance the theory of learner-centred education was his recognition of what he called collateral learning, an idea that has since been labelled confluent learning (Madlela, 2014). Morrison et al (2010) considered this type of learner-centred education the richest of all. Confluent learning in the way of information of enduring attitudes, of likes and dislikes, may be and often is much more important than the spelling lessons (Platz & Arellano, 2011).

3.2 Empirical Studies on Child Centered Learning Techniques in Teaching and Learning of Psychomotor and Creative Activities

Nyangeri (2014) investigated the use of music as a medium of instruction by pre-primary school teachers and how it related to factors that influenced use of music as a medium of instruction. The factors investigated were: teaching experience, teacher training, attitude towards music and academic qualifications. The study utilised ex-post- facto research design. The sample size included all pre-primary school teachers in all the 28 pre-primary

schools in Kitale Municipality. The study established that there was a significant relationship between ECDE teachers teaching experience and use of music as a medium of instruction. The researcher found out that ECDE teachers were using music as a medium of instruction in all the activity areas. From the findings of the study, it was also clear that varieties of music instruments were available for teaching like drums, shakers, flutes, sticks, fiddles, bottles, nails, reeds, horns, guitar, whistles, and leg bells were available in schools for instruction. Nyangeri focused on determinants of ECDE teachers' use of music as a medium of instruction while the current research focused on the extent to which activity based medium of instruction approaches facilitated learning in ECDE. The population was small and not defined. Moreover, the researcher used advanced statistical testing methods rather than using simple methods that requires a population of more than 30 respondents.

Andiema, Kemboi and M'mbonne (2013) study sought to establish relationship between play activities' implementation and learners' academic performance in West Pokot County. The researchers used descriptive survey design. All the 417 public ECDE centres in West Pokot County formed the study. Result showed that most ECDE centres had inadequate playgrounds and were not provided with instructional materials required. Similarly, the centres used play activities time for other activities. ECDE teachers did not engage and participate with the learners in the playfields. Andiema et al, (2013) research focused on one aspect of psychomotor and creative activity learning whereas this paper focuses on several child centered methods of teaching the activities at pre-primary level. In a study conducted by Eslami (2010), among a random sample of 20 ECDE and using regression analysis, Eslami found that learners can only be interested in what they already know about. If the focus was only on what learners were already interested in, they will have a limited pool of ideas and interest to draw on. This limited pool will interfere with creating a rich and engaging program, in collaboration with learners and families. While the curriculum decisions need to respect and involve learners, ultimately the creation of the curriculum is the responsibility of teachers hence ensuring effective learning outcomes. Brown (2011) study argued that making use of learner's interests to provide engaging and meaningful learning experiences is important to their learning outcomes, but it is also the role of educators to introduce new ideas and interests. Sometimes these will be things that they know are important for learners to learn, but that may never come up as an interest for example, road safety, sustainability or nutrition. That child will be interested once they are introduced to them for example cooking or gardening in many topics. This research investigated the extent to which child-centred methods influenced teaching and learning of psychomotor and creative activities in ECDE centres in West Pokot County.

Mweru (2012) conducted a research on teachers' influence on children's selection and use of play materials in selected ECDE Centres in Nairobi City, Kenya. The study was meant to establish among 36 teachers, teachers' gender stereotyped views and if they communicated these views to children during selection and use of play materials. An observation schedule instrument was used collect research data. It was established that

teachers influenced children in a gender stereotyped manner with more influence being exerted on boys compared to girls. The teachers influence on learners was found to encourage them to adopt gender roles that were not always fair to the two categories of learners. Mweru's (2012) study differed from the current study as it had a larger study population than Mweru's (2012) which comprised of only 36 teachers. The present study also employed: interview schedule and questionnaires lesson observation it was meant to find out the role of teachers in integration of activities method in ECDE curriculum in West Pokot County. Nguku (2015) investigated the influence of play on preschool children's academic performance in Yatta Sub-County, Machakos County, Kenya. The study was guided by three objectives which focused on types of materials, types of play and time allocated to play and their influence on children's performance. The study was hinged on Froebel's theory which states that play is a serious and deeply significant activity for young child. Froebel viewed kindergartens as institutions where children instructed and educated themselves. It was also a place where children developed and integrated all their abilities through play. The study employed quasi-experimental research design and the targeted all the 60 public pre-schools and private pre-schools in Yatta Sub County with a population of 1800 pre-school children and 62 pre-school teachers.

