

THE OCCUPIED CHILD AND ENGAGED TEACHING: ENVIRONMENTAL QUALITIES SUPPORTING EMERGENT READING IN KENYA

By Dr. Chepsiror Philomena
Moi University, Kenya

P.O. BOX 3900, 30100
ELDORET
KENYA.

Email: chepsirorpj@gmail.com
Cell phone: +254721303382

Abstract

Emergent reading is a ‘make or break it’ benchmark for success at later reading and academic achievement. However, without proper nurturing of the environments and experiences that support physical, social emotional, language, literacy, and cognitive development, many children face early disadvantages and begin school with learning gap. This study sought to establish environmental features that facilitate utilization of learning experiences for teaching emergent reading in Early Childhood Development and Education (ECDE) centres in Kenya. This study used the survey research design. The Ficus Upshot Model of reading development guided the study. Data was collected from 95 randomly selected ECDE teachers using the questionnaire and observation checklist. Data was analyzed both quantitatively and qualitatively. The study found out that the classroom features were neither sufficiently exposed to children nor adequately utilized and so did not absolutely smooth the progress of acquisition of emergent reading skills.

Key words: Emergent reading, occupied child, Environmental qualities

1. Background to the study

Under the Vision 2030, the government of Kenya is committed to endow its citizens with globally competitive and quality education. To arrive at this target the government is devoted to provide quality Early Childhood Development and Education (ECDE). The early years are important years for all aspects of development. In this regard, studies have confirmed that success in emergent reading is the cornerstone of education and the basis of life-long learning (Muij and Reynolds, 2001, Ford, 2010, MOE, 2015). Chall (1983) put forward four distinct stages of development across the continuum of learning to read; awareness and exploration stage (typically pre-K), Emergent reading (typically Kindergarten to Early Grade 1), Transitional reading (typically late grade 1 to grade 2) and affluent reading (typically grade 3 and higher). Emergent literacy skills are critical “getting ready skills” that children need to develop before they learn to read.

Emergent reading arises out of a series of perceptions, increasing conceptual and social development and cumulative exposures to oral and written language. Corresponding to this, standards delineated by the Ministry of Education (MOE, 2006) support the facilitation of holistic

development of ECDE children through provision of rich sensory experiences. Additionally, The Early Childhood Development Service Standard Guidelines (Republic of Kenya, 2006) specifies Hands-on exploration for learning through action. Further, MOE accreditation criteria for physical environment standard for ECDE 10(a) state that a variety of adequate, age and developmentally appropriate materials and equipment should be availed indoors and outdoors for children (MOE, 2006). These are all critical conditions for occupied child and engaged teaching in early childhood in general and emergent reading in particular.

Young children not only acquire a lot from the environment and so learn through everything they experience during the day but also through specific activities that are planned for them. Rich, Drummond, Myer & Dixon (2005) emphasized that young children are expert, intrepid and great explorers of their worlds. They are active, excited and very curious about everything and everybody around them. From an early age, and throughout their school lives, children need to be encouraged to engage with the world, using all of their senses in order to fully enjoy all that it has to offer. However, Fiester (2010) cautions that without proper nurturing of the environments and experiences that support physical, social emotional, language, literacy, and cognitive development, many children face early disadvantages and begin school with learning gap.

2. Statement of the problem

Reading proficiently by end of third grade is a ‘make or break it’ benchmark for becoming better readers and to perform better in school (Foley et al.2000, Snow, Burns and Griffins, 1998, Musen, 2010). Credible evidence maintains that in order to support literacy development, ample opportunities for concrete experiences should be provided in settings that promote literacy activity, skills and strategies in early childhood programs. Methodological guidelines given by UNICEF (2014) for reading and writing activities insists that pre-primary literacy curriculum should give emphasis on print rich classroom environment and on children’s active engagement in playful literacy activities through which children understand that people read and write in order to communicate with others and express their thoughts, ideas and emotions.

However, findings of the surveys conducted by Uwezo, Kenya since 2009 have confirmed that the basic literacy skills of primary school children in Kenya are deficient. Uwezo (2013) laments that a major setback facing learners in Early Childhood Education is that learners are either not learning or are not retaining the knowledge necessary for proficient reading at later learning levels. This crisis in education could possibly stem from the learning experiences for emergent reading which is a precursor for success at later reading and academic achievement. Table 1 displays a summary of the 2012 Uwezo report.

Table 1: Uwezo Reading level report, Kenya 2012

Level	Nothing	Letter	Word	Paragraph	Story	Total
Class 1	17.2	49.2	21.9	5.8	6.0	100
Class 2	7.9	31.2	32.4	14.9	13.6	100
Class 3	4.6	17.7	28.3	21.9	27.5	100
Class 4	2.2	8.1	15.8	24.3	49.5	100
Class 5	1.7	4.0	8.8	16.9	68.6	100
Class 6	1.1	2.3	4.3	10.7	81.6	100
Class 7	1.2	1.1	2.4	5.7	89.6	100
Class 8	0.9	0.9	1.9	3.3	93.1	100
Average	4.9	15.7	15.7	13.7	50.2	100

Adapted from Uwezo-Kenya (2013)

3. The Objective of the study

This study sought to establish environmental features that uphold lessons that occupy child and promote engaged teaching of emergent reading in ECDE in Bureti Sub-County, Kenya

4. The Conceptual Framework

4.1 Rationale

Studies have shown that becoming competent readers early in life is one critical pointer of children's academic success. Muij and Reynolds (2001) confirm that early literacy forms the starting point of most other learning and that children who cannot read well will encounter setbacks at school and will seldom reach their potential both at school and in life. The conceptual framework outlined in figure 1 reflects an approach to teaching and learning emergent literacy skills that align with this belief. Underpinning this framework is the perspective of the occupied child and engaged teaching and learning at the formative phase of learning.

The study was conceptualized in the form of the ficus tree (Figure 1) and christened 'The Ficus Upshot Model of Reading development'. Here, the three most important elements that determine the health of a tree are presented as the roots, the weeds and the fruits.

4.2 The Independent Variable

In the framework, the Tap root at the centre represents the independent variable; experiential learning strategies, while the branching roots are the supporting structures. The root systems are vital to the health and longevity of trees. This symbolizes that strong bases are necessary for an individuals' growing success. For this study, they imply environmental features and support systems at the foundational stages of reading.

4.3 The Moderator variables

Early reading strategies must be supported by literacy rich settings which offer materials and activities throughout the classroom that encourage reading and talking. The environment needs to be customized such that it taps into children's individual interests, draw out their emerging reading capacities, and respond to their sense of inquiry and exploration. Such an environment would include labels, signs, printed directions and displays of children's work made on the walls and in places that count. Stroud (1995) avers that literacy-rich activities and environment offers literacy-related benefits of helping children understand symbolization refine visual discrimination develop fine motor coordination and practice oral language skills.