Nguku (2015) study established that use of different play materials had a positive influence on academic performance of preschool children. It was found that using the number board yielded higher scores especially in arithmetic followed by skipping robes. There was also greater improvement in the mean score between the pre-test and post-test when children were exposed to types of play. When children were exposed to teacher initiated and guided play, they tended to record the highest improvement in their mean score. Role play and group play also significantly enhanced children's academic performance. Lastly, there was a significant change in the mean score of children with increase in time allocated for play and therefore play time was found out to have a significant influence on academic performance. Ngecha (2011) observed that is that despite government commitment to improve pre-school education, learning through play by learners had been dismally below expectation. With this problem, Ngecha studied to determine factors that hinder play in public pre-schools in Makadara District, Nairobi County, Kenya. The researcher established that most teachers from public pre-schools are aware of the government policy on play. This was exhibited in the manner in which they conducted play activities. However, outdoor play policy was not fully implemented in pre-schools. The study also concluded that availability of playing materials and facilities enhanced children's skills such as communication skills, social skills problem-solving skills and others. Further conclusions showed that the teachers in private schools participate more in outdoor play than the others in other categories. Odongo (2007) qualitative study examined teachers' perceptions on their use of music as a medium for enhancing development in all early childhood domains/areas (e.g., cognitive, communication, physical/motor, social-emotional and self help). Eight early childhood teachers, four drawn from Kenya and four from the United States, responded

to open ended interview questions about their experiences of teaching and using music in their classrooms and personal preparation for use of music in teaching young children. Observations in preschool classrooms were also conducted by the researcher to document the use of technologies, musical instruments and music resources used to observe planned or natural opportunities for children’s involvement in music. Results revealed strategies used to teach music, the role of music in early childhood curricula, instructional strategies used including singing and movement and use of musical instruments. From the review of empirical studies, it is evident that there exist gap in studies conducted locally on how utilization of child centred approaches and their influence on teaching and learning of psychomotor and creative activities in public ECDE centres in West Pokot County.

4. Materials and Methods

The study was conducted in West Pokot County, Kenya which is divided into four Sub Counties: West Pokot, Central Pokot, North Pokot, and South Pokot. This study used a mixed method research design. According to Johnson and Onwuegbuzie (2010), mixed method research is an approach that incorporates ideas from qualitative and quantitative research. This study used descriptive survey design since it sought teachers and head teacher’s opinions on utilisation how child centered methods affected teaching and learning of psychomotor and creative activities in public pre-primary centered in West Pokot County. The design allows the use of mixed method research (Johnson & Onwuegbuzie, 2010). Table 1 shows the target population and computed sample size for the study.

Table 1: Population Distribution of Schools,
Head teachers and Teachers (Target and Sample Size)

Respondents		Head Teachers		Teachers		Total sample size
No.	Sub county	Target	Sample	Target	Sample	
i	West Pokot	135	14	518	52	66
ii	Central Pokot	105	10	425	43	53
iii	North Pokot	92	9	378	38	47
iv	South Pokot	85	8	356	36	44
Total		417	41	1677	168	209

The researcher stratified the county into sub counties as indicated in Table 1 Based on the stratification, 66 respondents were selected from West Pokot, 53 from Central Pokot, 47 from North Pokot and 44 from South Pokot. However, during data collection, not all of them responded to the research instruments, not all schools in each sub county participated. For instance, the researcher managed to successfully conduct 35 interviews with head teachers out of a possible sample of 41 signifying a 93.45%. On questionnaire, 168 were issued and 157 were returned signifying 85.36% response rate for school heads and 93.45% for teachers. This response rate was high as supported by research scholars

(Kothari, 2014). The data from the open-ended items in the questionnaire and the semi-structured items in the interviews was transcribed and qualitatively analysed using thematic approach and merged with quantitative data during interpretation and presentation. Quantitative data was analysed using descriptive statistical techniques with the help of SPSS. The researcher used inferential statistics, Karl Pearson Product Moment Correlation to test hypothesis. The probability level was set up at 0.05 and 0.01 significance levels.

5. Results and Discussions

The teachers were asked to indicate their teaching experience. Table 2 illustrates the results.

Table 2: Distribution of Teachers by Teaching Experience

	Experience	Frequency	Percent
i	1-5years	27	17.2
ii	6-10 years	62	39.5
iii	11-15 years	68	43.3
	Total	157	100.0

As shown in the Table 2, 68 (43.3%) of the respondents had a teaching experience of 11 to 15 years, 62 (39.5%) of them had an experience of 6 to 10 years and 27 (17.2%) of the respondents had an experience of 1 to 5 years. This implied that most of the teachers had a long teaching experience. Therefore, it can be inferred that the teachers were expected to be providing quality teaching in the ECDE centres based on their experience. The findings coincide with Nyangeri's (2014) results from Kisii County that showed 10.7% of the pre-primary school teachers had a teaching experience of between 0 to 5 years while 89.3% of the teachers had a teaching experience of six years and above. From the above, it appears that most teachers were experienced, and this was important to establish the degree to which they applied child-centred approaches in teaching and learning of psychomotor and creative activities in ECDE centres in West Pokot County.

5.1 Utilisation of Child-centred methods in Teaching and Learning of Psychomotor and Creative Activities

In most cases, learners have a preference on creative ways of learning rather than focus on memorizing of information. As such, whenever creative activities are applied in the course of learning, learners learn better and faster (Ronkko & Aerrila, 2015). The fourth objective of the study was to determine teacher utilisation of Child-centred methods in Teaching and learning of psychomotor and creative activities in public ECDE centres in West Pokot County. The researcher therefore deemed it important to establish the learners understanding creative activities. Creative activities enable learners' acquisition of skills in; playing with different objects, drawing, painting, singing, dramatization and sculpturing (KICD, 2017). These statements were measured on a Likert scale of five; poor

(1), Below Average (2), Average (3), High (4) and Very High (5). Table 3 illustrates the results.

Table 3: Teaching and Learning of Psychomotor and Creative Activities

Statement		P	BA	A	H	VH	M	SD
a Learners ability to play with different objects e.g. blocks	f	4	6	55	52	40	3.75	.965
	%	2.5	3.8	35.0	33.1	25.5		
b Learners ability to draw and paint objects	f	2	9	69	54	23	3.55	.858
	%	1.3	5.7	43.9	34.4	14.6		
c Learners ability to sing	f	3	5	38	45	66	4.06	.982
	%	1.9	3.2	24.2	28.7	42.0		
d Learners ability to dramatise (role play)	f	14	41	23	54	25	3.22	1.249
	%	8.9	26.1	14.6	34.4	15.9		
e Learners ability to construct/mould objects e.g. sculptor	f	1	28	62	31	35	3.45	1.047
	%	.6	17.8	39.5	19.7	22.3		

Key:P-Poor, BA-Below Average, A-Average, H-High, VH-Very High, M=Mean and SD-Standard deviation

Findings from Table 3 reveal that 4 (2.5%) of ECDE teachers rated learners ability to be involved in play with different objects at school as poor, 6 (3.8%) indicated that it was below average, 55 (35.0%) indicated the level as moderate, 52 (33.1%) rated that it was high and 40 (25.5%) said it was very high. This indicates that ECDE children have high (M = 3.75, SD = 0.965) aptitude and capacity to participate in play activities in their schools. This therefore implies that teachers do not regularly teach using activity based child-centred teaching methods in preschool centres in West Pokot County. The information was corroborated with one head teacher interviewed who said that:

“Teachers in my school do not regularly fulfil their roles of engaging learners in play activities in schools. They tend to forget or ignore the integration of play sometimes.”