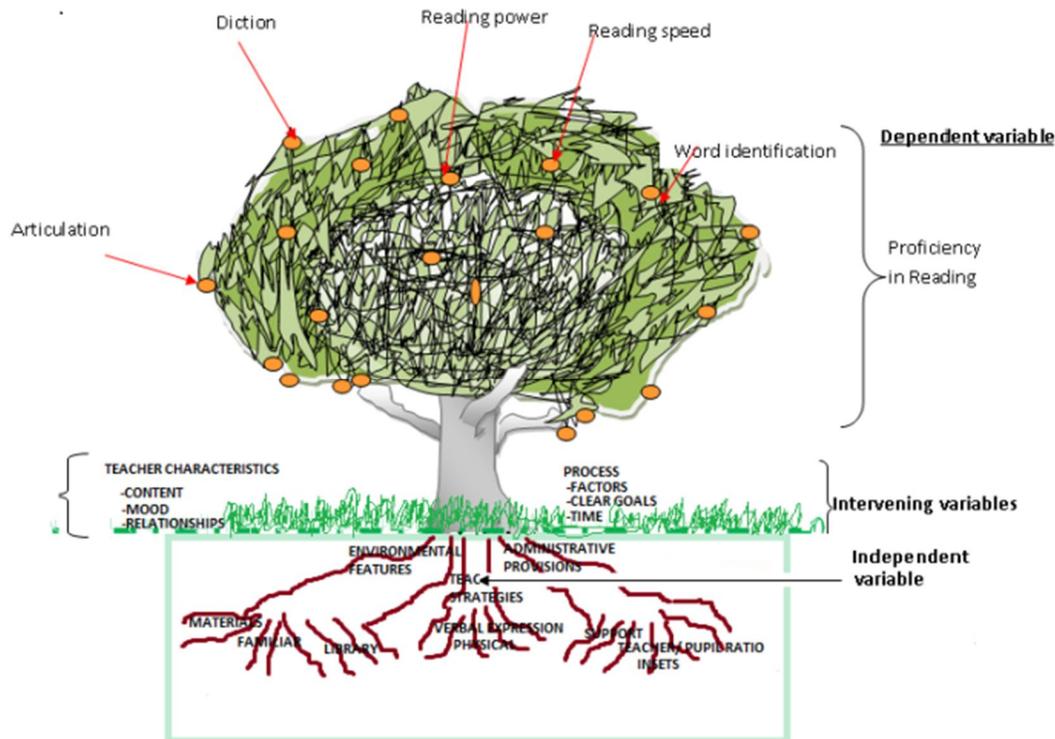


Figure 1: The Ficus Upshot Model of Reading Development. Source: Researcher (2015)

Emergent reading activities would require a very supportive school administration that is ready to prioritize the acquisition of the necessary facilities, equipment and materials. To do this effectively teachers should engage parents and all other stakeholders to marshal up the right quality and quantity of resources, both human and non-human.

4.3 The Intervening variables

Just above the roots are the weeds. Even though weeds are troublesome in the crop yield, they also have their usefulness to plants. The weeds signify the intervening variables. According to Heffner (2014) intervening variables are underlying abstract processes that are not directly observable but that link the independent and dependent variables. This study was cognizant to the fact that apart from the learning strategies, the environment and administrative support, other underlying factors would likely impact on reading proficiency. This includes teachers' characteristics and instructional process factors.

4.4 The dependent variable

The fruits stand for the final product or the expected learning outcomes. Good quality fruits come as a result of good quality roots. Good quality fruits look attractive, have good flavor and have more nutritive value. Emergent literacy experiences that are well structured and effectively applied will create greater interest for reading by fully engaging the learner. This consequently translate to improved reading competence at later levels which is exhibited in the form of superior diction, good articulation, improved ability to identify words, reading at the right speed and the realization of reading power. This framework acted as a tool to contextualize the study and to set expectations for the research. It also helped to keep the study focused on the research objectives and therefore assisted the researcher to make meaning of the research findings. Similarly, it provided reference points for discussing literature for the study.

5. Literature review

Classroom Environment is a powerful factor that shapes reading ability of young children. Roskos,(2003) and Wohlwend, (2008) were confident that effective early literacy instruction and classrooms provide preschool learners with developmentally appropriate settings, materials, experiences and social support that encourage early forms of reading and writing to grow and develop into conventional readers. Awareness of any effects of the physical environment on learners can help teachers to structure settings that promote literacy.

The intentional selection and use of materials is central to the development of the literacy rich environment. Goodman, Bird, & Goodman, (1991) contend that teachers should ensure that learners have access to a variety of resources by providing many choices. Their opinion is that teaching teachers should connect literacy to all elements of classroom life to maintain learner's interest and expose them to various genres and ideas. Classrooms should include miscellaneous literacy materials that are used in everyday life that demonstrate how literacy is used. For example: Phone books, dictionaries, menus, recipes, labels, signs, printed directions, learner's work and alphabet displays.