The results coincide with Obuchere et al (2014) study in Bondo Sub County that found out that teachers did not fulfill some of the roles specified for them in integration of play in ECDE curriculum. However, the study is different from Nguku (2015) who established that play materials have a significant influence on preschool children’s academic performance. It can therefore be concluded that play materials have a significant influence on academic performance of children in pre-schools although majority of teachers in West Pokot Sub county do not regularly assist learners in play activities.

With reference to level of learners’ skills in drawing of items and painting work, 2 (1.3%) termed learners ability as poor, 9 (5.7%) indicated that it was below average, 69 (43.9%) of the teachers said their learner capacity was average, 54 (34.4%) indicated that it was high and 23 (14.6%) of respondents noting that it was very high. This is confirmed by mean values obtained mean 3.55 together with standard deviations scores 0.858 that depicted teachers rating of learners’ skills in artwork activities of drawing and painting as high. In Finland, Aerila and Ronkko, (2013) suggest that this conceptualisation helps

the teacher and the children to understand their own interpretation and that of others by making visible the inner thoughts prompted by the fictional tale. It is common in ECDE that children sing several times a day (Ahmed & Aziz, 2009). Therefore, the teachers were asked to rate their ECDE learners' ability to sing well. According to results from Table 4.23, 3 teachers (1.9%) rated children's ability to sing was poor, 5 (3.2%) rated them below average, 38 (24.2%) rated children capacity to sing as average, a significant 45 (28.7%) number of teachers rated their learners as high while most 66 (42.0%) indicated their level very high. From this it is evident that the learners' gifts, talent and skills in singing songs have been well nurtured by the teachers in most ECDE centres in West Pokot County ($M=4.06$ and $SD = 0.982$). The findings coincide with ITNO (2009) who found out that curriculum areas most influenced by music education included language development, reading, mathematics, and science. Music itself is a form of language comprising patterns which can be used to form notes, chords, and rhythms. Experience in music helps a child to analyse the harmonic vowel sounds of language as well as to sequence words and ideas. Another curriculum area enhanced by music participation is reading. A child who participates in music activities experiences sensory integration, a crucial factor in reading readiness.

On preschool children ability to dramatize, 14 (8.9%) rated pre-school learners competencies in role play as poor, 41 (26.1%) of ECDE teachers asserted that learners' ability to dramatize was below average, 23 (14.6%) indicated that it was average, 54 (34.4%) indicated as high and 25 (15.9%) scaled children ability to dramatize as very high. The study obtained a mean of 3.22 with standard deviation scores of 1.249 implying that learners' ability to participate in role play was average. This shows that not all learners have the skills to participate in simple plays in pre-schools. The study coincides with Ngecha's (2011) research that found out that public pre-schools were the most hit with few play facilities and materials while a few private schools in well-established areas in Makadara had a variety of play materials and facilities. The study findings are different from ITNO (2009) in Ireland that found that pre-schools in Ireland used drama as a teaching method. This is because dramatization can potentially capture topics from other curricular areas with this unique accessibility. When children are learning, historical concepts, for example, can be brought to life as the participant 'lives through' a historical event or era. By learning through the body and senses, an enhanced understanding of the topic can be gained. The complex nature of events or their surroundings may emerge, leading to a more holistic understanding of the topic at hand.

Lastly, when asked to rate ECDE children ability to construct objects by their own, 1 teacher (0.6%) indicated their level was poor, 28 (17.8%) indicated that it was very low, 62 (39.5%) rated their skills as average, 31 (19.7%) pointed out that it was high and 35 (22.3%) indicated that it was very high. The descriptive statistics results ($M=3.45$ and $SD = 1.047$) indicated learners' ability to make objects was high. Therefore, this is a skill that needs to be more nurtured in the learners by ECDE teachers in the study area. In general, the average statistics for children competency in creative activities was found to be on average ($M=3.38$ and $SD=1.021$). The study also made observation of learners'

participation in creative activities and Table 4 presents the researcher's rating on their competencies.