Environmental print, according to Strickland and Riley-Ayers (2006) has its fair share of weight on children's literacy. He believes that children's experiences with the world greatly affect their ability to comprehend what they read. What children bring to a text influences the understandings they take away and the use they make of what is read. Children should be immersed in language-rich environments in order to develop emergent reading skills.

Children's natural dispositions to be intellectually curious and to investigate their environments emerge at the early years (Katz, 1995). They learn about tools such as reading and writing and become motivated to develop and use a wide variety of related skills. It is important that they have an opportunity to experience active, engaged learning. To encourage exploration, McIntyre (1984) advises teachers to offer open-ended types of equipment. If children are to have experiences in defining problems and testing solutions, teachers must let them explore the choices of equipment they will play with and decide how they will use them.

A playground can be such a setting if properly arranged and supervised because there is room for many activities. McIntyre considers that if children learn to think of themselves as inquirers, concepts are likely to remain with them. The feeling of independence which follows successful explorations builds confidence leading children to further probing. Children learn to ask questions and on their own and find ways of answering them. As children, through their own experiences, arrive at generalizations; their self- concepts become increasingly positive. What they learn in this way becomes a part of them, and the knowledge has greater depth and quality than does rote learning (McIntyre, 1984).

Visual learning is about how we gather and process information from illustrations, graphs, symbols, photographs, icons and other visual stimuli. According to Murphy (2013) young children are already accomplished visual learners long before they begin to understand language and learn to read and that they readily relate to visual models. According to Herbert (1995) there are five specific skills involved in the visual learning process: observation, recognition, interpretation, reception and self-expression. Observation has to do with seeing– not just looking at something, but really examining it. Recognition helps us to recall something based on our observations.

Interpretation relies on comprehension and enhances our understanding of something based o

n what we see. Perception uses visual analysis to help us make predictions and expand our thinking beyond what we see. Self-Expression is about drawing and image-making which allows us to communicate our feelings, share our knowledge, and demonstrate our creativity. Children should therefore be exposed to plenty of visual stimuli such as pictures, photographs, graphs and related stuff.

Wayne (2007, Christie and Enz (1992), Lindberg and Swedlow (1976) reckon that not only is room arrangement significant to support emergent literacy in the preschool class room but also the selection of materials available within each area. In early childhood classrooms, adding literacy props to children's play environments can significantly increase literacy behaviors during play. They believed that Props in the play area invite children to engage in play and continue to explore and build on their understandings. Children used reading and writing in more purposeful and complex ways in literacy-rich play centers than they did in more traditional play centers that did not emphasize literacy. Lindberg and Swedlow (1976) emphasize that the first books that a child is exposed to and the ways in which they are introduced may determine his literacy tastes for a lifetime. Children's books often use bold colors and strong contrasts and typically depict objects and animals that appeal to young children. The page of the book provides a clear focus for attention.

6. Research design and methodology

Hussey and Hussey (1997) define a research design as a detailed plan which is used to guide and focus a research. A procedure for carrying out a research entails recognizing a concern, drawing a detailed plan of action, identifying the means of collecting data, scrutinizing them and finally explaining the results. This study used the survey research design. Zechmeister, Shaughnessy & Zechmeister (2003) clarify that Survey research is used to assess people's thoughts, opinions, and feelings and concerns itself with describing, recording, analyzing and interpreting conditions that either exist or existed. Morgan's table (1970), containing recommended sample size schedule was used to select 95 ECDE teachers. To obtain the data for the study, the researcher used the questionnaire and observation checklist. Five of the participants were randomly selected for classroom observation while conducting a reading lesson. To ascertain validity of the instruments, Content Validity Index (CVI) was computed using the Kappa Coefficient, and the value obtained was .85 which proves that the instrument was valid.

7. Data Presentation, Analysis, Interpretation and Discussion

Lindberg and Swedlow (1976) consider the fact that a teacher's values are reflected in the way a room is set up, in the kinds of materials he/she selects, in the way he/she arranges the materials and equipment, in the way he/she provides for routine and in the way he/she encourages interactions. In this regard the study sought to establish the environmental features that facilitated the utilization of experiences for teaching reading in Bureti Sub-county, Kenya. Five items were presented in a 5-point likert scale to establish the status of the learning environments. SA stands for Strongly Agree, S for Agree, U for undecided, D for disagree and SD for Strongly Disagree. The results are presented in Table 2.

7.1 Status of the learning environment

Table 2 Learning environment

Status of the learning environment	SA		A		U		D		SD		T	
	F	%	F	%	F	%	f	%	F	%	F	%
There is a reading corner or space	29	30.52	32	33.68	1	1.05	24	25.26	9	9.47	95	100
There are plenty of materials e.g flash cards, book, letter blocks	30	31.57	44	46.31	1	1.05	9	9.47	11	11.57	95	100
The reading materials are graded to the level of learner	41	43.16	37	38.95	1	1.05	9	9.47	7	7.37	95	100
The reading materials have familiar experience for the learners e.g what is found within their surrounding	44	46.32	35	36.84			13	13.68	3	3.16	95	100
There is school library or room for the rest of the learners(for young learners to emulate reading culture)	15	15.79	29	30.53	4	4.21	31	33.63	16	16.80	95	100

7.1.1 Availability of reading space

As revealed in Table 2, 29(30.52%) respondents strongly agreed that there was a space designated for reading in their classrooms, 32(33.68%) agreed, one (1.05%) was undecided, 24(25.26%) disagreed, while 9(9.47%) strongly disagreed that they had a reading space in their classroom. For this reason over half 61(64.21%) of the respondents indicated that there was reading corner or space in the class room that was used for activities during the reading lesson

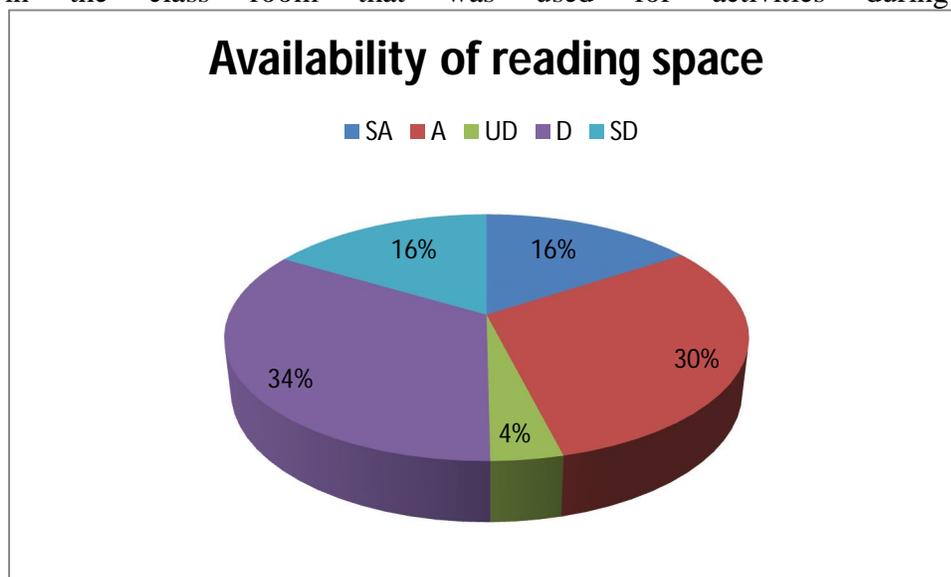


Figure 2 Availability of reading space

It is important to create a classroom climate in which children develop an appreciation of literature and to stimulate children to read. The arrangement of the books and the arrangement of space for reading or for story telling are important factors to be considered in setting up a room for children (Lindberg and Swedlow, 1976). During the classroom observations the researcher checked on the learning environments created purposely for reading. Table 3 shows what was found in the learning environment in the eight observed classrooms.