Table 4: Rating of Learners' Competencies in Psychomotor and Creative Activities

Statement	Low	Below average	Average	High	Very high
a Learners ability to play with different objects e.g. blocks	0	1	15	17	8
b Learners ability to draw and paint objects	3	5	7	20	5
c Learners ability to sing	0	0	7	30	4
d Learners ability to dramatise (role play)	4	6	8	12	11
e Learners ability to construct/mould objects e.g. sculptor	3	5	8	10	15

Table 4 result shows that most pre-school pupils had higher competencies in singing as recorded by the research. This was seen in schools whereby the pre-school learners used to sing every morning, after the break and when they were about to go home by singing lullabies in English, Kiswahili and Pokot. This improved their communication and also verbal skills. Secondly, it was also observed that most learners were able to construct and mould objects using clay which was locally available. Thirdly, it was also evident that through using local modified resources, learners' competencies in drawing and painting was high. Moreover, the researcher observed that the learners had higher skills in role play and ability to play with different objects. In general, the researcher observed that ability in creative activities was high among learners in the ECDE centres in West Pokot County.

The research hypothesis stated that:

H₀₁: There is no significant relationship between utilisation of child-centred approaches in the Teaching and Learning of Psychomotor and Creative Activities in ECDE centres in West Pokot County, Kenya.

A Karl Pearson correlation was computed to test the hypothesis between utilisation of child-centred teaching methods and teaching and learning of psychomotor and creative activities in pre-schools. The probability level was set up at 99% (0.01) confidence level. The results of the analysis are illustrated in Table 5.

Table 5: Correlations between Child Centered Methods and Psychomotor and Creative Activities

Child-centred teaching methods	Creative activities
a. Child Needs Approach	Pearson Correlation .255**
	Sig. (2-tailed) .001
	N 157
b. Child Interest Approach	Pearson Correlation .329**
	Sig. (2-tailed) .000
	N 157
c. Child Discovery Approach	Pearson Correlation .323**
	Sig. (2-tailed) .000

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	N	157
d. Activity Based Approach	Pearson Correlation	.386**
	Sig. (2-tailed)	.000
	N	157

** . Correlation is significant at the 0.01 level (2-tailed).

Results from Table 5 indicate that, all the four child-centred teaching methods had significant relationship ($p < 0.01$) with Teaching and Learning of Psychomotor and Creative Activities in ECDE centres. Therefore, the fourth null hypothesis is rejected ($p < 0.01$). This implies that as teachers continue to use child-centred approaches, learners develop competencies in creative activities. The ECDE curriculum emphasizes that learning should not take place only in the classroom but outside as well. This shows that among the four teaching and learning activities: child interest, child needs, activity based and child discovery instructional approaches. The study findings revealed that among the four methods, activity based approach had a more positive influence which was significant ($r = 0.386$ and $p = 0.001$) on teaching and learning of psychomotor and creative activities. This implies that teachers use of instruments, poetry, moulding and participation in co-curricular activities with pre-school learners, develop creativity skills in them. In United States, Linder et al, (2011), observe that creative environments and resources that encourage natural curiosity and discovery in mathematics could also be further researched in an effort to address disparities in achievement that begin early. In a study done by Rotumoi and Too (2012), they found out that availability of play facilities was crucial as it determined children's socialization, coverage of activity areas and development of psychomotor skills. Secondly, study results reveal that there also existed significant positive relationship ($r = 0.329$ and $p = 0.001$) between teachers use of child interest learning approaches in teaching and learning of psychomotor and creative activities. Thirdly, results also show a significant positive association ($r = 0.323$ and $p = 0.001$) between teachers use of discovery approaches and learners' acquisition of creative skills in schools. Lastly, the research results also showed a significant relationship ($r = 0.255$ and $p = 0.001$) between teachers' utilisation of child needs approach in Teaching and Learning of Psychomotor and Creative Activities in schools. From the above findings it is evident that there exists a significant positive correlation ($p < 0.05$ & $p < 0.01$) between teacher use of child-centred approaches and creative activities in ECDE schools in West Pokot County. This implies an increase in teachers' usage of child centered methods in teaching and learning of psychomotor and creative activities in schools. The study findings coincide with Obuchere, Okello and Odungo (2014), who found out that the relevance of the play activities integrated in ECDE curriculum was found to be ranging from being used to teach various subjects like Physical Education, Music, Science, Social Studies, Mathematics, Art and Crafts and Languages to being used for entertainment, refreshment of minds and for physical development of the child. Thus, teachers need to consider the many different ways to promote and encourage each child's participation in the light of their individual abilities, confidence, and experience.