Table 3 The classroom setting for reading

Classroom situation	Public		Private		Total	
	Yes	No	Yes	No	Yes	No
Reading corner	0	6	0	2	0	8
Learning materials	4	2	1	1	5	3
Orderliness of materials	3	4	0	1	3	5
Suitability of materials	5	1	1	1	6	2
Adequate learning space	2	4	0	2	2	6
Class size appropriate	3	3	0	2	3	5
Suitability of classroom arrangement	3	3	0	2	3	5
Attractiveness of reading environment	3	3	0	2	3	5
Daily timetable	2	4	1	1	3	5

Additional information from the observation as shown on Table 3 revealed that five of the eight observed classrooms did not have sufficient space for learning experiences to take place; there was just enough space for desks to fit in. Out of the three with space, two were public schools. The two public schools had plenty of space left at the back and sides though not meaningfully utilized. Clark (2007) recommended that classrooms ought to have open spaces with a mix of larger and smaller areas so as to maximize interaction, concentration and investigation. Figure 3 shows one of the congested classrooms; a 5x6 meter classroom with 68 pupils.

*Figure 3 A congested classroom*

7.1.2 Availability of reading materials

Moor (2002) believes that availing and presenting materials to children enhances their investigation and exploration. Table 2 shows that there were 30(31.57%) of the respondents who strongly agreed that there were plenty of materials (flash cards, books, letters blocks, wall displays) that were used during the reading lesson 44(46.31%) agreed, one (1.05% could not make up their minds. However, 9(9.47%) disagreed as 11(11.57%) strongly disagreed. This was an indication that majority of the respondents 74(77.89%) asserted that their classrooms had enough materials for teaching reading.

Contrary to the responses on the questionnaire, only two of the observed classrooms (Table 3) had plenty of materials which were stack in carton boxes and bags at the front and at the back of the classroom. In these two, there were good displays on the walls. Coincidentally, these two were both in public schools, disproving the assertion that support services of private schools could be more adequate at school level than they are in public schools.

7.1.3 Appropriateness of learning materials

The results on Table 2 further show that 41(43.16%) of the respondents strongly agreed that the materials they used were graded to the level of the learners, 37(38.75%) agreed, one (1.05%) was undecided. On the other hand 9(9.47%) disagreed that the learning materials they used were graded to the level of the learners, as 7(7.37%) strongly disagreed. This shows that a vast majority of the respondents 78(82%) affirmed that the teaching materials were graded to the level of the learners.

Table 2 also indicates that 44(46.32%) of the respondents strongly agreed that materials they selected for reading had familiar experiences for the learners, similarly, 35(36.84%) agreed. Conversely, 13(13.68%) disagreed that materials they used in their classroom were familiar to the learners, as only 3(3.16%) strongly refuted. This signifies that an overwhelming majority 79(83.16%) of the respondents acknowledged that the reading materials they selected for reading had familiar experience for learners. Providentially, all the materials seen on the ground were appropriate for the lesson and the level of the children except for one teacher who presented a chart with some unfamiliar words like alligator and yatch among others. According to Moor (2002) children can identify and engage with those activities and resources that match their current interest and curiosity.

7.1.4 The school library

As regards the availability of a library in their schools, 15(15.79%) strongly agreed to it, 29(30.53%) agreed, 4(4.21%) were not sure. In contrast, 31(33.63%) disagreed to the fact that there was a library in their school and a further 16(16.80%) strongly disagreed. These findings indicate that a higher portion of the respondents 44(46.31%) stated that no library or room for the rest of the learners in the school was available for the young learners to emulate the older students (Figure 4). However, of all the eight schools where observation for reading lessons was carried out, not a single school had a library