Children will assess their situation, consider possible options, express their views, and therefore influence decision-making processes in myriad ways.

6. Conclusions and Recommendations

Results of the study revealed that there existed a significant positive relationship ($p < 0.01$) between teachers use of child-centred methods in teaching and learning of psychomotor and creative activities in public ECDE schools in West Pokot County. The null hypothesis was rejected. The Pearson correlation statistics was weak, implying that teachers may be using teacher-centred approaches rather than child-centred ones thereby inhibiting learners understanding of Creative activities in schools. Despite that, the statistics are encouraging bearing in mind that through teachers' continuous use of child-centred approaches; learners will improve their competencies and skills in performing plays, dramas and music while developing their artistry talents in drawing, painting and moulding that are critical in ECDE pupils learning. There is need for teachers to widen their scope in the teaching of creative activities by incorporating more of child-centred activities. In addition, teachers need to ensure they manipulate available resources to enhance learning (improvisation locally available materials) that are interesting, motivating, topical and stimulating. It is advisable that teachers, head teachers and parents provide a variety of audio-visuals educational media to promote learners interest in learning. For instance, after reading activities, learners can draw what they understood from the materials read or can role-play or simulate what they have read. Apart from that, learners can also take part in drama, in which they can either compose, or base on a genre they are reading. In doing so, they will understand the text better while learning it in an interesting manner.

References

- Aerila, J. A. & Ronkko, M.L. (2015). Integrating literature with craft in a learning process with creative elements. *Early Childhood Education Journal*, 41(6), 4-13.
- Ahmed, F. & Aziz, J. (2009). Students' perceptions of the teachers' teaching literature communication and understanding through the eyes of the audience. *European Journal of Social Sciences*, 7(3), 7-10. Retrieved on 11-09-2015 from www.eurojournals.com/ejss7302.
- Andiemma, N., Kemboi, G., & M'mbonne, J. (2013). Challenges in teaching composition writing in secondary schools in Pokot County, Kenya. *Journal of Education and Practice*, 5(1), 15-22.
- Beard, C. & Wilson, J.P. (2006). *Experiential learning. A best practice handbook for educators and trainers* (2nd ed.). London, United Kingdom: Kogan Page.