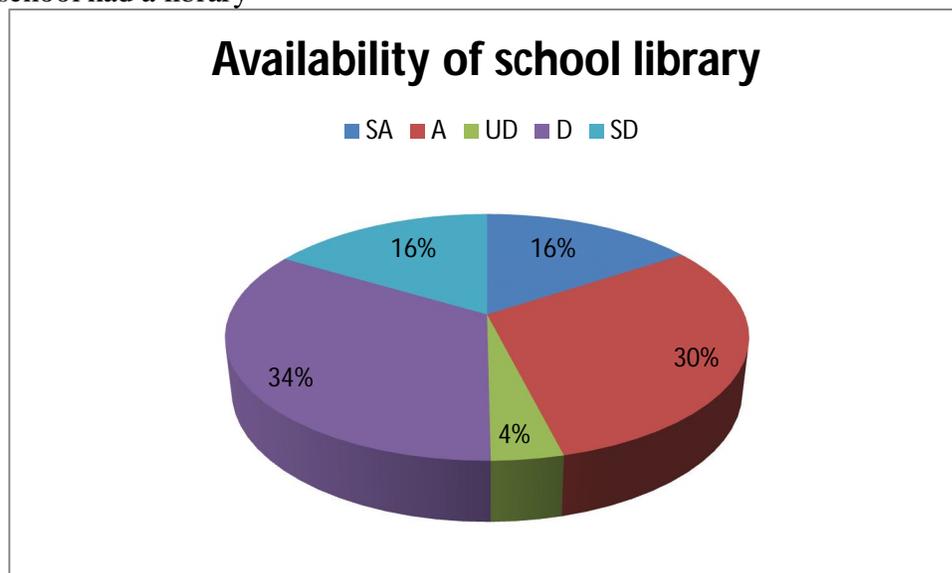


Figure 4 Availability of school library

7.1.5 Classroom organization

Pertaining to the arrangement in the classroom, three had desks/tables arranged in groups in search a way that the learners could move in and out of the group without difficulty and also be accessed by the teacher easily. All the three were public ECDE centres. The other five were arranged in the traditional rows/columns facing the teacher and interaction among pupils were few. According to Moor (2002) in appropriate learning spaces children can observe the various play possibilities and move in/out of the spaces at ease. Figure 5 shows a spacious and well-arranged classroom in one public school.



Figure 5 An organized, well-spaced classroom

7.1.7 The reading atmosphere

As for the reading atmosphere, what was observed in five of the eight classrooms was pathetic. There were no displays, no books, no materials; just desks, the teacher and pupils. Only two classrooms had learning areas, including the nature corner. Yet Curtis (2001) points out that those inviting surroundings where children can build their passions and attention and use open ended materials enhance children's positive dispositions toward learning and sense of belonging.

This state of affairs might be attributed to the kind of structures in most of the schools. One of the classrooms, for example, was an old timber building mended with corrugated iron sheets with no ceiling and still in dire need of repair (Figure 6). The room portrayed the fact that it was originally meant to be one classroom, but was sub-divided into three to accommodate three groups of ECDE children; baby class, middle and top class. With the noise from the adjacent rooms, it was exceedingly difficult to make out what a person was saying.



Figure 6 A pitiable structure of one classroom

The observation checklist also intended to find out if routines were provided for in the ECDE centres. Out of the 8 observed classes only 3 had daily timetables displayed on the wall (2 public and one private). In fact in one of these classes one child was heard consistently singing, “*Sanya, sanya, sanya wee*” a Kiswahili song meaning it was time to collect materials and move to the next activity.

7.2 Relationship between in-service courses and the environmental features created

In addition to completing training, teachers are required to continue taking refresher courses in their field of expertise in order to stay apprised of the latest developments. Teachers are expected to continuously improve their teaching skills and techniques and to keep up with new trends in teaching and learning. The study assumed that the more In-service courses one had attended, the more likely that he/she would adapt experiential strategies for teaching reading. Consequently, the study went ahead to establish the environmental features created by teachers who had attended In-Service courses for different number of times. This is presented on Table 4.

Table 4 In-Sets and the creation of learning environments

No. of In-service courses attended	None		>5		>10		<10			
	N=60		N=29		N=4		N=2		N=95	
Status of the learning environment	M	SD	M	SD	M	SD	M	SD	M	SD
There is a reading corner or space	4.45	.50	2.01	.51	1.00	.00	1.00	.00	3.52	1.38
There are plenty materials e.g flash cards, book, letter blocks	4.50	.50	2.89	1.21	1.00	.00	1.00	.00	3.79	1.28
The reading materials are graded to the level of learner	4.69	.46	3.29	1.00	1.00	.00	1.00	.00	4.03	1.21

The reading materials have familiar experience for the learners e.g what is found within their surrounding	4.73	.44	3.33	1.00	1.83	.38	1.00	.00	4.11	1.11
There is school library or room for the rest of the learners(for young learners to emulate reading culture)	3.75	1.05	1.67	.48	1.00	.00	1.00	.00	2.95	1.39

From Table 4 it can be recognized that teachers who had attended no In-service course at all seemed to meet most of the conditions required by the study as this group scored a mean of more than four in all items except the item on availability of the school library in which they scored 3.75 which was still above average. Indeed, of all the items, this particular item had the lowest weighted mean of 2.95 meaning majority of schools had no library. Generally, the more In-service courses respondents had attended, the more negative their rating was on the items on the environmental features they created to support the teaching of reading. This may be a sign that probably In-SETs organized may not have addressed specific needs of participating teachers.

It was necessary to establish whether there existed a significant relationship between the number of in-service courses attended and the environmental elements created for teaching emergent reading as stated in the study hypothesis. The results are shown in Table 5.

HO₁ *There is no significant relationship between number of in-service courses attended and the environmental features that facilitate the utilization of learning experiences for teaching reading in ECDE in Bureti Sub-County.*

Table 5 Chi-Square Results showing in-service courses attended and the type of learning environment created

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.072 ^a	17	.044
Likelihood Ratio	35.474	17	.005
Linear-by-Linear Association	5.223	1	.022
N of Valid Cases	267		

As shown in Table 5, a chi-square value of 28.072, df=17 and p-value of 0.044 was obtained. Since $p < 0.05$ this implies that there is a relationship between the number of in-service courses attended and the environmental features created.

8. Summary of the findings, Conclusions and Recommendations

The objective of the study was to establish environmental features that uphold lessons that occupy the child and promote engaged teaching of emergent reading in ECDE in Bureti Sub-County, Kenya. The features therefore that facilitated emergent reading in Bureti sub-county included the following:

8.1 Summary and conclusions

The fact that enough spaces had been set aside for reading, that there was an abundance of learning materials for emergent reading, the available materials were graded to the level of the learners and the materials and activities had familiar experience for learners. However, these were neither sufficiently exposed to children nor adequately utilized and so did not absolutely smooth the progress of acquisition of emergent reading skills. Additionally school libraries were noticeably missing in majority of the schools and there was no evidence of provision of school routines (i.e time tables) in most of the ECDE centres. Routines were also not adequately provided for in most of the classes.

Further, it was established from the computed chi-square test of 28.072, with a p-value of 0.044, that there is a relationship between the number of In-service courses attended and the environmental features provided for teaching reading. From the observations, it was evident that public schools were better off in as far as provision of learning materials and the classroom settings were concerned. They had more learning materials and more adequate classroom space which resulted in enhanced utilization of experiential strategies than in private schools.

8.2 Recommendations

ECDE teachers are strongly encouraged to provide literacy-rich environments that enhance children's natural responses of curiosity, exploration and communication. Consequently carefully designed environments should feature structures, objects and props, and labels that engage children in suitable choices, problem solving, investigating, discovery; inviting surroundings that enhance children's disposition towards reading. Daily routines should be provided, displayed and explained to the children so that it makes meaning to them. There is also need to mobilize schools to put up and equip libraries as a strategy to improve the reading culture in the schools.

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