- Brown, M. (2011). A changing landscape: Place responsive pedagogy. In D. Irwin, J. Straker & A. Hill (eds.), *Outdoor education in Aotearoa New Zealand: A new vision for the twenty first century* (pp. 104–124). Christ Church, New Zealand: cpit.
- Buyuktaskapu, S. (2011). Examination of ECDE teachers' beliefs about Science education. *The International Journal of Research in Teacher Education*, 5, 14-25.
- Chatzipanteli, A., Grammatikopoulos, V., & Gregoriadis, A. (2013). *Development and evaluation of meta-cognition in Early Childhood Education*. Early Child Development and Care. Retrieved on 13-09-2015 from: <http://dx.doi.org/10.1080/03004430.2013.861456>.
- Crumly, C. (2014). *Pedagogies for student-centred learning. Online and on-ground*. p. 26.
- Eslami, Z. R. (2010). Teachers' voice vs. learners' voice: A needs analysis approach to English for academic purposes (EAP) in Iran. *English Language Teaching*, 3(1), 1-9.
- Hyvonen, P., K., E-L., Jarvelaa, S., Maattaa, E., Mykkanena, A. & Kurki, K. (2014). Interactive and child-centred research methods for investigating efficacious agency of learners. *Varhaiskasvatuksen Tiedelehti Journal of Early Childhood Education Research*, 3(1), 82–107.
- Irish National Teachers Organisation [INTO] (2009). *Creativity and the arts in the primary school*. Dublin: INTO.
- Johnson, R. B., & Onwuegbuzie, A. J. (2010). Mixed research. In R. B. Johnson & L.B. Christensen, *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.), pp. 439-459). London: Routledge.
- Kenya Institute of Curriculum Development (2017). *Basic Education Curriculum Framework*. Nairobi: KICD.
- Kothari, C. R. (2014). *Research methodology: Methods and techniques* (2nd rev ed.). New Delhi: New Age International P.L.C.
- Linder, S., Powers-Costello, B., Stegelin, D. A. (2011). Mathematics in early childhood: Research-based rationale and practical strategies. *Early Childhood Education Journal*, 39, 29 – 37.
- Madlela, B. (2014). *An investigation on how the child-centred approach is applied in the teaching of natural science in Johannesburg East schools*. MED Thesis, University of South Africa.
- Metto, M. L. & Makewa, E., (2014). Learner-centred teaching: Can it work in Kenyan public primary schools? *American Journal of Educational Research*, 2(11A), 23-29.
- Morrison, F. J., Ponitz, C. C., & McClelland, M. M. (2010). *Self-regulation and academic achievement in the transition to school*. In S. Calkins & M. Bell (Eds.), *Child development at the intersection of emotion and cognition* (pp. 203–224). Washington, D.C.: American Psychological Association.
- Mweru, M. (2012). *Teachers' influence on children's selection and use of play materials in Kenya*. Nairobi: Kenyatta University.
- Nasibi, M. (2005). *Early childhood education teaching at ECDE*. Nairobi: Nehema Publisher.
- Ngecha, M. W. (2011). *Factors hindering outdoor play in preschools in Makadara District, Nairobi County, Kenya*. MED Research Project, University of Nairobi.

- Nguku, R. K. (2015). *Play and children's academic performance in Yatta Sub-County, Machakos County, Kenya*. MED Project, University of Nairobi.
- Nyangeri, E. J. (2014). *Determinants of pre-primary school teachers' use of Music as a medium of instruction in Kitale Municipality, Trans-Nzoia County, Kenya*. Master's Thesis, Kenyatta University, Kenya
- Obuchere, Z. M., Okello, M. O. & Odongo, B. C. (2014). Role of teachers in integration of play in Early Childhood Development and Education curriculum. *International Journal of Education and Research*, 2 (11), 503-5114.
- Odongo, B.O. (2007). *Promoting Child Development Through Music: A Comparison of Preschool Teachers' Perspectives in Kenya and United States*. MED Thesis, Wichita State University, United States.
- Platz, D., & Arellano, J. (2011). Time tested early childhood theories and practices. *Education*, 132(1), 54–63
- Republic of Kenya (2012). *Taskforce on the re-alignment of education sector to the constitution 2010*. Nairobi, Ministry of Education.
- Republic of Kenya (2013). *Basic Education Act 2013*. Nairobi: Government Printers.
- Ronkko, M-L. & Aerila, J-A. (2015). Learners designing a soft toy. An LCE model as an utilisation of the experiential learning during the holistic craft process. *Techne Series A*, 22(1), 44–58.
- Rotumoi, J. & Too, J.K. (2012). Factors influencing the choice of approaches used by ECDE Teachers in Baringo County, Kenya. *International Journal of Academic Research in Progressive Education and Development*, 1(2), 177-187.
- Starko, A. (2010). *Creativity in the classroom: Schools of curious delight*. New York: Routledge.
- UNESCO (2015). *Education for All, Global Monitoring Report: Teaching and learning, Achieving Quality for All*. Paris: UNESCO.
- United Nations [UN] (2015). *Sustainable development goals*. New York: United Nations General Assembly Resolution.
- Wangui, K.M. (2011). *Influence of learning environment on reading comprehension among pre-unit learners in Kikuyu Division, Kiambu County*. MED Project, University of Nairobi.
- Wanjiku, C.N. (2014). *Influence of Teacher Characteristics on Motivation of Pre-School Children in Learning the English Language in Starehe District in Nairobi County*. MED Project, University of Nairobi, Kenya.

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